

The Impact of Management Accounting Literature to Practice: A Study of Management Accounting Concepts in the Philippines Industries

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Abstract *This research concentrates in the area of Management Accounting. To identify the important management areas prioritize by today's managers and to recognize the up to date comprehensive contribution of academic scholars and researchers to management accounting literature. This study is important to unite the interest of the users and researchers on the management areas to support information needed by today's managers. The method of research process applied review of the related literature and survey to general managers and finance/accounting managers of servicing, merchandising and manufacturing firms registered in Metro Manila, Philippines.*

Key words Management accounting, Philippines, business, information, manager

DOI: 10.6007/IJARAFMS/v4-i2/898

URL: <http://dx.doi.org/10.6007/IJARAFMS/v4-i2/898>

1. Introduction

Knowledge in managing businesses operations historically evolved when Luca Pacioli's (Ballada 2012, p.6) uncovered and introduced his double-entry bookkeeping system, people realized its importance to life and businesses all over the world. Nowadays nations continued to make it more meaningful to users especially stakeholders, they make others understand the body of accounting knowledge together with the initiations of accounting information technology.

Managers of an organization need a more essential and general understanding of what the management work entails and that understanding can be gained from theories, textbook and literature. Management Accounting is renowned to be very useful accounting resources that extensively help organizations incorporate cost accounting data, financial and non-financial information. Knowing this information is essential for managers to do their jobs (Carter 2007, p.1). After several years of developing new perspective on the management concept this studies keep informed the users of the far-reaching contribution of leading scholars and academic researchers to management accounting literature. It covers the general and finance/accounting managers of servicing, merchandising and manufacturing registered entrepreneurs of Metro Manila, Philippines. Through this, readers will appreciate and recognize the adequate amount of valuable knowledge so as to unite the interest of the users and researchers, come across and fill up those short of management areas to meet the needs of today's practicing managers.

1.1 Background

In 1997, George Foster and Mark Young of Stanford and Southern California University conducted cost management conferences in two U.S. cities and executive seminars in four Australian municipalities. Respondents were made up of 300 general managers and finance/accounting managers working from different entities. The researchers asked the respondent to rank their top three choices as to the most important general management priorities that faces by their company. Foster and Young (1997) revealed that

managers identified customer satisfaction as the most important, followed by cost control and product quality for the managers responding out of the given important management areas through the one-page questionnaire handed out during their conferences and seminars. Then, Foster and Young (1997) matched the listing of the topics covered in the selected management accounting research journal reviewed and organized by Shield (1997). The studies was collected from 152 published articles of North Americans during the first seven years of the 1990s from well-known six leading journals and categorized the documents by article topics, settings and theories including the methods of research. Foster and Young (1997) discovered that cost management, cost control and cost accounting topics are the areas of the business that was given an extensive coverage in the management accounting literature.

1.2 Scope and Delimitation

This study focus on the area of management accounting literature through the work of Foster and Young (1997) about the identification of the level of importance for general managers and finance/accounting managers as to what management areas are emphasized and important in today's organization. As the current world's economic crisis affecting all aspects of society, the author would like to evaluate and bring up to date those earlier examinations to inform readers if there is a distinction of the business subject areas prioritize by general managers and finance/accounting managers of registered manufacturing, merchandising and service entities of Metro Manila Philippines. To match the practitioners important areas with the interest of academic researchers and to completely show the wide-ranging list of management accounting literature, the author keeps on using the previous review of 152 published articles by Shields (1997) and incorporate the most recent empirical research of Luft and Shields (2003) the comprehensive mapping of the 275 management accounting articles evidence as to the type of management accounting framework essentially contributed by scholars from the six leading journals.

1.3 Research Objectives

The author aims to discover whether management priorities in today's society changed in terms of level of importance placed as compared to previous studies and to measure up against the latest management researchers' contribution particularly within the important management areas considered by the company. The purposes of this study are:

1. To identify the very important management areas that today's managers (general, finance/accounting) prioritized from servicing, merchandising and manufacturing organizations.
2. To investigate the present-day management research topics that is generally of high interest to academic researchers.
3. To match the listing of today's practitioners' very important management topics to those that has been studied by academic researchers.
4. To discover the unimportant management areas for today's managers (general, finance/accounting) from servicing, merchandising and manufacturing firms.

1.4 Significance of Study

This research is undertaken for the purpose of explaining, predicting and to fully understand the value and importance of management accounting research investigated by scholars and students in the academic discipline to users especially practicing managers. This study will make them aware of discovering new and exemplified ideas of the management areas that will lead to the improvement of management accounting literature by helping, uniting the interest of both managers and leading scholars and to make the best use of their latest contribution.

2. Literature review

2.1 Introduction

This chapter describes the definition of management accounting and its importance to business, evaluates the sources of management accounting ideas and discusses the scope and justifies limitations found in the literature.

2.2 Definition of Management Accounting

Hornngren *et al.* (2013) explained that management accounting helps managers to measure, analyze and report financial and nonfinancial information in making decisions to fulfill the goals of an organization, which is similarly defined by Atkinson *et al.* (2012) that management accounting is also the process of supplying the managers and employees in an organization with relevant information, both financial (cost of producing a product, the cost of delivering a service and the cost of performing an activity or business process) and nonfinancial (measures related to customer satisfaction and loyalty, process quality and timeliness, innovation and employee motivation) for making decision, allocating resources, and monitoring, evaluating and rewarding performance.

2.3 Importance of Management Accounting Information to business

Garrison *et al.* (2011) placed an emphasis as to what extent the management accounting information can help managers to perform their functions. Garrison *et al.* (2011) discussed that managers use management accounting information to develop, communicate, and implement strategy. They also use management accounting information to coordinate product design, production and marketing decisions and to evaluate the overall company's operating performance including their employees, which is agreed and matched to Carter's (2007) perspectives, that management accounting information and other reports do not have to follow set of principles or rules required by different government agencies. The key questions are always (1) *how will this information help managers do their jobs better?* and (2) *do the benefits of producing this information exceed the costs?* Through these, managers can successfully run their businesses.

