This booklet was prepared by the Financial and Management Accounting Committee (FMAC) of the International Federation of Accountants (IFAC). It is the sixth in the series of annual theme booklets that aim to provide a range of viewpoints on an important topic. We appreciate the efforts of the contributing authors.

The mission of IFAC is the worldwide development and enhancement of an accountancy profession with harmonized standards, able to provide services of consistently high quality in the public interest. The mission of the FMAC is:

> *To support IFAC member bodies in the global development and promotion of the financial and management accounting aspect of the profession.*

The FMAC welcomes any comments you may have on this booklet both in terms of feedback and in terms of its future activities. Any comments received on this booklet will be reviewed by the FMAC and may influence further activities. Comments should be sent to:

Director General
International Federation of Accountants
535 Fifth Avenue, 26th Floor
New York, New York 10017
U.S.A.

ISBN 1-887464-36-0

PREFACE

Faced with increasingly competitive environment, today's organizations must be better informed and more agile as they strive to create value for their stakeholders. The theme, *The Role of Management Accounting in Creating Value,* is intentionally broad to embrace the many aspects of value creation. Authors from around the world responded to the call for papers with insights to a variety of areas and a common call for those involved in the activity of management accounting to continue to shift their role to further enhance the quality and relevance of information, the process of decision making and the agility of their organizations.

Stewart (USA) therefore offered, through concrete examples, such means that management accounting function can continue to evolve—by providing innovative solutions in the areas of strategic decisions, resource allocation, operations and performance measurement. In addition, the author stressed that management accountants should work closely with management, refine or redefine the nature of their function, and position themselves as "knowledge managers".

Although similar to Stewart in that both are shareholder value oriented, Mills (UK) provided a study of shareholder value analysis (SVA), after expressing concerns over the traditional profit based measurement system. SVA, as one of the methods of measuring a company's potential to create value, can overcome weaknesses of traditional measures by focussing upon both the short term and the long term. The author also pointed out that SVA can be applied both to the organization as a whole and to individual business unit levels to evaluate the value-creating ability of the parts of the overall organization.

Sharma (Australia) and Brewer & Friedberg (USA) both illustrated how internal audit can create value for organizations. Sharma presented a comprehensive literature review of the changing roles and new opportunities for internal audit, as well as an interesting case study of an outsourced internal audit service performed by a Big 5 firm. He argued that internal auditors should be more proactive and acquire such new skills as information technology, quality control, and relationship management, in order to make high-value recommendations in business decision making.

Brewer & Friedberg, on the other hand, explored the concept of "creating value", described the internal audit function in relation to each component in the value chain, and demonstrated how the internal auditing function improves the status of customers, shareholders, other stakeholders, top management, and operations management, through applying unique interpersonal and technical skills to identify the most pressing problems and to ensure they are addressed. The authors stressed that internal auditors cannot operate in an adversarial role and still be able to create value, they should become team players.

Mévellec & Lebas (France) strive to explain and seek ways to improve the relation between management accounting and value creation. They explored the evolution of cost management system along with the changing implications of "value". They then called for a shift from activity-based to business-process based costing to reflect the change of priority in the operations of a firm--from efficient allocation of labor and material to identifying the sources of customer value. In essence, this process is to think simultaneously in terms of costs and value.

Similarly, Landry and Chan (Hong Kong, China) posit that the new customer-focused strategies adopted by many firms requires a new management accounting philosophy. Management accountants should redesign systems to provide new measurement and new forms of information by moving away from traditional functional reporting and measuring of productivity and profitability to a customer-focused, waste-reduction system.

Mirra (Italy) also reviewed the historical phases and different focus of management accounting. He then discussed the future role of management accounting in a market characterized as mature, customer oriented and increasingly unpredictable. He presented a comprehensive taxonomy of management accounting tools in supporting value creation and also explored the consequences that such an evolution of management accounting toward value-creation activities may have on an organization.

Baker & Majid (Malaysia) argued that the traditional narrow view of accounting as scorekeeping, attention directing and problem solving and the current somewhat broadened approach that views accounting from a more holistic and process-wide perspective are both inward looking, internally motivated and self-reflecting. They proposed a new framework that views the role of accounting beyond its own domain, that looks at accounting from the outside and uses values set by other organizational participants for accountants to meet. Accounting would thus change from score keeping to creating a broader and more pervasive value for shareholders, managers and customers. For example, accounting can be used to implement organizational governance and control, to influence decision makers, and to shape expectations of organizational members.

On a similar vein, Prieto's (Spain) main theme is that management accounting is an essential instrument for influencing behavior, increasing knowledge and enhancing innovation, because it reduces information asymmetry, signals expected behavior and is useful in measuring results and regulating incentives. The real world cases from large multinational companies in the Spanish automobile industry further supplement the author's propositions.

