

CHAPTER 1

Management Accounting: Information for Creating Value and Managing Resources

ANSWERS TO REVIEW QUESTIONS

1.1 There are many possible answers to the question.

Qantas, the national airline of Australia, has faced a number of changes to the business environment over the last 20 years, including deregulation of the domestic aviation industry. This resulted in increased competition as new companies attempted to enter the industry. The most notable of these was two failed attempts by Compass to succeed in the market and gain market share by savagely cutting prices. Its major competitor, Ansett Australia, collapsed in 2001 resulting in Qantas having almost a monopoly for a short period. A powerful UK airline, Virgin, has also entered the market, with a history of taking legal action against market leaders who attempt to intimidate them using predatory pricing. Further, Impulse Airlines, a local airline, started operations, only to be eventually taken over by Qantas. On top of all this, the international terrorism crisis of 11 September 2001 saw a substantial contraction of international air travel for a period of many months, leading to the collapse of several United States airlines many times the size of Qantas.

Other changes to the business environment have included unrest and war in the Middle East and speculation in oil, resulting in volatility and serious increases in fuel prices; bombings in Bali in 2002; the outbreak of SARS in 2003; natural disasters such as the Asian tsunami; the heavy subsidisation of competing national carriers, especially by Middle Eastern countries; the entry of Tiger Airways into Australia; extra capacity gained by Virgin Blue; the shifting of significant parts of engineering maintenance operations offshore; publicity surrounding a series of safety and engineering concerns and an audit by CASA in 2008 finding that maintenance by Qantas was not up to its own standards; and financial uncertainty arising from the 2008 credit crisis and share market collapse. In more recent times, two different volcanoes have caused the cancellation of flights for several days, and the explosion of an engine in a new range of aircraft, the A380, in November 2010 caused the grounding of that fleet until January 2011 while the reason was explored and overcome (see 'Real life' in Chapter 21, page 955).

- 1.2** The explosion in e-commerce will affect management accounting in significant ways. One effect will be a drastic reduction in paperwork. Millions of transactions between businesses will be conducted electronically with no hard-copy documentation. Along with this method of communicating for business transactions comes the very significant issue of information security. Businesses need to find ways to protect confidential information in their own computers, while at the same time sharing the information necessary to complete transactions. Another effect of e-commerce is the dramatically increased speed with which business transactions can be conducted. In addition to these business-to-business transactional issues, there will be dramatic changes in the way management accounting procedures are carried out, one example being e-budgeting—the enterprise-wide electronic completion of a company's budgeting process.
- 1.3** Management accounting information prepared on a regular basis includes product costs, profitability reports, and also individual resource costs such as materials purchased and used, labour costs and the costs incurred in providing and managing facilities. On an ad hoc basis, management accounting reports may be prepared to estimate future cash flows relating to the impact of purchasing and operating a new piece of equipment and the expected outcome from changing the product mix.
- 1.4** Management accounting is defined as 'processes and techniques that are focused on the effective and efficient use of organisational resources to support managers in their task of enhancing both customer value and shareholder value'. Value creation is a central focus for contemporary managers. *Customer value* refers to the value that a customer places on particular features of a good or service (and which is what leads to them purchase the product). *Shareholder value* is the value that shareholders, or owners, place on a business—usually expressed in the form of increased profitability, increased share prices or increased dividends.
- 1.5** The important differences between *management accounting* and *financial accounting* are listed below.
- (a) Management accounting information is provided to managers and employees within the organisation, whereas financial accounting information is provided to interested parties outside the organisation.
 - (b) Management accounting reports are unregulated, whereas financial accounting reports are legally required and must conform to Australian accounting standards and corporations law.

- (c) The primary source of data for management accounting information is the organisation's basic accounting system, plus data from many other sources. These sources will yield data such as rates of defective products manufactured, physical quantities of material and labour used in production, occupancy rates in hotels and hospitals and average take-off delays in airlines. The primary source of data for financial accounting information is almost exclusively the organisation's basic accounting system, which accumulates financial information.
- (d) Management accounting reports often focus on sub-units within the organisation, such as departments, divisions, geographical regions or product lines. These reports are based on a combination of historical data, estimates and projections of future costs. The data may be subjective and there is a strong emphasis on reporting information that is relevant and timely. Financial accounting reports tend to focus on the enterprise in its entirety. These reports are based almost exclusively on verifiable transaction data. The focus is often on reliability rather than relevance and the reports are not timely.

1.6 The cost accounting system is one part of an organisation's overall accounting system, the purpose of which is to estimate the cost of goods and services, as well as the cost of organisational units such as departments. Cost information accumulated by the cost accounting system is used for both management accounting and financial accounting purposes. Management accounting uses include setting prices, controlling operations and making product-related decisions. Financial accounting uses include valuation of inventory and cost of goods sold for the manufacturer's balance sheet and income statement respectively.

Management accounting is broader than just the preparation and reporting of financial information; it encompasses the processes and techniques that focus on the effective and efficient use of organisational resources to support managers in their tasks of enhancing both customer value and shareholder value. It focuses on preparing information for making decisions about planning, directing and controlling an organisation's operations, including analyses of financial and non-financial resources such as performance data, and a range of techniques for managing costs and other organisational resources.

1.7 The 'Real life' report of changes in the airline industry on page 6 illustrates the increasing competition in the industry and the pressure to reduce fares. This pressure makes the need to have a clear idea of the business's costs imperative. The article shows a move from having few airlines servicing a particular route to having several airlines servicing it. When there

were few airlines flying from Sydney to Los Angeles they were able to charge a premium—essentially it was a sellers' market where the seller could have great influence over the price. With more providers on this route we move toward a buyers' market where the buyer has great influence over price due to the ability to turn to another airline with a lower fare. The balance between supply and demand has changed on this route. The providers now need to keep a close eye on methods of cost containment, their actual costs and what causes them and how long they can sustain low fares. Without adequate information it is not unusual for a firm to struggle because it charges prices below the product cost. This cannot be sustained for long.

The impact of cost cutting exercises needs to be analysed by the management accountant. For example, most costs in an airline do not change with the number of passengers. The cost of the aircraft, the fuel for a flight and the number of staff involved in the flight are static. Once airlines were inclined to provide food for all seats but now a last-minute passenger in business class or first class can be told that refreshments are not guaranteed. You may also have seen a report in 2010 of how much an airline saved by putting one olive fewer in a meal in first class!

