The Future of Management Accounting: A South Australian Perspective

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Abstract

In the last decade, there is has been a substantial degree of research interest in the changing function of management accounting and role of management accountants in commercial enterprises. indicating that management accounting may have lost some relevance to management and other information users. Consequently, there has been a plethora of research suggesting changes to management accounting systems, techniques and practices. This paper explores how current management accountants view their present and future role and from this, some ideas for future development of these issues are determined.

Key Words

Management Accounting Tasks Management Accounting Roles Change in Management Accounting Management Accounting Skills

Introduction

In the last decade, there is has been a substantial degree of research interest in the changing function of management accounting and role of management accountants in commercial enterprises (Booth, 1995; Shields, 1997). Since Johnson and Kaplan (1987) first alerted the accounting community to management accounting's apparent loss of relevance to management and other information users, there has been a plethora of (particularly) prescriptive research suggesting changes to management accounting systems, techniques and practices. Recommended 'solutions' to the relevance problem have included innovative costing and information frameworks such as Activity Based Costing, Balanced Scorecard, Key Performance Indicators, Economic Value Added and Benchmarking.

This paper takes a more exploratory approach with the intention of establishing how current management accountants view their present and future role. From this, some issues for the future development of management accounting are determined.

The paper is structured as follows. First, a review of the literature is provided, outlining three issues that predominated the research in the area of management accounting. This is followed by details of the specific research questions addressed, the survey conducted on South Australian management accountants, and the results of that survey. Finally, conclusions and recommendations are presented.

Review of the Literature

A review of recent empirical academic literature on the nature of change in the management accounting profession revealed surprisingly slim results. It appears that most of the comprehensive empirical studies in this area are funded and reported by the professional accounting bodies. For example, fairly recently, professional accounting bodies in the UK, the US, and Australia have funded and reported research into management accounting change experienced in that country.

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In the UK, CIMA (the Chartered Institute of Management Accountants) and the Economic and Social Research Council funded a longitudinal study into the changing nature of management accounting, covering the period between 1995 and 1998 (Scapens, Burns, Baldvinsdottir and Ezzamel. 2003). In the US, IMA (the Institute of Management Accountants), assisted by the AICPA (American Institute of Certified Public Accountants), commissioned the '1999 Practice Analysis of Management Accounting' (Siegel and Sorensen, 1999). In Australia, the Management Accounting Centre of Excellence of the Australian Society of Certified Practising Accountants (ASCPA) funded a delphi study in 1994 looking at management accounting change over the period 1989 to 1994 (Barbera, 1996). The results of the 1994 study were compared to those of an earlier delphi study conducted by Birkett (1989) on behalf of the Task Force for Accounting Education in Australia.

The common focus of all these studies has been on current and future triggers or drivers of change in the management accounting profession, changes in the management accounting functions or roles, and changes in the tasks performed and the skills required by management accountants.

Several other writers also report on these three issues and the results from all these sources are summarised below.

Triggers or Drivers of Change in Management Accounting

Currently, debate exists regarding the catalysts or drivers of change in management accounting practices. Historical researchers such as Luft (1997) and MacDonald and Richardson (2002) for example, challenge the widely held view largely espoused by Johnson and Kaplan's (1987) *Relevance Lost*, which the search for efficiency and profits is the key motivator of management accounting change. They argue that alternative explanations exist other than economic rationalism, and dispute the idea that management accounting change is the "product of continuous evolutionary selection of more efficient forms" (MacDonald and Richardson, 2002, p 132). Alternative explanations are often based on different world-views. The Critical perspective holds that the world is socially constructed, thus social, political, international and institutional factors may also drive change. For example, the Foucauldian perspective views accounting as a knowledge-based 'tool' used by organisations to exert power and control over managers and workers (see detailed discussion of this perspective in Luft, 1997). Consequently, the evolution of practices is neither always rational nor linear. The literature suggests therefore, that contemporary research on management accounting change adopt an integrated, 'pluralistic' perspective, which considers all of these "multi-paradigmatic" explanatory variables (MacDonald and Richardson, 2002, p 150).