Chakraborty (India) notes that today's economy has changed from a simple focus on cost competitiveness to an emphasis on creation of customer value. Some organizations now view themselves as a network of relationships, put together to create value for the ultimate user. Thus for accountants, financial control is not so much minimizing the cost of achieving a given output as to maximizing the value of output from given resources. To exploit these new opportunities, the author argued that, the accounting function has to develop its own new mind-set, to move away from "transaction processor" to "insight provider", that is, to shift from reporting towards planning, thus enhancing their organization's ability to remain on a path of continuous development and growth.

In summary, these authors, arguing from various perspectives, all recognize that in order for the accounting profession to maintain its relevance, those involved in the management accounting function should continue to adopt a more proactive, expanded role in enhancing the value creating ability of their organizations.

FMAC
April 1999

The Role of Management Accounting in Creating Value

CONTENTS

Creating Value with Internal Audit *

Robert Sharma, *Technical Consultant*
Australian Society of Certified Practising Accountants
Management Accounting Center of Excellence

ABSTRACT[1]

The role of the internal auditor in organizations is changing. Today's business environment requires the internal audit function to add value to the business by aiding the commercial business managers in business decision making. This paper provides a perspective on the changes occurring in internal auditing. The paper has two principal objectives. The first is to discuss the directions that are currently emerging in internal auditing. The second is to discuss an outsourcing case study with a Big 5 firm (Ernst and Young) that demonstrates the changes that have occurred.

1. INTRODUCTION

Today's business environment, characterized by continuous change, increased competition, and global transformation, poses a number of challenges to organizations. To survive, organizations must continuously *create value* for both customers and shareholders through the use of technology and innovation, which results in effective resource utilization (IMAPS-1, para7)[2]. *Value creation* is defined as "any activity or process that enhances a shareholder's claim on an organization's resources, after all other claims on the organization's resources by other stakeholders have been met" (Birkett, 1998).

In recent times, the notion of *value creation* has been further extended to the internal audit function within organizations[3]. The traditional role of internal auditing typically involves "a review of the internal control structure" and "examination of financial and operating information through a detailed testing of transactions, balances and procedures" [AUS 604, para .05 (a) and (b)]. The internal auditor typically operated as the "*corporate policeman*" and often alienated the very audience that he/she was ostensibly meant to assist. These outcomes needed to change for internal audit to survive, particularly in an environment where organizations are constantly seeking to create value through continuous performance improvements and cost reductions. Internal auditors have begun to recognize the need to "*add value*" by working with management to help organizations achieve their strategic objectives rather than simply

*** A joint submission by the Australian Society of Certified Practising Accountants and the Institute of Chartered Accountants in Australia.**

[1] **Acknowledgements:** We would like to extend a special thanks to Mr. Peter Moloney of Ernst and Young for his review and assistance with the case study. We would also like to thank Mr. Bill McElroy, Ms. Anne Molyneux, Mr. Colin Parker, Professor Stewart Jones, Mr. John Petty, Mr. Michael Neugent and Ms. D. Soukseun for comments on an earlier draft.

[2] The definition of *value creation* is open to numerous interpretations as it can be defined in terms of the relationship the organization holds with its stakeholders. A stakeholder is defined as a group or individual who can affect or is affected by the achievement of the firm's objectives (Freeman, 1984). Stakeholders of the firm include shareholders, customers, creditors, employees, public interest groups, and governmental agencies.

[3] The notion of *value creation* has already been applied to other services provided by auditors, particularly assurance services with the launch of The Special Committee on Assurance Services Report (1996), of the American Institute of Certified Public Accountants and the Report of the Joint Assurance Services Taskforce, (1997) by the ICAA and ASCPA. Assurance services are "independent professional services that improve the quality of information, or its context for decision makers" Special Committee on Assurance Services Report, 1996.

imposing costly and risk averse processes (Walz, 1997). Therefore, the scope and objectives of internal auditing are tending to place greater emphasis on other elements such as "a review of the economy, efficiency and effectiveness of operations including non financial controls and ....review of compliance with management directives and other internal requirements" [AUS 604, para .05 (c) and (d)].

This paper examines the extent to which the internal audit function participates in *value-creating* activities that traditionally fall within the scope of the business manager. First, a number of papers that emphasize the role on internal auditing in value creation, are reviewed and classified. Second, this paper examines how value-creating activities were undertaken in the case of an outsourced audit function with a Big 5 firm as the service provider. Finally, the discussion and conclusions are presented.

2. A REVIEW OF TRENDS

In order to determine the trends that are evolving in internal auditing, a review and analysis of the content of journals held on a major electronic database from January 1997 - September 1998[4] was conducted. All papers that used the term "internal auditing" in their text qualified for initial selection resulting in 299 papers. These papers were then reviewed and classified according to their major themes. The representative results from the analysis according to topic area, author, and description are summarized in table 1 and table 2 below[5]. Three features were observed from the results. Each of these features is described below.

