

# Into the 21<sup>st</sup> Century: Management Accounting Trends

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## Abstract

*This paper considers the role of management accounting in organisations. It goes on to discuss some of the issues that currently impact on management accounting in the last three years of the twentieth century and will continue to do so into the next century.*

## Introduction

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As an historian of management accounting it is something of a new experience to look forward rather than backward. Management accounting has a rather long history because evidence of practices that are similar to modern management accounting can be traced to periods earlier than the Industrial Revolution (Eighteenth century). It seems that management accounting developed as a tool to assist management when individual enterprises grew too large for supervision by one person [see for example Pollard, 1965; Fleischman and Parker, 1962; Williams, 1997]. Management accounting is still serving in that role today, and will no doubt continue to serve management throughout the next century. However, if we are going to consider management accounting in the future then before we begin perhaps we should consider the function of management accounting in the present.

## Definitions

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It would be useful at this point to establish an understanding of what is meant by the use of the term 'management accounting'. A starting point could be the definition of management accounting put forward by Horngren, et al, a standard text on the subject, which describes the use of management accounting in the late twentieth century. They describe management accounting as being focussed on internal customers and measuring and reporting "financial and other

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information that assists managers in fulfilling goals of the organisation" [1994, p4].

Similar definitions in other text-books [Hilton, 1994; Garrison & Noreen, 1994; Dyckman, et al, 1994; Emmanuel, et al, 1990; Scapens, 1991] also highlight the internalisation, as it were, of accounting, where accounting records become used in the internal management of a business, rather than solely as a record of external obligations. The definitions are very general in nature, but they all emphasise the notion of the provision of information to assist in the management processes of planning, controlling, organising and decision making [Garrison & Noreen, 1994]. The texts also emphasise that management accounting includes cost accounting, as a system of accumulating cost and other quantitative data, but is wider in its application than the accumulation of costs inasmuch as it provides information for the whole range of managerial activity [Dyckman, et al, 1994]. Cost accounting, then, is encompassed by management accounting, which goes beyond the recording and calculation of cost to incorporate the uses to which cost and other information is put.

Hornngren, et al, suggest that management accounting is concerned with three of the four purposes of an accounting system. Those three purposes are:

1. Internal routine reporting to managers for (a) cost planning and cost control of operations and (b) performance evaluation of people and activities.
2. Internal routine reporting to managers on the profitability of products, brand categories, customers, distribution channels and so on. This information is used in making decisions on resource allocation and in some cases decisions on pricing.
3. Internal nonroutine reporting to managers for strategic and tactical decisions on matters such as formulating overall policies and long-range plans, new product development, investing in equipment, and special orders or special situations.

[Hornngren, et al, 1994, p4]

Again, the stress is on the internal use of accounting data for purposes of management, for the recording of internal transactions as opposed to transactions with external entities.

Management accounting reflects the use of techniques from different disciplines, for the solving of organisational problems, its major focus being the efficient allocation of resources within an organisation [Belkaoui, 1980]. This notion of efficiency of resource

allocation is central to the use of accounting information because it highlights the problem of dealing with resources that are always scarce and in demand for a number of alternative applications. The wider role of accounting information has come to prominence since World War II, prior to that the emphasis was on cost and cost control [Scapens, 1991]. Belkaoui [1980] supported the above definition by emphasising its decision support role as well as its use in motivation and the encouragement of efficiency. Belkaoui described management accounting as being "...accounting-based, and individual-organisation-, and decision-centred" [1980, p2].

The accounting characteristic of management accounting is related to the accumulation, classification, analysis and adaptation of information. Its organisational dimension is concerned with tailoring a system of internal reports to the organisational structure. The behavioural aspect is concerned with taking into consideration the cognitive make-up of the recipients of the information as well as motivational factors. Finally the information provided by the system must be relevant for decision making purposes [Belkaoui, 1980].

Management accounting information is produced to assist managers in carrying out their roles of planning and controlling the function for which they are responsible. Of course, accounting is not the only source of information available to managers, but it does provide a means of quantifying, in common terms, generally money, and overall performance. Emmanuel, et al referred to this integrative function of management accounting, when they wrote:

...management accounting systems are of major importance because they represent one of the few integrative mechanisms capable of summarising the effect of organisations in quantitative terms.

[1991, p4]

The integrative function of management accounting becomes paramount as organisations grow in size and complexity. Often accounting is the only source of such information, the aggregation of which makes clear the performance of the organisation as an entity: an aggregation that is essential if the direction of the entity is to be maintained and monitored.

