

THE DYNAMICS OF MANAGEMENT ACCOUNTING IN MALAYSIA: A RESEARCH NOTE

Suzana Sulaiman

Aliza Ramli

Accounting Research Institute and Faculty of Accountancy
Universiti Teknologi MARA, Malaysia

Falconer Mitchell

Business School

University of Edinburgh, UK

Abstract

Management accounting changes take in various dimensions and are not a uniform phenomenon. The changes demand management accounting tasks, skill and tools and techniques to change. A study was conducted on Malaysian registered management accountants with CIMA Malaysian division. The findings showed that Malaysian management accountants held different job titles in various functional areas within the organization. Management accountants in the future are expected to be able to relate management accounting to wider information flow within the organization. There is a shift from 'financial accounting' to 'commercial orientation'. However, traditional management accountants tasks such as cost/financial control, planning/management budget and operational information interpretation remain essential. Future management accountants are expected to be more analytical and have a broad view of business. They are expected to use more non-financial measures and be able to integrate both financial and non-financial measures into planned strategic activities. They are also required to be ethical in performing their tasks besides developing leadership quality skills, while future management accounting tools and techniques are expected to be forward-looking and activity-based. In addition, value creation tools appear to be important management accounting tools in the near future.

Keywords: management change; management accounting tasks; management accounting skills; management accounting tools and techniques

Introduction

The aims of this paper are twofold. First, it provides a concise review of the state of the art practices of management accounting in Malaysia. Second, it explores the views of practicing Malaysian management accountants on how the discipline will change in the short to medium term. The achievement of these aims provides a basis for locating Malaysian management accounting in the context of practice

surveys of other countries. This permits an assessment of its relative distinctiveness and sophistication in the modern world. In addition, the results of the study will be of interest to those involved in designing educational programs in order to incorporate future trends.

The IFAC (1998) definition of management accounting as a "...process of identifying, measuring, analysing, interpreting and communicating information in pursuit of an organisation's goals..." is adopted. This definition emphasises that management accounting involves both the production and use of information within organizations. Thus the study adopts a tripartite structure and management accounting is represented as the tasks, skills and tools and techniques of the management accounting. In the following section, literature relating to each of these three aspects is reviewed. The research method is then explained. This is followed by the presentation of results and finally some conclusions are drawn.

Literature Review

Management Accountant Roles

Management accountants have long been known to have multiple roles. Categorized as scorekeeping, attention directing and problem solving roles by Simon (1954) in his study of the controllership function. The scorekeeping and attention directing roles typically focus on compliance reporting and control-type issues, respectively. The problem solving role focuses on providing business unit managers with relevant information for decision-making (Friedman and Lyne, 1997). From the late 1980s both the professional and academic literature started examining how these roles have been changing (Bromwich and Bhimani, 1989; Hiromoto, 1991; Scapens, 1991; Burns et al., 1996; Atkinson et al., 1997; Burns and Scapens, 2000; Friedman and Lyne, 2001). A number of commentators have suggested that the problem solving role has become relatively more important as companies' managers have faced increasingly uncertain environments where new and different information is needed to manage those uncertainties (Granlund and Lukka, 1998). Where management accounting information has not kept pace with these uncertainties, the relevance of management accounting has been increasingly questioned by business unit managers (Murphy et al., 1995; Kaplan, 1986). To more closely meet the changing information needs of business unit managers, there have been calls for management accountants to spend less time working within a centralised accounting function and more time working in business units with the users of management accounting information (Copper, 1996; Evans and Ashworth, 1996). Management accountants whose role involvement is of this latter type have greater mutual understanding and empathy towards the information needs for business unit managers.

The ways in which centralized management accountants interact with others have increasingly been of concern. For example, some industrial design executives reported that the management accountants are members of their new product development teams (Hertenstein and Platt, 1998). Participation in new product development and then early in the design and development process may necessitate subtle changes in the role of management accountants. This role may require them to take a more creative, proactive, flexible approach to cost and financial analyses [Kaplan (1983), Nanni, et. al. (1992)]. Another benefit of including a management accountant in the new product development effort is to develop a capital proposal on new equipment. Another effect of having a management accountant on the product design team is their role in providing a constant reminder to all team members that the cost and financial success of the product are key goals that the ultimate product design must satisfy. It is important for cost control and effectiveness that the management accountant report. They also monitor the progress of the engineers and industrial designers in meeting the cost targets that were established at the beginning of the product development process.