The most common change factors cited in the empirical literature are, on a broad environmental level, globalisation of markets, advances in information and production technologies, and increasing competition (Barbera, 1996; Scapens et al., 2003; Siegel and Sorensen, 1999; Chenhall and Langfield-Smith, 1998). On an organisational level, they include greater emphasis on core competencies, emphasis on customer and supplier relationships, downsizing, outsourcing, flatter organisational structures and team-work (Barbera, 1996; Binnersley, 1997; Scapens et al., 2003).

Changes in the business environment often result in changes to how organisations operate, trade and are managed. This may indirectly affect the function and tasks of management accounting, since management accountants have traditionally provided information, which facilitates or supports effective and efficient operations and management (Atkinson, Balakrishnan, Booth, Cote, Groot, Malmi, Roberts, Uliana and Wu). However, some of these changes may also *directly* affect the functions and tasks of management accountants. For example, the rapid progress of information technology implies that management have become increasingly aware of the availability of more information (for example, through data warehousing and the Internet) and expect that management accountants will provide this for them (and expeditiously). This has an indirect effect on the management accounting function. However, the rise of new technologies has also meant that management accountants can relinquish much of the 'bean counting' and 'number crunching' to computerised accounting systems, leaving them more time to analyse and interpret the information produced. Thus, information technology also directly affects the tasks conducted by management accountants.

Granlund and Lukka (1998) write about the recent phenomenon of the global convergence or 'homogenisation' of management accounting practices. They claim that convergence drivers such as the globalisation of markets and information technologies, trans-national legislation, the 'professionalisation' of management accountants and imitation techniques such as benchmarking are overpowering divergence drivers, such as national legislation/regulation and national culture. This, they argue, has and will continue to lead to greater convergence in management accounting practices across the industrialised or post-industrial parts of the world.

The establishment of global markets, the emphasis on customer relationships and improved quality of products and services, and the enhancement of production technologies all serve to increase the level of competition between organisations. Firms compete on price, quality, speed of delivery, and customer service. Managers need measures and performance indicators on all these factors, and management accountants, being the traditional information specialists of the organisation, must provide these. Failure to do so may result in other information professionals bridging this gap, essentially rendering management accountants comparatively irrelevant (Burns and Vaivio, 2001; Binnersley 1997). As a result of these changes to the business environment, management accountants must be less concerned with 'number crunching' and generating the traditional, antiquated accounting measures, and look at how they can add value and become more 'integrated' into the organisation (Binnersley, 1997). Scapens et al. (2003) claim that management accountants must progress beyond 'bean counter', 'corporate cop' and 'financial historian' to become instead a 'valued business partner' with greater strategic and managerial decision making responsibilities.

Thus, the key drivers/triggers of change in management accounting practice, as reported by empirical studies conducted in Australia, the UK and the US, can be classified into two groups: environmental and organisational factors. Table One provides a summary of the factors identified.

Table One: Summary of Drivers of Change in Management Accounting Reported in Australian, UK and US Research

ENVIRONMENTAL FACTORS:
Globalisation of Markets
Advances in Information and Production Technologies
Increased Competition
ORGANISATIONAL FACTORS : Greater organisational emphasis on
Core Competencies
Customer and Supplier Relationships
Downsizing
Outsourcing

- Flatter Organisational Structures
- Team-Work

Changes in the Management Accounting Function and Roles of Management Accountants

The IMA study conducted in the USA (Siegel and Sorensen, 1999) found that the respondents surveyed felt that the rate of change in their role as management accountants had been more rapid between 1995 and 1999 than over the preceding five year period, and believed that the rate of change would continue to increase over the next three years.

The identity of management accountants is also under transition. The IMA study asked management accountants to define their position in the organisation. None of the respondents defined themselves as 'management accountants'. Thirty nine percent said that they work in Finance, thirty three percent said Accounting and twenty eight percent said something else (Siegel and Sorensen, 1999). The following quote attempts to explain why (p 13):

"The most common reasons for people saying that they work in finance, rather than accounting, have to do with the positive connotations that respondents have of finance and the negative connotations they have of accounting. Finance is forward-looking, while accounting is backward looking. Finance is all-inclusive. Accounting refers to debits and credits. Accountants are number crunchers".

