Significance and Performance Scale of small and medium scale Manufacturing of auto Components

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Abstract

In this essay, Author would like to focus about the Responsibility Accounting refers to the management control system of accounting and reporting at divisional level of the organization. This research paper focuses on the concept of Responsibility Accounting and its applications in the Small and Medium Scale Auto Component Manufacturers. The ever increasing demands for all types of vehicles puts extra increasing pressure on the Auto Components manufacturers, as these organizations manage the entire raw materials inputs for the large scale auto manufactures.. So it has become quite essential to measure and to control the performance of Production and other supporting divisions in the SME Auto Components. The performance is to be evaluated on the basis of divisional Profitability and for this; the Profit Center would be the strategic tool to be applied for the performance measurement.

KEY WORDS: *Divisional Check, Performance, Profitability, Reporting and Strategy*.

INTRODUCTION

Decentralization is now days a common process followed in all types of business organizations. It is the process of delegating decision authority and responsibility to the functional divisions. In centralization, a limited amount of authority is delegated. In decentralization, a significant amount of authority is delegated to the middle or lower level management. The large scale organizations always believe in decentralization and operate their key functional activities such as production, marketing, sales etc. accordingly. The decentralization is quite common now days due to the product or service varieties, branch networks and wide spread business areas. In the small and medium scale organizations, usually the decision making is often rest in the hands of the top management or the owners. They highly follow the system of centralization. But the changing scenario of the small and medium scale organizations is now also demanding for the decentralization at least up to a certain extent. When the division is decentralized, then it considers as a separate responsibility center which carries entire responsibility of the given task. The responsibility center shows input output relationship very intensely. The divisional managers are held responsible for the performances of their respective divisions and the performance of each division is to be measured in the financial terms. Such a financial performance of the division can be measured by adopting the system of responsibility accounting.

Responsibility accounting is a management control system based on the principles of delegating and locating responsibility at the divisional level. Responsibility accounting is a system under which managers are authorized to decisions making, and holding responsibility for each activity that occurs within a specific area of the company. Under this system, managers are made responsible for the activities of segments. These segments may be called departments or branches or divisions or units.

OBJECTIVES OF STUDY

This particular research has been carried out for the following purposes,

- To evaluate the divisional performance in the Small and Medium scale (SME) Auto Components firms considering the ever increasing demands of auto vehicles.
- To apply Responsibility Accounting System in these divisions.
- To explain concept of Profit Center to these organizations

SIGNIFICANCE OF RESPONSIBILITY ACCOUNTING

The present performance of the automobile sector is fabulous. It can be explained with the given data:

Table 1
Sales Performance of Automobile Vehicles
(Number of vehicles sold)

Segments	2008- 2009	2009 – 2010 Up to Oct.2010	% Change
Cars	103227	143976	39
Commercial Vehicles	29842	49086	61
3 Wheelers	27525	33144	20
Motor Bikes	562349	656119	17
Scooters	97129	148247	53
Total	894380	1120081	25
Exports	107424	201543	88

Source: Manual- Society of Indian Automobile Manufacturers (SIAM)

The efficiency and effectiveness in the performance of the large scale automobile manufacturing organizations largely depends upon the performance (especially the production performance) of the small and the medium scale auto ancillaries. The timely and quality supply of all types of auto components, spare parts, equipments etc. is entirely controlled by the SME auto units. So it is essential to measure the performance of these types of organizations and to decentralize the key divisions therein.

The SME auto component industries in India have about 500 organized and 600 unorganized firms. Chennai and Pune are the main centers of the auto ancillaries. These types of industries manufacture the components of the automobile vehicles. The SME auto component industries are production- wise categorized as follows,

Table 2
Category of SME Auto Components Industries

Components	% Market
Engine Parts	31
Drive Transmission and Steering Parts	19
Suspension and Brake Parts	12
Electrical Parts	9
Body and Chassis	12
Equipments	10

Source: Manual- Auto Components Manufacturing Association of India (ACMA)

Note: The Indian auto components industries have Original Equipment manufacturing of 50%, Replacement Market of 35% and Export Market of 15%.

The auto components manufacturing units are running their businesses on small and medium scale basis. These types of units have their fixed direct customers and these customers are the large scale automobile organizations which manufacture different types of vehicles.