Traditional measures of new product performance have focused on financial results such as sales, costs and profits. The modern management accountant is trained to go beyond these financial measurements by developing, tracking and assessing multiple financial and non-financial performance measures throughout firms. Examples of some non-financial measures include time to market, number of changes to the design, degree of innovation, customer satisfaction and evaluation. Thus there is evidence that management accountants' role is changing to include all types of relevant information including financial and non-financial quantitative and qualitative variables.

Management Accountants' Skills

Management accountants have been criticized for their inability to innovate (Johnson and Kaplan, 1987), and this was described as 'accounting lag' that needs to be minimized in order to keep management accounting relevant to the changing information needs of managers. The traditional skill of the management accountant centred around overseeing the costing system and periodic financial performance report preparations. However as a result of acquiring skills in new technology, management accountants have been able to exhibit more proactive skills as business planners, leaders, communicators and business partners.

One clear message is the need for the management accountant to understand operational processes together with the need to embed management accounting systems within operational activities. Accounting personnel should be working much more closely with manufacturing managers and product and process engineers. This proximity means that management accountants need to possess

'people' skills which will enable them to be more familiar with the sort of decisions business unit managers make and understand the information that is of most value to making those decisions.

Management Accounting Tools and Techniques

Since Relevant Lost (Johnson and Kaplan, 1987) there has been a burgeoning of new management accounting practices. These include activity-based costing and management (Cooper and Kaplan, 1991; Cooper et al., 1992), the balanced scorecard (Kaplan and Norton, 1996), quality costing (Deming, 1986; Oakland, 1982; Hill 1991a; 1991b; Petty, 1997), life cycle costing (LCC) [Shields and Young, (1991)], EVA © [McLaren (1999)], functional cost analysis [Yoshikawa, et. al., (1995)], throughput accounting [Darlington, et. al., (1992)] and strategic management accounting (SMA) [Simonds, (1981)]. However, an unsettled issue is whether these emergent practices have complemented or substituted traditional management accounting practices such as budgeting, absorption costing, cost volume profit analysis, variable costing and target costing. One view suggests that these emergent management practices have played a prominent role in revitalizing the discipline of management accounting by acting as substitutes for the financially orientated mindset that has fostered information manipulation in the short-term (Johnson, 1994). These new management practices now explicitly incorporate non-financial information and provide support for corporate strategy (Chenhall and Langfield, 1998). Another view suggests that the comparison of traditional and emergent management practices requires a more holistic view as both sets of practices tend to complement one another (Chenhall and Langfield, 1998a, 1998b). The choice and selection between traditional and emergent managerial practices are therefore particularly relevant for the business manager in the new millennium (Granlund, 2001).

Research Methodology

Data were collected through postal survey. Registered management accountants with the CIMA Malaysia Division were the target respondents for this study¹ and at the time the study was conducted there were approximately two thousand and five hundred registered CIMA members in Malaysia. A preliminary questionnaire was developed based on Burns and Yazdifar (2001) and other related literature review [Bromwich and Bhimani, 1989; Hiromoto, 1991; Scapens, 1991; Burns et al., 1996; Atkinson et al., 1997; Burns and Scapens, 2000; Friedman and Lyne, 2001; Cooper and Kaplan, 1991; Cooper et al., 1992; Kaplan and Norton, 1996; Deming, 1986; Oakland, 1982; Hill 1991a; 1991b; Petty, 1997, Shields and Young, (1991), McLaren (1999), Yoshikawa, et. al., (1995), Darlington, et. al., (1992) and Simonds, (1981)]. The draft questionnaire was pilot-tested by ten randomly selected

registered management accountants². The selection was done by CIMA Malaysia Division with due respect to confidentiality policy. The draft questionnaires and self-addressed envelopes were mailed to the respective registered management accountants by CIMA Malaysia Division.