2.4 Sources of Management Accounting Ideas

To acquire knowledge in understanding what management accounting is all about, a person can make use of the two basic sources of information: management accounting textbooks and management accounting research literature written by different well known authors and academic researchers.

2.4.1 Management Accounting Textbooks

Table 1.

Brief Content of Textbooks 2008-2012
How Management Accounting Information Supports Decision Making
The Balanced Scorecard and Strategy Map
Using Costs in Decision Making
Accumulating and Assigning Cost to Products
Activity Based Cost Systems
Measuring and Managing Customer Relationships
Measuring and Managing Process Performance
Measuring and Managing Life-Cycle Costs
Behavioral and Organizational Issues in Management Accounting and Control Systems
Using Budgets for Planning and Coordination
Financial Control

Source: Atkinson *et al.* (2012); Garrison *et al.* (2011); Hilton (2008); Weygandt *et al.* (2008)

Atkinson *et al.* (2012), Garrison *et al.* (2011), Hilton (2008) and Weygandt *et al.* (2008) shared similar concept of giving ideas as to the most recent topics and up to date theories including the important application of it into practice as summarized in Table 1. Their books gave insights by defining what management accounting and strategy is, and the behavioral implications of management accounting information as a good source of background for the readers. Textbook authors presented the significant

outcome of using the balance scorecard that can be used to improve the company's employee's performance such as: by setting their company's objectives, measures and targets, by creating strategy map and doing the same process not only for private entities but also to non-profit and government organizations. Correspondingly, they pointed out on how management accounting support internal decision making, like in a situation of dropping, making or buying a product and as to product mix decisions, by way of identifying the meaning of variable and fixed costs and other useful cost definition that is relevant to a short-term decision.

To get in the lead, Atkinson *et al.* (2012), Garrison *et al.* (2011), Hilton (2008) and Weygandt *et al.* (2008) indicated the crucial use of assigning and accumulating cost to products. Management needs helpful cost management systems, employees who are proficient in understanding some important cost terms and cost flows in organization, proper handling of indirect cost and overhead allocation particularly in a manufacturing environment that uses either job order or process systems. Furthermore, textbook authors specified the usefulness of using activity-based costing as compared to traditional manufacturing costing systems implemented by different companies applicable not only in manufacturing setting but also to service companies. They also introduced the ideas on how to increase customer profitability, how to give salesperson incentive, discussed the life-cycle profitability and how to measure customer performance with nonfinancial metrics. For the company to completely measure and manage their performance process, textbook authors suggested to check the company's facility layout system including inventory costs and processing time, cost of non-conformance and their quality cost issues.

Additionally, Atkinson *et al.* (2012), Garrison *et al.* (2011), Hilton (2008) and Weygandt *et al.* (2008) introduced the use of environmental and target costing, just-in-time manufacturing, kaizen costing, and benchmarking scheme to minimize the cost of making and keeping a product for a long period of time. To improve the company's operating performance, their books featured the behavioral and organizational issues in Management Accounting and Control Systems (MACS) explicitly by defining what management accounting and control systems are, the characteristics of a well-designed MACS, the human resource management model of motivation, the organizational ethic code of conduct and behavioral aspects of MACS design, using a mix performance measures through a balance scorecard approach, empowering employees to be involved in MACS design and developing appropriate incentive system to reward performance.

Likewise, their books highlighted and call the attention of using budgets for planning and coordination functions, by way of determining the level of capacity-related and flexible resources, managing the budgeting process, interpreting the production plan, comparing actual and planned results, preparing periodic and continuous budgeting, controlling discretionary expenditures and the role of budgeting in service and not-for-profit organizations. As a final point of their topics, they comment and add notes on the environment and effectiveness of financial control, responsibility centers and evaluating unit performance, transfer pricing, assigning and valuing assets in investment centers, and the efficiency and productivity elements of return on investments.

Through evaluation and review of the content of the four well known management accounting textbooks from 2008-2012, the author find out that textbook researchers demonstrated their ability to establish a worldwide up to date knowledgeable work and schoolbook for readers' specifically to undergraduate students who are dependent users of their books. As opposed to Bredmar (2011) studies and observation of the 1991-2009 cost and management accounting books. Bredmar (2011) mentioned that most of the foundation areas covered a common structure and majority of the topics focused only on cost calculations, management control and budgeting. But despite of that, textbook authors continue to improve their work, by way of providing a web-based tutorial and assessment software which is flexible for all users to help them to easily integrate into their course subject. All of their books substantially include of what you called "In Practice" example corresponding to every topics to make readers aware of the actual application of theories into practice. Through these, readers are able to acquire the latest issues that take place in the businesses around the world.

2.4.2 Management Accounting Research Literature during 1990s

Perez and Zulueta (2010, p.3), member of the National Research Council of the Philippines (NCRP) described research as a systematic and refined technique of thinking. By way of employing specialized tools, instruments and procedures, researchers obtained solution to a given problem. Thus research scholars

provide valuable information whether educational, economic, social, political and cultural issues to refined and extend the knowledge towards the improvement of the quality of individuals' lives.

Table 2.

Research Topic List	Number of Published Articles
Management Control Systems	
Incentives	26
Budgets or budgeting	21
Performance measurement	21
Transfer pricing	8
Responsibility accounting	6
Internal control	3
Cost Accounting	
Cost accounting overall	7
Cost allocation	8
Activity-based costing	4
Product costing	3
Cost variances	2
Cost Management	
Quality	4
Just-in-Time	4
Use of cost for decision making	3
Benchmarking	2
History	1
Cost drivers	11
Management Accounting Information and Systems	7
Research Methods and Theories	6
Capital Budgeting and Investment Decisions	5
TOTAL	152

Source: Shields (1997) Research in Management Accounting, p.5

Table 2 illustrates Shields (1997) constructive examination of the 152 published articles by North Americans from the six leading journal, specifically: Accounting, Organizations and Society (25); The Accounting Review (36); Contemporary Accounting Research (11); Journal of Accounting and Economics (11); Journal of Accounting Research (16); and Journal of Management Accounting Research (53), starting from the year 1990-1996.