SCOPE OF RESPONSIBILITY ACCOUNTING IN SME AUTO COMPONENTS UNITS

The automobile sector is performing exceptionally well in recent period and the SME auto components units have steady and ever increasing markets. Many of the SME units are enjoying monopoly up to the large extent in their selling. They have regular components supply to the big automobile houses such as Tata, Mahindra, Bajaj etc. The annual demand is fixed so the production scheduling is well preplanned. The concept of Responsibility Accounting has wide scope in such types of units especially for the production divisions.

THEOROTICAL BACKGROUND OF RESPONSIBILITY ACCOUNTING

"Responsibility Accounting is a system of Management Accounting under which accountability is established according to the responsibility delegated to various levels of management and Management Information and Reporting System instituted to give adequate feedback in terms of the delegated responsibility. Under this system, division or units of an organization under a specific authority in a person are developed as Responsibility Centers and evaluated individually for their performances." (Institute of Cost and Works Accounts of India)

"Responsibility Accounting or Profitability Accounting or Activity Accounting which means the same thing, is a system that recognizes various decision or responsibility centers throughout the organization and traces costs (and revenue, assets and liabilities) to the individual managers who are primarily responsibility for making decisions about the costs in question". (Charles T. Horongren)

To simplify with, the term Responsibility Accounting refers to an accounting process that reports how efficiently and effectively the managers of responsibility centers have fulfilled their responsibility. It is also known as Activity or Profitability Accounting. Such a system has great relevance of the cost accounting. All the functional divisions in any organization have performance responsibility usually of high output and cost controlling. The managers of the divisions are held accountable for the incurrence and control of the costs of their respective divisions. However, the divisional revenues are neglected.

The responsibility accounting is quite important for the firms for measuring the separate performance of the divisions there in. However, all the divisions are not exactly performance oriented, but all the divisions are responsibility oriented and hence these are the responsibility centers. An application of responsibility accounting is quite significant because of the following reasons.

- It enables the identification of individual managers responsible for satisfactory or unsatisfactory performance.
- The divisions and the employees therein are motivated for quality performance knowing that it is financially measurable.
- Responsibility accounting system provides readymade Reporting system of the performance of the divisions. It provides a framework for the managerial performance appraisal and accordingly motivates managers to act in the best interests of the firm.

With reference to the definitions specified above, each functional division or unit within the organization has a separate individuality, clearly delegated responsibility of performance and thus, to be considered as a separate Responsibility Center. The performance of each Responsibility Center is financially measured on the basis of simple accounting principles as costs incurred for and revenues generated by that center. Responsibility accounting is a control device for the performance of the division. Each separate division like production, marketing, sales etc. should have to prepare its performance reports with reference to costs and revenue aspects. Here, the performance measurement is quite simple and it is done on the basis of only,

- Total Actual Costs incurred in that division for the period or for the job against the predetermined Budgeted Costs.
- Net Revenue generated at that division for the period or for the job against the predetermined budgeted revenue. The revenue may not be the sales of the organization.

Divisional or Responsibility Center ‘Revenues’

For any company, revenue is the total amount of money received from the goods sold or services provided during a certain time period. It also includes all net sales, exchange of assets; interest and any other increase in owner's equity and is calculated before any expenses are subtracted. The company’s net profit is calculated by subtracting expenses from revenue. In terms of reporting revenue in a company's financial statements, different companies consider revenue to be received, or "recognized", different ways. For example, revenue could be recognized when a deal is signed, when the money is received, when the services are provided, or at other times. There are rules specifying when revenue should be recognized in different situations for companies using different accounting methods, such as cash basis and accrual basis. But the Responsibility Centers’ revenues are different from the company’s revenues. These revenues are based on actual output (quantitative and qualitative). The divisional revenues are entirely different to the organizational revenues (sales turnover). In fact the divisional revenues are extremely difficult to evaluate because all the divisions are not output oriented or their output does not add anything in the profitability of the organization. Again, these revenues may or may not be the financial revenues. E.g; Accounts and other administrative divisions are supporting divisions only. These departments are efficient and not effective and hence are not the revenue oriented. But some divisions like Production, Marketing, Sales, R&D, Quality Control, Finance etc. are directly or indirectly linked up with the profit performance of the organization. These departments contribute something in the revenues and the profits of the organization. So, separate performance measurement of these divisions is essential to improve performance of the whole organization. In other words, it can be said that, when the organization is in the profits, it is not essential that all the divisions are performing at the given level and contributing in the profits, but when all the divisions are performing at the given level and contributing in the profits, the organization surely earns the profits. Accordingly, the key functional divisions of the organizations should be the Profit Centers. The sales incurred by the organization are the revenues in real terms, but for using the responsibility accounting concept, the Standard or Average estimated Sales for the period are taken and not the actual sales incurred. This enables to measure the performance of the sales division. For other divisions, the revenues can be as under,