The management accountant can also help by analysing the likely result if various marketing approaches are adopted. Hence, ways to increase business class sales requires analysis of the cost of providing more business class seats (and fewer economy seats) and the fare that will provide the required profits. Other changes to remain competitive may include better service in business and first class (for example, flatbeds and complimentary pyjamas) and cost saving in economy (for example, not providing a blow-up neck pillow on long haul flights and removing moisturiser from the toilet bags provided on these flights). We have also seen an introduction of 'premium economy', which provides more room than economy but less comfortable seats than business class. The economic feasibility of taking that step would have been analysed by management accountants with advice from marketing managers on the likely demand in all classes if it were introduced.

- 1.8** There are arguments that when a management accountant's office is located on the factory floor, they are regarded as 'spies' who report back to head office. However the counter-argument is that the management accountant needs to be near the action to understand the processes and the data that come from them and to better understand what management accounting information will help the decision makers at all levels.

It used to be the case that management accounting was a function undertaken at head office, often by a generalist accountant rather than a specialist management accountant. With the development of management accounting techniques that better assist decision making, management accountants gradually took their place in decision-making teams. It is possible for management accountants to have a presence on the factory floor and in the corporate offices. Very often each plant will have at least one management accountant. The chief management accountant is then likely to be located in head office where he or she has regular contact with other senior managers and is regularly involved in meetings with these other senior personnel.

1.9 A CFO needs to possess:

- leadership skills that can be applied to the accounting/finance function, senior management and the organisation as a whole
- managerial skills that support the need to balance responsibilities of stewardship with those of strategy development and implementation, thus requiring the effective and efficient acquirement of and use of resources while safeguarding assets through internal controls and risk management
- the ability to build effective, collaborative relationships with internal and external stakeholders
- understanding of the organisation and its environment, such as its competitors, markets, technologies and new developments
- professional qualities as they pertain to professional accountants, including integrity, objectivity and competence.

While the CEO may be the first pilot, the CFO can be an indispensable flight engineer.

1.10 Major processes that management accounting systems use to create value and manage resources include:

- product costing systems that estimate the cost of resources consumed in producing goods and services
- processes that compile information that is required in planning and control, the preparation of budgets (financial plans) and the monitoring of progress in comparison to planned progress (control)
- performance measurement and evaluation processes relating to individuals, discrete parts of the organisation and the organisation as a whole.

1.11 Competitive advantage refers to a unique advantage that one firm has over others. It is unique because it is so difficult to imitate that others do not duplicate it. Porter (see discussion in the chapter) suggests two principal ways to gain such an advantage: by being a cost leader or by adopting a strategy of product differentiation. Cost leaders focus on cost containment in every way, so that their sales prices can be lower than competitors. Product differentiation can be attained in many ways, for example by creating different features for the product, different appearance, different quality, or a difference in customer service.

1.12 A management accountant might provide the following types of information to assist management in managing resources in the Australian Football League (AFL):

- costing of individual functions and competitions
- analysis of revenues from various media outlets
- activity analysis of interactions with the different member clubs (which could also be costed)
- costing of a project designed to enhance and improve the AFL website
- costing of the resources consumed in each department
- variances of costs and revenues from budget
- a breakdown of costs, such as promotions of AusKick, community clubs and AFL membership
- forecast costs for strategies including recruitment, overtime and outsourcing
- analysis of member needs, inquiries and complaints
 - number of complaints
 - number of new members
 - member retention rate
 - member satisfaction with service
- membership profitability analysis
- a cost benefit analysis of proposed new products.

1.13 In a business that considers cost leadership to be of key strategic importance, a management accountant could provide information to management that helps managers to measure and manage their costs more efficiently and effectively. This could include information about:

- costs of products, processes, activities, and departments
- costs of materials and other key inputs
- costs of supporting individual customers and customer groups
- the root causes (cost drivers) of the major costs incurred by the business
- performance reports focusing on the control of costs and also of key cost drivers
- the prices of the products sold
- comparison of the probable total sales revenue for various prices (allowing for reduced sales numbers for higher sales price and vice versa)
- competitors, including the prices of competing products and the cost structures of their businesses.

1.14 A management accountant might provide the following types of information to assist management in a business that considered product quality to be of key strategic importance:

- number of defects
- quality costs (i.e. the costs incurred in training, maintaining and improving equipment, scrapping or correcting defective work)
- warranty costs
- returns
- analysis of customer needs, inquiries and complaints
- number of new customers
- customer retention rate
- customer satisfaction with products
- customer profitability analysis
- market share.

1.15 Budgets are not control systems; they are a component part of planning and control systems.

In the context of an organisation's vision and purpose (mission), organisational objectives are developed and strategies are formulated to attain those objectives. While the strategies define the long-term plans of the organisation, plans are laid down for shorter time periods such that they lead toward the achievement of the corporate strategic objectives. The financial representation of these short-term plans is called the budget. It records and reports the spending and revenues that are expected if the plans are implemented as intended. Because they itemise the usage of resources in the achievement of set objectives, budgets can be called resource usage plans for the operating period, which is normally twelve months.

For control purposes it is necessary to keep monitoring whether plans are being followed and whether the results are as expected. This is achieved by measuring any variances between the planned financial outcomes set out in the budget and the actual outcomes achieved. When there is deviation, called a budget variance, managers must decide whether it is necessary to take steps to achieve the plan or whether circumstances have changed such that replanning is necessary.

1.16 Planning and control systems are the part of the management accounting system that provide a framework for effective resource management to generate customer and shareholder value. Those two systems are interdependent of each other as, in order for successful strategies to be implemented, organisations need to formulate plans to set the direction for future operations of the organisation, and have control systems to ensure that those operations are proceeding according to plan and that the objectives of the organisation are achieved.

1.17 The costs included in inventory are called inventoriable costs. They have been defined for the purpose of external reporting in a financial accounting context to include only manufacturing costs or the cost of product bought for retail. However, estimates of the inventoriable costs of products are not sufficient for many product-related decisions. For example, in assessing the profitability of a product over the longer term it is necessary to consider design and development costs and the costs of customer support in addition to the cost of manufacture. Decisions about whether to accept contract bids will require inclusion of all relevant costs whether inventoriable or not.

(Products include goods and services and one can see that classification of inventoriable costs relates only to goods, as services cannot normally be stored in inventory. However, comprehensive information about service costs may also be useful to managers.)

