



PERFORMANCE MEASUREMENT- AN INCLUSIVE APPROACH FOR SMEs WITH SPECIAL REFERENCE TO AUTO COMPONENTS MANUFACTURING UNITS

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Abstract

Organization needs to be careful about measuring its performance especially in a globally volatile scenario of the market. Recent globalized market trends would not allow any conventional approach towards the performance assessment and based on decisions. Instead the same is expected to be multi-tasked.

Performance measurement gains more significance in the Small and Medium Scale Enterprises (SMEs) because of their B 2 B business nature and the derived demand orientation. Many of the auto components manufacturing units are operated on small or medium scale basis. Their demand and supply gets affected highly due to the market volatility in the automobile industry (original vehicle makers) which otherwise increases rapidly but has shown fluctuations in last couple of years.

The hypothetical approach of this research is about negligence and conventionality of the auto components manufacturing units towards the performance measurement in their organizations.

The micro level research undertaken aims to study and analyze how the auto components manufacturing units are formally sincere and careful about measuring their performance on both the fronts i.e. financial and non-financial. On macro level, an attempt is made to explain importance of periodic formal performance measurement with some strategies for the SMEs.

The methodology adopted for research includes direct interaction and unstructured interviews with senior executives in selected SME auto components manufacturing units in Pune, Maharashtra. The ultimate finding is that the selected companies have very conventional approach towards the performance measurement. They are recommended to be keen and strategic about measuring the performances both financial and non financial fronts.

Key words: Cost, Customization, Innovation, Performance and Profitability

Introduction

The Small and Medium Scale Enterprises or SMEs in India have restricted their limits as far as their overall measurable performance is considered.

The SMEs are fully privatized organizations. So they enjoy benefits from the Government such as little control, more liberalization and other promotional aids. The SME sector has provided 60 Million employments and generated 1.3 Million jobs in the recent period. The sector produces around 8000 quality products. The SME contribution in country's GDP was 17% in 2014 and the same is estimated to be 22% in 2016.

But such a wide spread sector has several problems especially with their internal operations. The auto components manufacturing companies in the SME sector are purely the supply-based and their performance is nothing but the supply elasticity, considering the present market volatility in the Indian automobile sector. The auto components units are on weaker side as far their financials are considered. The continuous demand and supply of components to the vehicle makers does not add so much in the bags of auto components makers. The auto components industry is increasing with size only (600 organized units in India in 2015 as per the ACMA report.) But it is still weaker on financial fronts because of the limited sales turnover, very less profit margin, huge imports (which are increasing rapidly since last 3 years with a range of \$5 Billion to \$10 Billion and it has caused a trade deficit of \$4 Billion.), high cost on borrowings and materials etc. Along with stated financial problems, some non-financial problems such as lack of skilled manpower, limited customers etc. are also not to be neglected.

The auto components manufacturing industry in India has wide spread units in the entire country. This rapidly growing industry is contributing sizably (2.1% in 2015) in the GDP of India. The auto components manufacturers (Tier I, II and III) achieved annual turnover of \$30 Billion in 2015 in which the exports include \$5 Billion. The figure was considerably higher than that of the previous year's (2014) figures, which were \$26 Billion and \$3.8 Billion respectively. The industry estimates a target turnover of \$110 Billion per year till 2020. The industry is growing at 20% CAGR since 2000. But this is an external scenario of the sector. This bright side of picture indicates only performance as a whole.

India started experiencing the globalized change into the automobile sector due to the entry of some foreign auto players such as Ford, General Motors, Chrysler, Toyota, Honda, BMW etc. in the domestic market. The prime reason of this is the low cost profile especially of the manufacturing operations of the auto components manufacturing in India. The low cost profile cannot be a characteristic but it is a loss as far as the domestic auto component sector is considered.

Performance Measurement is actual evaluation of the organization's efforts against the predetermined standards. The auto components companies and the entire SME sector should be keen about their performance consistency and for this they are recommended to go for some strategic approaches which would provide them a strong and structured model of performance measurement. These approaches are:

1. Performance Measurement – Performance based.
2. Performance Measurement – Competency based.
3. Performance Measurement – Leadership based

Conceptual understanding of performance measurement

(Esque Timm J and Patricia A Patterson): “Performance Management is a process of designing and executing motivational strategies, interventions and drivers with an objective to transform the raw material of human resource into performance”.