Shields (1997) discovered that most of the research scholars topics focused primarily on the management accounting control systems (85), followed by cost accounting (24), cost management (14), cost drivers (11), management accounting information and systems (7), research method and theories (6) and capital budgeting and investment decisions (5). All articles gathered were derived from different locations, activities and industries, namely: manufacturing (57), marketing and retailing (5), research and development (1) transportation (3) other single industry (4), multiple industries (8), government, not-for-profit, hospitals (10), generic (45), international (5), inter-organizational (3) and other different settings (11).

Through these samples, Shields (1997) exposed that there was an apparent shortage research on the aspect of long-term planning such as capital budgeting and investment decision making even though there was 57 manufacturing industries involved in the studies. Shields (1997) believed that it was due to lack of social science theories and lack of access to data to support the subject areas since companies will not simply disclosed important information that can limit their operational performance and take it as an advantage by their business opponents. In this manner, Shields (1997) encouraged the academic researchers to take the

opportunity for more research studies in relation to capital budgeting and investment decision and other topic that they think are important to users of management accounting literature.

On the other hand, Foster and Young (1997) formulated their own literature studies and examined the applicability and consistency of management accounting literature to meet the needs and interest of the general managers and management accountants through the ideas contributed by management accounting researchers. Foster and Young (1997) matched the listing of the topics covered in the selected management accounting research journal reviewed and organized by Shields (1997). They conducted cost management conferences in two U.S. cities and executive seminars in four Australian municipalities. Respondents were made up of 300 general managers and finance/accounting managers working from different entities. They asked the respondent to rank their top three choices as to the most important general management priorities that faces by their companies as presented in Table 3.

Table 3.

What are the three most important general management priorities that your organization faces today (1990s)?	
Rank	Topic
1	Customer satisfaction
2	Cost control
3	Product quality
4	Company growth
5	Company profitability

Source: Foster and Young (1997) Journal of Management Accounting Research, p.67

Foster and Young (1997) find out that managers identified customer satisfaction as the most important, followed by cost control and product quality for the managers responding out of the given important management areas through the one-page questionnaire handed out during their conferences and seminars. In contrast with the work of Shields (1997), Foster and Young (1997) mentioned that customer satisfaction, quality, growth and profitability were never reflected on the compilation studies made by Shields (1997) but instead, cost management, cost control and cost accounting topics are the areas of the business that were given an extensive coverage in the listed articles. Foster and Young (1997) were not really convince of the studies and comment on the slight coverage of the topics such as: target costing, kaizen costing or capacity cost planning in the articles listed by Shields (1997) since, there were a major shift in management literature over the last five year periods.

In comparison with the work of both the literature researchers, Shields (1997) will never meet the expectations of Foster and Young (1997) as to the completeness of the listed articles given that, the scope of the studies were based mainly on the 152 North Americans published articles and it was constructed simply on the six leading journals, while Foster and Young (1997) experiment were gathered from a combined total of 300 respondents which are not even allocated proportionately between American and Australian managers as the sample size of their studies. It is difficult to put together the applicability and consistency of their ideas as a result of cultural differences (Hofstede, 1997) between the respondents therefore, that could affect the effectiveness of the result. On the other side, both Shields (1997) Foster and Young (1997) would like to inform the numerous interested researchers of finding new and relatively unexplored areas that could offer a promising further substantive contribution to knowledge.

2.4.3 Management Accounting Research Literature in 2000s

Table 4.

Map	Category	Links
A	Causes and effects of budgeting at the individual level	42
B	Causes and effects of budgeting at the organization levels	27

Map	Category	Links
C	Information for planning and control	33
D	Implementing management accounting change	16
E	Performance measures and incentives	30
F	Contracting and control: micro processes	33
G	Individual judgements and decisions	48
H	Management accounting in its historical and social context	13
I	Organizational change processes and the relation of financial and operational realities	18

Source: Luft and Shields (2003). Mapping management accounting, pp.177-181

Management accounting empirical research has grown in the modern decade, in this manner, Shields (2003) continued to improve and expand the coverage of gathering and analyzing management accounting research topics from 152 to 275 published articles from 1972 to 2002 and came up with the renowned studies identified as the Mapping management accounting: graphics and guidelines for theory-consistent research with the help of Joan Luft (2003) as presented in Table 4.

They provide a graphic representation of the theory-consistent empirical management accounting research as exemplified by articles published in the same six leading journals (Accounting, Organizations and Society; The Accounting Review; Contemporary Accounting Research; Journal of Accounting and Economics; Journal of Accounting Research; and Journal of Management Accounting Research). To summarize the theory-consistent empirical evidence, Luft and Shields (2003) used the nine graphic maps (A-I) to provide a compact visual overview of the various research streams of management accounting. In constructing the individual studies they used three questions: (1) What set of variables did the study include? (2) What is the causal model? and (3) What is the level of analysis (Individual, Subunit, Organization and Beyond organization). The examination of the maps offers a rapid tracing of what topic has been researched through the use of the causal link which is identified by a number that references the studies collected from numerous academic researchers.

Firstly, Map A deal with the individual budget work based on 42 links. The research is all about the following topics: Attitude that budget is useful; Attitude toward organization and job; Budget-based compensation and difficulty fairness; Budget emphasis by a superior in evaluating a subordinate; Controllability of budget variances used for determining rewards; Expectation that budget will be achieved; Frequency of budget feedback; Participative budgeting; Use of participative budgeting to coordinate task interdependence; Explanation given for why participation did not lead to budget subordinate proposed; Use of participative budgeting to increase subordinates' motivation, for planning and goal setting; Subordinate involvement during budgeting (Luft and Shields, 2003, p.209).

Secondly, Map B stress out the causes and effect of budgeting at the organizational and subunit level based on 27 links and consists of the following studies: Budget-based planning and cost control; Budget importance; Change in competitive strategy; Control system complexities and tightness; Decentralization; Differentiation strategy; Importance of expenditure budget for management control; Flexible budget; Interactive use of budgets; Importance of dealing with budget overruns; Knowledge of task transformation process; Long-term incentive use; Manipulate performance measure; Number of potential causes of budget variances recorded in the accounting system; Use of operating budgets for management control; Product standardization; Planning vs. control decision; Short-term managerial orientation; Technology automation (Luft and Shields, 2003, pp. 212-213).