- 1.18** Specific aspects of management accounting systems that may be used to motivate employees and managers include performance measurement systems, which form part of the control process. Employees can be held responsible for various financial and non-financial performance targets and may be rewarded, for example with bonuses, if those targets are achieved. Employees may be motivated to achieve those targets when they participate in setting them, when they regard those targets as fair and achievable and when they value the rewards that they earn for achieving targets.
- 1.19** The implications of contingency theory for management accounting system design are that the design may be influenced by (that is, be contingent upon) a range of factors that reflect the context within which the organisation operates, including the external environment; technology; organisational structure; organisation size; strategy; and organisational and national culture (Chenhall, 2003). This means that in designing the system, the management accountant will need to take account of the size and complexity of the organisation, the types of markets the organisation operates in, the existing management style within the organisation and so on.
- 1.20** During the 1980s and 1990s, management accounting started to shift towards the broader techniques of resource management and focused on the creation of customer value and shareholder wealth. Management accountants became more valuable in the formation and evaluation of strategies. Accordingly, by the early 2000s, management accountants were seen as part of the management team, with a clear view of the 'big picture', a full understanding of the business as a whole and as providers of information to managers that could help them to maintain a competitive advantage in order to achieve corporate objectives. The focus of management accounting in the first decades of the 21st century has broadened from the drivers of customer value, shareholder value and organisational innovation to include the drivers of stakeholder value, risk management and sustainability reporting. Students will find that the broader focus on all stakeholders (not just customers and shareholders) is explored in more detail in Chapter 17.

1.21 To become a full member of CPA Australia or the ICAA it is necessary to obtain a degree that is accredited by that professional accounting body for the purpose (certifying that that degree, with specified content, satisfies the educational entry requirements of that professional body), and then complete that professional body's own postgraduate program of study. Both of these organisations also require the completion of three years of mentored work experience. Continuing membership then requires the completion of a minimum of 120 hours of continuing professional development (CPD) in each three year period. Entry to the IPA is possible with an accredited advanced diploma or university degree and some mentored experience.

SOLUTIONS TO EXERCISES

EXERCISE 1.22 (10 minutes) The nature of management accounting

- 1 (a) The primary role of management accounting is to assist managers in decision making.
Decisions are about the future so management accountants *are* required to predict future outcomes. Unlike financial accounting, it is *not* confined by a need to provide objective, verifiable information that emphasises accuracy, and does not restrict itself to financial information. Rather, it is often based on estimation, probabilities and expectation. To provide information that is relevant to managers' decisions, management accounting goes beyond financial information to include both quantitative and qualitative non-financial information.
- 2 (b) Other than providing data for the use of financial accountants in preparing financial reports (that is, the cost of goods sold and inventory) and reporting the outcome of past decisions for performance evaluation and feedback on predictive processes, management accounting is intended to assist managers in decision making. To do this it:
 - regularly changes to meet the current changing demands of managers, responding to changes in the business environment
 - often provides a detailed analysis of information
 - involves far more than cost accounting
 - does not over-aggregate information since the detail is usually important to the users.
- 3 (d) What is measured and the way it is measured, analysed and reported can have an impact on employee behaviour. A significant role of management accounting is to influence the decisions of managers and influence the behaviour of employees, both in what they decide to do and how they carry out their decisions. To help managers in decision making management accounting must:
 - be relevant to strategy decisions and consistent with attempts at implementing strategy
 - provide information that is relevant to the decision being made without extraneous information that could confuse the manager
 - be future focused even though this represents expectations rather than precise measures.

EXERCISE 1.23 (15 minutes) The nature of management accounting systems

- 1** False. The management accounting system may not be able to provide all of the information managers need to make decisions. Although management accounting systems are increasingly providing physical information (such as reject rates and material usage) as well as financial information some management decisions require information from other sources. Examples of such information include competitors' prices, market research information, forecasts, environmental impacts, technological possibilities and so on.
- 2** True. There is some overlap between management accounting systems and the information required to produce financial statements, as both draw on the transaction-based accounting system. In particular the costing system informs the management accounting reports and provides estimates of product costs for inclusion in the balance sheet and income statement. However, management accounting systems are not subject to external regulations and draw data from wider sources, consider the present and the future, and emphasise relevance to managers. Management accounting systems also need to be flexible enough to produce information required by managers for routine decisions and also some of the information needed for decisions that occur infrequently.
- 3** True. Management accounting systems do draw on data from a variety of internal and external sources, unlike financial accounting systems, which rely primarily on internal information from the transaction-based accounting system.
- 4** False. Management accounting is not directly concerned with product quality, however, management accountants may prepare data to help managers assess whether or not the business is meeting quality expectations and requirements.
- 5** False. While management accountants should supply information that is relevant and timely, it may not be 'objective' and 'verifiable' in the financial accounting sense. There is likely to be a trade-off between accuracy and timeliness and the management accountant may well accept estimates rather than verifiable measures to ensure that information is available to support managers' decisions on a timely basis.

EXERCISE 1.24 (15 minutes) Differences between management accounting and financial accounting

1 (b)	Preparing a balance sheet	Financial accountant
2 (a)	Preparing a profit forecast by product line	Management accountant
3 (a)or(b)	Estimating the depreciation expense for a factory's equipment	MA or FA
4 (a)	Monitoring the effects of a quality improvement program	Management accountant
5 (c)	Estimating the cost of goods produced	Cost accountant
6 (a)	Estimating the cost of a prototype for a new product being developed	Management accountant
7 (a)	Preparing a sales forecast	Management accountant
8 (a)	Monitoring the effects of a waste reduction program	Management accountant
9 (a)	Preparing a report on customer satisfaction.	Management accountant
10 (b)	Preparing an income statement.	Financial accountant

EXERCISE 1.25 (15 minutes) The role of the management accountant

Many answers are possible. An example follows.

Management Accountant—Circa \$80,000 package

Melbourne | Permanent

Published 01/12/2008

- *Car space provided*
- *Ideally looking for someone who can start immediately!!*

About Our Client

Our client is recognised globally as a market leader with a reputation for quality and innovation.

They are a driven multinational organisation that is currently experiencing a period of growth and development.

Job Description

Reporting to the Divisional General Manager, you will play a pivotal role in ensuring that the company continues to meet its growth targets as well as managing the financial aspects of this key business division. Specifically, you will help drive profit growth through management reporting and analysis, coordinate the preparation of budgets and forecasts and ensure project cost reviews are conducted. You will supervise an Accounts Receivable person and play a lead role in continuously improving systems and processes.