This definition emphasizes on employee's performance which can be measured individually and as a team. It is suggested to add other resources of organization in the above definition such as money, machine, material and management. However it also should be noted that performance management and performance measurement are not synonymous terms.

(U.S General Accounting Office Glossary- May 2005): “Performance Measurement is an ongoing monitoring and reporting of program accomplishments, particularly progress towards pre-established goals. It is typically conducted by program or agency management”.

This definition gives more stress on the goals and objectives of the organization that should be well decided. Each and every function of organization needs to be matched with the organizational goals.

(Bourne, Neely, Mills & Platts- 2003): “A Business Performance Measurement System

(BPMS) refers to the use of a multi-dimensional set of performance measures for the planning and

management of the business.”

This is more precise definition because of inclusion of two key aspects in the same. Different performance measurement norms have to be used in the business organization. Such a multi-dimensional approach consists of several perspectives of the performance measurement which are also emphasized in the ‘Balanced Score Card’ model that Dr. Robert Kaplan and David Norton developed (1992). The BSC perspectives of performance measurement (Financial, Customer, Business Process and Learning & Growth) indicate the multi-tasked approach which has been studied in this research paper.

Organization needs to be careful about measuring its performance, as performance is the prerequisite for allocating resources within it. The scope of measuring performance is not only at organizational but also at individual and at departmental level, because every department is considered as a responsibility center. Performance measurement is nothing but answer to the question, ‘What is quantitatively happened?’ while performance appraisal adds another question, ‘Why it is happened?’ i.e. a qualitative insight of actual performance.

Many authors and experts in the management domain have suggested various indicators of performance measurement such as competitive advantage, flexibility of organization, financial performance, resource utilization, quality of service, innovation etc. Out of these, the first 2 indicators reflect the business success by way of improvement in the Bottom Line whereas the subsequent 4 are the determinants or means for the competitive success.

The organization in spite of its size, type and nature of activity, should balance an appropriate range of performance measures. While choosing measures it is essential to ensure that:

1. A product life cycle is smooth and continuous.
2. Suppliers’ delivery is well in time.
3. Quality standards are duly fulfilled.
4. Costs like repairs, maintenance, shipments and backlog are minimum.
5. R& D costs are well managed.
6. Labour turnover is measured on priority basis.
7. Finance and Accounts Divisions are centralized divisions.

All these are not the performance measurement tools or techniques but the elementary requirements of the sound performance measurement system if the same is to be applied as a

A concept of performance measurement can be elaborated with its proper classification as follows:

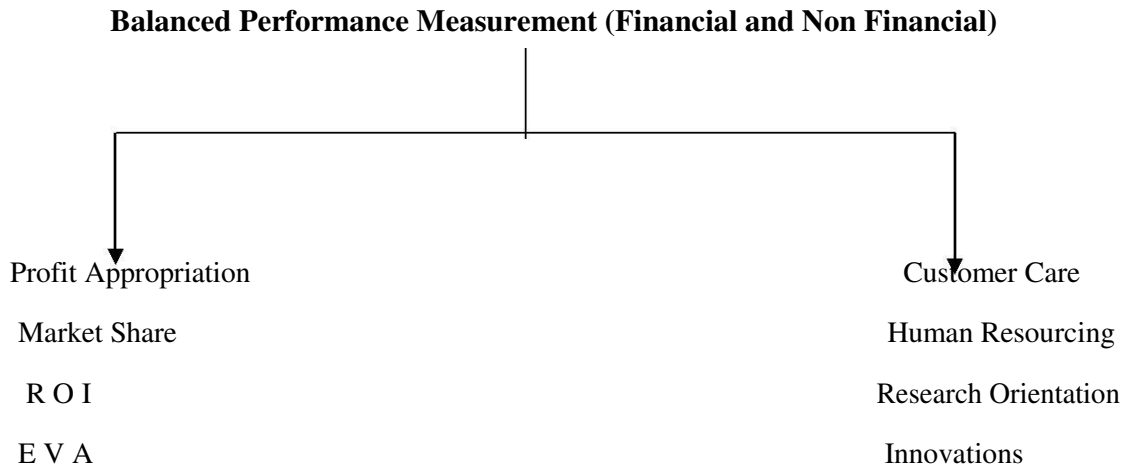


Figure 1: Balanced Performance Measurement (Financial and Non Financial)

However the SMEs require different approach towards the performance measurement. They should concentrate and evaluate their present available resources but prior to that the strategic goal setting is essential for them. A planning process for SMEs would be as follows:

1. Define objectives and goals that are achievable.
2. Decide strategies for achieving the objectives and goals.
3. Assess resource availability (present and acquirable).
4. Feedback testing of previous performances.
5. Establish performance based work culture.