Questionnaire

The questionnaire was divided into six sections. Section A was designed to obtain background information about the organization, respondent's job title and length of service, which served to identify the registered management accountants with at least five years working experience within the organization. Only those who met this criteria were included for the data analyses. Section B solicited the perception of the management accountants' on the importance of management accountant's tasks over the past five years (2000-2004). A three-point scale of vitally important, average importance and negligible was used. Respondents were required to identify five most important tasks by the year 2009, from a list of tasks provided. The importance over the past five years of management accounting tools and techniques according to the respondents is covered in section C.

Section D focused on the respondents' perception of business managers' perspective of management accountants in the next five years. A three-point scale of totally agree, some agreement and totally disagree was used to measure the perception. Section E aimed to discover the importance of the skills listed in the question over the last and next five years. A three-point scale of vitally important, average importance and negligible was also used to measure the respondents' opinion. In addition, they were also required to choose five most important skills of management accountants' by the year 2009. Finally, Section F was to discover factors driving the change in the tasks and roles of management accountants over the past five years. A three-point scale of vitally important, average importance and negligible was used to gauge their perception of the change drivers.

Postal survey

A total of 2500 questionnaires and self-addressed stamped envelopes was distributed by the CIMA Malaysia Division. As their members' list is confidential, CIMA Malaysia Division managed the mailing of the questionnaires. At the date of mailing of the questionnaires, CIMA Malaysia Division had a total of 2346 members. Hence, questionnaires were mailed only to these members. Two follow-up messages were emailed to all the members³. A total of 59 questionnaires was received after both reminders. The third follow-up through e-mail by a CIMA representative resulted in the return of an additional 30

questionnaires. Eventually, a total of 251 questionnaires was returned by 10 October, 2005⁴. The study resulted in the exclusion of only one questionnaire. Hence, 250 usable questionnaires were analysed, representing an overall response rate of about 11 percent (250/2346). A test for non-response bias was conducted, and there was no response bias detected⁵. Chi-square test for independence was applied in the study to reflect the relationship of variables that were both categorical in nature.

Findings

Respondents' Background

Table 1 shows that CIMA members held various job titles. About 45% of CIMA members were managers of various functional areas, involved in various areas such as: Finance; Auditing; Information Technology; Risk Management; Quality Assurance and Control; Operation; Contract and Procurement; Cost Accounting; Business and Taxation.

Table 1: Job Title

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Accountant	47	18.8	19.2	19.2
	Lecturer	4	1.6	1.6	20.8
	Manager	109	43.6	44.5	65.3
	VP	5	2.0	2.0	67.3
	Others	6	2.4	2.4	69.8
	Auditor	3	1.2	1.2	71.0
	Analysts	2	.8	.8	71.8
	CEO/COO	5	2.0	2.0	73.9
	Consultant	1	.4	.4	74.3
	Directors	20	8.0	8.2	82.4
	Executives	8	3.2	3.3	85.7
	Controller	26	10.4	10.6	96.3
	GM	9	3.6	3.7	100.0
	Total	245	98.0	100.0	
Missing	999	5	2.0		
Total	250	100.0			

19 % of CIMA members were accountants and only seven of these respondents (2.5%) stated that they were management accountants. The responses show that the majority held managerial rather than accounting positions with a substantial minority reaching the top levels of corporate management. Although few of the

respondents were working as management accountants, all were experienced in managerial roles of some type and as such will have direct exposure to the management accounting service in their firms.