Thirdly, Map C concentrates on the usefulness of budgeting system for planning and control based on 33 links such as: Activity-based accounting and management; Advanced manufacturing practices and technologies; Availability of nonfinancial information to workers; Achievement of sales or profit target, controlling for the level of sales or profit; Balanced scorecard; Capital budgeting monitoring system; Customer-focused strategy; Cost-based transfer pricing; Effectiveness of discounted cash flow model for capital budgeting decisions; Type of decision is more strategic and less operational; Usefulness of external, historical information; Use of flexible-budget information; Importance of financial information for decision

making; Increased importance of management accounting practices; Improved matching of management accounting with contextual variables; Increased reliance on management accounting system; Just in time; Low-cost/price strategy; Usefulness of nonfinancial relative to financial information; New product development performance; Use of standard cost information; Usefulness of timely information; Total quality management (Luft and Shields, 2003, pp. 215-218).

Fourthly, Map D creates 14 links and focus on the use of specific type of information rather than overall use of the budgeting system to implement changes namely: Compatibility with existing cost system; Number of changes in management accounting systems; Number of management accounting systems Organizational implementation/adoption or success/satisfaction with ABC and/or activity-based management; Product diversity; Linkage to performance evaluation and compensation; Quality strategy; Training in ABC; Top management support; Use of the control system for continuous improvement (Luft and Shields, 2003, pp. 219-220).

Fifthly, performance measures and incentives for Map E associated more on nonfinancial in relation to financial strategy based on 30 links such as: Asset turnover; Residual income; Relative ROA performance compared to industry; Change in revenue/assets; Shifting of reported costs to products with more cost-sensitive revenues; Variable cost ratio relative to allowable ratio (Luft and Shields, 2003, pp. 221-223).

Sixthly, Map F stands for micro process that includes negotiated or centralized transfer prices, product costing method and incentive systems based on 33 links for example: ABC (vs. volume-based allocation) cost information; Budgetary constraints on investment proposals; Bargaining costs of accounting-based contracts (Luft and Shields, 2003, pp. 224-225).

Seventhly, Map G relates to individual judgement and decision making for both planning and control based on 48 links such as: Activity-based cost knowledge content; Activity knowledge structure; Accurate product costs; Budget forecast and variance are required, in addition to a production decision; Decision-maker ignores irrelevant reported cost allocations; Information about relevance of cost data; Information about production processes; Judged likelihood of cause of variance; Management accounting experience; Magnitude of variance required to trigger an investigation; Number of business units evaluated; Negative feedback about the usefulness of cost system; Optimizing choice of expenditure; Opportunity costs are used in making a decision; Specific experience in which different costs were relevant than in the present task; Volume-based cost knowledge content; Variance in transfer price predictions; Willingness to change cost system (Luft and Shields, 2003, pp. 227-230).

Eighthly, Map H addresses management in its historical and social context that focused on the calculation-based control through financial standards based on 13 links, for instance: Key individuals' actions supporting management accounting; Local circumstances affecting resistance to management accounting; Limitations of non-accounting information; Management accounting and control system development and use; Resistance to management accounting control systems and their effects; Resource pressure and resource allocation problems (Luft and Shields, 2003, p. 232).

Lastly, Map I describes organizational change process in a financial and operational setting based on 18 links, such as: Accounting through which environmental change is analyzed; Accounting change (e.g. costing systems); Availability and quality of accounting information; Acquisition strategy based on financial performance; Environmental change; Information technology change (Luft and Shields, 2003, pp. 233-234).

Through the extensive studies made by Luft and Shield (2003) it is evident at this time that there are numerous topics already made about customer satisfaction, quality, growth and profitability as to what Foster and Young (1997) comment on Shields (1997) previous reports, together with the research on the aspect of long-term planning such as capital budgeting and decision making. Moreover, their studies include valuable representation about the causes and effects of management accounting that clearly shows the connection and disconnections in the diverse streams of management accounting literature.

2.5 Scope of literature and justification of its limitation

Throughout the findings of all those researchers, the author will use the same first five questions formulated by Foster and Young (1997). However due to changes in the company goals, working environment and workers expectations, the author add up six to ten questions of management areas taken up from the latest management accounting textbook published by Atkinson, et al. (2012), Garrison *et al.* (2011), Hilton

(2008) and Weygandt *et al.* (2008). Likewise, the studies carried out by Foster and Young (1997) did not mention the respondents' types of employment sector but it is simply the generalization of the industries on their studies, nor the demographic data that they used and the place where they conducted their studies were throughout seminars and conferences only.

Furthermore, Luft and Shields (2003) examinations of "Mapping Management Accounting" did not show up the corresponding frequency or number of the topic articles but instead the various academic research work appears on the Appendices (A-I) using a record list and the main purpose was the illustration of the connection and disconnection of the various management accounting research among individual, subunit, organization and beyond organization, unlike Shields (1997) previous "Research in Management Accounting," it was clearly disclosed the exact frequency of every management accounting research topic article. Even though the previous research found of with limitations, the author believed in spite of that through the techniques utilized in gathering and analyzing the research data will successfully achieve the research objectives.

3. Methodology of research

3.1 Introduction

This chapter presents a brief discussion of the research methods used, the research design and instruments applied in data gathering including the population where the respondents are drawn and the limitation connected to the implementation of this study.

3.2 Research Methods Used

The primary source of data was collected and analyzed through quantitative (survey questionnaire) method. To appropriately work out with the research objectives the author additionally used secondary data such as published journals, related management accounting literature, management accounting textbooks and other research-related documents.

3.3 Research Design and Instrument

Questionnaire survey served as the main tools used by the author in data gathering through the written questionnaires and divided into 2 parts: the first part aim is to gather the respondent nature of businesses, employees rank/position and length of service as possible and the second part will include the ten management areas as to the importance of general management priorities that faces today by their company. Respondents asked to rate from 1 to 4, the number indicated the degree to which the respondent considered how important the management areas for the organization. Likert Scale (1932) measurement was used to represent the point of the related responses to each item, one for each point.