Feature 1: The traditional role of the internal auditor is changing. The trend analysis indicated that the traditional role of the auditor in due diligence, internal control, and fraud detection had changed. Table 1 summarizes three cases that demonstrate how the role of the traditional auditor has changed in the areas of internal control evaluation, implementing technology, and due diligence. In the internal control study (A), the auditor had to evaluate five components of control that went beyond the traditional evaluation of the control environment, identification of the existence of the control, and monitoring of the control's effectiveness. Two new components were included as part of the control system evaluation: a comprehensive risk assessment[6] and communication of key findings to the board and staff[7]. In the implementing technology study (B), the role of the internal auditor went beyond identification of key control risks and the design of effective controls. The auditor played the role of a business management consultant and was required to acquire a number of skills. These skills included knowledge of the SAP R/3 software, and understanding of platform and architecture issues for the software. The aim throughout the implementation process was to adopt a strategic mindset in order to meet management's

[4] Content analysis has been used in past accounting research in order to determine trends in major journal publication themes (Lehman and Tinker, 1987). This time period was chosen in order to ensure that there was adequate diffusion of the Assurance Services Reports by the AICPA and the ASCPA and the ICAA within the Journals. The database that was used was the business periodicals on disc database, an internationally compiled database that holds over 1200 journals.

[5] There were several instances where authors covered the same topic area more than once. Providing an exhaustive list of examples would deviate from the main focus of this section which was to identify trends. Therefore, in order to maintain the clarity of argument throughout the paper, only representative examples were chosen for the purposes of Table 1 and Table 2.

[6] The risk assessment process typically evaluates three kinds of risk: strategic, operational, and financial. Strategic risks are risks that relate to the entire organization and constitute the risk that management's goals and objectives will not be achieved in reality. Operational risks are the risks that operational business units would not achieve management objectives that are relevant to the business unit. Financial risks are the risks that financial balances would be misstated due to inadequate or ineffective controls. Auditors have tended to emphasize financial risks over strategic and operational risks. The COSO report (1992) and the Assurance Services Reports (1996, 1997) have drawn auditors' attention to the other risks.

[7] The two components are also relevant to external auditors according to the Assurance Service Reports issued by the AICPA (1996), the ASCPA and the ICAA (1997).

objectives. Finally, in the merger and acquisitions case for Nationsbank (C), the internal auditor played a role that went beyond due diligence, control risk evaluation, and prevention and detection of fraud. The internal auditor played an active role in performance management by reviewing key performance indicator data on call response times with management, identification of “backoffice” inefficiencies, and making recommendations for cost reduction.

Table 1 :Trends in Internal auditing -Variation in traditional roles

Topic	Author	Description
A. Evaluating internal controls through an integrated framework	Simmons (1997)	Reviews internal controls within the framework developed by the Committee of Sponsoring Organizations (COSO, 1992) for a government department. Five components of internal control that must be present and functioning for achieving business objectives are: 1. The control environment 2. Risk assessment 3. Control activities 4. Information and communication 5. Monitoring The five control components form an integrated system that reacts dynamically to changing business conditions.
B. Implementing technology	Gibbs (1998)	Details the auditor’s role during and after a major SAP implementation. Identifies the new skills and competencies being demanded of auditors. These include 1. Focus on business objectives 2. Adopting a strategic mindset 3. Advanced IT knowledge (particularly, SAP R/3) 4. Adoption of innovative audit techniques to meet business objectives 5. Developing consulting skills particularly on platform and architecture issues
C. Due diligence	Trampe (1998)	Reviews the role of the internal auditor in mergers and acquisitions for a major US bank (Nationsbank). Internal auditors played a role that went beyond due diligence. The internal auditor operated in a cost saving capacity by 1. Reducing costs of external auditors and consultants 2. Enhancing customer retention by ensuring smooth changeover on systems 3. Identifying back-office efficiency and reducing risk 4. Reducing internal and external fraud The internal auditor developed and monitored the key performance operational indicators with management. These included response times on calls from customers, and calls that were abandoned.

Feature 2: There are new opportunities for internal auditors. The second feature is that there are a number of new opportunities emerging for auditors that would typically fall within the domain of the business manager. Table 2 summarizes these opportunities. The opportunities include preparedness for year 2000, internet and intranet auditing, environmental management auditing, auditing the strategic plan, business process reengineering implementation, relationship auditing, auditing TQM, and facilitating organizational change. Internal auditors can draw on their knowledge of the business, knowledge of control risks, skills in interviewing, and understanding of business processes and controls to capitalize on these opportunities.