Table 2: Length of Service (years)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 5 years	110	44.0	44.9	44.9
	< 5 years	135	54.0	55.1	100.0
	Total	245	98.0	100.0	
Missing	missing	5	2.0		
Total		250	100.0		

Length of Service (years)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0.1 to 4.9 years	110	44.0	44.9	44.9
	5 to 10 years	91	36.4	37.1	82.0
	10.1 to 15 years	32	12.8	13.1	95.1
	15.1 to 20 years	9	3.6	3.7	98.8
	> 20 years	3	1.2	1.2	100.0
	Total	245	98.0	100.0	
Missing	missing	5	2.0		
Total		250	100.0		

Table 2 shows that about 44 % of the respondents had been with the same organization for less than five years, followed by 36 percent who had been with same company for between five and ten years. However, there were three of CIMA members who had been with the same organization for more than 20 years. The length of service categories was recoded to more or less than five years. The results indicated that a large proportion or 55 percent of the respondent had been with the current organization for more than five years. The recoding was done so that only the opinion of respondent who had been employed with the current organization for five years and more was analysed for factors that drive change, management accountant tasks and management accounting tools of their organization. Only those employed by the same company for duration of at least five years would be in a convincing position to respond to the above issues (Burns and Yazdfar, 2001).

Organizational Background

Table 3: Country of Origin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malaysia	151	60.4	62.1	62.1
	Asia(Japan, Singapore, Hong Kong & Indonesia)	23	9.2	9.5	71.6
	Europe	39	15.6	16.0	87.7
	N. America (USA & Canada)	23	9.2	9.5	97.1
	Africa	3	1.2	1.2	98.4
	Australia	2	.8	.8	99.2
	UK & Australia	1	.4	.4	99.6
	UK & USA	1	.4	.4	100.0
	Total	243	97.2	100.0	
Missing	999	7	2.8		
Total	250	100.0			

Table 3 shows that majority of the respondent (60%) were employed by local organizations. Others were employed by organizations with European, North America, Japanese, Singapore and other Far Eastern organizations. The European countries included United Kingdom, Denmark, Sweden, Switzerland and Italy.

Table 4: Main Product/Services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Consumer product	48	19.2	19.6	19.6
	Industrial product	55	22.0	22.4	42.0
	Trading/services	106	42.4	43.3	85.3
	Palm oil & property	1	.4	.4	85.7
	Properties	16	6.4	6.5	92.2
	Technology	12	4.8	4.9	97.1
	Plantation	5	2.0	2.0	99.2
	Hotel	2	.8	.8	100.0
	Total	245	98.0	100.0	
Missing	5	2.0			
Total	250	100.0			

The organization's main product has been categorized as consumer and industrial product, trading or services, palm oil and property, properties, technology, plantation, and hotel. These are categories as listed under Bursa Malaysia. About 42 % of

the CIMA members are employed by organizations involved in trading and services. These were two other substantial groupings with 22% and 19% from industrial and consumer products, respectively.

Table 5: Total Employees

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<300	123	49.2	49.8	49.8
	300 to 600	46	18.4	18.6	68.4
	601 to 900	9	3.6	3.6	72.1
	901 to 1200	17	6.8	6.9	78.9
	> 1200	52	20.8	21.1	100.0
	Total	247	98.8	100.0	
Missing	999	3	1.2		
Total	250	100.0			

Table 5 shows the number of total employees employed by the organization. Half of the responses came from relatively small organizations (under 300 employees) with 80% of respondents having fewer than 1,200 staff.

Table 6: Qualified Management Accounting Staff

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<5	193	77.2	78.5	78.5
	5 to 10	23	9.2	9.3	87.8
	11 to 15	7	2.8	2.8	90.7
	16 to 20	3	1.2	1.2	91.9
	> 20	20	8.0	8.1	100.0
	Total	246	98.4	100.0	
Missing	999	4	1.6		
Total	250	100.0			

Table 6 suggests that the size distribution influences the management accounting staffing levels. Only around 20% had more than five (5) qualified accountants.

Table 7: Physical Location

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	all centralized	153	61.2	64.3	64.3
	all decentralized	48	19.2	20.2	84.5
	majority centralized	27	10.8	11.3	95.8
	majority decentralized	10	4.0	4.2	100.0
	Total	238	95.2	100.0	
Missing	999	12	4.8		
Total	250	100.0			

Table 7 shows the physical location. Most of the management accountants in various organizations were all centralized. This is followed by 19% (48) with their entire management accountant located at various departments in the organization. About 11% of the organization had most of their management accountant located at various departments within the organization.