3.4 The Respondents

- Settings and Respondents – the target populations are the general and finance/accounting managers of the 3,496 registered entrepreneurs as of the year 2012 recognized by Department of Trade and Industry (www.dti.gov.ph) from service (1,686), merchandising (1,319) and manufacturing (491) type of business in the Philippines.

- Sampling procedure – the author used the Slovin (1960) formula in determining the 359 sample size out of the total population and applied Stratified Sampling Technique (as cited in Perez and Zulueta 2010, p.121) to ensure that different nature of business are adequately represented to test the sample.

For statistical treatment of data, the following were used to compute for the samples:

- *Slovin (1960) Formula*

$$n = \frac{N}{1 + Ne^2} \quad (1)$$

Where:

n = sample size;

N = population;

e = desired margin of error.

$$n = \frac{3,496}{1 + 3,496 (.05)^2} = 359$$

▪ *Percentage:* $P = n/N \times 100$ (2)

Where:

P = percentage;

n = number of responses;

N = total number of respondents.

$$P = 359/3496 \times 100 = 10.27\%$$

- *Stratified Sampling Technique:*

Type of Business	Population	Percentage	Sample size
Service	1,686	x 10.27%	173
Merchandising	1,319	x 10.27%	135
Manufacturing	<u>491</u>	x 10.27%	<u>51</u>
Total	<u>3,496</u>		<u>359</u>

3.5 Data Gathering

The author gathered all the data from the general, finance/accounting managers of service, merchandising and manufacturing businesses in the Philippines by means of written questionnaires hand-delivered to the participants, filled out and returned through intra-company mailbox or hand over to the researcher individually. Survey questionnaires were formulated from the first five cost management questions of the important management areas used by Foster and Young (1997), six to ten questions originated from the four well-known management accounting textbook authors (refer to Appendix A) and correspondingly, the author will go over the published structured study carried out by Shield (1997) along with the investigation performed by Luft and Shield (2003) from the same six major management research journals.

3.6 Data Analysis

The respondents were answered by encircling a point as to the measurement of the statement (not important = 1, somewhat important = 2, important = 3, and very important = 4). The circle are assigned numerical values from 1 to 4 then totaled over the item to give the respondent an altitude score. The results of data collected are tallied to see how many correspondents based on the number of samples answered the survey questionnaires and how they responded to specific questions.

To arrive at the exact analysis and interpretation the author used Weighted Arithmetic Mean as the statistical technique for the data gathered. After tallying, the data are presented using the tables to make the data clear and understandable for the reader and matched the listing of management priority areas to Shield (1997) as well as Luft and Shield (2003) studies to achieve the research objectives.

- *Statistical Tool – Weighted Arithmetic Mean*

$$\bar{X} = \frac{f_1X_1 + f_2X_2 + \dots + f_kX_k}{f_1 + f_2 + \dots + f_k} = \frac{\sum fx}{\sum f} \quad (3)$$

Where:

$$\bar{X} = \text{Weighted Arithmetic Mean}$$

$\sum fx$ = Sum of the products of f and x where f is the frequency of each weight and x is the weight;

$\sum f$ = Sum of all the frequency;

- f = frequency of responses;
 x = weight of responses.

3.7 Limitation of the Study

The author encountered the following limitations:

- Sample Size – the sample was based mainly to each sector such as service, merchandising and manufacturing businesses in Metro Manila Philippines only. There was no allocated ratio into different activities of the industries and with the understanding that the author still reached the sample size to start the presentation of data and to complete the analysis of the findings.
- Questionnaire Survey - were given only to those correspondents who are capable and willing to answer the feedback form seriously to gather a reliable and more accurate data. Only selected-response format used in questionnaire survey from 1 to 4 numerical values to properly present the points of the related responses.
- Sources of Textbook – the researcher make use of the four well-known authors of management accounting textbooks published only from 2008–2012 editions to gathered the most recent management theories and appropriately meet the right questions used for the survey.
- Statistical Technique – the weighted arithmetic mean does not supply information about the homogeneity of the group but the author believed that it is more reliable, most stable and with the least probable error to properly present and analyze the data to achieve the research objectives.

4. Survey findings and discussion

4.1 Introduction

This chapter discloses the results of study explained in Chapter 3 Methodology. The research gives attention to the important management areas prioritized by today’s managers and extent of management research topics studied by academic researchers and the relationship of the data based on the current findings.

4.2 Data Presentation

A. Questionnaire Survey

Exhibit 1.1.

	Management areas of priority	Service
1	Customers satisfaction	3.91
2	Running and controlling of management operations	3.43
3	Quality of product/service	3.42
4	Company profitability	3.36
5	Product pricing activities	2.85
6	Capital budgeting activities	2.40
7	Company growth/expansion	2.40
8	Product/service cost calculation	2.07
9	Performance measurement activities	1.83
10	Decision making activities	1.50

- 0.01 - 1.00 = Not Important (NI)
 1.01 - 2.00 = Somewhat Important (SI)
 2.01 - 3.00 = Important (I)
 3.01 - 4.00 = Very Important (VI)

Exhibit 1.1 gives the reader an idea to know the result of the data collected from the 173 sample size of service business respondents. Customers’ satisfaction (3.91), running and controlling of management operations (3.43), quality of product/service (3.42) and company profitability (3.36) rank *very important* areas

prioritized by the management. Then, followed by product pricing activities (2.85), capital budgeting activities (2.40), company growth/expansion (2.40) and product/service cost calculation (2.07) classified as the management areas *important* to them. Performance measurement activities (1.83) and decision making activities (1.50) were considered *somewhat important* management areas for the companies.

Exhibit 1.2.