The Successful Applicant

You will be degree qualified and studying towards / or completed your CA/CPA studies. You will possess a proven track record in accounting and have a hands on proactive approach. You will have the ability to drive outcomes and liaise with key stakeholders in the business. Excellent interpersonal and communication skills are essential for this role and exposure to a large ERP system (ideally SAP) will be highly favourable.

What's On Offer

- *Attractive Salary*
- *Company Benefits*
- *City Fringe Location*
- *Liaising with key stakeholders within the business*

Source: Michael Page International

Available at <http://www.michaelpage.com.au/job-detail/title/Management-Accountant/ref/A1263980.html>. Accessed 8 December 2008.

The key roles for this position are to:

- ensure that the company continues to meet its growth targets
- manage the financial aspects of business division
- conduct management reporting and analysis
- coordinate the preparation of budgets and forecasts
- ensure project cost reviews are conducted
- supervise an Accounts Receivable person
- play a lead role in continuously improving systems and processes.

The required qualifications are:

- degree qualified and studying towards/or completed CA/CPA studies.

The required attributes are:

- a proven track record in accounting
- proactive approach
- ability to drive outcomes and liaise with key stakeholders in the business
- excellent interpersonal and communication skills.

The desired attributes are:

- exposure to a large ERP system (ideally SAP).

Similarly, accessed 19 April 2011 at <http://countingjobs.com.au/2648.print>:

About our Client

Our client is a leader in their chosen industry, and are conveniently located on Sydney's North Shore.

Job Description

Reporting to the Financial Controller, duties will include:-

- Assisting with monthly management reporting and analysis
- Working with cost centre managers on annual budget and forecasting
- Assisting in the preparation of management presentations for Head Office reporting
- Generating ad hoc performance reports
- Identifying and supporting process improvement around reporting efficiency and accuracy
- Assist in the preparation of business plans
- Analysis of costs, revenue and gross margin

The Successful Applicant

The successful applicant will be immediately available, will be degree qualified, and will be studying toward their CA/CPA. With experience in a similar role, you will be able to operate and communicate within a team environment, with excellent communication skills being essential.

And, again for a recent graduate, at

<http://countingjobs.com.au/2556+job+Management+Accountant+Sydney.aspx> on 19 April 2011:

- Leading software distribution organisation
- c.\$75-85K plus super
- Report straight into the Finance Director of a growing team.

Company

This is a major software distributor who has gone through a period of organic growth and is continuing to build on their success. The environment is very fast paced with a strong team focus with a supportive management team and a can do approach shared by all.

Position

Reporting to the Finance Director, you will be responsible for a designated portfolio looking after all aspects of the month-end including reporting, general ledger reconciliations, commentary, analysis, BAS and FBT. Over time you will also be heavily involved in project work involving system and process implementation and enhancement. In addition, training and development will be given to enable you to become involved in budgeting and forecasting including commercial decision support.

Person

You will be degree qualified and either studying towards or CA, CPA qualified. Excellent communication skills are required for the role along with someone that likes to use their initiative and can demonstrate problem solving skills.

Benefits

This is an exciting opportunity for those looking to play a commercially focused and pivotal role within an expanding organisation. Make your mark by developing new processes and improving business performance. Career development opportunities will be available for those who demonstrate enthusiasm and capability.

EXERCISE 1.26 (20 minutes) Management accounting information

- 1** Estimates of how long it would take to clean the store, how much it would cost to outsource this task and the cost of employing cleaning staff would be relevant to this decision.
- 2** The cost of extra collections and the cost of providing the special bins. Forecasts of the popularity of this service may help estimate the amount likely to be collected and therefore the frequency of collection, which would help with the cost estimations. Some value judgments may need to be made about the views of residents (will they separate their waste and will they be unhappy if this service is not provided?).
- 3** Whether the earlier matches would clash with the summer season for other sports and how this would impact on availability of players, attendance of crowds and appeal to television viewers, if appropriate, and the impact this could have on revenue; the availability of sports arenas if they are shared with other sports codes, and the cost of using a different arena if necessary; the difference in running costs, such as more watering if the pitch has greater usage during drier months, and more or less use of lights in early evening (if used); if the football season has an extra month in warmer weather there may be a change in refreshment consumption, such as more cold drinks being sold in the warmer month.
- 4** A forecast of future trends such as whether the increase in patient numbers is likely to be permanent or temporary, the cost to employ additional permanent staff and the cost to hire agency staff would all be relevant.

EXERCISE 1.27 (15 minutes) Major influences on management accounting

- 1** True. Many management accounting techniques were developed within the manufacturing sector due to its growth, increasing complexity and diversification.
- 2** True. With the changing organisational structures, management accountants may now need to provide information to employees at the operational levels of the business, as well as to middle and senior managers.
- 3** True. Management accounting is increasingly concerned with reporting both financial and non-financial information. Management accounting can play a major role in developing measures of customer service but it is not always used to full advantage. However, developing measures of customer service is the responsibility of management accountants in some organisations, as they may form part of the broader performance measurement system.

- 4** True. Advances in information technology have a big impact on the way management accountants supply information to managers. Greater volumes of data may be processed in a shorter time, which allows information to be supplied to managers more frequently and in a more timely manner. Printed reports may give way to electronic databases that managers can access when they require information. Numeric information may be supplemented by graphical displays to enhance levels of communication.

EXERCISE 1.28 (15 minutes) Management accounting information

- 1** Competitors' products and prices; current market share; cost of developing, producing and marketing the new product; likely profitability of the new product; potential impact on sales of existing products; likely sales volume of the new product; additional staff and equipment needs.
- 2** Availability of new staff; cost of hiring new staff; any effect on morale of existing staff; additional office accommodation and vehicle requirements; likely sales and profits generated by new staff; additional salaries cost.
- 3** Different costs of the two alternatives; any impact on customer satisfaction from delaying production until next week; the cost of overtime; delay to regular production if produced next week; availability of staff to work overtime.
- 4** For each competing location: proximity of competitors and an estimate of their sales volume; expected volume of sales from passing traffic; cost of rental; running costs; availability and salaries of employees; establishment costs such as refurbishing premises and promotions; analysis of potential suppliers.

EXERCISE 1.29 (30 minutes) Management accounting information

There can be many answers to this question. A brief example of what can be found follows.