Management accounting assists in the planning function by providing information relevant to product marketing. It aids short-term planning by providing data on past performance and projected future performance. As well, the budgetary process is designed to ensure that the short-term plans from the various parts of the

organisation are in harmony and their assemblage into the master budget provides a financial plan for the organisation as a whole.

The control function of management is helped by the regular production of performance reports that compare actual results with expected results and calculates trends and other significant statistics. Control is assisted by measurements that identify trouble spots and prompt action to be taken. Performance reports are also intended to motivate desirable performance by providing an indication of the effectiveness of goal achievement and a measure of operational efficiency.

The conventional view of the role of management accounting is that it is a provider of information to management. The implication is that this information is objective and free from bias. There is another view, however, that discounts this somewhat idealistic view of management accounting. In the abstract to her paper, Loft writes that management accounting

...is commonly understood to be a set of techniques for collecting and processing useful facts about organisational life. The information obtained is viewed as an objective form of knowledge untainted by social values and ideology...

[1986, p137]

She then goes on, in her paper, to suggest the conventional view might not be the real situation.

Management accounting can be used as a tool of control, in the sense of domination. This view is supported by doubts about the objectivity of information based, so often, on judgements and interpretations [Miller & O'Leary, 1987; Hopper & Macintosh, 1990; Hopwood, 1987; Neimark & Tinker, 1986; Hoskin & Macve, 1994]. As well, management accounting information tends to flow up the organisational hierarchy, so those occupying a higher status have greater knowledge than those below them in the hierarchy.

Standards and budgets provide prescriptions for behaviour with the system providing information to evaluate and discipline those not complying with the prescription. It is this dual role of management accounting that must be borne in mind when considering the operation of accounting techniques with in the context and culture of a particular organisation.

Roberts and Scapens, as a result of their research reported that management accounting did fulfil its traditional role of providing information to help manage but that it also exhibited this dual role of domination. They stated that accounting information.

...appeared to be used both as a means of integration and co-ordination and also as an instrument of domination.

[1990, p107]

This other side of accounting must be considered when looking at current and future uses of accounting where its technology can be instigated as a disciplinary procedure. [Walsh & Stewart, 1992] and has been highlighted in studies by Hopper and Armstrong [1991], Millerand O'Leary [1987], Hoskin and Macve [1986, 1992a, 1992b, 1994], and Walsh and Stewart [1992] among others.

## What of the Future?

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The conditions under which business, and indeed government operates, are in a continual state of change. The world seems to be shrinking and organisations must now consider international conditions when making their plans. Multinational corporations operate across many countries and apply their particular accounting techniques with little apparent regard for the accounting practices of the countries in which they operate. Managements are themselves under going change with more emphasis than hitherto being put on the effects of an organisation's activities on the environment. Quality, and its cost, is also a major factor in corporate thinking.

In its discussions of a new report in one of its news items Management Accounting (Vol 75 No 6, June 1997), the journal of the Chartered Institute of Management Accountants (UK) said (p 11) the report indicated that:

- (s) ome common themes about the future emerged
- knowledge will be ab organisation's primary resource;
  - an organisational design that stimulates entrepreneurial behaviour is vital for an organisation's success;
  - managing technology effectively, especially with regard to data management, access and use, will significantly effect a company's future, and
  - new types of learning by employees need to be explored and emphasised.

These predictions suggest that information and knowledge generation will be the key to the future of management accounting. This could result in conflict with the IT role, which after all is to manage information flows within an organisation, and indicates need for a more proactive position for management accountants. Research

in the U.K. suggests that the traditional role of management accountants of being scorecard keepers is changing and they are becoming more innovative as they seek to find solutions to problems.

One problem in discussing the future of management accounting revolves around the fact that each organisation uses the management accounting system that serves its needs. This being so the following discussion is concerned with general issues that may or may not involve a specific organisation.

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### Current and Future Issues

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In the closing stages of the twentieth century, as it has done for at least two hundred years, management accounting is called upon to assist management in its function of managing an organisation to achieve its goals. Management accounting assists by providing information and opinion in the formation of both strategic and operational plans and by providing information to assist in the control of the performance needed to achieve those goals. The role of management accountants was discussed by the ASCPAs' Management Accounting Centre of Excellence, which decided that they were to be seen as informed analysts who participated in and contributed to:

- strategy formation to ensure sustained competitive advantage, achieved by providing customer and shareholder value
- resourcing decisions to ensure the availability of environmental resources, finance, technology, people, knowledge, processes and products to achieve the determined strategies
- the management of change in a world of uncertainty, complexity and speed.

