Management Accounting

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Introduction

Financial Accounting concerns the preparation and reporting of accounting information for people outside of the organisation, and is regulated to ensure that the status of the organisation is not misrepresented. It is highly aggregated, objective by definition, and must be reliable. This means it may not be relevant, and is used more as a record of performance of the business in the past.

Contrast this with Management Accounting, which is practiced to ensure that managers within an organisation are aware and savvy about the current status of the organisation and how it is developing. It is for internal usage only, and its format may vary from one centre in the company to another. It may use information from non-financial sources to project into the future about goals and expectations. This document concerns Management Accounting.

1 Purpose

Management Accounting represents the systems to support an organisation's structure and formation, and the implementation of the strategy that an organisation plans to carry out. It should provide information to help managers manage their resources effectively, through careful planning and effective use of control within an organisation. For example, it may predict the ability of the organisation to grow in the future with a given predicted revenue - ie. how the organisation manages under certain projected scenarios). It should estimate the cost of outputs of an organisation (including tangible outputs such as a product, to intangible outputs such as a particular service) to support the development of future strategies and decision-making, thus helping the organisation to maintain a competitive advantage.

1.1 Place within the Organisation

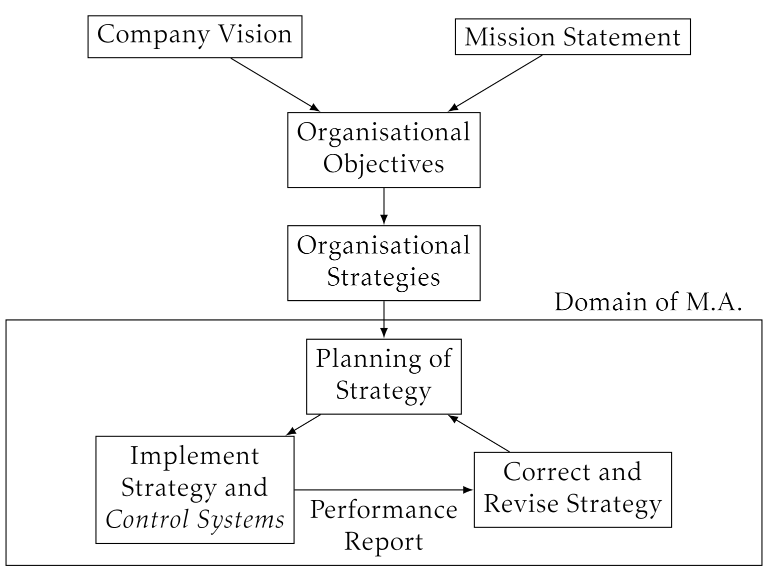

Figure 1: Represents the place of Management Accounting within an organisation.

1.2 Goals

One potential goal of management accounting is to motivate all staff (standard employees and managers) to maximise the *organisational benefit* of their work. One possible control system for this is by using performance measures of employees, and appropriate reward systems, to deliver the required benefits.

Something to consider is the trade-off between the cost of organising the management system, and the benefit that this entails. Management is a *support function*, meaning that it is an indirect contribution to the performance of a company; that is, its benefits may not be immediately tangible. The costs of management include salaries, management resources (such as computers and relevant training), data required to plan and manage effectively, and costs associated with the time taken for managers to understand and digest information available to them into something useful.

One potential management decision might be the discontinuation of a financially unproductive product (one which only breaks even) in order to remove management overhead *within* the company structure. Such decisions may be tough to explain to non-managerial staff as it may seem counter-productive. The benefits of being able to make such management decisions include improved decision making and planning, greater efficiency within (and fine control of) the company, and hence increased value to the customer and shareholder.

2 Components

There are several systems of understanding information associated with management accounting.

Costing System This involves understanding that a range of factors, not necessarily internal to the company, may cause costs to vary. Such external factors include the behaviour of suppliers, current world events (or state of the world economy), natural disasters and the actions of the competition.