An excerpt from the Myer Chairman's Letter in their 2010 *Annual Report*:

...THE BUSINESS IS POSITIONED FOR GROWTH. After four years and more than half a billion dollars of investment in supply chain, technology, brands and stores, we have built what we know to be a world-class operating platform that will give us real competitive advantage and will help sustain our growth into the future. We are now on the cusp of a new phase, the growth phase, which will see us expand our store portfolio by 15 new stores over the next four years. The first of these opened at Top Ryde in New South Wales in August 2010 and the second is due to open at Robina in Queensland in October 2010. The complete rebuild of our Melbourne flagship store is almost complete, with the majority of the store due to be open in time for Christmas, and the team is excited about offering Myer customers a truly international-class retail experience.

Examples of the use of management accounting information in the decision making include:

- costing the projects in which investments were made
- evaluating the benefits of the new technology
- assisting in the analysis of each stage of the supply chain, such as value-adding, environmental impacts and social impacts
- costing alternative courses of action so that informed choices could be made
- analysing costs and benefits of opening the new outlets and refurbishing the Melbourne store.

Source: Myer Investor Centre available at http://media.corporate-ir.net/media_files/irol/23/231681/2010AR/2010AR/chairmans_letter.html, accessed 27 July 2011.

EXERCISE 1.30 (15 minutes) Management accounting system design

- 1** Institutional theory suggests that the management accounting system will be designed, and will change, to give the impression that the business is accepting new ideas and methods. This theory promotes the idea that the management accounting system design is less related to its intrinsic benefits than the extrinsic rewards, such as being accepted as 'doing the right thing', even if the adoption of the techniques is for the wrong reason. The management accounting systems that are influenced by this line of thought are more likely to be a copy of what is used elsewhere than designed for the purpose (that is, they are not adapted to the needs of the organisation).
- 2** Many answers are possible. Three examples that can be expanded upon in class are the misuse of budgets, the inappropriate adoption of complex costing systems and the incorporation of environmental measures into control systems. Budgets may be developed as a means to show responsible practices but if they are developed and not referred to until 12 months later they lose most of their advantage. A firm that has few products and little diversity among those products does not require a complex costing system as this sophistication can make only minor differences to the product costs developed; yet a number of firms adopted costing systems such as Activity Based Costing because it seemed the 'in' thing to do and many were misled about its ability to solve their problems. It is possible that sometimes environmental measures are reported as a public relations exercise when they do not relate directly to what is done or controlled within the organisation, despite being part of the budgeting and internal and external reporting systems.

EXERCISE 1.31 (15 minutes) (appendix) Evolution of management accounting

- 1** (b)
- 2** (c)
- 3** (d)
- 4** (c)
- 5** (c)

SOLUTIONS TO PROBLEMS

PROBLEM 1.32 (30 minutes) Differences between management accounting and financial accounting

1 To: Human Resources Manager
From: Financial Controller
Re: Two new positions

With the growth in the organisation and the increasing demand for the accountants' assistance in the formulation of a new strategic direction, the accounting department seeks the creation of two new positions. For your assistance in distinguishing between the two positions and in filling them I provide below some information with regard to the different roles, one a financial accountant and the other a management accountant.

The financial accountant will be part of the financial accounting team. It is responsible for preparing and reporting accounting information for users external to the organisation. This includes current and prospective shareholders, lenders, government agencies (for example, the Australian Taxation Office), investment analysts and other external stakeholders. The reports for these external bodies focus on what has happened and are based on past transactions and decisions. The financial accountants ensure the accurate recording of transactions so that they can prepare reports that are reliable and verifiable and that conform to detailed accounting standards and corporate law.

In contrast, the management accountant needs the skills required to be able to prepare information that will assist internal decision makers—our managers. The internal reports are more detailed than external reports and are not constrained by external regulation on what is included or how they are prepared. The focus is on assisting the decision being made. Since decisions are about the future, not the past, management accounting information often includes estimates, projections and alternatives. Relevance to the decision is paramount. The management accountant will go beyond financial data to include consideration of qualitative and non-financial quantitative information. The content of the reports must be timely, and will often be subjective, using a variety of techniques to analyse data. The need for relevance means that different detail will be pertinent at different levels of the organisation. The person must also have an understanding of how their output can affect employee engagement.

2 Possible questions and answers:

- i. *Can't we manage with one new position to cover all extra tasks?* The skill set is different for the two positions and we would prefer specialists who are fully familiar with the latest developments. The financial accountant will need to be up to date with changes in accounting standards and legislation. The management accountant develops experience in analysing data, understanding the needs of managers even when those managers cannot articulate what information will be the most useful to them (often because they are not aware of the possibilities), and has knowledge of current developments in management accounting techniques.
- ii. *What experience should the management accountant have?* While they do not need to have experience with all of these it would help if they had experience in some of the following: activity-based costing or at least activity analysis, target costing, cost-volume profit analysis, life cycle costing, environmental management accounting, process re-engineering, performance evaluation, analysing quality costs and budgeting and project costing. In addition to being able to apply prescribed methods of analysis, the management accountant should show an aptitude for being innovative in the use of these methods and in preparing analyses and reports designed specifically for the use and the user.
- iii. *What experience should the financial accountant have?* While not essential it would help if they had experience in a manufacturing industry so that they are familiar with any changes to the accounting standards that are particularly pertinent to us.
- iv. *How important is it to be a team player?* It is important for the financial accountant to work well with the other accountants, including the management accountants who will need to provide them with product cost information for the external reports. Unlike the senior financial accountants this person will not have much need to interact with managers outside the accounting department. However, all of the management accountants need to interact well with other employees at all levels. They need to understand the other managers' needs, the strategic direction of the company, and the performance variables affecting employees. They also need a detailed understanding of operations and an ability to discuss managers' decisions with them. Part of the management accountant's task will be to motivate good performance from employees through the design and use of the management accounting system.

v. *What qualifications should they have?* They should both have relevant degrees and membership of relevant accounting bodies. While they could each be a member of the ICAA, CPA Australia or NIA, the management accountant might be a member of a specialist management accounting body such as the Chartered Institute of Management Accountants (CIMA).