Management Accountants' Roles

Respondents rated the importance of several management accountant roles in their organizations during the past five years (2000 to 2004) and offered their views on how these might change in future (2005 – 2009). Respondents were required to rank the top ten roles of management accountants out of the 33 roles (see Appendix 1) provided. Table 8 shows the comparison of the top ten management accountant roles considered as vitally important for the past five years (2000 to 2004) and in future years (2005-2009).

Table 8: Comparison of Top 10 Past and Future Management Accountants' Roles

(2000 – 2004)	(2005 – 2009)
Business Performance Evaluation	Business Performance Evaluation
Cost/Financial Control	Strategic Planning/Decision-making
Interpreting/Presenting the Management Accounts	Implementing Business Strategy
Planning/Managing Budgets	Cost/Financial Control
Cost Cutting	Planning/Managing Budgets
Profit Improvement	Profit Improvement
Functional Cost Analysis	Creation of Value
Interpreting Operational Information	Competitive Intelligent Analysis
Operational Planning/Projects/Decision-making	Risk Management
Implementing Business Strategy	Cost Cutting

One aspect of consistency is the top rating of business performance evaluation. However there were some marked changes in ratings in the second period. Strategic support by the management accountant became more important with “Strategic Planning/Decision Making” entering the selection at rank 2 and “Competitive Intelligence Analysis” at rank 8 while “Implementing Business Strategy” rose from rank 10 to rank 3. Other new inclusions were “Risk Management” (rank 9) and Creation of Value (rank 7). More traditional functions such as “Cost/Financial Control, Budgeting and Cost Cutting were all demoted.

Overall the management accountants’ role was viewed as becoming more outward-looking and creatively constructive.

Management Accountants’ Skills

Respondents were required to rank the top ten skills as management accountants out of a listing of 21 skills provided (see Appendix 2). Table 9 shows that only one new item was introduced in the 2005 to 2009 ratings i.e. “managing change” (rank 8). All of the new other changes were marginal with increases for “Broad Business Knowledge” (rank 4 to 2), “Decision Making” (rank 6 to 3), “Leadership” (rank 7 to 5) and “Integration of Financial and “Non-financial Information” (rank 8 to 6). Demotion was evident for “Strategic Thinking” (rank 3 to 4), “Professional/Ethical” (rank 2 to 7) and “Team Work” (rank 5 to 10). “Written Communication” was the only item to disappear. The results show that there was a stronger emphasis on strategic and value creating skills.

Table 9: Comparison of Top 10 Past and Future Management Accountants Skill

(2000 – 2004)	(2005 – 2009)
Analytical/Interpretative	Analytical/Interpretative
Professional/Ethical	Broad Business Knowledge
Strategic Thinking	Decision-making
Broad Business Knowledge	Strategic Thinking
Team-work	Leadership
Decision-making	Integrating Financial & Non-Financial Information
Leadership	Professional/Ethical
Integrating Financial & Non-Financial Information	Managing Change
Presentational	Presentational
Written Communication	Team-work

Management Accounting Tools and Techniques

The selection of important tools and techniques by respondents highlighted further the dynamic nature of contemporary management accounting in Malaysia. Four new items had appeared (EVA[®], Value Management, Six-Sigma and JIT). Another four had increased in their prominence (SMA, ABC, Standard Costing and TQM). Only rolling forecasts showed a decline while variance analysis retained its second place. Four of the top ten (2000 – 2004) had gone and these included the number 1 (one) rated item, budgets (also ABM, Balanced Scorecard, Target Costing).

Table 10: Comparison of Top 10 Past and Future Management Accounting Tools and Techniques

(2000 – 2004)	(2005 – 2009)
Budgets	Strategic Management Accounting
Variance Analysis	Variance Analysis
Strategic Management Accounting	Activity-Based-Costing
Rolling Forecast	Standard Costing
Standard Costing	Rolling Forecast
Activity-Based-Costing	Total Quality Management
Activity-Based Management	Economic Value Added
Balanced Scorecard	Value Management
Total Quality Management	Six-Sigma
Target Costing	Just-in-Time

Conclusion

This study was based on respondents' perceptions of the dynamics of management accounting as reflected in their views on changes of emphasis within the discipline during two recent five-year periods comprising the current decade. This was done to generate evidence on contemporary change in management accounting. It shows that the management accounting discipline in Malaysia is currently dynamic rather than static in nature. It reveals that the practical role of the management accountant is consistently focused on entity performance evaluation. However, it is evident that this role is changing with a greater emphasis placed on the creative aspects of value creation and risk management.