Feature 3: Internal Auditors need new skills. A final feature that emerges from tables 1 and 2 is that auditors ***will need to enhance*** their skills in at least four specific areas in order to create value. First, auditors need to enhance their knowledge of technology in order to prepare for a variety of challenges emanating from the Internet and the year 2000 “millennium bug”. Second, auditors need to enhance their knowledge and understanding of other quality standards that relate to the environment such as ISO 9001 and ISO 14001. Third, auditors need to become more aware of trends in business management such as TQM, business process reengineering, and strategic planning in order to remain focussed and relevant to their clients. Finally, and most importantly, auditors need to develop a number of "soft skills" in order to communicate more effectively and facilitate relationships[8]. These skills include: skills in change management and resiliency, listening, negotiation, marketing, and personality type understanding (Bennet, 1998).

Table 2:
Trends in Internal Auditing - New Opportunities for internal auditors

Topic	Author	Description
Year 2000 preparedness auditing	Carvill (1998)	Internal auditors with their knowledge of the business, skills in risk assessment, and internal control evaluation can aid with year 2000 implementation and even create value through customer retention.
Internets and intranet auditing	Bodnar (1998)	Internal auditors can contribute to management's objectives by promoting cost reductions in addition to reviewing controls relating to network security.
Environmental management auditing	Picard (1998)	The breadth and depth of the internal auditor's knowledge and skills in investigation will allow internal auditors to become effective players in implementation of environmental standards such as ISO 9001 and ISO 14001.
Auditing the strategic plan	O' Shaughnessy and McNamee (1997)	Internal auditors can aid in auditing the strategic plan by evaluating its effectiveness in business operations. Objective evaluation of strategic plan directives at the operational level is critical for formulating an effective strategic plan. .
Business process reengineering implementation	Lanza (1997)	Internal auditors can contribute to the reengineering of key business processes. In the U.S.A., Lafarge Corp used internal auditors to improve vendor and supply process management. The internal auditors 1. Identified the audience 2. Developed a preliminary questionnaire 3. Interviewed staff and gathered data from untapped sources 4. Formulated recommendations in a report
Relationship auditing	Ratcliff and Brackner (1998)	Internal auditors can review the nature of relationships in organizations. Bad relationships can have a direct effect on an organization's performance and effectiveness. Based on over 250 observations and interviews two criteria need to be satisfied for good relationships: 1. All parties must benefit from the relationships 2. The relationship must be mutually pleasant
Auditing TQM and business process reengineering projects	Moore (1997)	Internal auditors can evaluate the effectiveness of TQM and business reengineering projects by measuring the levels of customer satisfaction, and attainment of organizational goals.
Organizational change agents	Jeffords et al (1998)	Internal auditors can contribute as change agents by: 1. Serving managers with more than recommendations 2. Recognizing that audit recommendations don't change organizations but people do 3. Communicate early and communicate often 4. Developing the powers of persuasion

In conclusion, the role of the internal auditor is fundamentally changing as the business environment evolves. There are now a greater number of opportunities emerging that also pose a greater number of challenges to the internal auditor. The next section discusses a case study, where the challenges and opportunities facing the internal auditor are discussed within a particular context.

3. OUTSOURCING CASE STUDY

Background

[8] An anonymous case study in "Internal Auditor" documents two situations where open lines of communication and trust enabled two cases of fraud to be detected.

A Big-5 firm was engaged to provide outsourced internal audit services to a company engaged in the finance industry. The decision to outsource was based on a number of difficulties with the internal audit function including:

- poor relations between the internal audit team and management
- a perception that internal audit was not adding value to the business
- concern by the audit committee that internal audit was not effectively reviewing all of the risks that it should.

Management did not believe that reengineering the “in-house function” would provide them with the assurance that was required, therefore the function was outsourced. The Big-5 firm provided the people, processes, and technology to plan, execute, and report all internal audit activity[9].

What was done?

A number of specific initiatives were undertaken at the planning, audit execution, communication, and reporting stages. Each of these initiatives were undertaken in order to address management’s concerns with the in-house audit function.

Planning

On appointment of the internal auditor, the existing internal audit plan was reviewed. It focussed on predominantly financial risks and was more concerned with testing to identify error, rather than conducting a process review to identify solutions.

Next, a risk assessment was initially performed to identify **all** the risks associated with the organization, including strategic and operational risks (see Figure 1). The emphasis was not only on *“looking at the things that would go wrong”*, but also the risk that important business objectives would not be achieved. The assessment was executed using interviews with the senior management team, in order to ensure that the issues identified were the ones that concerned them. A review of the corporate strategies and plans was also undertaken in order to ensure that the exercise was complete. Once the relevant risks were identified, each risk was then rated according to its significance. Finally, an audit response to the risk was developed, where appropriate. The objective was to assist management to manage the identified risks. This approach resulted in creating a plan with management that was well understood and supported. In the course of developing the plan, there was a conscious attempt to ensure that the expectations of the audit committee were also addressed. Essentially, the internal audit plan was to go far beyond the financial threats facing the business, and in this manner, the opportunity to create value had improved.