PROBLEM 1.33 (25 minutes) Designing a new management accounting system

1 As the new management accountant, I am eager to be involved in the design and operation of the new management accounting systems for the hospital. My training as a management accountant provides me with the skills to help design these systems and to ensure that they meet the needs of the business. A management accounting system should be tailored to the specific needs of the organisation. It should flow from the organisation's strategy and take account of a range of contingent factors that are both internal and external to the organisation, such as the competitive environment and organisational structure. I have a good knowledge of strategic planning and well-developed skills in the area of information systems and accounting systems design.

Much of the information needed to operate the management accounting systems will draw on the existing transaction-based accounting system. As an accountant, I am in a good position to advise on the types of data that may be used in costing services and departments. In addition, the management accounting system will provide a range of predicted information, such as departmental budgets, and non-financial information, such as operational performance measures (as described in requirement 2 below).

When consultants are engaged to design the new systems, it is important that there are managers within the hospital who are involved in the design phase, to ensure that the operation of the new systems proceeds smoothly. Management accounting staff are the most appropriate staff to participate and supervise the operation of the systems on an ongoing basis.

2 There are many different types of information that may be required weekly or monthly by senior managers as the hospital consists of many different 'businesses'. Some examples are as follows:

- Accident and emergency: number of patients treated, average length of stay, number of referrals to consultant, billing rate, Medicare revenue, private insurance revenue, gap revenue, medical supply costs, average cost per bed, average cost per patient
- Intensive care: bed occupancy rate, number of patients treated, average length of stay, number of patients unable to be accommodated and transferred due to lack of beds, intensive care nursing hours, number of incident reports, billing rate, Medicare revenue, private insurance revenue, gap revenue, medical supply costs, kitchen costs, average cost per bed, average cost per patient
- Neurology: number of patients on waiting list, bed occupancy rate, number of patients treated, average length of stay, billing rate, Medicare revenue, private insurance revenue, gap revenue, kitchen costs, medical supply costs, average cost per bed, average cost per patient
- Cardiology: number of patients on waiting list, bed occupancy rate, number of patients treated, average length of stay, billing rate, Medicare revenue, private insurance revenue, gap revenue, kitchen costs, medical supply costs, nursing costs, average cost per bed, average cost per patient
- Radiology: number of x-rays during period, number of radiology staff hours during period, number of referrals per doctor, billing rates, Medicare revenue, private insurance revenue, gap revenue, medical supply costs, nursing costs, average cost per patient
- Patient records: number of new records, number of patient entries processed, staffing costs

NOTE: More detailed information may be required by middle management and junior managers.

3 Weekly and monthly reports may be supplied electronically to allow managers access to information when they require it and at the various levels of detail that they need. Information may be added to databases very soon after the end of each week or month to provide information to managers as quickly as possible.

PROBLEM 1.34 (25 minutes) Management accounting information

Financial information that would help in the ownership of a sports equipment store:

- Cost to purchase various pieces of equipment
- Costs to furnish the store
- Projected running costs such as power, rates, insurance, rent, advertising, staff salaries
- Analysis of the impact of different sales prices on demand and the consequent projected total monthly revenue stream.

Non-financial information that would help:

- Projected demand at different times and on different days to schedule appropriate sales staff hours
- Features and practical advantages and disadvantages of displaying various pieces of equipment
- Likely age profile of customers
- Type of advertising campaign that would attract the target customers
- Customer satisfaction survey results
- Details of location of and prices at competing stores.

PROBLEM 1.35 (25 minutes) The strategic nature of management accounting

To: Human Resources Manager

From: Financial Controller

Re: A strategic leadership role

As the new senior management accountant, I am eager to be a member of the Strategic Leadership Team. A few decades ago management accountants were educated and trained to provide financial reports and perform some analyses, largely of financial information, as required. More recently management accounting has developed beyond that role, such that management accountants are equipped to make valuable contributions to the formation and evaluation of strategies. It is common for management accountants to be part of senior management teams, with our clear view of the big picture, a full understanding of the business as a whole, and as a provider of information to managers that can help them maintain a competitive advantage in order to achieve corporate objectives.

Having developed techniques over the last century that assist in the creation of shareholder wealth and customer value, we now also focus on analyses that assist in risk management and sustainability reporting and have a greater understanding of the drivers of stakeholder value. (A stakeholder perspective recognises a wider range of influences over businesses than just shareholders and customers.) I have been educated and gained experience in these areas and would be of great value as a member of your SLT. Strategy underpins all that the management accountant does. Management accountants are at the forefront of monitoring the organisation's strategic advances and strategy development should be integral to my role.

I can bring to the SLT an understanding of financial and non-financial aspects of operations; a breadth of knowledge of operations, as required to provide assistance across all departments; and a depth of knowledge of operations as required to lead my team in our normal reporting and supporting roles. Consequently I can contribute to the latest approaches that enhance success in the modern competitive environment in the context of our particular operating and strategic needs.

PROBLEM 1.36 (25 minutes) Information for management

- 1** There is a variety of information that Murphy could use to help him run his business more effectively. The main areas of concern appear to relate to inventory, cash flow, supplier performance and loss of customers. Also, the ski business may not be profitable. The following information may be useful:
 - inventory—inventory turnover, reporting of monthly inventory balances, all by product line
 - sales—monthly sales units by product line, sales forecasting
 - weekly cash flow budgets
 - monthly cost budgets versus actual costs
 - monthly profitability statements by sales outlet, by product line, by business (for example, ski trips)
 - detailed analysis of costs of the skiing business
 - supplier performance indicators, including those that relate to delivery performance, cost and quality
 - customer performance measures—customer satisfaction, customer complaints, number of customers retained
 - benchmarking of products and selling prices with competitors.
- 2** The role of the accountant is to provide information to managers to assist in managing resources and creating value. This requires that both financial and non-financial information be provided. Merely providing financial information is not sufficient. There is no evidence that budgeting systems are in place, and these are needed to provide a framework for planning and for controlling operations and the overall business. Profit statements need to focus on areas of the business that are of interest to managers, such as sales outlets and the ski business. Performance indicators will need to assess areas of the business where performance needs to be improved.
- 3** Murphy needs to put in place more detailed reporting systems, including a budgeting system, detailed profit reporting and performance indicators. If the accountant will not assist in these developments, then other managers may need to be employed to assist—or perhaps the accountant needs to be replaced!