Similarly, in the UK study it was found that "In some businesses...accountants are changing their job titles, becoming 'business analysts' instead of 'corporate controllers'" (Burns et al., 1999, p 29).

The Australian study by Birkett (1989) found that the purpose of management accounting was to "provide management with the necessary key information as quickly and accurately as possible, to enable appropriate action to be taken" (p 16). The 1994 ASCPA study concluded that the management accounting function was value-adding participation in strategy formulation, control, and change (Barbera, 1996). Significantly, the terms 'valueadding', 'strategy', and 'change' reflected the changes in the business environment and management philosophies, as well as changes in the management accountant's role. Some additional observations are made when comparing the results of these two studies.

Barbera (1996) found that management accountants' customers are more broadly defined to include engineers, operations, marketing, HR personnel, cross functional teams and cellular work teams. Additionally, the roles of management accountants had expanded to include the provision of expert advice, team leadership, leadership in using statistical/analytical techniques, the design and management of information systems, the design and control of performance measurement systems, providing information, being teachers, guides, analysts, internal consultants, and interpreters and managers of complexity.

The results of the studies conducted in the US and the UK largely mirror these findings. The IMA study found that increasingly, management accountants spent more time as internal consultants or business analysts, worked on crossfunctional teams, were actively involved in decision making and consulted with decision-makers on how to improve the usefulness of information for this purpose (Siegel and Sorensen, 1999). The term 'change' also featured in this study.

Management accountants are increasingly assuming the role of change agents. Russell et al. (1999) claim that "Management accountants aren't just managing change: They are *initiating* change." (p 41). Binnersley (1997) agrees that management accountants "need to recognise and facilitate the changes taking place rather than resist them....they have the expertise to apply rigorous measurement discipline, ability to develop systems and a unique view across the business." (p 36). Sharma (1998) concurs, asserting that management accountants will "be called upon to operate as managers of business value, and agents of change" (p 24). Likewise, Zarowin (1997) claims that "new accountants are

change agents and more – much more" (p 38). Although there is strong theoretical support for accountants' proactive involvement in change, evidence suggests that in Australia their role is one of supporter of change rather than instigator (Barbera, 1996). Terms such as 'accommodate', 'adjust to', 'accept' and 'support' were used by respondents in relation to change. Similarly, in relation to the management accountant's involvement in strategy formulation, Australian evidence suggests that it is only in a support role. Thus, it appears that Australian management accountants are lagging behind their overseas counterparts in influencing change and strategic direction in the organisations they work for.

Table Two provides a summary of the various roles or functions of a management accountant as suggested in the international literature.

Table Two: Summary of Contemporary Roles and Functions of Management Accountants Reported in Australian, UK and US Research

Business Analyst
Strategy Formulator
Internal Consultant Or Advisor (Or 'Business Partner')
Change Agent Or Supporter Of Change
Information Provider (Or 'Knowledge Worker' The 'Hub' For Data)
Leader Of And/Or Participator In Cross-Functional Teams
Designer And Manager Of Information Systems
Designer And Controller Of Performance Measurement Systems
Teacher, Guide Or Educator
Interpreter And Manager Of Complexity

Changes in the Tasks Performed by Management Accountants

Chenhall and Langfield-Smith (1998) conducted a survey of 140 manufacturing firms in Australia. A number of current and future trends in management accounting tasks/practices were observed in this study. Sharma (1998) provides a summary of these trends, and classifies them according to the emphasis given to each in the study. This analysis is presented in Table Three.

