

Chapter 6

Solving of sub-problems and conclusion

A solution of the five sub-problems as outlined in Chapter 1 will, at the same time, resolve the basic problem addressed in this study. Identifying techniques and skills required of management accountants in practice (sub-problems 1 and 2) and comparing them with the syllabi used in education (sub-problem 3), will lead to a clearer understanding of the gaps between education and practice, if any, (sub-problem 4), which will enable the researcher to make recommendations regarding the education of management accountants (sub-problem 5).

6.1 The results of the questions relating to sub-problem 1

The focus of sub-problem 1 is to identify the tools and techniques that are important to practitioners and which should be included in management accounting syllabi. These tools and techniques were evaluated in questions 12 and 13 of the questionnaire. An analysis of the responses indicated that the most important tools and techniques, driven by various change drivers (discussed in section 5.10) which have an influence on the key tasks of a management accountant, were the following:

- * Budgeting and variance analysis
- * Working capital management
- * Asset management
- * Strategic cost management

- * Cost-volume-profit analysis and free cash flows
- * Knowledge management
- * Product costing
- * Economic value added
- * Value-added accounting
- * Value chain analysis
- * Standard costing
- * Forecasting and designing “what if” scenarios
- * Management accounts
- * Cash flow budgeting and cash flow management, where the emphasis is shifted from a cost focus to a cash flow focus
- * Marginal costing on a product, activity, division and business unit, where the principle “different costs for different purposes” is applicable

Of these, several are not included in the syllabi, as will be demonstrated in section 6.3.

Tools and techniques that were rated as less important by the respondents are the following:

- * Learning curves
- * Regression analysis
- * Activity-based costing
- * Target costing and life cycle costing
- * Quality costing and total quality management
- * Balanced scorecard

The techniques mentioned above that were rated as important by practitioners, should be included in the syllabi and students should be able to handle these techniques in a confident way to enable them to survive in the changing business environment (refer to section 3.9). The other, less important techniques, should take up less time in the educational timetable, but should still be addressed in the syllabi because these techniques contribute to the rich portfolio of skills required by management accountants. Also, they give a rigour to the examination process that is seen as a challenging “rite of passage” into the profession. Knowledge and understanding of the range of quantitative techniques available to organisations is a powerful differentiator for the management accounting profession, even if the occasions upon which management accountants are required to draw upon much of that knowledge are few and far between.

6.2 The results of questions relating to sub-problem 2

Sub-problem 2 consists in identifying the skills that are required by practitioners. Questions 10 and 11 of the questionnaire aimed to evaluate the competency in the various skills of the respondents, or of their peers, in their companies. Skills that respondents felt fairly confident or very confident of, are the following:

- * Ethics
- * Analytical skills and general business knowledge
- * Initiative, self-motivation and communication skills
- * Strategic and critical thinking

- * Stress management
- * Integration of non-financial and financial information
- * Teamwork abilities
- * Leadership skills and presentational skills

The fact that respondents felt that they or their peers were competent at the above skills, means that they received relevant training in terms of these skills and that this focus need not be changed in future educational programmes.

Skills that respondents felt incompetent at are the following:

- * control and performance evaluation,
- * the use of information technology and the design and maintenance of management information and systems and
- * adaptability.

Other skills, which four of the respondents felt were important but had not been included in the given list of skills, are:

- * negotiation skills and self-confidence,
- * the ability to look at the bigger picture (4-quadrant thinking) and
- * managing people.

This information relating to the respondents' competency and incompetency with regard to the different skills will help to resolve sub-problem 2, where the most

important skills required of management accountants – not necessarily those at which they are competent – had to be identified and addressed accordingly in the syllabi.

6.3 The results of questions relating to sub-problem 3

Sub-problem 3 constitutes comparing the findings of sub-problems 1 and 2 with the CIMA and SAICA syllabi. The differences will enable the study to make recommendations in terms of SAICA and CIMA's syllabi and also to make recommendations as to how teaching at the academic institutions could be changed to add more value to the education of management accountants. No question covered this comparison as such, as it will emerge from the study itself. This comparison is done referring to the SAICA syllabus only because it is assumed that the CIMA syllabus is not followed at the South African universities during the undergraduate courses. The CIMA syllabus is only applied during the management accounting honours year, where the final touches are added to qualify as a chartered management accountant. The reasons for this assumption is firstly, that it is too costly to do the basic three year degree in management accounting education for CA's and CIMA's separately and secondly, the SAICA syllabus seems to cover all the aspects of the CIMA syllabus.