PROBLEM 1.37 (30 minutes) Vision, mission statement, objectives and strategy

1 and 2

Many answers are possible. An example of a not-for-profit organisation is:

The Australian Institute of Energy

***Vision** – Leadership in Energy*

***Mission** – To promote understanding and awareness of energy issues and the development of responsible energy policies in Australia.*

Objectives:

- *A strong independent Institute, representative of all energy sectors, actively networking and debating economic, environmental, social and technology issues*
- *Effective communication and interaction between Members*
- *Excellence in the provision of services to Members*
- *Collaboration with related organisations, in Australia and overseas, in advancing Members' interests*
- *High standards of Member conduct, competence and achievement and professional interest and inquiry*
- *Enhanced community awareness of issues in the production and use of energy and in responsible energy policies.*

(Note that for internal management purposes it is likely that these objectives would be made more specific and narrow and expressed in future orientated, quantifiable and time related terms.)

Strategies:

- *To encourage dynamic branches throughout Australia, with active programmes supporting Members' interests and debating relevant issues*
- *To encourage and enhance interaction between Members and other interested parties at Institute meetings and conferences and through the Institute's internet site and journal*
- *To undertake continuous improvement in Member services and develop new, innovative activities for Members*

- *To develop collaborative arrangements with professional organisations and associations, accessing relevant programmes and publications for Members*
- *To facilitate participation by students and younger Members in Institute activities*
- *To promote training opportunities*
- *To encourage and recognise excellence and high professional standards in Members' activities through awards*
- *To publicise and promote Institute activities and views to governments and in the wider community.*

Source: The Australian Institute Of Energy available at
<http://www.aie.org.au/national/vision.htm>, Accessed 9 December 2008.

An example of a commercial organisation is: Hunt Energy and Mineral Co Australia Pty Ltd

Vision:

A drilling company that is committed to providing a safe, illness and injury free working environment and long term job security for all its employees.

Mission:

To contribute to the oil and gas industry an efficient and competitive drilling company continually striving for excellence.

Source: Hunt Energy and Mineral Co Australia Pty Ltd available at
<http://www.huntenergy.com.au/statement.htm> Accessed 9 December 2008

Objectives and strategies are not included on the website. From the information that is available the following suggestions are made:

Objectives:

- To win contracts to drill for oil and gas
- To set up and manage drilling projects to maximise returns
- To provide long-term job security for employees
- To provide a safe workplace.

(Note that for internal management purposes it is likely that these objectives would be made more specific and narrow and expressed in quantifiable and time related terms.)

Strategies:

- To tender for all potential drilling projects
- To benchmark efficiency and productivity of drilling activities and processes
- To purchase drilling machines most suitable for the projects to be undertaken
- To establish a safety committee responsible for reviewing and addressing employee suggestions and concerns and ensuring compliance with world's best safety practices.

The choices of the above objectives and strategies may be explained by their consistency with the vision and mission statement of the drilling company and the activities and projects highlighted on its website.

PROBLEM 1.38 (25 minutes) Management accounting information for resource management

- 1
 - (a) Manager of each retail outlet: monthly costs by line item; stock turnover; back orders; product sales by major product group; customer complaints and feedback.
 - (b) Manager of the design team: number of designs completed each month; number of designs in progress; costs by line item; number of designs rejected.
 - (c) Marketing manager: customer feedback; monthly sales by product line; new products under design and their anticipated completion dates; monthly cost of advertising; future advertising campaigns planned.
 - (d) Manager who negotiates contracts with outside manufacturers: number of contracts in process and their expiry dates; performance measures for each manufacturer (for example, number of products rejected on delivery, delivery on time); value of payments made to each manufacturer.
- 2 Planning systems are an important management tool which can assist the organisation to implement its strategies and achieve its objectives. Specifically, planning is concerned with the setting up of objectives and formulating plans for the future operations required to achieve those objectives. This can occur at all levels of the organisation. At the top level of an organisation, objectives for the entire organisation can be developed and long-term strategies for the organisation can be formulated. These strategies are the means by which the organisation plans to achieve its objectives. Plans for shorter time periods (for example, the next twelve months) can also be formulated. Budgeting systems are an example of a short-term plan. Whether we are concerned with long-term or short-term planning, plans allow managers to know where the organisation is headed. They provide a benchmark against which actual activities and outcomes can be evaluated, so managers can evaluate whether the organisation is running according to plan.

Management accounting information may assist in improving the planning function of the organisation. For long-term plans, management accounting information can be used to determine the financial impact of strategies. In short-term planning, such as budgets, management accounting information is used to determine the financial impact of operations for the budget period. Management accounting information can also be used to formulate performance targets for both short-term and long-term plans, in an attempt to improve employee motivation to achieve plans. These performance targets can form part of a control system which should accompany the planning system.

PROBLEM 1.39 (30 minutes) (appendix) Behavioural issues; ethics

- 1** Management accounting information can be used to motivate employees to achieve the goals and objectives of the organisation. In this case the bonus system is intended to encourage the sales team to achieve profit goals. However, there are two significant problems with this system. First, to be effective the bonus needs to be based on outcomes that are controllable by the sales team. In this case the team can control sales revenue but probably has little influence over the cost of goods sold, and has no influence over the overhead charged to each product line. It can be very dysfunctional to hold managers/employees responsible for factors outside their control. Second, the allocation of overhead costs to each product line on the basis of sales revenue seems to contradict the goal of encouraging sales, as more sales revenue will result in more overhead charges. (Many businesses allocate overheads on the basis of sales revenue, as this ensures that overhead costs are shared among the business units on the basis of each unit's ability to pay. However, this can have adverse motivational consequences, especially when attached to performance reward systems.)
- 2** As a CPA, Riteous has an obligation (to his profession and the public) to behave ethically, as described in the *Code of ethics for professional accountants* issued by the Accounting Professional and Ethical Standards Board (APESB). His decision to move some of the overhead charges to other salespeople violates this code in a number of areas including integrity, objectivity and professional behaviour.
- 3** For these reasons Riteous should advise Kaniva that he will not comply with her request to move some of the overhead charges to other salespeople. In practice this may be difficult if Kaniva is more senior than Riteous within the organisation. Riteous may need to embark on a process of ethical conflict resolution by consulting first with other appropriate persons in the firm, then the Board of Directors and/or audit committee and if still unresolved CPA Australia and legal advisers, bearing in mind the fundamental principle of confidentiality.