Budgeting System This involves allocating realistic goals for budgets to certain workflows. Intelligent consideration of which complications are likely to occur is needed for an effective budgeting system.

Performance Measurement System If an organisation is to operate as efficiently as possible, measures must be taken to evaluate the performance of the systems that the organisation practices. This may involve benchmarking, refinement of existing processes, and even using specialist software to analyze the existing workflows.

Cost Management System This must maintain a proactive approach to managing resources and also reducing the costs associated with the organisation, not just controlling said costs. This may involve analysing the real causes of the costs incurred to the organisation and eliminating wasteful activities and workflows.

These techniques are needed in increasingly large organisations such as multi-national corporations (MNCs). Management Accounting may contribute to an MNC's competitive advantage. This might involve contributing to activitives improving the delivery and time flexibility of an organisation's output, as well as improving the quality, brand recognition and innovation associated with that product, while driving down costs.

In a world with ever-increasing global competition and globalisation, activities such as reducing import tariffs and quotas, deregulation of industries, privatisation of public-sector industries (espcially in developing regions - for example, privatisation of health care in China) and a gradual shift from a *production*-based economy to a *service*-based economy, all while satisfying increasing customer demands (due to new markets such as the internet and e-commerce).

3 Value Chain

A *value chain* is a set of linked processes, from the beginning (resource acquisition) to the delivery of something of value to the customer (a product or service). Understanding the value chain(s) within a company provides a framework for examining the areas incurring a cost on a business. Such an analysis might result in the decision to manufacture more of a product at night, as electricity costs are cheaper outside of working hours, however this would involve paying workers more for working unsociable times - weighing up such decisions is the responsibility of Management Accounting.

There are three primary sections of a value chain, divided up into several stages each.

UPSTREAM COSTS
This includes everything prior to manufacture/production.

Research and Development - this includes things like developing questionnaires to better understand the needs of the customer and current niche markets within an economy. It also involves investment into developing new manufacturing techniques which must be undertaken in order to keep up with the competition.

Design - not only does this include the cost of designing the product itself (ie. function and visual appearance) but also the cost of designing an efficient and appropriate manufacturing process, or sourcing one if it already exists.

Supply - this involves sourcing the required parts to manufacture them. Not only should the base costs of the components being supplied be minimised, but the source should be chosen intelligently to minimise transport and import costs, while maintaining optimal quality of the end product.

PRODUCTION COSTS
This includes everything during, or required for, continued production.

Collection - this includes the collection of required components from the selected supply. Hence, this ties in closely to the previous stage.

Assembly - the cost of the work effort (ie. man-hours) required to produce the needed volume of the product.

DOWNSTREAM COSTS
This includes everything after the product has been produced and delivered.

Distribution - this includes shipping and handling (where relevant) of the finished product, and storage where necessary.

Marketing - even if the product is perfect, the potential consumers must still be aware of the product. This includes the market research required for effective marketing.

Customer Support - after-sale services fall into this stage. For intangible output (eg. services, such as in telecoms) this might be a very large fraction of the total cost of the product.

The relative fraction of the cost of each stage might be disproportionate for certain targets (as mentioned with telecoms). For example, if a product is manufactured in a third-world country, the actual production cost might be minuscule compared to shipping and import costs. Carefully analysing the areas of higher expense in the value chain can help to identify *cost drivers* within an organisation.

4 Cost Drivers and Control

A *cost driver* is an activity incurring any cost to a company. The greater the cost associated to a given driver, the more accurate the description and understanding is of the behaviour of the cost. Conventional Management Accounting would believe that a cost is wither fixed or variable - contemporary understanding believes in a range of potential cost drivers, including *non-volume* cost drivers:

Unit cost is the cost of producing one unit.

Batch cost is the cost of producing a certain quantity of a product. This is understood differently from a product as, even if producing one unit costs x, producing n units need not necessarily cost nx.

Product cost is the total cost of producing the required volume of a given product.

Facility cost is the cost of producing all products produced at a given facility.