Table 3
Divisional Revenues

Divisions	Revenues options
Production	Quick Output in units in the given capacity, Cost saving and Zero defect production
Marketing	Generating new customers, Searching new innovative modes of marketing and Cost saving
Finance	Optimum capital structure, Economical mode of finance, Strategic investments decisions and Liquidity
R&D	Increase in sales due to innovative research and designs.

The revenues options shown in the Table 3 are more or less financial and affect the profits of the company up to a great extent. These revenue options can be the performance measurement tools for the respective divisions. But ultimately, the sales of the company are only the direct revenues.

Profit Center Concept

According to Peter Drucker, “Profit Centers divide a company into smaller entities, allowing entrepreneurs to measure results more easily. These results can be used to hold each unit accountable for desired profit levels or simply to ensure that they are generating sufficient profits”.

Thus, in an organization when financial performance of the center, division or department is evaluated in terms of profits (revenue – expenditure) then the center, division or department is termed as the Profit Center. It is a separate segment of a business for which costs, revenues and profits are separately calculated. It is a branch or division of the company that creates Profits individually and separately from the main organization. The costs (which are direct divisional costs) are subtracted from the revenue of the division. (by eliminating Allocated costs which are common to all divisions in the organization.) Profit Center is also called as the Contribution Center or Financial Performance Center. The organization can create better management control on its operations by converting its key functional units into the profit center.

Profit Center is a segment of business organization, which is responsible for the cost it incurs as well as the revenue it generates. It is a profit making responsibility center in the organization. The organization has an opportunity to convert its key divisions (production, marketing and sales) into the profit centers. It is a strategic tool of the performance measurement and strong management control. Profit Center is responsible for the Profits (Revenues minus Costs of that division) of that particular division.

The large scale manufacturing units often use the profit center system by converting their main functional divisions such as production, marketing or sales, into the profit centers. In this case, they decide Transfer Price for the internal transfers of goods or services. It is the price at which divisions of a company transact with each other and these are treated as the profit centers. The transactions may include the trade of raw materials, components and specialized services also. But for small or medium scale manufacturing units, such a system is not followed because of their restricted organizational structure, limited expertise skills and lower profitability. Many of the units have lack of departmentation also. These companies have good opportunity of converting their major functional division (usually the production division) into the profit center.

Figure 1
Functional Division as a Profit Center

The usefulness of Responsibility Accounting is purely the internal control aspect for the company. It enables company to establish internal control over the performance of its key functional divisions. When the division has to be converted into the profit center, the performance of the division is measured in terms of divisional profits and divisional profit is ascertained by deducting divisional expenditure from the divisional revenues (As mentioned in Table 3) or from the standard (budgeted) sales of the main organization.

STATEMENT OF THE RESEARCH PROBLEM

This research study is based on two statements of Hypothesis (H) i.e. H-0 and H-1

H 0 - The SME auto components manufacturing units usually follow any traditional system for their divisional performance measurement.

H- 1 – The SME auto components manufacturing units are not familiar to the concept of Responsibility Accounting as a performance measurement tool.

RESEARCH METHODOLOGY

This research paper is based on face to face interaction with SME auto components located in Pune (Maharashtra.)

The relevant primary data for this research has been collected through personal visits to 3 SME auto components units. The selected units are in manufacturing of the components like gear boxes, steering wheels for four wheelers, sheet metal pressing etc. All these units are selling their components to commercial vehicles and light motor vehicles manufacturers. The annual turnover of the units is between Rs.50 crore to Rs.300 crore. The primary data is consisted of cost and expenditure details of the units, sales turnover, profit margin and the major practical problems faced by the SME auto components in their regular operations.

The secondary data is collected from the published reports of the selected units, relevant reference books and websites.

OBSERVATIONS AND FINDINGS

From the research it is observed that the selected SME auto components units have good market demand and ever increasing sales turnover every year.

However these units have major proportion of their cost investment in the manufacturing activity only (about 75% to total costs). The manufacturing costs are uncontrollable up to a great extent. So, it has become quite essential to establish Responsibility Accounting system in the Production Divisions of the units.