Current Trends	Future Trends	
High Emphasis	High Emphasis	
Budgeting for Planning and Control	Budgeting for Planning and Control	
Variance Analysis	Variance Analysis	
Capital Budgeting	Capital Budgeting	
Return on Investment Techniques	Return on Investment Techniques	
Absorption Costing	Moderate Emphasis	
Variable Costing	Balanced Scorecard	
Moderate Emphasis	Customer Satisfaction Measurement	
Balanced Scorecard	Activity-based costing and management	
Customer Satisfaction Measurement	Shareholder Value analysis	
Low Emphasis	Benchmarking	
Activity-based costing and management	Absorption Costing	
Shareholder Value analysis	Variable Costing	
Benchmarking	-	

Table Three: Current and Future Trends inManagement Accounting Techniques/Practices

(Adapted from Sharma, 1998, p 24)

It is apparent from the analysis above that respondents believed that some traditional management accounting techniques such as budgeting, variance and ROI analyses would continue to be used and be given a high level of emphasis in Australian manufacturing firms. The study also found that contemporary techniques such as strategic planning, product profitability analyses, long range forecasting, benchmarking and ABC would assume increased importance in the future. Additionally, respondents believed that management would continue to emphasise financial over non-financial performance measures (Chenhall and Langfield-Smith, 1998).

Barbera (1996) found that the tasks associated with contemporary management accounting were predominantly: resourcerelated direction setting (e.g.strategy formulation, business planning, operational decision making); support for organisational change processes; and contribution to the development and review of performance measurement systems, control systems, and user-focused information systems.

The IMA study in the US (Siegel and Sorensen, 1999) found that compared to five years ago, respondents spent more time performing tasks such as internal consulting; long-term strategic planning; computer systems and operations; process improvement; and financial and economic analysis, and expected to continue to focus primarily on these activities.

On the other hand, respondents spent less time on tasks such as accounting systems and financial reporting; short-term budgeting; project accounting; and compliance reporting, and expected to continue to spend less time on these activities into the future.

The UK study (Burns et al., 1999) found that there had indeed been a change in the tasks conducted by management accountants, however this change was primarily in the way management accounting information was used "rather than change in management accounting systems and techniques *per se*" (Burns, et al., 1999, p 28, emphasis in original). Traditional management accounting information continued to be generated, but these results were interpreted in a broader context:

"...a key role for management accountants today is to place financial numbers into a broader context and relate them to key non-financial measures. The management accountant integrates the different perceptions of the business indicated by the financial and non-financial measures, and integrates managers' understandings of their operating performance, the financial results and the strategic directions of the business." (Burns et al., 1999, p 29)

Changes in Skills Required by Management Accountants

Comparing the results of the Birkett (1989) study to those from the 1994 Australian study, an increased emphasis was placed by management accountants on personal, interpersonal and analytic/constructive skills (Barbera, 1996). Personal skills included things like tolerance of ambiguity and the ability to take leadership roles. Interpersonal skills such as the ability to facilitate cross-functional team-work, empower employees, and assume a consultative/educative role were also highly valued. Analytic/constructive skills were also vital in fulfilling the business analyst, change agent and strategy formulator roles. Finally, the ability to be intuitive and think creatively were also considered valuable skills.

The UK perspective reported by Burns et al. (1999) suggests that "it is important to develop not only management accountants' financial knowledge, but also their broader personal skills and commercial capabilities" (p 29). He suggests that accountants should have an understanding of the broader commercial environment (e.g. some

marketing knowledge) and the business they work for, and the ability to work closely with other members of the management team – to become 'hybrid accountants'.

In the US study (Siegel and Sorensen, 1999), respondents were asked to identify the most important KSAs (Knowledge, Skills and Abilities) necessary in the management accounting function. The results clearly mirror the UK and Australian studies, focussing on communication (oral, written and presentation), team-work, analytical, and technical skills. Computer skills were identified as the most important skill that respondents had learned in the past five years. Other skills included data modelling, forecasting, process analysis, being adaptable and not resisting change, and being strategic and forward looking.

Zarowin (1997) suggests that accountants must possess skills in persuasion and facilitation, as well as good presentation skills to be an effective change agent. In addition, accountants should have more foresight, be less backward-looking, and be more risk taking.

A summary of the key research findings in regard to the current skills required by management accountants is presented in Table Four.