There is also a marked movement towards management accountants playing a more prominent role in formulating and implementing business strategy. Views from the important skills of management accountants exhibit more stability, although given the dynamism inherent in both management accountants' roles and tools, it is notable that skill in change management has emerged among the top ten ratings. The respondents' ratings of tools and techniques show that Malaysian firms attribute importance to many of the most contemporary of management accounting practices.

Moreover, the high degree of ratings changed over the two periods indicating preparedness for the management accountant function to change in response to demand. The prominence of strategic management accounting in the late period reinforces respondents' belief that the major change in the practice of management accounting in Malaysia will be the support which the discipline can provide to achieve effective business strategies.

Those with experience of practice in Malaysian companies exhibit considerable confidence in the potential business contribution that can be made by management accountants. The results of this research suggest that management accountants need to realise that this potential change is needed in several key aspects of the service they provide. To maintain the management accountants' relevance in this dynamic context, both pre-career and ongoing professional development requires regular redefinition to ensure training and education reflect the demands likely to be placed on Malaysian management accounting in the modern business world.

Limitation and Future Research

The study inevitably suffers from the limitations inherent in survey research. Apart from the normal limitations associated with survey research, this study has additional caveats. This includes the perception from the respondents on the management accounting tools and techniques and management accountants' tasks and skills within the decade (2000 – 2009). The results may have been influenced by the effects of the economic slowdown (1997 – 2001) which affected most Asian countries, including Malaysia. This may have accelerated the rate of changes in the management accounting tools and techniques. Similarly, management accountants are also required to perform multiple tasks and skills. This survey may therefore have overstated the management accounting tools and techniques and management accountants' tasks and skills. Finally, the respondents may have suffered from memory lapse or from bias in their views.

While this study has made several contributions to the already extensive and rapidly growing literature on management accounting change, many challenges and opportunities for further research need to be explored.

Notes

- ¹ Survey was conducted as it facilitates researchers to survey a large random sample of population at a relatively low cost and it focuses on facts instead of personal opinions (Brownell, 1995 and Gosselin, 1997). Furthermore, less pressure is placed upon the respondent and anonymity could be maintained. Brownell (1995) suggests that survey research methods provide powerful tools for analyzing studies that relate to exploring a specific hypothesis. Nevertheless, there are several disadvantages of the postal survey method. According to Brownell (1995), survey methods expose the research to internal validity threats. Internal validity threats in the study could be overcome by including design features that minimize the occurrence of these threats. There are two impending problems with respect to mail survey (Gosselin, 1997). The problems are low response rate and non-response bias. Total Design Method was adopted by Dillman (1978) to achieve a higher response rate. Accordingly, this technique has been very successful in achieving higher response rates and quality data collection.
- ² The main objective of the pilot study was to minimize inevitable management accounting tasks, roles and techniques. It was also to eliminate open-ended questions (Chau and Tam, 2000), appraise logical inconsistencies, understanding, questions sequence and task relevance. According to Edwards and Emmanuel (1990), before questionnaires are distributed to the targeted respondents, they are tested for comprehensiveness, comprehensibility and clarity. Two follow-up phone calls were made to respective CIMA members. As a result, three completed draft questionnaires were received. Most issues were fairly clearly understood by the target respondents in the pilot study. Therefore, there were minor comments, and the questionnaire was adjusted accordingly.
- ³ This is to minimize non-response among the members (Brownell, 1995).
- ⁴ Each questionnaire received was studied for the consistent use of the ranking scheme (Edwards and Emmanuel, 1990).
- ⁵ A test for non-response bias was conducted using t-test in relation to size of organization (Edwards and Emmanuel, 1990). The t-test was also conducted on respondents' response towards factors driving the change in management accounting tools and skills.