Up to what extent a balanced performance measurement (shown in Figure 1) is suggestible to the SMEs? The answer is, 'Up to very little extent'. See given table.

Financial Performance	Suitability and Achievement Probability	Non Financial Performance	Suitability and Achievement Probability
Profit Appropriations	Very High	Customer Care	Very High
Market Share	Limited	Human Resourcing	High
ROI	Very High	Research Orientation	Limited
EVA	No	Innovation	High but customized

Table No. 1: Balanced Performance Measurement in SMEs

The performance indicators such as Market Share, EVA etc. are suitable and used in the large businesses because of their nature, size and capital investment. The SMEs need to focus on non financial performance indicators mainly and to mobilize their available resources accordingly. The above table shows that the Balance Score Card or BSC has limited use in the SMEs. The reasons are as follows:

1. Financial performance is hard to be measured on the basis of Market Share and EVA as these two cannot be the absolute terms for the SMEs.
2. Product Life Cycle is not clearly defined because the products are fully customized. So the quality standards and R&D operations are to be undertaken as per the specifications of the customers (large businesses) only.

Data Sources and Methodology

This research was undertaken with the following objectives:

1. To study and analyze performance of the selected auto components manufacturing units.
2. To establish an authentic performance measurement policy in the selected units.
3. To study scope of performance measurement in SMEs.

Accordingly **10** auto components manufacturing units in Pune - Maharashtra, were selected for the hypothesis testing. The selection criteria was,

1. Turnover of the companies which should be Rs.10 Crore to Rs.100 Crore.
2. Number of employees which should be within 50 to 200.

Out of 10 companies, 4 companies were within turnover of Rs.50 Crore to Rs.100 Crore and 3

companies each within Rs.10 Crore to Rs.20 Crore and Rs.20 Crore to Rs.50 Crore respectively.

The methodology adopted for research was direct interaction and unstructured interviews with senior executives (especially Accounts or Finance Managers) in selected SME auto components manufacturing units.

Empirical Results and Analysis

The approach of the organization towards performance measurement is very important. Prior to this, the profile of the organization is also very important aspect. With respect to this, the results of selected auto components manufacturing units are as follows:

Organizational Profile

1. **Quality Standards:** The selected companies have certification of ISO or ISO/TS or both. These certifications are the indicators of the standardization and quality.
2. **Span and Volume:** The SME auto components manufacturing units are classified as,
 - I. **Third Tier Suppliers:** (III Tier) which involves the companies in manufacturing of supporting equipments for any auto vehicle such as Rubber, Glass, Steel, Plastic, Aluminum, Engine Parts etc.
 - II. **Second Tier Suppliers:** (II Tier) which involves the companies which make design of vehicle system or auto bodies.
 - III. **First Tier Suppliers:** (I Tier) which provides major system of vehicle to the vehicle manufacturer. The entire designing process and innovation in it is undertaken by the I Tier companies.

All the selected 10 companies were the Second Tier (II Tier) companies.

3. **Product Variety:** All the selected units are in manufacturing of variety of auto components such as auto body, electrical parts, engine parts, sheet metal parts, drive transmissions, steering parts, suspension and brake parts, fuel tank, exhaust systems etc. Each company is making more than one component.

4. **Customers:** Pune is a big automotive hub in recent past. The zone has captured around 29% of the Indian auto components market. Many of the auto vehicles companies have established their manufacturing units in and around Pune city. Some of these companies are Tata Motors, Mahindra & Mahindra, General Motors, Volkswagen and Premier Auto. The selected auto components companies have good demand from the specified auto vehicle makers especially from Tata Motors, Mahindra and Premier Auto.
5. **Organizational Structure:** The Line and Staff organizational structure was experienced in all the selected companies. Instead, the Functional structure will be useful for them. It was observed that the selected auto components companies have very simple type of organizational structure. They operate on small to medium scale basis but the demand and supply of auto components is

continues and in bulk quantity. The companies are working with their maximum capacity utilization. Around 50 to 200 employees are working in a company and majority of them are in the production divisions as operators, supervisors and workers. Very few employees are working in the administrative divisions. Given below is a typical format of organizational hierarchy in the selected companies.