Management areas of priority		Merchandising
1	Customers satisfaction	3.85
2	Running and controlling of management operations	3.49
3	Quality of product/service	3.39
4	Company profitability	3.30
5	Capital budgeting activities	2.92
6	Product pricing activities	2.83
7	Decision making activities	2.59
8	Company growth/expansion	2.35
9	Product/service cost calculation	2.04
10	Performance measurement activities	1.84

0.01 - 1.00 = Not Important (NI)
 1.01 - 2.00 = Somewhat Important (SI)
 2.01 - 3.00 = Important (I)
 3.01 - 4.00 = Very Important (VI)

Exhibit 1.2 presents the result of the data collected from the 135 sample size of merchandising business correspondents. Customer satisfaction (3.85), running and controlling of management operations (3.49), quality of product/service (3.39) and company profitability (3.30) were considered *very important* areas concentrated on by the management. Go along with capital budgeting activities (2.92), product pricing activities (2.83), decision making activities (2.59), company growth and expansion (2.35) and product/service cost calculation (2.04) rank as *important* while performance measurement (1.84) was reflected as *somewhat important* areas for them.

Exhibit 1.3.

Management areas of priority		Manufacturing
1	Product/service cost calculation	3.98
2	Product pricing activities	3.94
3	Customers satisfaction	3.94
4	Capital budgeting activities	3.90
5	Quality of product/service	3.86
6	Running and controlling of management operations	3.82
7	Decision making activities	3.59
8	Company profitability	3.02
9	Company growth/expansion	3.00
10	Performance measurement activities	2.80

0.01 - 1.00 = Not Important (NI)
 1.01 - 2.00 = Somewhat Important (SI)
 2.01 - 3.00 = Important (I)
 3.01 - 4.00 = Very Important (VI)

Exhibit 1.3 shows the result of the data collected from the 51 sample size of manufacturing business respondents. The *very important* areas prioritized by the management consist of the product/service cost calculation (3.98), product pricing activities (3.94), customers' satisfaction (3.94), capital budgeting (3.90), quality of product/service (3.86), controlling and running of operations (3.82) and decision making activities (3.59) whereas, company growth/expansion (3.00) and performance measurement activities (2.80) weigh up as *important* management areas of priority.

B. Management Accounting Research

Exhibit 1.4.

Research Topic List	
Management Accounting Information and System	
	Use of management accounting information
	Importance of management accounting practices
	Information technology change
Management Control System	
	Use of budgets for planning and coordination
	Developing appropriate incentives system to reward performance
	Importance of financial performance measures
	Importance of nonfinancial performance measures
	The balance scorecard use
	Cost-based transfer pricing
	Efficiency based performance measures
	International Control
	Cost volume profit analysis
	Use of cost information in the management control system
	Use of customer information in the management control system
	Use of product design information in the management control system
	Decentralization
Cost Accounting	
	Cost Accounting overall
	Product cost allocation
	Activity based accounting and management
	Cost variances
	Cost Driver
	Use of standard cost information
Cost Management	
	Total quality management
	Just in time
	Use of cost for decision making
	Benchmark information
	History and social context
	Customer Satisfaction
	Low-cost/price strategy
Capital Budgeting and Investment Decision	
	Use of discounted cash flow model for capital budgeting decision
	Development phase of strategic capital budgeting decision
	Relevant cost for decision making
Research Method and Theories	

Source: Shield (1997); Luft and Shields (2003)

Exhibit 1.4 shows the combined and summarized list of management accounting topics covered on the studies made and worked only by Shields in 1997 and Luft and Shields in 2003. From 152 published articles to 275 most recent empirical researches collected from the six leading journals namely : Accounting, Organizations and Society; The Accounting Review; Contemporary Accounting Research; Journal of Accounting and Economics; Journal of Accounting Research and Journal of Management Accounting Research (refer to Table 2 and 3, Literature Review).

4.3 Analysis of the Findings

4.3.1 Identification of the important management areas prioritized by managers

Through a systematic investigation, there were clear similarities and further added factors as to the very important management areas that today's general managers and finance/accounting managers prioritized. Majority of the answers for all the type of business activities ranks customer's satisfaction, running and controlling of management operation, quality of product/service, and company profitability are the managers' very important management areas considered and strengthen by them. By reason of greater operations performed by a manufacturing company, product cost calculation, product pricing activities, capital budgeting and decision making activities were also included and concentrated by them as substantial elements among the areas of management (refer to exhibit 1.1-1.3).

Managers in manufacturing firm placed an emphasis and concentrate on how they will achieve the primary purpose in doing their business and ends up in satisfying their customers. They considered the importance of product cost calculation to prepare a product cost estimate at the beginning of their operation. Through this, managers are able to properly set the price or value of each product from different product lines in order to determine what target price that customers are willing pay. As a result, the firm can timely provide a plan in the form of master budget which implicitly include their decision making process while performing their planning function. Once the budgets are completed, managers carry out directing and motivating duties among their employees. Then, running and controlling of operation followed in order to evaluate and improve company's production process and to provide the best quality products and services that their customer expects.

Furthermore, the products produced by manufacturing firm are the goods purchased by a merchandising company. Running and controlling of management operations of a merchandising business were best demonstrated by acquiring quality products from their reliable suppliers given that those goods they purchase are the one that is directly sell to their customers. When buyers successfully received high level of quality for both manufacturing and merchandising firm then, associated with it is the companies' profitability which is one of the basis or determinant in successfully running their businesses. Then again in today's service industry, managers likewise provide a customer-focused strategy. Managers considered that having an organized and properly controlled performance will turn out into a quality performance service to make their profit increased.

4.3.2 The present day Management Accounting research topics contributed by academic researchers

Through the extensive gathering of articles from 1972 to 2002 Luft and Shields (2003) exposed the most recent and valuable contribution studied by various academic researchers from six leading journals as shown in Exhibit 1.4. The management areas covered its importance and usefulness to individual, subunit, organization and beyond organization at this time, as compared to 1997 Shields compilation of management accounting articles. Atkinson *et al.* (2012) stated that all enterprises need management accounting. Having an organized management accounting information system is a powerful tool to monitor and evaluates the results of decisions carry out by managers. Most importantly if the business was driven by more complex operations, innovative technology and the entrance of new competitors in the market.