An example of how a risk was addressed through this process, was the risk that the organization could lose key personnel through resignation. The risk was rated as significant, as staff turnover was high, and training new staff was a costly and time-consuming process. The audit response was to diagnose the reasons for the high turnover, and working with personnel consultants to identify initiatives that could be undertaken to reduce the incidence of staff turnover. The solutions included a performance assessment

[9] The staffing levels and skills of the members on the audit team varied according to the nature of the task and its priority with respect to the entire organization.

system that provided immediate feedback to staff, and the development of an incentive system to retain staff[10].

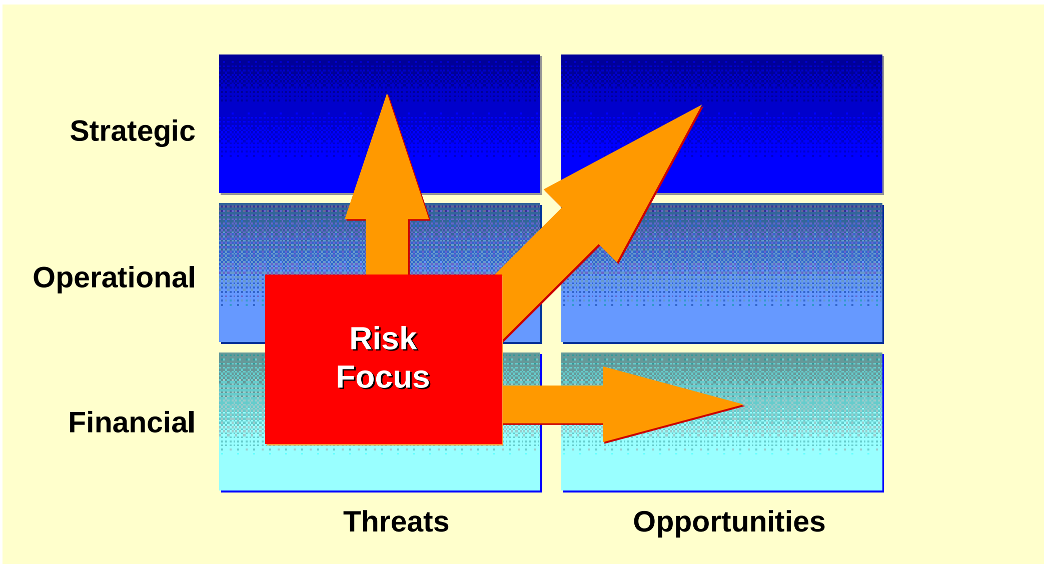


Figure 1: Audit Planning and Risk Focus

Audit Execution

Management had little regard for the internal audit process, therefore their respect had to be earned. A number of initiatives were undertaken to convince them that the audit process added value. These included the use of:

- **Specialists**
- **Business process approach**
- **Control risk self assessment**
- **Technology**

Specialists. It is not possible for a general auditor to be an expert in all aspects of an organization's activities. If the auditor is not reasonably proficient in the area being reviewed, it is unlikely that the auditor will be entirely effective, or that the auditor will gain the respect of management, who often view the audit as a time-consuming activity, where they have to teach the auditor about the business. The solution to this problem was to use **specialists** in the subject matter being reviewed. For example, in the case of a human resources system review, a human resources expert was included in the team to ensure the audit was properly planned and executed and that the findings were relevant and represented best practice. This resulted in gaining management's respect for the audit team, and recognition that auditors could add value given their objectivity.

[10] Another operational threat that turned into an opportunity followed from management's participation in the planning process. Management's involvement in the entire planning process, resulted in the organization's business units recognizing the audit plan as a value-adding activity due to the level of commitment and support it received.

Business Process Approach. This involved performing the audit in the context of the business processes already established, and assessing where those processes could be improved. The traditional audit testing was kept to a minimum as this generally added little value or understanding and was only needed to confirm the operation of the processes described to audit staff. This approach was beneficial in three ways. First, the negativity generated through the reporting of past errors was substantially eliminated. Second, costs in terms of personnel man hours, and time to perform critical tasks was reduced. Finally, the suggestions that were made for improvement were more relevant to the business processes in operation, and had a greater tendency to benefit the organization in the future. For instance, in the case of the personnel review, the internal auditor reviewed remuneration processes, and the process for approval of training, recruitment, and terminations. The internal auditor did not audit individual transactions; rather the entire business process was considered.

Control Risk Self-Assessment. This involved internal audit assisting the management team to evaluate the quality of the control systems that they designed and implemented. This varies from the more traditional model where management design a system, and then ask for internal audit sign off for that the system, once it is well controlled and established.