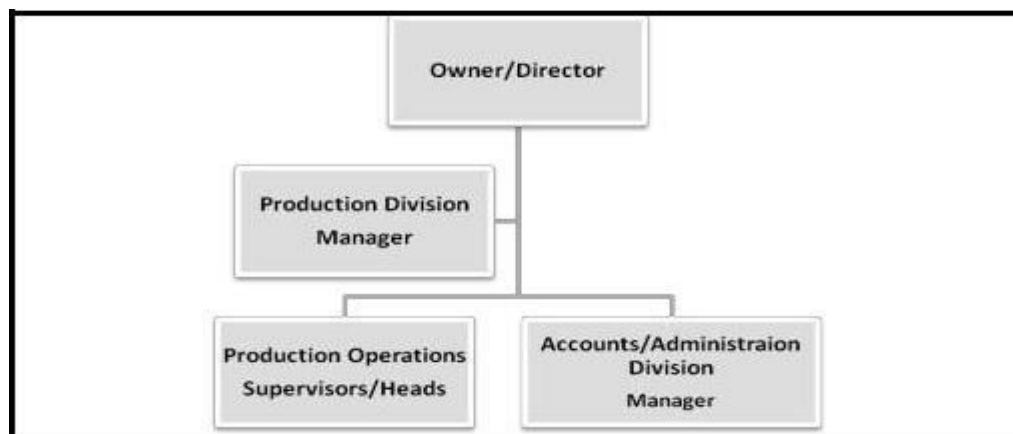


Figure No. 2: Line Functional Organizational Structure in Auto Components Companies

Production division is a key functional division. Accounts division takes care of periodic accounts reporting. Administrative division undertakes activities like recruitment, selection, salaries and wages calculations etc. The respective managers are the heads of the divisions but their decision making authority is restricted to operational or functional level only. The ultimate decision making rests with the top management i.e. Owner or Director. Production division is a

key division in the companies on the basis of:

- i. Work volume
- ii. Costs incurred (80% to 90% of total cost)
- iii. Employees engaged

Performance Measurement

During interactions with executives of the companies, it was observed that the selected companies are measuring their performance on the given criteria. The criteria are not specific but multiple such as:

- 1. Increase in Sales
- 2. Increase in Profits
- 3. Saving in Costs
- 4. Customized Innovative Production
- 5. Quick and Timely Supply of products

But the criteria specified are not standardized and hence should not be considered as authentic tools or methods of performance measurement.

It was observed that the selected companies have reluctant approach about any standardized performance measurement or control system. The company may use some common tools such as Budgeting, Funds Flows or Cash Flows etc. The financial results can be interpreted through these tools. The most important financial interpretation is about the working capital management.

The feedback of selected companies with respect to all the specified tools was dissatisfactory.

These units don't have an authentic policy towards the Cash or Working Capital Management.

The feedback of the companies' executives with respect to all these was as follows:

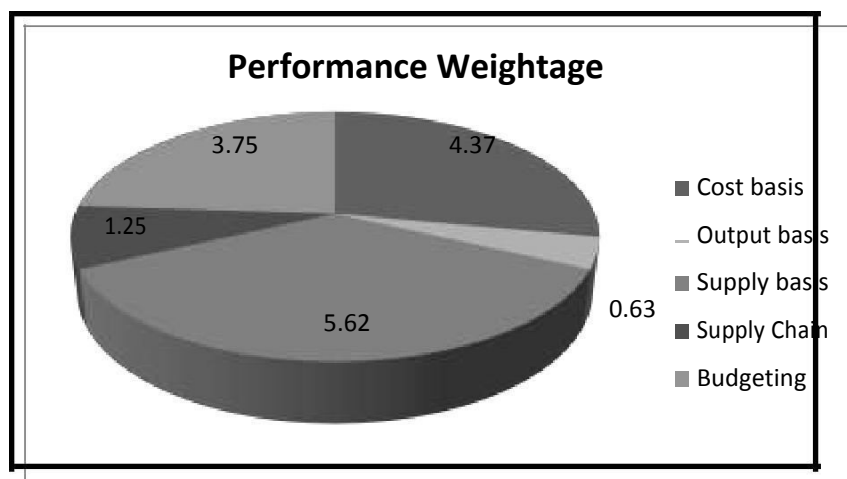


Figure No. 3: Standardized Performance Measurement

The companies' executives provided the stated feedback about the standardized performance measurement system in their companies. Almost every auto component unit is very particular about timely supply of components to the auto vehicle makers. For this, the actual production or output should be intact so as the supply chain in the production and distribution. But the companies are reluctant about these two major aspects of the performance and control. The production budgets are prepared as per the dispatch-orders received from the clients. Likewise the companies are very sensitive about the cost control. The production cost is high (around 80% to 90% to total cost) and the same has to be systematically allocated. In the selected companies, an authentic cost control has been irregularly followed.