The following techniques were included in question 12 of the questionnaire but are not included in the SAICA management accounting syllabi:

- * Life cycle costing
- * Value chain analysis
- * Asset management
- * Working capital management
- * Strategic cost management
- * Knowledge management
- * Value-added accounting
- * Economic value added
- * Free cash flows

Free cash flows and working capital management are included in the financial management syllabus and are therefore ignored for further purposes of this study, as it is assumed that a management accounting student should cover those two techniques in the financial management discipline.

The other techniques listed above, which are not specifically covered in the syllabus, should help the researcher to make recommendations as to how the syllabus (and therefore the teaching) could be adjusted to add more value to the education of management accountants.

Skills are not addressed directly in any management accounting syllabus, but should develop during the student's management accounting studies. It is important though, given the opinions quoted in section 5.8 and summarised in section 6.2, that the focus of education and assessment methods should address the development of those skills which respondents felt incompetent at.

6.4 The results of questions relating to sub-problem 4

Sub-problem 4 focused on finding reasons for the gap, if the questionnaire indicated a gap. Of the 15 techniques listed as important (refer to section 6.1), nine are not included in the syllabi (refer to section 6.3). This indicates that there is a gap between education and the requirements of business. The reasons for this gap will next be investigated.

6.4.1 Reasons for the gap

Possible reasons for the gap are based on the different change drivers which drive and change the key tasks of a management accountant and were addressed in questions 14 and 15. The most important change driver which emerged from respondents' answers and which has had a profound effect on the tasks of a management accountant is information technology. Additional change drivers will also be discussed in the following paragraphs.

6.4.1.1 Change in the profession

In the early 1980's management accountants were employed in corporate staff positions. As staff accountants they were outsiders to the central work of their companies: they were physically separated from the operating department and had relatively little face-to-face communication with the people in line positions. Management accountants were not participants in the decision-making process; instead, they functioned as support staff and were often informed of decisions after the fact (Siegel and Sorenson, 1999: 3). The bulk of their time was spent in the mechanical aspects of accounting, which were any of the following: preparing budgets, checking expense reports, producing inventory cost reports and generating various financial statements.

During recent years, information technological advances (refer to section 3.9.1) have liberated them from the mechanical aspect of accounting outlined in the previous paragraph. They have moved on to work on cross-functional teams, have face-to-face communication with people throughout the organisation and are actively involved in decision-making. Less confidence is placed in the value of quantitative information as an input for decision-making activities and greater emphasis is placed on informal processes and flexibility. They take on leadership in their teams and are much sought-after for the valuable information they provide. They are business partners, which means that they are equal members of the decision-making team. This change in the profession, driven mainly by the advances in information technology and organisational restructuring, could provide a reason for the gap between management accounting education and practice.

6.4.1.2 New value to organisations

The questionnaire used in this study showed that the technological revolution has fostered a new information economy and that management accountants are in heightened demand within their organisations for their expertise, advice and involvement. They are therefore perceived by a growing number of employers, inside and outside the finance function, as adding greater value to the company than they did in the past. This is confirmed, given the answers to questions 20 and 21 (refer to section 5.13), where respondents were asked to name areas where a management accountant could add value to an organisation. Information technology enables management accountants to provide better management information systems, and therefore enhances their value to organisations in terms of decision-making. Management accounting education should take cognizance of the important role played by information technology in practice.

6.4.1.3 Changing work activities

Given the important techniques, skills and areas where management accountants are perceived to add value to organisations (refer to section 5.13), as rated by the respondents, it is clear that analysis and decision-making are becoming more important than in the early 1980's. More time is also spent on non-traditional activities such as strategic planning, internal consulting, process improvement and performance evaluation. Traditional activities such as budget preparation, compliance reporting and producing cost statements are becoming less important and are taking up less of management accountants' time. Management accountants tend to move

into management and away from traditional accounting functions. These changes in work activities are causing a gap between management accounting education, based on traditional activities, and what practice expects.

6.4.1.4 Name of profession is becoming obsolete

The term “management accountant” is prevalent in academic accounting literature, but it is rarely used in practice. In question seven most of the respondents referred to themselves as managers in the finance environment and only a few indicated that they were working as management accountants (see section 5.6). A possible reason for their response is that the traditional accounting functions are rather left to be performed by computer, given the advance in information technology, while management accountants spend more of their time on decision-making and strategic planning.

