

Chapter 4

The development of the questionnaire

The research problem, as discussed in chapter one (refer to sections 1.1 and 1.2), is to identify whether there is a need to change the contents or approach of management accounting education at South African academic institutions and to provide recommendations for improvement.

4.1 Basic considerations

The research, therefore, had to find answers to several questions, as discussed in sections 1.1 and 1.2. For this purpose the questionnaire (see Appendix 2, page 181) was constructed to determine, firstly, whether there is an expectation gap between current management accounting education and what practitioners expect of a management accountant. Secondly, should it prove true, it would provide the opportunity to investigate the most important reasons for the existence of the expectation gap and thirdly to evaluate the strengths and weaknesses of management accounting education at South African universities. Finally, this would indicate possible ways to close the gap so that a positive contribution to the relevance of management accountant education could be made.

The questionnaire, therefore, addresses inter alia various skills applicable in the working environment, techniques used in practice and also the main factors which drive the key tasks of a management accountant.

4.2 Questions asked

The questionnaire consisted of 23 questions, of which the first nine addressed issues relating to the respondent's age, gender, qualifications, job description and the industry in which the respondent is working. The respondents' age is important because the older the respondent is, the higher the chances are of finding an expectations gap between his or her abilities and the skills required to perform the job efficiently. The reason for this assumption is that older respondents may have studied a few years ago, when education could not have prepared them for the requirements of the business environment of today, which can make it difficult to perform the job. The gender of the respondents was included for the sake of completeness. The respondents' qualifications were very important because they will give an indication of the context in which management accounting, as a subject, was included in their education. Since management accounting education for final year chartered accountant students differs from the education for chartered management accountant students, this difference will have an effect on their estimates of the various skills and techniques applicable in business. Qualifications of the respondents would also have an influence on the angle from which the respondents would answer the various questions. Chartered accountants tend to focus more on financial accounting and related issues, whereas management accountants tend to focus more on decision-making issues. Job descriptions would also have an impact on the angle from which the questions were answered, because some job descriptions are very wide and some are more specific, which means that the respondents evaluated the questions from different angles. The industry in which the respondents were working would also have an effect on their opinions due to the fact that, for example, the manufacturing

environment focuses more on costing issues, whereas the financial environment will focus more on financial planning and related financial issues.

Eight questions (the body of the questionnaire) addressed the various skills, techniques and change drivers and their applicability (importance) in the specific working environment of the respondent. These skills, techniques and change drivers were directly related to the literature study described in chapters one, two and three and are listed below. Open-ended questions allowed the respondents to add important issues which they thought the researcher had not covered. These issues are critical for the study because these are the areas where possible changes should be made to enable education to close the gap between education and practice.

The skills, which refer to the various capabilities required to apply knowledge and values appropriately and effectively in a professional context, and addressed in question 10, were the following:

- * Communication skills
- * Leadership skills
- * Strategic and critical thinking
- * The ability to integrate non-financial and financial information
- * General business knowledge
- * Analytical skills
- * Ethics
- * Control and performance evaluation
- * Information technology competence

- * Design and maintenance of management information and systems
- * Teamwork abilities
- * Initiative and self-motivation
- * Adaptability (change management)
- * Stress management
- * Presentational skills

The techniques addressed in question 12 included traditional and non-traditional management accounting techniques as shown in Table 1 on page 73, because both are required to make better decisions (Burns, 2001). A company's size is significant for emerging practices, while industry is significant for traditional practices (Sharma, 2000). They were the following:

- * Budgeting
- * Costing systems
 - Product costing
 - Life cycle costing
 - Target costing
 - Quality costing
- * Formula-based analysis
 - Cost-volume-profit analysis
 - Regression analysis
 - Learning curves
 - Value chain analysis
- * Asset management

- * Working capital management
- * Strategic cost management
- * Knowledge management
- * Variance analysis
- * Value-added accounting
- * Activity-based costing
- * Total quality management
- * Balanced scorecard
- * Standard costing
- * Economic value added
- * Free cash flows

The recommendations of the respondents who answered the pre-testing questionnaires were also included in the final questionnaire. This is the reason for the difference between the skills and techniques listed above and those referred to in chapters one, two and three.

To determine whether the key tasks of management accountants are currently driven by traditional or other factors, the following change drivers were addressed in question 14 (Burns, 2001):

- * Information technology
- * Organisational restructuring
- * New accounting software
- * Customer-orientated initiatives
- * New management styles
- * E-commerce
- * External reporting requirements
- * Globalisation
- * Core competency aims
- * Takeovers and mergers
- * Quality-orientated initiatives
- * New accounting techniques
- * External consultant's advice
- * Production technologies
- * Performance and bonus schemes
- * Corporate Governance guidelines
- * Brand and customer profitability

The last six questions of the questionnaire dealt with general issues regarding the value of management accountants in business, the education of management accountants and the employment of applicants in a management accounting environment. These questions were very important to gauge the general feeling of the respondents in connection with management accounting education, which will enable the researcher to make final recommendations in chapter six.

Although some of the questions are not directly related to the resolution of the problem statement, they were included nevertheless for the sake of completeness and to address the issue of non-bias response.

Scales of four were mainly used so that the respondents could not give a neutral response, but had to opt for a specific positive or negative opinion on each question.

Throughout the questionnaire the researcher made use of relevant open- and closed-ended questions. The respondents were competent, due to the nature of the sample that was used, i.e. 60 financial managers. Where academic terminology which could be unknown to the respondents was used, a clear definition was given. Questions were short and unbiased. Double-barrelled questions and negative items were excluded from the questionnaire so that respondents could answer the questions quickly and easily. This also played a positive role in the willingness of the respondents to answer the questionnaire.