Operational Problems

The auto components manufacturing organizations have several problems as far as their regular operations are considered. The companies' executives provided detail feedback about the same aspect. According to them, the operational problems are internal as well as external. The external problems due to which the internal operations interrupted are as follows:

- i. Market volatility in automobile industry.
- ii. Huge competition in auto component sector.
- iii. Shortage of skilled labour.
- iv. High cost on borrowings.

But on internal level, the auto components units also have several serious problems due to which their overall performance gets affected. The feedback with respect to this was as follows:

- i. Shortage of supply of material from vendor.
- ii. Extra load on production due to rush orders.
- iii. High cost of machine maintenance.
- iv. Technological problems.

A combination of all these (or even a single) internal problems restricts their quantified performance up to a large extent.

Feedback about new techniques of performance measurement

Recommending some authentic tools or techniques of performance measurement to the selected auto components companies was the major objective of the research. Accordingly some accounting techniques like Responsibility Accounting and Profit Centre were recommended to them and the executives provided mixed feedback on the same. The feedback was as follows:

According to finance managers of the selected auto components, the recommended accounting techniques are useful for them up to a limited extent only. Some companies provided negative feedback giving the following reasons.

1. The components' orders from the clients are fully customized and standardized with respect to the quality, quantity and even prices also. Due to this, the periodic budgeting may not be possible. The budgets are prepared as per the orders received from clients.
2. Costs incurred on manufacturing components are very high and uncontrollable.
3. New techniques like Responsibility Accounting or Profit Centre are time consuming as far as administrative work is considered. It requires additional manpower.
4. The decision making is centralized and rested with the top management. Any new technique of accounting can be used with approval of the top management only.

Goal Settings

The most important observation during the data collection was the lack of goal settings in the selected auto components units. The feedback was taken about their long term goals. The response was as follows:

Turnover Range of Companies (Rs. in Crore)	No. of Auto Component Companies (10)	Long Term Goals	Nature of Goal	Actual Interpretation
Rs.10 to Rs.20	3	Increase in Sales and Profits every year	Quantified	Strict measurement essential year wise.
Rs.20 to Rs.50	3	Product Monopoly	Quality Innovation based	Customer retention & Product essential.
Rs.50 to Rs.100	4	Scale Conversion	Quantified	Investment planning essential.
		Market Leadership	Strategic	Restructuring is essential.

Table No. 2: Goal Setting in Auto Components Companies

Conclusion

The auto components manufacturing organizations shall consider performance measurement on priority basis because the auto vehicle makers largely depend upon them. The following table indicates role of auto components units in producing the vehicles.

Type of Cost	Mahindra & Mahindra	TATA Motors	Maruti Suzuki
Manufacturing	217.89	1652.22	1278.20
Components Buying	12437.87	24759.49	22435.40

Table No. 3: Expenditure of Auto Vehicle Makers (Rs. in Crore) in 2014-15

The automobile companies will have to incur huge cost on buying the components. The manufacturing cost includes mainly the assembling and engine manufacturing. The vehicle manufacturers have very effective strategic supply chain management that makes timely vehicle production and distribution. Due to this, the auto components companies are very much keen about supply aspect (as shown in Figure 3). A perfectly competitive market of auto components also makes them alert and responsive.

Taking into consideration all these aspects, the auto components manufacturing companies are recommended to adopt some strategic measures for their performance evaluation.

The recommendations are as follows:

1. Performance Based Measurement System: The auto components companies should have to focus on quantified and measurable performance. Accordingly the financial performance to be measured strategically. Some methods are:

- i. Yearly increase in sales turnover (overall and customer wise or main product wise)
- ii. Yearly increase in profits after making all provisions of taxes and mandatory appropriation payments such as bank interest (which observed as very high for the selected companies.) and others.
- iii. Cost Management and Control by establishing standardized cost budget system.
- iv. Proper estimation of avoidable and unavoidable costs.