SOLUTIONS TO CASES

CASE 1.40 (45 minutes) Objectives, strategy and management accounting systems

- 1** There are many advantages in implementing processes to determine organisational objectives, strategies and planning systems. Clarification of objectives and strategies would encourage the company to formally evaluate the competitive market in which it operates, including the activities of competitors and the preferences of customers. It would allow managers to assess the strengths and weaknesses of the company and put in place future plans that would allow it to undertake its strategies to achieve its objectives. The company can formally consider opportunities for producing new products and evaluate whether or not it is advisable to focus solely on old, established product lines. If new products are to be introduced then formal planning systems will allow the business to consider the cash flow implications and establish timelines for introducing those new products. The formalisation of objectives and detailed plans will provide the business with targets against which actual performance can be measured, and communicate to employees the future directions of the business. Currently there seems some uncertainty as to what types of products the company should be offering. As part of the strategic planning process, customer preferences need to be assessed and predictions made of the likely future demand for products.
- 2** The control system that can be put in place may include monthly targets that should derive from the yearly budget and longer-term plans, and a system that monitors areas of key strategic interest. These targets will be used by employees and managers to compare against actual performance. The targets may be financial, such as cost targets and sales revenue. However, it will also be important to set non-financial targets, such as those relating to quality and delivery performance. In selecting these targets the company needs to decide which areas are of the most importance in managing the company. Customer preferences are obviously crucial to this business. The company needs to put systems in place to monitor any changes in customer preferences for particular products. The company must keep track of what competing bakeries are offering and try to anticipate changes in demand for its products by carefully monitoring changes in sales mix.

CASE 1.41 (45 minutes) (appendix) Disclosure of confidential information; ethics

- 1 Although Benjamin is not identified as a CPA in this case, as a professional accountant she would be expected to act ethically and, therefore, the code of professional conduct described in this chapter would apply. As such, she should maintain confidentiality and not disclose the information she has acquired as an employee of BizSolutions to a third party such as Print Design.
- 2 Yes. Benjamin should advise BizSolutions that McHugh has postponed the paper order, as she is not an employee of Print Design and does not owe that company any duty of confidentiality. On the contrary, her professional responsibility rests with BizSolutions, and it is in BizSolutions' interest that she should provide this information as soon as possible.
- 3 Benjamin should meet either with Bradbury or her own supervisor/manager and explain the situation. If she has acted ethically in the past she should be able to establish her credibility and resolve the situation.

CASE 1.42 (45 minutes) The unethical use of accounting information

NOTE TO INSTRUCTORS: students who search for 'Enron Ethics' are likely to locate pages on Enron's Code of Ethics, and Enron-related ethics with regard to law, business ethics and other areas of ethics. An easier route to the misdeeds of accountants is to search for 'Enron Accountants' (or 'Enron Scandal'). This finds media reports, Enron emails and other documents as well as the summary referred to below.

- 1 There are many ways in which both the accountants inside Enron and their external public accountants behaved unethically, so students may have a variety of answers, including the following points that appear in a variety of web pages that they may access. At this stage in the unit students are likely to find the best summary and 'easiest to access' account in Wikipedia (<http://en.wikipedia.org/wiki/Enron> and/or http://en.wikipedia.org/wiki/Enron_scandal, both accessed 3 August 2011). While not encouraging students to use this as a source and reference for assignments, the issues are clear and well referenced. Students should seek those references if writing an assessable assignment.
 - Enron applied practices and reporting techniques that would increase *reported* income and *reported* net cash flow, inflate *reported* asset values and understate *reported* liabilities. There is an opportunity here to discuss the difference between what is reported and the reality.

- In trading transactions, financial firms normally reported brokerage (or trading) fees as revenue but Enron adopted the practice of reporting the full value of the trade as revenue.
- This inflation of revenue set up expectations with regard to growth in revenue that could not be met without pressure to manipulate.
- While financial companies often reported the income from a long-term project by reporting the net cash flow from the project over the whole project life, Enron became the first non-financial company to use this method, thus inflating reported income in the short term.
- This again made it difficult to maintain this high income in future, since what would normally be recorded as income in the future had already been reported as income in the year the contract was signed.
- If projects were cancelled, the costs of the cancelled projects were recorded as assets, as long as they did not exceed \$US200m!
- Liabilities were moved from the balance sheet by creating many 'special purpose entities', mostly offshore.
- The offshore special purpose entities were able to reduce taxes.
- The special purpose entities provided what was, in a sense, self-funded hedging facilities, thus encouraging investors to think there was hedging when there was not.
- Budgeting was not based on what was achievable but on what earnings were needed to maintain the share price.
- High profile accountants were hired to find loopholes in GAAP (these are said to include a number of people who helped to write the accounting standards for FASB).
- Executive compensation was based on short-term earnings so action focused on boosting reported earnings in the short term. The executives walked away with millions in cash and shares.
- When the walls started to crumble (the share price was dropping and revelations and criticism were gathering momentum) the executives encouraged investors to buy while they and their families were selling their shares.

- Arthur Andersen (AA) was the audit firm and they compromised their independence: they received \$US25m in audit fees plus \$US27m in consulting fees, while they were operating the internal audit (it had been outsourced to them).
- At one time the Houston office of AA overruled critical comments on Enron by their Chicago partner.
- AA appears to have given in to pressure from Enron and eventually condoned behaviour with which they were uncomfortable.
- AA destroyed about 30 000 emails and computer files when it looked as if the firm would be investigated.

2 All of the principles underpinning professional and ethical standards appear to have been contravened:

- Integrity: Members must be straightforward and honest in professional and business relationships. Integrity also implies fair dealing and truthfulness.
- Objectivity: Members must not compromise their professional or business judgement because of bias, conflict of interest or the undue influence of others.
- Professional competence and due care: Members must maintain professional knowledge and skill at the level required to ensure that clients or employers receive competent professional service and act diligently in accordance with applicable technical and professional standards when providing their services.
- Confidentiality: Members must not disclose outside the firm or employing organisation confidential information acquired as a result of professional and business relationships without specific authority from the client or employer unless there is a legal duty to do so. Members must not use confidential information acquired as a result of professional and business relationships to their personal advantage or the advantage of third parties.
- Professional behaviour: Members must comply with relevant laws and regulations and avoid any action or omission that may bring discredit to the profession.

There was lack of honesty, fair dealing, truthfulness, professional care and compliance with the law. On the other hand there was no lack of self-interested influence on others, compromised professional and business judgment due to self interest and conflict of interest, the use of confidential information for personal advantage (insider trading) and action that brought discredit to the profession.