Table Four: Summary of Research Findings of Current Skills Required by Management Accountants

- Personal (tolerance of ambiguity; ability to take leadership roles)
- Interpersonal (Ability to: facilitate cross-functional team-work; empower employees; assume a consultative/educative role)
- Analytic/constructive
- Commercial/business
- Communication (oral, written and presentation)
- Technical
- Computer, including data modelling
- Forecasting
- Process analysis

Research Questions

The preceding discussion addressed three issues: drivers of change in management accounting, changes to the management accounting function, and changes to management accounting tasks. As stated earlier, this study aims to establish how management accountants currently view their present and future role, therefore, from the literature above, four main research questions were developed that will be addressed. These are outlined as follows, with some subsidiary questions where appropriate.

1. What do management accountants see as the current and future *functions* of management accounting?

2. What do management accountants see as the current and future *tasks/activities* involved with being a management accountant?

- Which of these do they currently perform?
- For those they do not perform, why not?

3. What do management accountants see as the current and future *skills* required to perform these tasks/activities?

- Do they believe that they currently have these skills?
- If not, which skills would they like to acquire or further develop?

4. Do management accountants think there has been change in the functions, tasks and skills of management accounting in the last 5 years?

- What is the likely rate of future change?
- What do management accountants think have been the major drivers/triggers of that change?

Method

The research questions were addressed by developing a self-administered mail

questionnaire¹. The questionnaire was structured in four sections covering the three areas discussed in the literature review, plus a section for the collection of demographic information including age, gender, experience, position in the organisation, education level and qualifications.

In order to maximise responses, the surveys were sent out with a letter from CPA Australia encouraging respondents to complete the questions, and those returning their survey by a specified date were put into a prize draw. Surveys were also handed out in packets provided at the CPA Australia State Congress in 2001.

Sample

The sample chosen was South Australian members of CPA Australia who are either working in, or have a professional interest in, management accounting. This was determined through the use of a CPA Australia mailing list and was confirmed with a survey question.

Limitations

Apart from the usual limitations associated with survey research (particularly nonresponse bias and desirability bias), the fact that the survey was only sent to South Australian members of the professional accounting bodies is a limitation. As South Australian small business is largely manufacturing however, it is not considered to cause serious difference in the results if compared to other States. Generalisation of the results however, must be undertaken with caution.

Analysis

The results are presented predominantly in descriptive terms (percentages, tables of frequencies) due to the exploratory nature of the paper. Where appropriate however, nonparametric statistical techniques are used to test for differences and associations and test statistics are provided whenever these are used.

¹ A copy of the questionnaire will be provided by the authors on request.

Results

While the response rate was quite low, in total 161 individuals responded to the questionnaire providing enough data to undertake some preliminary investigation. The first question asked respondents whether they were in a management accounting role, and if not, whether they had a professional interest in management accounting. Of the 161 responses, one indicated he/she was neither a management accountant nor interested in management accounting, and 3 declined to answer this question. 108 are currently working in a management accounting role (67%). 49 are not working as a management accountant, but have a professional interest in the area (30%). Tests were run to determine whether there was any significant difference between these two groups. Each question was compared using the Mann Whitey Test and no significant differences were found at the 5% level for 106 of the 125 variables tested.

Where a difference was found, it appears that the difference can be explained, not by whether the respondents were in a management accounting role, but by their age and/or how long they have been working in the area of accounting. Specifically, the variables where a difference appeared include: to whom they provide information (p=0.019), attitudes about traditional measures (p=0.031), age group (p=0.000), professional qualification obtained (p=0.022), educational qualification obtained (p=0.048), and the number of years they have been an accountant (p=0.001). Differences were also apparent for the rating given to the position of a management accountant on the importance of teamwork skills, forecasting and problem solving, and the rating given to themselves on the importance of problem solving, technical skills, decision making skills, dealing with change and strategic skills (p=<0.05).

The tests were re-run excluding those respondents who had been an accountant for more than 20 years and those who were over 55 years of age. All but two of the variables that were previously significant were no longer significant.² Notwithstanding this, as very few significant differences were found, the entire sample was used for the analysis presented in the following sections.