6.4.1.5 Changing skills for success

The questionnaire indicated important skills for accountants to succeed in the dynamic business environment (refer to section 5.8). These skills are: good communication skills, the ability to work in a team, analytical skills, solid understanding of accounting and clear understanding of how a business functions. Information technology competence is another highly prioritised skill if a management accountant wishes to maintain his/her position in future. These skills have not always received adequate attention in the education of management accountants.

6.4.1.6 Lack of practical experience

The changes in the profession (discussed earlier in sections 6.4.1.3 and 6.4.1.4) from management accounting to management implies that students should be able to see the bigger picture, identify the relevant data for an applicable decision, and have a sound theoretical knowledge to base their decision on. Both chartered accountants and management accountants have to perform practical work before they may become professional accountants or management accountants, but eight of the ten respondents who expressed an opinion (question 9; discussed in section 5.15) as to how to improve management accounting education, felt that more actual business examples should be included in the training of management accounting students. This has not always been possible because of a limited time schedule.

6.5 The results of questions relating to sub-problem 5

Sub-problem 5 deals with making recommendations for changes in education. These recommendations are based on the resolving of sub-problems 1 to 4 and are given in terms of professional bodies, corporations and educators.

6.5.1 Recommendations regarding professional bodies

From the questionnaires it was established that there is a perceived gap between practice and education (see section 6.4). This gap could be reduced if a closer relationship between the professional bodies and the business environment could be developed, which would enable professional bodies to establish more relevant syllabi

with focus being placed on the relevant skills and change drivers as indicated in sections 5.8 and 5.10. A closer relationship should also enable the professional bodies to have a better understanding of what is expected from employees to enable them to add value to businesses. The relationship could be in the form of collaboration, where delegates of the professional bodies periodically met with delegates of the business environment to establish areas where value could be added and, therefore, where education could be improved. Syllabi should therefore be revised periodically according to the recommendations from practice.

Professional bodies should educate the business community about the new role of management accountants and the benefits to be derived from involving them more fully in the decision-making process. By doing this, professional bodies will enhance the image of management accountants.

A new, universally acceptable title for the new organisational role of management accountants should be developed. The term “management accountant” is not often used in practice (refer to section 5.6), as many management accountants say they work in finance. Referring to “management accountant” may result in losing students, who may seek careers in corporate finance, financial analysis or financial consulting, rather than in management accounting.

There should also be continuous communication with accounting students to let them know about the changes in the profession, the evolving role and image of management accountants and what will be expected from them on the job.

Educators should be informed about the changes that have occurred in management accounting and where the profession is heading.

Skills, techniques and change drivers that were indicated by the research to have a fundamental influence on the education of management accountants are listed in the following sections.

6.5.1.1 Skills that should get more exposure in the syllabi

- * control and performance evaluation,
- * the use of information technology,
- * design and maintenance of management information and systems
(information/presentation/personalisation) as discussed in section 3.9.1, and
- * adaptability (change management).

These skills were discussed in section 5.8.

6.5.1.2 Techniques that should get less exposure in the syllabi

- * Learning curves
- * Regression analysis
- * Activity-based costing
- * Target costing and life cycle costing
- * Quality costing and total quality management
- * Balanced scorecard

6.5.1.3 Techniques that should get more exposure in the syllabi

- * forecasting and designing “what if” scenarios,
- * management accounts,
- * cash flow budgeting and cash flow management, where the emphasis is shifted from a cost focus to a cash flow focus (refer to section 3.9.3) and
- * marginal costing on a product, activity, division and business unit, where the principle “different costs for different purposes” is applicable (refer to section 3.9.2).

These techniques were discussed in section 5.9.

6.5.1.4 Techniques that should be addressed in an informal way during the course of education

The most important change drivers that are driving the key tasks of a management accountant are:

- * Information technology
- * External reporting requirements
- * Corporate Governance guidelines
- * Performance and bonus schemes
- * Brand and customer profitability
- * Organisational restructuring
- * Takeovers and mergers

- * New management styles
- * E-commerce
- * Globalisation
- * New accounting techniques
- * Core competence aims
- * Customer-orientated initiatives
- * New accounting software

These change drivers cannot be included in the syllabi, but they are seen as the factors driving the key tasks of a management accountant (refer to section 5.10). Therefore, they should be addressed in the syllabi in an informal/indirect way so as to ensure that the focus of management accounting education stays in line with business practices.

6.5.2 Recommendations regarding corporations

Corporations should become more involved in the academic community through advisory boards, guest speaker activities, plant visits and by facilitating short-term courses on areas and skills which are not covered in the syllabi or on areas which need more practical application. Working with advisory boards could also help companies to benchmark their internal transactions. In-house or external educational and personal development programmes (training through partnership with academic institutions) will become increasingly important as it will equip staff to manage their professional responsibilities relative to the needs and expectations of the customer base and the more complex business environment.