Currently, the research topic on *Management Accounting Information and Control System* covered an expansive subject matter in contrast to 1997 researched collected and deals with how management accounting supports internal decision making in many ways such as: *Pricing* were the managers use product cost information to determine whether the company cost structure are capable to compete profitably in the

market; *Product Planning* is the effort of the managers to focus on products process and designing of product that can deliver and satisfy the customers based on their needs and wants together with the potential profit that a product can contribute in view of the market requirement; *Budgeting* helps managers to forecast cost for diverse level of production and sales activity; and *Performance Evaluation* of the business and their employees were also reflected based on the comparison of actual result from organization budget and the method of giving rewards in applying both financial and nonfinancial measurement.

Then, in the area of *Cost Accounting*, academic researchers established far-reaching articles that users in manufacturing, merchandising, and servicing industry can immediately applied and take advantage of the information related to measuring, analyzing and reporting relevant data connected to the cost of acquiring and using resources in organizations. From initial recording of product cost such as materials, labor and overhead using the actual, normal and standard costing, use of variance analysis up to activity based costing and management were useful tool to properly track costs for each product. All of these were reflected on the studies made by Shields in 1997 “Research in Management Accounting” (refer to Table 2, Literature Review).

Subsequently, due to economic changes, researchers open up the concept of *Cost Management* to users. This refers to the methods and activities of managers in using company resources to increase value to customers and to attain organizational goals. *Cost Management* can help the company on how to enter new markets, carry out new organizational process, including modification of product design. The focus is not only reduction of cost but rather it includes decision to incur additional costs to develop new product, to improve quality of the product and to increase customer satisfaction with the goal of enriching company revenue and profits. It was visibly verified using the Map C and D of “Mapping management accounting: graphics and guidelines for theory-consistent research” of Luft and Shields (2003). Map C concentrates on the usefulness of budgeting system for planning and control based on 33 links and supported the research about customer-focus strategy and Map D creates 14 links and focused on the use of specific type of information rather than overall use of the budgeting system to implement changes and associate the topic on product diversity, linkage to performance evaluation and compensation, quality strategy, training in ABC, top management support and use of the control system for continuous improvement (refer to Table 4, Literature Review).

Finally, *Capital Budgeting and Investment Decision* were clearly discussed and demonstrated using the Map C and G of “Mapping management accounting: graphics and guidelines for theory-consistent research” of Luft and Shields (2003). Map C concentrates on the usefulness of budgeting system for planning and control based on 33 links and explained about the capital budgeting system and Map G relates to individual judgement and decision making for both planning and control based on 48 links this relates to decision-maker that ignores irrelevant reported cost allocations, information about relevance of cost data, opportunity costs are used in making a decision, effectiveness of discounted cash flow model for capital budgeting decisions and specific experience in which different costs were relevant than in the present task. This is where managers plan significant investment projects that have long-term implications but promises the greatest future return for the company. As well as identifying the costs and benefits relevant to different decision making (refer to Table 4, Literature Review).

4.3.3 Match up of management accounting topics important to practitioners and academic researchers

The examination of the maps offers a rapid tracing of what topic has been researched through the use of the causal link which is identified by a number that references the studies collected from numerous academic researchers published by Luft and Shields (2003) combined with the work of Shields alone during 1997 (refer to Table 2 and 4, Literature Review) and summarized using exhibit 1.4. Generally under servicing, merchandising and manufacturing company, the firms identified the very important management areas for the managers (refer to Exhibit 1.1-1.3) and the counterpart contribution to knowledge of leading scholars to support the users and readers valuable management accounting information needs.

Customers’ satisfaction, quality of product/service, company profitability, product pricing activities and product/service cost calculation agree with the *Cost Management*, whereas running and controlling of management operation fall within the *Management Control System*, but capital budgeting activities and company growth/expansion go along with the *Capital Budgeting and Investment Decision*. As a result of too many decisions performed by managers, decision making activities were appropriate and involved with the

entire research topic list from *Cost Management, Cost Accounting, Accounting Information System, Management Control System* up to *Capital Budgeting and Investment Decision*.

5. Conclusions and recommendations

5.1 Introduction

This part re-examine the individual research objectives and summarized the overall outcomes of the study. Conclusions and recommendations including its limitation are addressed.

5.2 Summary of the Findings and Conclusions

5.2.1 Research Objective 1: Identification of the very important management areas prioritized by today's managers.

2013			1997
Service			Overall Business
1	Customers satisfaction	3.91	Customer Satisfaction
2	Running and controlling of management operations	3.43	
3	Quality of product/service	3.42	
4	Company profitability	3.36	Cost Control
Merchandising			
1	Customers satisfaction	3.85	Product Quality
2	Running and controlling of management operations	3.49	
3	Quality of product/service	3.39	
4	Company profitability	3.30	
Manufacturing			
1	Product/service cost calculation	3.98	Company Growth
2	Product pricing activities	3.94	
3	Customers satisfaction	3.94	
4	Capital budgeting activities	3.90	
5	Quality of product/service	3.86	Company Profitability
6	Running and controlling of management operations	3.82	
7	Decision making activities	3.59	
8	Company profitability	3.02	

Based on the overall evaluation between the researches made in 1997 as compared in the present day, there were similarities in the management areas prioritized by general and finance/accounting managers. Customers' satisfaction, cost control, product quality and company profitability ranks as their top level of priorities during 1997 and still, today's practicing managers whether from servicing, merchandising and manufacturing industries considered these as the very important management areas to look over daily. Considering that managing their cost accurately will provide the best possible price that customers are willing to pay but customers demand much more than just a fair price, they expect quality product delivered in a timely way. Then exceeding their customers' expectations will positively generate high revenue and profits that benefits the whole company including their employees.

However, Company Growth was considered very important mainly by the manufacturing company and falls under capital budgeting category. Servicing and merchandising businesses often have the lesser capital and it is one of the reasons why managers take into account the careful consideration of committing long term obligations although this decision involves an investment today in the hope of realizing future profit.

In addition to customer satisfaction, cost control, product quality, company profitability and company growth, there are more very important factors involved for manufacturing company such as: product cost calculation, product pricing, and decision making activities. From the very start of their operations one part of managers decision making action is the accurate selecting of costing method to use whether actual, normal

and standard costing to record the manufacturing cost of the product. An appropriate cost estimate can enter into competitive market as a result of the right product value acceptable for consumer.