Sample Demographics

The complete sample of surveys returned provided an excellent representation of various sizes and industries as can be seen in Table Five. Both centralised and decentralised firms are also evenly represented.

Large organisations (those with greater than 1,000 employees) were most common in the sample (36%), however, all size groups, measured in terms of number of employees were represented. Most respondents were from manufacturing businesses (24%) or public sector organisations (20.5%). Within the manufacturing organisations, a variety of industries were represented (see footnote to Table Five).

Size Groups	N (%)	Main Industry	N (%)
(employees)		Groups	
0-100	47 (29.2%)	Manufacturing*	39 (24.2%)
101-500	33 (20.5%)	Public Service	33 (20.5%)
501-1,000	20 (12.4%)	Financial Services	16 (9.9%)
>1,000	58 (36.0%)	Education	9 (5.6%)
		Community Services	9 (5.6%)

Table Five: Size and Industry Classifications

* Motor vehicles; electronics; food, wind, beverages; printing; building; chemicals; optical; batteries; paper; steel.

All questions were tested for differences between smaller sized organisations (up to 1,000 employees) and larger ones (>1,000). The only place that differences appeared was for some 'techniques' and 'performance measures' currently used by their organisation. These will be discussed below.

Most respondents described their position as either a manager/supervisor (34%) or an accountant (22%). Only 13% described themselves as solely a management accountant. Others included financial controller (11%) and consultant (2.5%). The majority of respondents were male (65%) and aged between 26 and 45 (66%). Most respondents had an undergraduate degree only (63.4%) with a further 17%holding a postgraduate diploma and 12% holding a Masters degree. 66.5% of respondents have CPA status. 64.6% of respondents had only been in their current position for less than 5 years, however the number of years working as an accountant was spread fairly evenly between less than 5 (18%), 5-10 (25%) and 11-20 (30%). Even more than 20 years as an accountant was indicated by 20.5% of respondents.

Research Questions

Current and Future *Functions* of Management Accounting

When asked to state the current primary function of management accounting, reporting and information provision was indicated by 102 respondents (63.4%), followed by strategy, decision making, forecasting and planning being suggested by 15 respondents (9.3%) and budgeting and costing by 11 respondents (6.8%).

This confirms trends found in the UK and US that while the function of management accounting is changing, there is still major emphasis on quantitative and financial issues. The future functions of management accounting were not considered to be very different from the current functions except that the priority is reversed; respondents indicated that most important will be strategy, decision making, forecasting and planning (36%, 58 respondents) followed by reporting and information provision at 32.3% (52 respondents). Performance measurement was also mentioned by 7 respondents (4.3%).

Hence, the two major functions of the management accountant of the future appears to be providing information and involvement in strategy and planning – again this confirms prior research that the relative emphasis on each is changing (reversing).

Current and Future *Tasks/Activities* Involved with being a Management Accountant

The types of management accounting techniques that were most commonly used by the sample of management accountants were those not traditionally related to costing as can be seen in Table Three. Financial tools such as CVP, residual income and variable costing were used by less than one third of the respondents. Moreover, contemporary costing tools such as life cycle costing and target costing had not been adopted by many organisations. The major emphasis indicated by Table Six is on budgeting and strategy, with all costing techniques being used by less than half of the respondents.

The use of these techniques and performance measures was compared between larger organisations and smaller organisations and some differences were found as indicated in Table Six.

² Three new variables did become significant (the rating for whether the position of management accountant requires analytical and data modelling skills, and whether increased competition is changing the role of management accountants).

Techniques	%	Performance Measures:	%
Operating budget*	90.1	Non financial measures	65.8
Cash flow budgets	86.3	Divisional profits	61.5
Strategic planning	81.4	Customer satisfaction	54.7
Capital budgeting*	78.3	Return on Investment*	46.6
Profitability analysis	62.1	Balanced scorecards*	27.3
Benchmarking*	57.4	Residual Income*	14.3
Absorption costing	32.3		
Activity Based Costing*	31.1	7	
Variable costing*	29.2	7	
Shareholder value analysis*	22.4		
CVP analysis*	20.5	7	
Life cycle costing*	9.3	7	
Target costing	6.8	7	

Table Six: Techniques and Performance Measures Used

* showed a significant difference (p=<0.05) between larger and smaller organisations.