[1994, p.23]

To reinforce this view, the Chartered Institute of Management Accountants in the UK surveyed its members and identified "changing patterns of demand; increases in customer bargaining power; pressures on costs "[May, 1997, p28], as being the major drivers of significant organisational change. May's article refers to organisations becoming flatter in their hierarchy with the employees becoming more empowered. May suggests that organisations are tending to be more customer-focussed and flexible in their approach to an ever changing environment.

We will now consider some of the particular issues that will possibly shape and determine management accounting into the next century.

## Strategy

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Management accounting used to be confined to internal matters only but it is now becoming more proactive. It is looking both to the future and outside the organisation. A good example of this is the increasing attention being paid to value chain analysis as a means of assessing competitive advantage. Management accounting has developed a number of procedures and techniques to enable the assessment of an organisation's value chain and its comparison to the value chains of its competitors. Management Accountants have also become proficient in the development of financial models to test proposed actions.

## Strategy and the Environment

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In order to survive in the long term organisations must look ahead and try to anticipate the future. Not an easy thing to do but one that can be assisted by information produced by management accountants. Management accounting can help by monitoring the market in which the organisation operates, by analysing the competitors and by monitoring the organisation's progress in achieving the goals set by the strategic plan. Increasing pressure is being applied to organisations to expand their narrow view of the world to include the monitoring of their impact on the natural and social world around them.

For many years business organisations have assumed that the social and natural infrastructure that they used came without cost, an attitude that still holds in many countries. An example of this is the Australian company BHP's behaviour in Papua New Guinea, when it allowed waste product from a mine at Ok Tedi to flow into a river and destroy the livelihood of those living downstream of the mine. Legal action redressed the damage but at a huge cost, a cost that could have been avoided.

An article by Smith and Lambell [1997] argues that strategic management accounting should encompass environmental issues, they go on to say that " (s)trategic management accounting in incorporating environmental management accounting is clearly concerned with long-term sustainability" [p34]. In other words, for an organisation to survive in the long term it must be able to monitor

Smith and Lambell conclude their article with the comment: In future years accountants may have to adopt more radical approaches to assist them in accounting for the environment. Ultimately organisations will have an obligation to account for sustainability by measuring the extent to which they are denying future generations the use of natural resources.

- Quality improvement reports. These may include non-financial indicators.
  - Budgets and standard costs. These techniques can be applied to environmental targets as well as to production.
  - Recyclable materials when recyclable alternatives are available.
  - Prices. Pricing policy should reflect the environmental impact of the product. For example, a premium could be charged for non-recyclable materials when recyclable alternatives are available.
  - Life Cycle Assessment. This involves the evaluation of the environmental loads associated with a product, process or activity for the whole life cycle of the product, process or activity. This includes extraction and processing of raw materials, manufacturing, transportation and distribution, use and maintenance of the product, recycling and final disposal. Energy, material usage and environmental releases should be quantified and the data used to assess the impact on the environment and identify opportunities for environmental improvements" [Smith and Lambell, 1997, p 35].
  - Avoid penalties.
  - Compliance with regulations. Government regulations often impose heavy compliance duties upon organisations, requiring the development of policies and measures to discharge these duties. Compliance has to be monitored by the organisation to avoid penalties.
  - Energy use appraisal and monitoring
  - Costing waste. Is it more cost effective for an organisation to dump its waste or to recycle it? Dumping may incur high social charges as a result of people objecting to pollution coming from factories as well as fines for illegal dumping and charges for legitimate dumping. Some of the costs of waste cannot be quantified in financial terms but if not addressed will severely affect the long-term sustainability of the organisation
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  - Budgets and standard costs. These techniques can be applied to environmental targets as well as to production.
  - Quality improvement reports. These may include non-financial indicators.
- its affect on the natural environment. The organisation simply will not survive if it ignores environmental costs.
- Management accounting can assist by developing measures and reporting on the impact of decisions that relate to the environment. Actions such as:



This is a clear ethical responsibility placed on management everywhere.