References

- Atkinson, A. A., Balakrishnan, R., Booth, P. J. M., Groot, T., Malmi, T., Roberts, H., Uliana, E. and Wu, A. (1997). New Directions in Management Accounting, *Journal of Management Accounting Research*, 9 : 79-108.

- Bromwich, M. and Bhimani, A. (1989). *Management Accounting: Evolution not Revolution*, CIMA Publishing.
- Burns, J. and Scapens, R. W. (2000). Role Rehearsal, *Management Accounting UK*, 78 : 18.
- Burns, J., Scapens, R. W. and Turley, S. (1996). Some Further thoughts on the Changing Practice of Management Accounting, *Management Accounting UK*, 74 : 58-61.
- Burns, J. and Yazdifar, H. (2001). Tricks or Treats. *Financial Management*: 33-35.
- Brownell, P. (1995). Research Methods in Management Accounting, Coopers and Lybrand.
- Chau, P. Y. K. and Tam, K. Y. (2000). Organisational Adoption of Open Systems: A 'Technology-push, Need-pull' Perspective, *Information and Management*, 37: 229-239.
- Chenhall, R. H. and LangField-Smith, K. (1998a). The Relationship between Strategic Priorities, Management Techniques and Management Accounting: An Empirical Investigation using a System Approach, *Accounting, Organisations and Society*, 23, 3: 243-268.
- Chenhall, R. H. and LangField-Smith, K. (1998b). Adoption and Benefits of Management Accounting Practices: *An Australian Study: Management Accounting Research*: 1-19.
- Cooper, R. and Kaplan, R. S. (1991). Profit Priorities from Activity Based Costing, *Harvard Business Review* (May – June) : 130-135.
- Cooper, R. (1992). From ABC to ABM, *Management Accounting* (November) : 55.
- Cooper, R. (1996). Look Out, Management Accountants, *Management Accounting UK*, 77, 11: 20-26.
- Darlington, J., Innes, J., Woodward, J. and Mitchell, F. (1992). Throughput Accounting: The Garrett Automotive Experience, *Management Accounting* (April). 32-38.
- Deming, W. E. (1986). *Out of the Crisis: Quality Productivity and Competitive Position*. Cambridge University Press.
- Dillman, D. A. (1978). *Mail and Telephone Surveys*. New York: Wiley-Interscience.
- Edwards, K. A. and Emmanuel, C. R. (1990). Diverging Views on the Boundaries of Managing Accounting, *Management Accounting Research*, 1: 51-53.
- Evans, H. and Ashworth, G. (1996). Wake up to the Competition, *Management Accounting UK*, 74 (5) : 16-18.

Friedman, A. L. and Lyne, S. R. (1997). Activity-Based Techniques and the Death of the Beancounter, *European Accounting Review*, 1 : 19-44.

Friedman, A. L. and Lyne, S. R. (2001). The Beancounter Stereotype: Towards a General Model of Stereotype Generation, *Critical Perspective Accounting*, 12, 4: 423-451.

Gosselin, M. (1997). The Effect of Strategy and Organisational Structure on the Adoption and Implementation of Activity-Based-Costing, *Accounting, Organisations and Society*, 22, 2: 105-122.

Granlund, M. (2001). Towards Explaining Stability in and around Management Accounting Systems. *Management Accounting Research*, 12: 141-166.

Granlund, M. and Lukka, K. (1998). Towards Increasing Business Orientation: Finnish Management Accountants in a Changing Cultural Context, *Management Accounting Research*, 9 : 185-211.

Hertenstein, J. H. and Platt, M. B. (1998). Why Product Development Teams Need Management Accountants. *Management Accounting*, 79, 10: 50-56.

Hill, S. (1991, a). How Do You Manage the Flexible Firm? *The Total Quality Model Work Employment and Society*, 5, 3: 397-415.

Hill, S. (1991, b). Why Qualities Circles Failed but Total Quality Might Succeed British, *Journal of Industrial Relations*, 5, 3.

Hiramoto, T. (1991). Restoring the Relevance of Management Accounting, *Management Accounting Research*, 3 : 1-15.