There did not however, appear to be a pattern in the differences, with smaller firms more often using operating and capital budgets, and life cycle costing and larger ones more often using the variable costing and ABC, and performance measures such as ROI and Residual Income. It was therefore concluded that size is not a major factor influencing the use of traditional versus contemporary management accounting techniques and performance measures.

Respondents were asked to identify from a list, the single most critical work activity for a management accountant, and this was considered to be 'accounting systems and financial reporting' by almost 20% of the sample, and 'managing the accounting/finance function' by almost 16%. Hence, this is evidence that while financial/quantitative activities are still a high priority for management accountants, there is increasing emphasis on management activities.

When provided with a list of activities and asked whether their work in this area had increased, decreased or remained the same, responses varied and are summarised in Table Seven. As can be observed in the table, only five activities were considered by the majority of respondents to have increased and all of these are finance related. The majority considered all other activities to have decreased, however a number of respondents chose not to answer this question, hence the low percentage figures in the table.

Finally, when asked what role in the organisation the management accountant primarily plays, the most often cited roles were information provider (83.2%), internal consultant or advisor (62.1%) and business analyst (56.5%). These reflect the trend in the UK to change the title of management accountants in many organisations to the broader job title of 'business analysts'" (Burns et al., 1999, p 29).

Current and Future *Skills* Required to Perform these Tasks/Activities

Respondents were asked to rate a range of skills on a scale of 1 to 5 according to how necessary they believed each skill is to the position of a management accountant, and then to rate themselves on the same scale (1 = not necessary/poor, 5 = very necessary/excellent).

Activity	Increased	Decreased
	%	%
Capital budgeting	27.3	
Investment of funds	22.4	
Credit collection	19.3	
External financing	16.8	
Mergers, acquisitions and divestments	14.9	
Process improvement		49.1
Computer systems and operations		44.1
Educating the organisation		42.2
Perform financial and economic analysis		39.1
Performance evaluation		38.9
Accounting systems & financial reporting		37.9
Long term, strategic planning		37.3
Compliance reporting		36.0
Internal consulting		34.2
Managing the accounting/finance function		32.9
Short term budgeting process		31.7
Project accounting		23.0
Risk management		23.0
Cost accounting systems		22.4
Quality systems and control		21.1
Customer and product profitability		20.5
Tax planning and strategy		16.8

Table Seven: Activities Undertaken by Management Accountants

	Necessary for position	Self Rating
	Mean	Mean
Problem solving ability*	4.6	4.2
Broad understanding of day to day operations*	4.5	4.0
Interpersonal skills*	4.5	4.1
Analytical skills*	4.5	4.2
Leadership skills*	4.4	4.0
Ability to deal with change*	4.4	4.2
Communication and presentation skills*	4.3	4.1
Ability to work in a team	4.3	4.4
Computer skills*	4.3	4.1
Adaptability	4.3	4.2
Strategic and forward-looking*	4.2	3.8
Decision making skills*	4.1	3.9
Forecasting and projection skills	3.9	3.7
Technical accounting skills	3.8	3.8
Creativity*	3.7	3.5
Data modelling skills	3.4	3.3

Table Eight

* significant differences between position rating and self rating

Those variables where the self rating was significantly¹ different to the rating for necessity are marked in Table Eight with an asterisk. Those that showed no difference were mainly technical skills such as modelling and forecasting, as well as teamwork and adaptability. The lack of difference for teamwork may be accounted for as most respondents stated that they currently worked in an accounting team (65%) and often worked in a cross functional team (49%), hence had developed their team working skills.

Interestingly, the top of the list for both the 'necessary for position' rating and the self rating contained problem solving skills, interpersonal skills and ability to deal with change. Much of the literature investigating the changes to management accounting includes warnings that management accountants will need to be prepared to undergo changes, and will need to develop skills that are often different to those they currently have, that is, less technical and more personal. The response to this survey however, indicates that most management accountants believe they have these skills already.