In the case of this client, control risk self-assessment was implemented by way of the management workshops that were facilitated by internal audit. These workshops had the objective of identifying the key control risks for each key business activity and then devising a control solution that reduces the risk and fits comfortably within the business process. This approach had the advantage of achieving management buy-in and reducing the internal audit hours required to undertake a project. It also placed full responsibility for the suitability and adequacy of control in the hands of management, where it belongs. For this client, funds-management personnel were particularly wary of internal audit. A number of workshops were undertaken to jointly identify continuing control issues that impacted on the success of the business. Solutions were jointly determined and agreed, and in some cases the risk did not justify any further action, while in other instances specific risks required the implementation of specific controls. In this way, the internal auditor worked with the business and the management team to jointly determine and calibrate the risk and controls according to the needs of the business.

Internal audit was still required to provide assurance to the Board regarding the quality of the systems established through limited reviews of their operation. From management's perspective however, the time-consuming and often 'nit picking' audits were removed from the cycle, and commercially sensible controls were implemented.

Technology. As with any other business process, the internal audit function was able to increase efficiency and the quality of the internal audit by using **technology.** The possible applications are many but the more common ones that were used included

- Access to best practice information — working with the firm's own data bases of best practice, the internet, and professional providers — information that could assist the business to improve its processes was easily accessed. This information was included in reports to ensure that constructive and attractive solutions were offered. For example, best practice personnel management techniques were identified for the personnel review.
- Work paper systems and tools to automate audit processes, to improve efficiency, and improve quality were used by all team members.

- Communication, not just through Email, but also using information-sharing techniques including Lotus Notes[11]TM. Lotus Notes allowed the internal audit team to share the audit file electronically in more than one location.
- Data interrogation software to search large volumes of data and to identify trends and issues that are not necessarily apparent in the routine management reports provided another perspective, and therefore added value to management.

Communication and Reporting

Reporting of internal audit findings had always been an unpleasant experience for management. The reports focused on errors and exceptions and were therefore negative in nature. The result was conflict and tension between internal audit and management. This relationship also resulted in a lower probability that audit recommendations would be implemented. In order to overcome this obstacle a number of initiatives were undertaken.

- Where a detailed report was required, it included comment on the positive aspects of the function reviewed to ensure that an appropriate balance was communicated to senior management and the audit committee.
- Where possible, before preparing any report, workshops were held with the management group in the area being reviewed. The purpose of the workshops was to ensure that the issues identified were factually correct, that the solutions proposed were discussed and agreed, and that management were comfortable with the outcomes of the audit. The result of this was consensus and agreement on the way forward, which meant that the change needed was far more likely to be implemented. Any report that was produced became a summary of issues and an agreed action plan.
- The internal audit function ensured that their recommendations didn't strive for a perfect world. The recommendations made by internal audit were made consistent with the organization's appetite for risk. Most successful organizations are not risk averse because this would limit their opportunity to grow. The internal audit views therefore had to be consistent with the risk profile of the business.
- Finally, reports were kept brief and to the point in order to ensure that these would be read, and acted upon.

4. DISCUSSION – The Bridge between Theory and Practice

In order to measure the success of the internal audit function, a management survey was conducted at the end of the first year. The management survey constituted a set of questions developed according to criteria identified at the start of the audit. The survey called for an assessment of the performance of the internal auditing function in a number of key areas. Specifically, the following questions were directed at management:

- Did the outsourcing internal audit function project achieve its objectives?
- Were the audit findings factually accurate?
- Were the recommendations appropriate?
- Did the recommendations add value?

[11] Lotus Notes is a standard information-sharing tool that allows the sharing of information with other people in a defined group. The tool holds information in the form of documents and includes lists of audit programs for key account balances, and lists of experts in certain topic areas. Information can be read, searched, retrieved, used, and printed from Lotus Notes. Furthermore, new topics can be created and workareas can be customized on Lotus Notes.

- Did the project assist in the control of risk?

Management were unanimous in confirming that the performance of the internal audit function had significantly improved across all of these criteria. The overall business risk was reduced by the approach that was adopted by the new auditor. A potential area that management identified for improvement was individual project planning and management.

Furthermore, the outsourcing case suggests that a four-step approach can be usefully applied by the internal auditor to serve the interests of the board and management (see Figure 2). First, the internal audit function needs to gain an understanding of all the business risks, rating these risks according to management's understanding, and tailoring an audit approach that addresses both management's and the Audit Committee's objectives. Second, value to the organization can be generated by placing an emphasis on communication and gaining the support and participation of management. To achieve this objective, positive aspects of the audit and business process improvement can be emphasized, and specialists and technology can be used as effective aids. Third, once management's "mind-set" and behavior has changed, the assurance to the board can be enhanced as management is actively involved in the planning, execution, and reporting process. Finally, the solutions that are delivered within the organization need to be aligned with management's risk and reward agenda. This approach results in enhancing stakeholder value, as the goals of the internal audit department are aligned with those of the entire organization.