6.5.3 Recommendations regarding educators

Given that the syllabi are relevant and updated as recommended in 6.5.1, educators should obtain a better understanding of the work performed and how decisions are made in modern manufacturing and service industries (refer to section 3.8). This can be accomplished by meeting with practising management accountants, visiting their companies and, with their help, introducing more practical case studies, especially on service industries (refer to section 3.9.4), which covered 25% of the sample.

To be able to accommodate the extended, more relevant syllabi, the time allocated to management accounting as a subject should be increased. At present, the time allocated to lecturing on management accounting equals half the time set aside for financial accounting. This is a constraint, which directly relates to the theoretical assessment of the subject – there is no time available to relate skills and techniques learnt in theory to the expectations of the business environment. Management accounting is moving away from traditional management accounting activities to a broader area of management. To be able to accommodate a more comprehensive understanding of the subject, more time is needed to incorporate the different skills and techniques required by business. Educators should partner with information technology experts on the one hand, and strategic thinkers on the other hand, to better understand how to teach students the wider and more strategic dimension of the subject (Maher, 2000: 347).

In addition, more time will allow students to do case studies in groups where interaction in the group takes place. This, and related assessment methods, will improve communication skills, presentation skills, writing skills, teamwork skills, 4-quadrant thinking, analytical skills and the ability to understand how a business functions. These skills were top skills as rated by IMA members (refer to section 3.8).

6.6 Conclusion

94% of the respondents indicated that they would employ a chartered accountant, chartered management accountant or a B.Comm (Management Accounting) student in a typical management accounting environment. This indicates that the suggested changes in the syllabi (refer to section 6.5.1) are applicable for B.Comm (Management Accounting) and B.Accountancy students. It is interesting, though, that chartered accountants fulfil an important role in a management accounting environment, as 28% of the respondents indicated that they would employ a chartered accountant. Possible reasons for this could be that chartered accountants are more sought-after and are more known in the business environment than chartered management accountants. The recommendation made in section 6.5.1, namely that professional bodies should enhance the image of management accountants, should inform managers of the value that a management accountant could add to their business. Although the education of chartered accountants focuses more on accounting, auditing and taxation, the suggested changes in the syllabi should also be introduced in chartered accountant education.

The research indicated that no areas should be taken out of the syllabus, but some skills and techniques (refer to section 6.5.1) should get more attention to ensure a sound and relevant education on the theoretical aspects of the subject. The focus should change, provided that case studies on service and manufacturing companies (refer to section 3.9.4) are included in the syllabus, to ensure the practical application of the subject in the business environment (refer to sections 3.7 and 3.8). This will enable management accountants to define problems clearly, identify relevant data for analysing problems, and suggest sources of data from the various company systems to facilitate the analysis. Students should be educated to become creative problem solvers who add value to their organisations (refer to section 3.6).

In conclusion, management accounting is continuously evolving, with the emphasis shifting from a cost determination and financial control focus, to the provision of advice that results in addition or creation of value, to taking part in decision-making and strategy formulation. To enhance this shift from management accounting to management implies that more time should be spent on the development of higher level skills by way of case studies presented by the students. For education to accommodate this need, second and third year syllabi should cover most of the important techniques (refer to sections 5.6 and 6.5.1.1). Less important techniques (refer to section 6.5.1.2) should be covered by way of self-study projects. Third year students should periodically be introduced to case studies which involve the applicable techniques and related skills covered in the second and third year syllabi. The reason for introducing case studies (and therefore higher level skills) in the third year and not in the honours year is because a large number of students enter the business world after graduating without the applicable higher level skills to add value

to their employers. In the honours year most of the education should be done by means of case studies, supported by a detailed self-study programme focusing on the most important techniques and skills as mentioned earlier.

To accomplish this change in focus, Management Accounting should be weighted equally with Financial Accounting with regard to time allocated in the syllabi, which means more time will be available to prepare students to add value in the business environment. Another important aspect is that this changed focus and weight allocation should be introduced not only in Chartered Management Accountant education but also in Chartered Accountant education, since four thousand four hundred and fifty-nine of twenty-three thousand registered SAICA members are employed as auditors in the public sector and the rest enter the business world as financial managers (SAICA, 2004).

Should these evolving aspects of the discipline be introduced in the new management accounting syllabi, management accountants will be equipped with more relevant techniques and skills that should close the perceived gap between education and practice.