5.2.2 Research Objective 2: The present-day management research topics that is generally of high interest to academic researchers.

Research Topic List 1997	Number of Published Articles	MAP	Research Category 2003	Links
Management Control Systems		A	Causes and effects of budgeting at the individual level	42
Incentives	26			
Budgets or budgeting	21	B	Causes and effects of budgeting at the organization levels	27
Performance measurement	21			
Transfer pricing	8			
Responsibility accounting	6	C	Information for planning and control	33
Internal control	3			
Cost Accounting		D	Implementing management accounting change	16
Cost accounting overall	7			
Cost allocation	8	E	Performance measures and incentives	30
Activity-based costing	4			
Product costing	3			
Cost variances	2			
Cost Management		F	Contracting and control: micro processes	33
Quality	4			
Just-in-Time	4	G	Individual judgements and decisions	48
Use of cost for decision making	3			
Benchmarking	2			
History	1	H	Management accounting in its historical and social context	13
Cost drivers	11			
Management Accounting Information and Systems	7	I	Organizational change processes and the relation of financial and operational realities	18
Research Methods and Theories	6			
Capital Budgeting and Investment Decisions	5			
TOTAL	152			

After an extensive examination of the researches made by Shields (1997), Luft and Shields (2003) it is evident that Shields (1997) inspired and pursued the academic researchers to take the opportunity for more research studies in relation to capital budgeting and investment decision and other topics that they think are important to users of management accounting literature. Through their remarkable studies called “Mapping management accounting: graphics and guidelines for theory-consistent research” it was presented using Map C with 33 links associated in the usefulness of budgeting system for planning and control and Map G with 48 links connected to individual judgement and decision making for both planning and control.

Additionally, the Mapping management accounting researched of Luft and Shield (2003) resolved Foster and Young (1997) comment and observation with regards to the nonexistence of customer satisfaction, quality, growth and profitability. It was reported in Map C and D, supported the research about customer-focus strategy and the specific type of information rather than overall use of the budgeting system to implement changes and associate the topic on product diversity, linkage to performance evaluation and compensation, and quality strategy. However, there was no development on the slight coverage mentioned by Foster and Young (1997) on the topic areas of target costing, kaizen costing or capacity cost planning.

5.2.3 Research Objective 3: Matching of today’s practitioners’ very important management topics to those that has been studied by academic researchers.

Management areas of priority		Research Topic List
1	Customers satisfaction	Cost Management
2	Running and controlling of management operations	Management Control System
3	Quality of product/service	Cost Management
4	Company profitability	Cost Management
5	Product pricing activities	Cost Accounting
6	Capital budgeting activities	Capital Budgeting and Investment Decision
7	Company growth/expansion	Capital Budgeting and Investment Decision
8	Product/service cost calculation	Cost Accounting
9	Performance measurement activities	Management Control System
10	Decision making activities	Cost Management Cost Accounting Management Accounting Information System Management Control System Capital Budgeting and Investment Decision

After an in-depth examination of the Management Accounting information both from textbooks and literature completed by Foster and Young (1997), Shields (1997), Atkinson *et al.* (2012), Garrison *et al.* (2011), Hilton (2008), Weygandt *et al.* (2008), Luft and Shields (2003), it was revealed that researchers meet the needs of today’s practicing managers. It shows that at this time, academic scholars and researchers’ literature contribution agree with the managers’ interest. From the very important up to somewhat important management areas of service, merchandising and manufacturing firm, researchers provides reasonable sources to help them obtained the knowledge on how to deal with customers satisfaction, running and controlling of management operations, quality of product/service, company profitability, product pricing activities, capital budgeting activities, company growth/expansion, product/service cost calculation, performance measurement activities and decision making activities. Managers can benefit from the ideas, they can also refined and extend the knowledge towards cost management, management control system, capital budgeting and investment decision, cost accounting and management accounting system.

5.2.4 Research Objective 4: Discovery of the unimportant management areas of priority for today’s managers

Management areas of priority		Service	Merchandising	Manufacturing
1	Customers satisfaction	3.91	3.85	3.94
2	Running and controlling of management operations	3.43	3.49	3.82
3	Quality of product/service	3.42	3.39	3.86
4	Company profitability	3.36	3.30	3.02
5	Product pricing activities	2.85	2.83	3.94
6	Capital budgeting activities	2.40	2.92	3.90
7	Company growth/expansion	2.40	2.35	3.00
8	Product/service cost calculation	2.07	2.04	3.98
9	Performance measurement activities	1.83	1.84	2.80
10	Decision making activities	1.50	2.59	3.59

Based on the survey findings, all the management areas of priority are important for today’s managers. Managers provide the ideas on how to prioritize their work by applying the degree of its importance appropriate for their day to day business operations. By classifying the management areas from very important, important to somewhat important were essential in order for them to continuously perform the

right planning, organizing, directing and motivating, controlling and protecting the workers and the welfare of the organization.

5.3 Recommendations

Even though there was no such development in the topic areas of target costing, kaizen costing or capacity cost planning, interested academic students and leading scholars, can benefit and use the Atkinson *et al.* (2012), Garrison *et al.* (2011), Hilton (2008) and Weygandt *et al.* (2008) cost accounting and managerial accounting books as the foundation of increasing the research topic. They introduced the use of environmental and target costing, kaizen costing, and benchmarking scheme to minimize the cost of making and keeping a product for a long period of time. Their books highlighted budgets for planning and coordination functions, by way of determining the level of capacity-related and flexible resources of the company.

Ever since, all managers from different firms point out the importance of satisfying their customers, the author recommend the use of *Customers Relationship Management* to keep them satisfied and loyal overtime. Researcher must likewise develop and produce studies about strategies that integrate people and technology to strengthen the relationships of the business to customers, partners and distributors.

Future researchers may be able to use this study as a reference material in doing some related studies. Some facts may be added or some of the data presented may be altered to improve the contents of this study.

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