One possible explanation is that the forecasted change has taken place more quickly than expected, alternatively, the results could reflect the fact that 66% of the sample are under 45 year old and therefore more likely to have commenced employment since the change started to take place. To test whether younger respondents were more likely to rate themselves higher in these areas than older ones, the Mann Whitney test was used to compare those respondents under 45 years of age with those over 45. A few differences appeared, most importantly however, of those where there was a difference between the rating for the position and the self rating, problem solving, leadership, being forward looking, decision making and creativity showed differences by age². Both age groups rated themselves highly for communication skills, interpersonal skills, adaptability and

ability to deal with change. This appears to indicate that while all respondents see themselves as having the personal qualities considered important for the position of management accountant, the younger respondents rate themselves more highly for specific qualities such as leadership skills and problem solving ability.

Changes in the Functions, Tasks and Skills of Management Accounting

Most respondents (over 50%) do consider that management accounting is currently in a state of change, has changed significantly over the past five years, and will continue to change. They also considered that the role of the management accountant has changed in that they now have more input into organisational decisions, and that in the future there will be more need for change in traditional management accounting techniques.

The roles that respondents see management accountants playing in the future include strategy formulator and consultant. They see themselves as having more involvement in the design of information systems, and in the design and control of performance measurement systems and less involvement in costing and day-to-day operations.

The major reasons given for the changes are the introduction of e-commerce, advances in information technology, increased competition, changes in organisation structure and changed performance measures (including customer relations).

Conclusions

The results of this exploratory study show quite clearly that those working as a management accountant perceive their role as a changing one, and points to evidence that the change is mainly in the tasks that management accountants must undertake. Much more emphasis is being placed on strategy and decision-making roles, rather than the more traditional areas of costing and financial analysis. The one traditional area to remain high on the list of important areas for management accounting however,

¹ Using the Wilcoxon Ranked Signs test, at the 5% level of significance (p=<0.05).

 $^{^{2}(}p = < 0.05)$

is budgeting. This suggests that one of the core traditional functions of the management accountant has remained stable while other functions have changed rapidly to become much broader in their focus.

Interestingly however, many of the various contemporary techniques that have been developed in response to the changing requirements of management accounting were not seen by the respondents to this study as being particularly useful. Activity Based Costing, Balanced Scorecard, Economic Value Added, and Benchmarking were all cited as not currently used and unlikely to be used in the future. Performance Indicators was one of the few more recent innovations respondents felt might be useful.

The observation that the role of management accounting has changed and will continue to change has led to calls for management accountants to develop new, 'personal' skills that are outside the traditional skills learned in universities and training courses (Burns et al., 1999). This study however, suggests that while there is agreement that these are important, most people in a management accounting role believe that they have adequate skills in these areas.

Implications and Further Research

This study provided an exploration of the attitudes of management accountants in South Australia. Its two major findings are: that many of the techniques that have emerged in response to the changing needs of management accounting are not considered useful: and that most respondents consider their personal attributes to be sufficient to deal with what the future brings, although training and development in these areas are welcomed. As this study was exploratory and limited in its scope, it is important that more work is undertaken on a broader sample, and internationally, in order to make comparisons.

It is also important to examine the detailed areas where management accountants perceive a lack of development. In particular, the impact of some of the issues identified as influencing change need to be examined, such as e-commerce and the current focus on performance. Wider ranging surveys, interviews and case studies would all be useful in determining the gaps in current management accounting training and professional development. This also has implications for University courses which still tend to focus on traditional costing techniques, and contemporary techniques such as ABC and benchmarking, that do not appear to be seen as relevant.

Thus, the major implication of this study is that current 'solutions' to management accountants' need for relevant skills, techniques and practices are not apparently useful. The results support most prior studies in suggesting that more emphasis needs to be placed on developing the personal skills rather than technical skills – management accountants need skill in communication, analysis, creativity and adaptability. It seems that there is a need for more emphasis on the 'management' than the 'accounting'. The challenges for the accounting profession are to find ways of developing and maintaining such characteristics.

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