The questionnaire was compiled only in English, because the respondents were all employees of large South African companies based on market capitalisation. The researcher therefore assumed that all the respondents were comfortable with English as it is the general business language in South Africa.

4.3 Structure of the questionnaire

The questions in the questionnaire were spread out and uncluttered although the questionnaire consisted of only five pages. This meant that the questions could easily be answered without any preliminary training. For replies to closed-ended questions boxes spaced adequately apart or matrixes were used, which looked professional and also facilitated ease of answering and processing. The matrix format increased the comparability of responses given to different questions for the respondents as well as for the researcher. Respondents could quickly review their answers to earlier items in the set, by comparing the strength of their agreement with their earlier responses.

The questionnaire started with clear instructions for completing the questionnaire. The respondents were told exactly what the researcher wanted and that all answers would be treated confidentially.

Three contingency questions were asked, where respondents only needed to answer the applicable question given the outcome of a previous question. This was used properly and facilitated the respondents' task in completing the questionnaire because they were not faced with trying to answer questions irrelevant to them.

The full questionnaire was pre-tested because there is always a possibility of error. Ten people with similar backgrounds and expertise, but who were not employed at any of the large companies in terms of market capitalisation, were asked to complete and evaluate the questionnaire. Valuable information was received which was used to

finalise the questionnaire. No precoding of the questions was done. The questions were numbered from one to twenty-three.

4.4 Method used

Self-administered questionnaires were used because the population under study is adequately literate. Data collection took place through mail transmittal of the questionnaires, accompanied by a letter of explanation and a fax and telephone number. The questionnaire was folded in a particular way to make the opening and reading easier. An identification number monitored returns as they were received. After two months new follow-up questionnaires were sent out, with a new letter of explanation to encourage the return of the new questionnaires. Most of the questionnaires were received via fax and a few were returned via mail transmittal.

4.5 Construction of the sample

Questionnaires were sent to 60 financial directors or managers of the top South African companies listed on the JSE Securities Exchange South Africa, rated in terms of market capitalisation. The reason for using this curriculum was because the top companies would definitely be able to add value to the research problem as they are structured with qualified management accountants and accountants who had studied at various secondary institutions. Companies with head offices overseas were not included in the sample. Holding companies where no normal business procedures were applicable were also excluded from the sample. These companies normally only exist for legal purposes.

Of the 60 questionnaires that were sent out initially, 31 were received immediately and 11 were received after two months when 29 follow-up letters and questionnaires were sent out. In total, 42 completed questionnaires were received from the 60 that had been sent out; this gives a 70% response rate. Some researchers regard anything above a 20% response rate as satisfactory and relatively high. Therefore, a response rate of 70% can be regarded as very high and very satisfactory. Non-response bias may be a problem where the response rate is low and the respondents who did not respond can have an important influence on the aggregate responses. With such a high response rate the risk of non-response bias is very low and can practically be ignored.

4.6 List of the companies which were included in the sample

The questionnaire was sent to the financial directors of large companies (in terms of market capitalisation) listed on the JSE Securities Exchange South Africa. The names in the first column are the company names as listed on the JSE Securities Exchange South Africa. The second and third columns indicate when the questionnaire was received, either with the first (31 companies) or the second round (11 companies). Two companies, marked with “\$”, were not prepared to answer the questionnaire. These companies are listed below in Table 2:

Table 2

Names as listed on the JSE Securities Exchange South Africa	Received First round	Received Follow up
BHP Billiton plc		
Sasol Ltd	*	
Anglo American Platinum Corporation Ltd		
SAB Miller Plc	*	
Anglo Gold Ltd	\$	
Gold Fields Ltd	*	
Standard Bank Group Ltd	*	
First Rand		*
Implats	*	
Remgro Ltd	\$	
Nedcor Ltd	*	
Sappi Ltd	*	
MTN Group	*	
Absa Group	*	
Telkom SA Ltd	*	
Sanlam Ltd	*	
Liberty Group Ltd	*	
Bidvest Group Ltd	*	
RMB Holdings Ltd		
Barloworld Ltd		
Tiger Brands Ltd	*	
Imperial Holdings		
Kumba Resources Ltd		*
Johnnic Holdings Ltd	*	
VenFin Ltd	*	
Amal Beverage Industries	*	
Nampak Ltd	*	
Naspers Ltd	*	
Iscor Ltd	*	
Pick 'n Pay	*	
Woolworths Holdings Ltd		*
PPC Company Ltd	*	
Netcare		
Afrox		*
Dimension Data Holdings		*
Alexander Forbes Ltd		*
Santam Ltd		
JD Group Ltd		
Metro Cash and Carry Ltd		*
Murray and Roberts Holdings		
Massmart Holdings Ltd		*
New Africa Capital Ltd		
Durban Roodepoort Deep		
Investec Ltd	*	
Reunert Ltd	*	

Tongaat-Hulett Group	*	
Aveng Ltd	*	
Western Areas Ltd		
Edgars Consolidated Stores Ltd		*
Foschini Ltd		
Truworths International		
African Bank Investments		
Shoprite Holdings Ltd	*	
Northam Platinum Ltd	*	
Medi Clinic Corporation Ltd	*	
Aspen Pharmacare Holdings		
Sun International SA		
Coronation Holdings Ltd		
Discovery Holdings Ltd		*
Distell		*

The questionnaire and the covering letter are included on pages 180 and 181 to 185 as Appendixes 1 and 2.