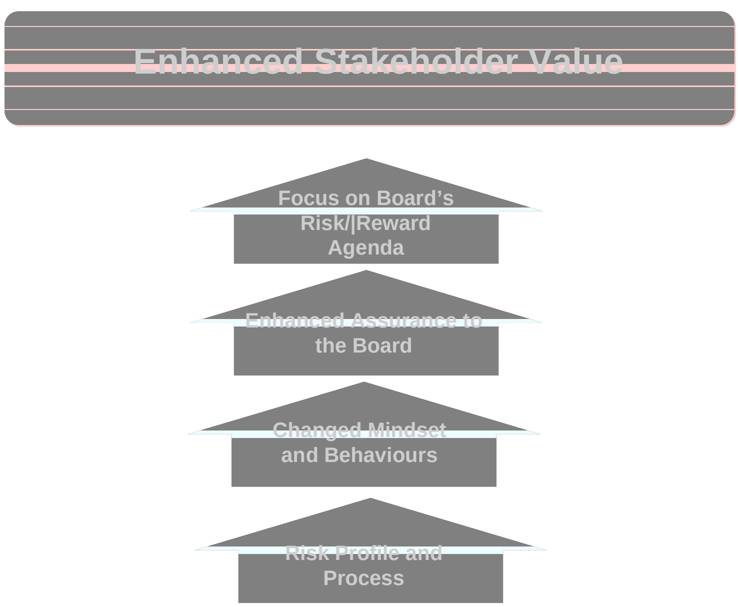


Figure 2: Summary of Internal Audit Approach

5. CONCLUSION

This paper has had a dual purpose. The first purpose has been to review the trends in internal auditing. The second has been to review the trends within the context of a particular outsourcing case study.

Two primary conclusions can be drawn from the analysis. First, the internal auditor *has* an important role to play in future working more closely with the commercial business manager[12]. The review of trends and the case study seem to suggest that the emphasis in the future would be on high-value recommendations that facilitate organizational improvement in terms of business process redesign, reduction of cost, reduction of time in key business processes, and enhanced profitability[13]. Second, there are a number of new opportunities emerging for internal auditors. However, internal auditors will need to be proactive in order to meet the challenges ahead. Internal auditors will need to make a significant investment in the acquisition of new skills in order to remain relevant. The skills that need to be acquired include those relating to information technology, quality control, and relationship management, to name but a few.

[12] See the Kennametal case by McMunn and DePasquale (1997) where employees are becoming internal auditors.
[13] Similar sentiments are echoed in Walz (1997).

REFERENCES

American Institute of Certified Public Accountants (1996), Special Committee on Assurance Services Report, 1996.

Anonymous, Communication Trust are Pluses, *Internal Auditor*, Vol 55, pp.93-98, April 1998.

Australian Accounting Research Foundation , AUS 604, Considering the Work of the Internal Auditing, October 1995.

Bennet, A.R., Management Soft Skills importance in the audit environment, *Internal Auditing*, Vol 13, pp.45-47, May/June 1998.

Birkett, W., The Management Accountant of the 21st Century, *Public lecture* 11 May 1998.

Bodnar, G.H., Internets and Intranets: Network Accounting, *Internal Auditng*, Vol 13, pp. 43-47, July/Aug 1998.

Carvill, W.S., Management Use of internal audit to assure year 2000 preparedness, Internal Auditing, Vol 13, pp. 24-28, July /August 1998.

Freeman, R., Strategic Management: a Stakeholder Approach (Marshall, MA:Pitman,1984).

Gibbs, J., Going Live with SAP, *Internal Auditor*, Vol 55, p70-75, June 1998.

ICAA and ASCPA, Report of the Joint Assurance Services Task Force, 1997.

International Federation of Accountants, International Management Accounting Practice Statement (IMAPS)-1, March 1998.

Jeffords, R., Thbadoux, G.M., Scheidt, M., An internal auditor’s guide to facilitating organizational change, *Internal Auditing*, Vol 13, pp.37-41, July/August 1998.

Lanza, R.B., Performing a process improvement study, *Internal Auditor*, Vol 54, pp.58-62 August 1997.

Lehman, C., and Tinker, T., The “Real” Cultural Significance of Accounts, *Accounting Organizations and Society*, No. 5, pp.503-522, 1987.

McMunn, H.E., and DePasquale, R.J., Everyone an Internal Auditor, *Mangement Accounting* (U.S) Vol 78, pp 40-44, March 1997.

Moore, J.W., Auditing Business Process Reengineering and TQM projects, *Internal Auditing*, Vol 12, pp.47-52 Winter 1997.

O Shaughnessy, J., and McNamee, D., The Internal Auditor and the Strategic Plan, *Internal Auditing*, Vol, 12, pp.53-58 Winter 1997.

Picard, R.R., “Environmental Management: What’s Auditing got to do with it” Vol 55, Internal Auditor, June 1998 pp.32-36.

Ratcliff, R.L., and Brackner, J.L., Relationships, *Internal Auditor*, Vol 55, p37-41, Feb 1998.