4.1 Cost Control

Cost control is an activity undertaken to better control the costs associated with the organisation as a whole. This might include *decentralization* of power and splitting the organisation into a hierarchy, with each level controlled by a dedicated sub-manager. The sub-managers will have better local information to more effectively manage their own area of expertise. This allows managerial training to be more specific and allow for future higher-level managers. This might increase the motivation and job satisfaction of the staff while allowing higher-level corporate management more time to deal with over-arching strategic issues, and react quicker and more effectively to problems and opportunities as a company.

4.2 Responsibility Accounting

This assigns responsibility to managers to run their own sub-units. This reinforces the advantages of decentralization, yet has the unintentional side-effect of potentially distracting sub-managers of the end-goal: organisational benefit. Ensuring mid-level managers stay on track, and not focus too narrowly on the performance of their sub-division, is called *goal congruence* and gets progressively harder to achieve in more decentralised organisation. Performance measures and employee reward systems again become relevant here to ensure the organisation stays on track, and departments within the organisation don't become competitive to the point of losing productivity.

5 Enhancing Productivity

5.1 Transfer Pricing

Transfer pricing is the price to transfer partially-complete assets through the value chain across departments - like an internal price. This cost occurs at the jump from revenue of a selling division to the cost of a buying division. Tracking this allows the selling division to record revenue and earn a profit based on the effort expended in producing the product. It allows the buying division to record the cost of the transformed asset to match against the company-wide revenue when it's eventually delivered (in its final form) to the customer outside of the company. The transfer price should:

- Result in profits accurately reflecting performance of the division.
- Encourage divisional autonomy.
- Most importantly, prioritise goal-congruent behaviour.

5.2 Evaluation Measures

Summary financial evaluation measures are performance of profit and investment centres. Three examples are:

5.2.1 Return on Investment

RoI measurs the performance of an investment centre. It it calculated as:

$$\text{ROI} = \frac{\text{Profit}}{\text{Investment Capital}}$$

ROI focuses on profit of an investment centre, and the assets needed to do so. It evaluates the objective performance of an investment center, but has the disadvantage of potentially encouraging short-term gain of the management, such as by asset over-use (by deferring asset replacement to preserve costs and avoid short-term investment and the resulting decrease in ROI - even if the end result is acceptable from the organisation's point of view), causing depreciation of the assets and expending long-term viability of the workflow, and competitiveness of the company.

5.2.2 Residual Income

RI is calculated as:

$$\text{RI} = \text{Profit} - (\text{Invested Capital}) \cdot (\text{Imputed Interest Rate})$$

Where *imputed interest rate* is an implicit interest rate not explicitly financially stated/demanded. It's based on the required rate of return that the organisation expects of what it invests, which is based on the expected rate of return of the organisation itself. RI has the advantage of promoting goal congruence, and encourages investment in projects yielding a positive residual income even if it results in a short-term reduction in ROI.

However, RI can't be used to assess performance of subdivisions of different size as the formula is biased in favour of larger businesses, and like ROI, may encourage myopic business decisions.

5.2.3 Measures of Shareholder Value

Shareholder value is the value of the business from the shareholder's perspective. Aiming to improve this may result in an objective increase in value of the business. This is called *value-based management*, and using shareholder value analysis to manage and direct a business is a solid framework for adding economic value to the business. It consists of four centers of analysis:

Valuation uses *cash flows* to measure value - care must be taken to discount future cash flows based on the risk associated with them (which, in term, is associated with how far into the future said cash flows are). Value drivers are the activities or actions creating value for aa business from the shareholder's perspective, and includes spread (such as globalisation), growth and sustainability (both economically and environmentally).

Strategy has a significant impact on the value of the business, and so is important to analyse.

Financial policies of the business influence creation of value and should be taken into consideration.

Corporate Governance and control/management of systems which are selected and implemented to increase the value of the company is a key player in the direction of the company (and, hence, the value ofthe company to the shareholders) in the future, and should be taken into account.