International Management Accounting Practice Statement (IMAPS) 1, *Management Accounting Concepts*, International Federation of Accountants (IFAC March 1998), New York: IFAC Publication.

Johnson, H. T. and Kaplan, R. (1987). *Relevance Lost: The Rise and Fall of Management Accounting*, Boston: Harvard Business School Press.

Johnson, H. T. (1994). Total Quality Management and the Role of Management Accounting. *Critical Perspectives on Accounting*, 5, 3: 259-267.

Kaplan, R. S. (1983). Measuring Manufacturing Performance: A New Challenge for Managerial Accounting Research, *The Accounting Review*, LVIII, 4: 686-705.

Kaplan, R. S. and Norton, D. P. (1996). The Balanced Scorecard-Measures that Drive Performance, *Harvard Business Review* (Jan- Feb) : 71-79.

- Kaplan, R. S. (1986). Accounting Lag: The Obsolescence of Cost Accounting Systems, *California Management Review*, 28 (2) : 174-199.
- McLaren, J. (1999). A Strategic Perspective on Economic Value Added, *Management Accounting* (April), 30-32.
- Murphy, C., Currie, J., Fahy, M. and Golden, W. (1995). *Deciding the Future: Management Accountants as Decision Support Personnel*. CIMA Publishing.
- Nanni, A. J., Dixon, JR. J. R. and Vollmann, T. E. (1992). Integrated Performance Measurement: Management Accounting to Support the New Manufacturing Realities, *Journal of Management Accounting Research*, 4, 1-19.
- Oakland, J. S. (1982). Total Quality Management. London: Heinemann Press.
- Petty, J. (1997). Managing and Accounting for Quality, *Issues Report*, 6, May.
- Scapens, R. W. (1991). *Management Accounting: A Review of Recent Developments*, MacMillan, London.
- Shields, M. D. and Young, S.M. (1991). Managing Product Life Cycle Costs: An Organisational Model, *Journal of Cost Management*, 5: 39-52.
- Simonds, K. (1981). Strategic Management Accounting, *Management Accounting* (April), 26-29.
- Yoshikawa, T., Innes, J. and Mitchell, F. (1995). A Japanese Study of Functional Cost Analysis, *Management Accounting Research*, 6: 415-432.

APPENDIX 1

Management Accountants Roles

No.	Management Accountants Roles
1	Business Performance Evaluation
2	Strategic Planning/Decision-Making
3	Implementing Business Strategy
4	Cost/Financial Control
5	Planning/Managing Budgets
6	Profit Improvement
7	Creation of Value
8	Competitive Intelligent Analysis
9	Risk Management
10	Cost Cutting
11	Interpreting Operational Information
12	Interpreting/presenting the Management Accounts
13	Operational Planning/Projects/Decision-Making
14	Productivity Improvement
15	Capital Expenditure Evaluation/Control
16	Functional Cost Analysis
17	External Financial/Statutory Reporting
18	Advice on Accounting Policy
19	Working Capital/ & Short-term Financing
20	Taxation Planning
21	Managing and Organizing Others
22	Implementing/Designing New Information System
23	Expense form Analysis
24	Customer Interface Management
25	Transaction Processing
26	Environmental Scanning
27	Customer/Supplier Assessment
28	Reduction of (resource) Waste
29	Take-over/Merger Assessment
30	Supply Chain Management
31	Managing IT Systems
32	Research & Development Consultation
33	Currency Dealing

APPENDIX 2

Management Accountants Skills

No.	Management Accountants Skills
1	Analytical/Interpretative
2	Broad Business Knowledge
3	Decision-Making
4	Strategic Thinking
5	Leadership
6	Integrating Financial & Non-financial Information
7	Professional/Ethical
8	Change Management
9	Presentational
10	Team-work
11	IT/System Knowledge
12	Oral Communication
13	Interpersonal
14	Knowledge/Intellect Management
15	Consultation
16	Negotiation
17	Written Communication
18	Project Management
19	Commercial
20	Technical Accounting
21	Others

Copyright of *Asia-Pacific Management Accounting Journal* is the property of Universiti Teknologi Mara Represented by Accounting Research Institute and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.