[1997,p35]

## Quality

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The cost of poor quality is lost sales and rework, and hence lost profits. If a firm wants to maintain a competitive edge then it must pay strict attention to the quality of its product or service. Consumers are becoming increasingly intolerant of poor quality products. Total Quality Management or TQM along with continuous improvement are vital issues in both the private and public sectors. The institution of a programme of TQM within an organisation requires the continuous measurement of every organisational process. Failure to determine and measure key variables will mean that the quality improvement programme will fail because measurement is one of the cornerstones of TQM. Without measurement it is impossible to know whether problems have been solved. Management accounting needs to develop reporting and measurement practices to ensure that TQM is a success and contributes to the competitive advantage of the organisation

TQM is different to traditional quality controls because they focus on the end product and require remedial action to be taken to ensure a good product leaves the organisation. On the other hand, TQM tries to ensure that no defective products (or services) are produced in the first place and reworking costs are avoided. Accounting can develop measures that will indicate to management the progress of quality management as well as the cost of failure to improve the product. Management should at all cost avoid minimalist attitudes; a bad product no matter how well made is still a bad product.

## Benchmarking

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As part of the process of continually improving an organisation's systems the practice of the leaders in a particular field can be used as a benchmark or a point of reference when setting organisational targets. As mentioned above this process demands measurement and monitoring. These are two functions that are well suited to the management accountant.

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**Costs**

One of the major constituents of management accounting is the calculation of the cost of the product or service being offered to consumers.

- Costing will still be an important part of the management accountant's role because costs are still needed for pricing and control purposes. Cost collection is assisted greatly by the introduction of new technology. The calculation of costs in real time is becoming a reality through the use of sophisticated computer systems.
- Costing systems that mirror actual production process will become more common. The introduction of Just-in-Time means that the old system of process costing has lost relevance because there is no need to measure inventories. This being the case then **backflush costing** can be used simplify the accounting process.
- **Activity based costing (ABC)** will probably become more popular as organisations realise the benefits that can accrue from the in-depth examination of their organisation that is required to install an ABC system. ABC has application to both the producers of goods and the producers of services.
- Standard costing has been criticised on the basis that it is prescriptive and can stifle innovation and initiative as well as leading to dysfunctional behaviour as manager's seek to circumvent the standard. However, this does not have to be so. Standard costs can be used to provide control even though it may be necessary to change the attitudes of those who use them as well as re-examine the criteria on which they are based [Lucas,1997].
- **Life-cycle costing** is becoming increasingly important, as the market demands more frequent product change given the magnitude of upstream and downstream costs. The precursor to this, Life-cycle budgeting, is of great importance in developing product and their prices given the sensitivity of the market to prices.
- **Target costing** involves the management accountant in the products are developed to meet a desired price and return.

## Control

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One of the major functions of management is that of control. Accounting assists and will continue to assist in the process of control. It may well be that some of the tools used to measure goal achievement will change but there will still be a need to compare actual performance to desired performance. This control process has already been alluded to; the future will see it being broadened in application as more non-financial performance measures are included in management reports. The public sector seems to be setting the pace in the development of performance measures for the many diverse activities performed by this sector. The key to the success to any organisation is the monitoring of what it sees as its critical performance indicators and the taking of corrective actions when necessary.

New technology means that control can be exercised in real time. Variance analysis can at last provide a useful measure by signalling unexpected occurrences when they happen rather than some weeks after.

In a survey by the Canadian Institute of Management Accountants [Hrisak, 1996] members "rated budget Vs actual net income as the most effective [financial performance measure], followed second by return on investments, third by productivity, and fourth by budget versus actual sales" [p 48]. The survey then went on to point out that some of the most popular nonfinancial measures..include cycle time, on-time delivery, customer satisfaction and retention, defect analysis, yields, throughput (sales minus material costs), and safety" [p 49].

Accounting information has always been an important aid to management control. This assistance will become more important as management accountants use technology to provide more timely information in many diverse forms.

## Conclusion

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The foregoing is not an exhaustive assessment of the direction that management accounting will take the next century. However, present indications are that management accounting will continue to develop in its role of assisting management in its function of planning, organising and controlling. Management accounting will also change as manufacturing technologies change and it will

continue to measure cost. Management accountants will become more proactive as they look outside the organisation and assist in strategy development and the maintenance of a competitive edge. management accounting will become more customer oriented by developing a flexibility in its ability to provide timely and relevant information to assist managerial decision making. Management accounting will also return to its roots, in a sense, as it becomes more involved product design.

While it is impossible to predict the future with 100% accuracy it is possible to make reasonably accurate predictions. management accountants are involved in predictions and provided they continue to look ahead to determine and define opportunities and threats to organisational sustainability then there is no reason to doubt a future for this important aid to good management.

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