2. Leadership Based Measurement System: It was observed that the top management of the companies holds all decision making by delegating only functional authority to the managers. The managers of finance or accounts divisions perform only routine jobs. Instead, it is strongly recommended that the top management should have to delegate much more authority to the finance division. Finance manager should be considered as CEO or CFO and the centralized control should be in his hands. Accordingly, he may design the following systems of evaluating the performance.

- i. Operating Cycle (cost or finance based)
- ii. Operating Cycle (monetary output based)
- iii. Master Budget (customer and product based)
- iv. Supply Chain Management

3. Competency Based Measurement System: The annual turnover and existing manpower of the selected auto components companies is countable enough but not so high. Some of the selected companies have more than one production plant in and outside Pune. A plant wise turnover is limited and its incremental proportion is less. The selected units are medium scale units (as per the definition of SIDBI and SSI) and they should keep long term vision of converting them into the large scale. A competency based performance measurement system is essential in the units. Such a system offers a complete strategic approach.

4. **Customer Relationship Management (CRM):** This is perhaps the most important recommendation to the auto components units. As it is observed that the units have limited number of clients only, it is quite essential to expand the database. The auto components units should have effective marketing division which may be treated as SBU or Profit Centre. It is true that the current situation of automobile market is not very satisfactory, but it is a temporary phenomenon. The vehicle manufacturing companies are adopting different competitive strategies for compensating the reducible sale of their vehicles. They are offering various discounts schemes on Ex-showroom prices of the vehicles so as simple and friendly vehicle financing schemes at teaser interest rates by the banks and finance companies. This is a market condition in which the auto components manufacturing companies have opportunity to reconstruct their business operations and make them internally stronger. Marketing strategy for the production or product mix, pricing of components, target markets (or clients), distribution and product promotion and very close access to the export market can be adopted by the auto components manufacturing units.

To conclude with, the SME sector should be more performance oriented and a scope of performance measurement can be extended in the sector in consideration with the following:

1. Nature and volume of business that can be tiny, small or medium.
2. Whether the unit is organized or unorganized. (as In India, 600 organized auto components manufacturing units are registered with the ACMA)
3. Approach towards formal performance measurement.

References

Books

- *Amruta Oke, Sunil Ujagare, Vilas Nandavadekar & Gauri Kulkarni (2011), 'Organizational Behaviour and Principles and Practice Management'. Sixth Edition, Nirali Prakashan, Pune*
- *Charles F. Kinght & Davis Dyer (2005). 'Performance without Compromise'. First Edition. Harvard Business School Press. Bostan Colin White (2007), 'Strategic Management'. Palgrave Macmillan, New York.*
- *Mark Jenkins & Veronique Ambrosini (2007), 'Advanced Strategic Management- A Multi-Perspective Approach'. Second Edition. Palgrave Macmillan, New York*

- Mintzberg, Ahlstrand & Lampel (2007), 'Strategy Safari'. Second Reprint. Dorling Kindersley (India) Pvt. Ltd. New Delhi.
- Michel Armstrong and Angela Baron (2011). 'Performance Management (A Strategic and Integrated Approach to achieve Success.)'. Tenth Edition. Jaico Publishing House. Mumbai
- Neeta Baporikar (2002) 'Entrepreneurship and Small Industry'. First Edition. Himalaya Publishing House, Mumbai
- Neeta Baporikar (2011), 'Entrepreneurship Development and Project Management'. Second Edition, Himalaya Publishing House, Mumbai
- P.Subba Rao (2010). 'Business Policy & Strategic Management'. Second Edition. Himalaya Publishing House. Mumbai
- Uday Kumar Haldar (2010). 'Leadership & Team Building'. First Edition. Oxford University Press.

Journals

- Alastair Shaw (2009) "A Guide to Performance Measurement and Non Financial Indicators". The Foundation for Performance Measurement, Kingston, Surrey
- Frances-Santos, Monica and Andy (2007) "Towards Definition of a Business Performance Measurement System". International Journal of Operations & Production Management, Vol. 27(8) U.K

Websites

- www.automotive/horizon/sulekha
- www.gao.gov/special.pubs/gg_98026
- www.fpm.com/journal/mattison.htm
- www.icra.in/files/ticker/05092011-n-indian_auto
- www.small-medium-business.blogspot.com
- www.smetimes-tradeindia.com/2011/imports