At present, these units evaluate performance of their production divisions on the basis of quick and timely supply as per the demands**.** (Accordingly **H- 0** is tested and correct.) They are ready to compromise with increase in costs for maintaining quick and quality supply of the product components. Due to this, the cost control over production may become problematic.

The units measure performance of their Production Division with the following criteria. **(H-0)**

Criteria 1: Timely and quick supply as per the orders.

Criteria 2: Zero defect production

Criteria 3: Standard Cost v/s Actual Cost

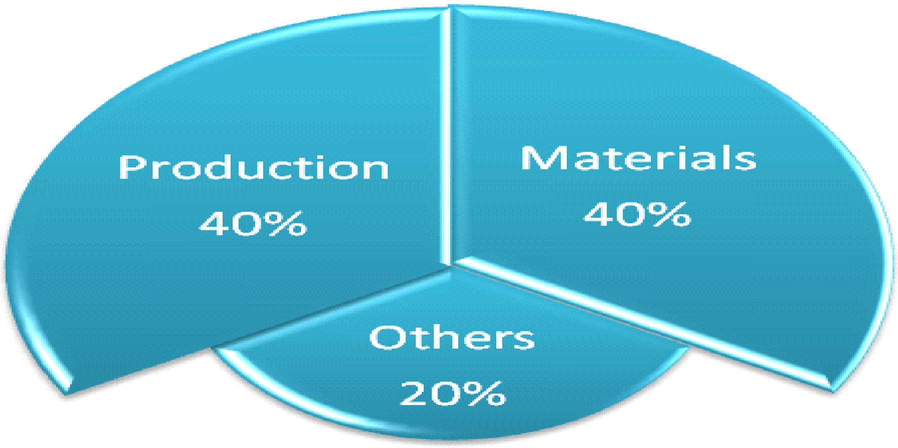
However, these units do not follow any particular criteria for performance measurement of their divisions. The criteria mentioned above are only the traditional criteria. The units are experiencing some common problems. These are,

- Use of traditional costing system.
- Very lower profit margin of maximum 8%.
- Not allow to decide the final prices for the selling of components. The clients are the price makers and they force to negotiate the final prices of the auto components.
- The actual costs incurred are many times much higher than the standard costs. The cost standards are set on total cost basis only.

(Accordingly **H- 1** is tested and correct.)

The SME units incur total 80% of its Total Cost on actual manufacturing and materials purchasing. The other divisions in the units do not have separate individuality and are treated as other divisions only. The units do not have the divisions like marketing and R&D as the customers are fixed and they only decide for the components designs. The overall production output is fully customized. The units are lacking of specific organizational structure. The production division is the key and only division in the units. The other divisions are treated as the administrative units.

Figure 2
Cost Structure of the SME Auto Components Units



APPLICATION OF RESPONSIBILITY ACCOUNTING SYSTEM (PROFIT CENTER ACCOUNTING)

An application of Responsibility Accounting System in the production division of the SME auto components units is quite simple. They can use the following type of accounting system and measure the performance accordingly,

Steps for turning out Production Division as a Profit Center

- To transfer all the Prime Costs and Factory Overheads to Production Division. or
- To transfer entire Prime Costs but to transfer only specific Factory Overheads to the Production Division only after proper classification,

Example: SME Auto Component Unit X.

X company has average turnover of Rs.325 crore (aprox.). This company has big customer like Tata Motors which regularly purchases the Sheet Metal Pressing Components for its light vehicles like Indica, Indigo and Safari.

The production related costs of the X Company are given below,

Table 4
Performance Report of the Production Division for the A.Y 2009-10

Heads	Standards.	Actual	Actual
	Rs. in Crores	Rs. (in Crores)	Rs. (in Crores)

Prime Cost (Entire)			186.00
Long Term Variables:			
Power and Fuel		10.10	
Factory Electricity		1.80	11.90
Fixed Controllable:			
Indirect Wages and Salaries		30.40	
Repairs and Maintenance of Machinery			
Repairs and Maintenance of Shafting		5.70	
Belting Repairs and Maintenance			
		1.40	38.20
Total Costs Transferred to Production Division		0.70	
Profit from Profit Center			
Sales of the Company (Standard or average figure)	**88.90** **325.00**		**236.10**

Factory Overheads (Nature of Cost wise)
Long Term Variable: Power and Fuel and Factory Electricity (100% transfer)
Fixed Controllable: Repairs and Maintenance of Machinery and Shafting and Renewals and Indirect Wages and Works Salaries (100% transfer)
Fixed Uncontrollable: Depreciation on Machinery and Shafting and Factory Rent (**not** to be transferred).
Sales of the Company: The sales are taken as the standard or average annual turnover. The actual sales can be more or less than it. However, the company always tries to maintain the expected standard sales turnover. The costs transferred are actual. The company is not following the performance measurement system as Standard Costs v/s Actual Costs. The average turnover of the unit is Rs.325 crore and the profit margin is Rs.88.90 crore (i.e 27.35%). The task given to the production division is to retain the steady profit margin to the standard or average sales turnover for the given period and the performance of division can be controlled accordingly.

In the above table, the performance of the production division of the X Company is shown on the basis of the actual costs incurred on the manufacturing activities. The company has not determined the standard costs. Only the production and related costs are transferred to the production division. The Fixed Costs which are Uncontrollable such as Depreciation and Factory Rent are not transferred to the production division even though these are the factory overheads. This is because; these two overheads are to be incurred by the company in any cases (profit or loss, excess production or less production). This means, the costs which directly get affected by the change in production volume directly or indirectly, only are transferred to the production division. Here the performance of the profit center is its contribution in profits of the company or the profit earned only from the manufacturing activity which is Rs.88.90 Crore (27.35% to the Standard Sales).

Now the question can be raised that how the company will improve the performance of the production division? The company can improve it by,

- The production division should follow the production planning exactly as per the standard and predetermined sales during the period.
- The division should maintain the steady profit margin (e.g 27.35% in the above case.) to the standard sales turnover of the given period.
- The division should make clear classification of the production costs as Controllable and Uncontrollable.
- The division should keep continues track of its financial performance and for this; the performance reports (as shown in table 3 and 4) should be prepared periodically say monthly, quarterly or six monthly.
- As the standard sales are taken for checking out the performance, it can create control on the performance of the sales division also. The sales division will try to achieve standard sales for the given period.
- **Profit Margin** (27.35% in above case) should be the performance indicator for the division. The unit should consider this figure as a standard minimum margin for the period. An increase in divisional profit is the outcome of either increase in actual sales and or of maintaining steady production costs.

Table 5
An Interpretation of Production Division's Performance (Ratios) for the A.Y 2009-10

Ratios	Results (Standard)	Results (Actual)	Variance
Divisional Profit Margin	**27.35%**	**?**	
Prime Cost to Standard Sales	**?**	57.23%	
Long Term Variables (Total)	**?**	Rs.11.90	
Fixed Controllable Costs (Total)	**?**	Rs.38.20	
Total Production Cost to Standard Sales	**?**	72.65%	
Actual Sales to Standard Sales	Rs.325	**?**	

The units should have to determine the standard budgeted figures for the above and check the results accordingly. They can go for necessary steps for improvement in the areas of unfavorable variances. This enables unit to keep direct control on the performance of the production division.

CONCLUSIONS

An ultimate conclusion is about the performance measurement and control which lacks in the selected SME auto components units. From the survey, it is concluded that the profits of the company hugely depend upon the sales turnover and the demand for SME auto components largely depends upon the market demand of auto vehicles which is ever increasing in the recent period. The SME auto components units are not aware about the concept of Responsibility Accounting. They do not follow any authentic system for the internal performance control. The job of production division is not to generate or to increase the sales, but to support the sales by keeping the expected output ready (quantitative and qualitative). If the company fails to generate the expected sales in any period, then there will be the wastage of overall costs which initially incurred on the production activity. The company can rectify this by adopting the system of Responsibility Accounting and especially by converting its production division into the profit center. In the large scale organizations, the production divisions usually perform as separate profit centers. But the SME organizations are still unaware about such a system of the performance measurement. These organizations can adopt the profit center system to measure the performance of their main divisions and especially of the production division. The profit center accounting system is simple to operate (as shown in the above tables). It is nothing but the Revenue and Expenditure Account for the concerned division. The profit calculated is the profit of the division and not the profit of the company. Thus, in profit center, the profit figure is used only for the performance measurement and it is the divisional profit and not the actual profit from the business operations. By adopting the Responsibility Accounting system, the top management will be in a better position to synchronize the overall goal congruence at divisional levels.

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