Simmons, M.R., COSO Based Auditing, *Internal Auditor*, Vol 54, pp.68-73, December 1997.

Trampe, J., Thriving on Change, *Journal of Accountancy*, (U.S.), Vol 185 pp.33-36, April 1998.

Walz, A., Adding Value, *Internal Auditor*, Vol 54, pp.51-54, Feb 1997.

ABOUT THE AUTHOR

Robert Sharma is Technical Consultant at the Australian Society of CPAs. He graduated with First class Honors from Monash University. He has presented at numerous International Conferences, including the European Accounting Association Conference, and the British Accounting Association Conference. He completed his professional studies at Colonial Ltd where he was part of their demutualization project.

Robert has published on a wide range of issues that relate to both financial and management accounting. The topics include cash flow disclosures, Management Accounting System design, Activity based costing, and the exercise of managerial control.

Simultaneously Managing Cost and Value: The Challenge *[1]

Pierre Mévellec, Ph.D., *Professor of Management Accounting, University of Nantes*

Michel Lebas, *Professor of Management Accounting and Management Control, H.E.C. School of Management, France*

ABSTRACT

During the last 15 years, there has been a tremendous interest in new costing techniques, especially in activity based costing. But the efforts made to put the ABC/ABM approach into practice have not been supported by a corresponding effort in theory building. Most of the literature is dedicated to the computational side of the approach, and as a consequence we cannot see today any homogeneity in so called ABC costing.

The hypothesis presented in this paper is that the clue to the redesign of a costing system lies in their dual nature. Every cost system is a twofold system. On one side it describes resource consumption (using causality relations, traceability and responsibility); on the other side, through the product and services costing procedures it implicitly simulates the minimum value the firm is hoping to get from their customers.

To be profitable, a firm must have costs lower than the value perceived by customers. Thus, if management accountants want to contribute to efficient management of firms, they need to design costing system that are also consistent with the value chain of the firm. The only way to obtain such a result is to move along from activity to business-process based costing. This new vision allows the authors to suggest that the evolution of costing system design is driven by changes in value attributes and not by a search for solving technical difficulties.

The question of the contribution of management accounting in value creation in and by firms is a good one. It suffices to look around the business world to see that the answer is not clear-cut. On one hand, medium-sized companies are dynamic and profitable and create jobs, but they generally use only the strict statutory minimum in terms of accounting resources, and often do not use any management accounting tools. On the other hand, large enterprises, which seem to be using all available management accounting tools, tend to be slow to react, do not give an especially sterling performance in terms of return on equity, and often appear to be destroying jobs. While this picture may be somewhat exaggerated, and examples to the contrary abound, the situation nevertheless remains substantially paradoxical. It leads researchers and practitioners alike to question the contribution of management accounting to what is the veritable *raison d'être* of any organization: value creation. We believe that there is a relation between management accounting and value creation and seek ways to improve this relation.

* **A joint submission by The Conseil Supérieur de l'Ordre des Experts Comptables and The Compagnie Nationale des Commissaires aux Comptes, France.**

[1] This article was inspired by a previous article, "*The Nature of Cost Systems*", presented by Pierre Mévellec at the European Accounting Association Annual Congress in Antwerp in May 1998.

Cost accounting has always played an essential part in the management of firms, for example through the calculation of profitability or contribution margins of products used as a basis for product portfolio management. During the 1980's, the identification of increasingly serious misalignment between cost accounting signals and the needs of competitiveness led to a vast movement of renovation, theoretical at first but then increasingly practical, often known under the name of Activity Based Accounting (ABC)[2]. Unfortunately the results of these attempts were not always those expected. Indeed the calculated product costs were different, but the calculation procedure was complex, and despite good intentions, "results" were often difficult to interpret. Any additional contribution in helping management create value was only marginal in that it limited its scope to cost calculations.

How can we explain this lack of success, despite the general agreement that extends well beyond the confines of management accounting (see for example the value-chain concept), on the interest of an activity-based view of the firm? Our hypothesis is that up until now, too much emphasis had been placed on reconstructing (better) product costing systems, with too little attention paid to the development of cost management systems (CMS) that address the two questions of the root causes of the existence of costs and of their purpose.

We will adopt first a historical approach and then formulate views about the nature and the evolution of cost management systems. In a first section we will review the position of cost systems when value was measured by aggregating costs. In section two we introduce the impact of the customer's viewpoint in the determination of value. A third section will show how cost systems are used in organizations to develop their strategic abilities, while in section four we will suggest an explanatory and anticipatory model of the evolution of cost systems.

COST MANAGEMENT SYSTEMS WHEN VALUE WAS CONSIDERED TO BE A SUM OF COSTS

Developed in a world where the dominant notion of value was *work value*[3] or intrinsic value, early cost analysis systems attempted to measure as best they could the consumption of resources required to bring products to market. The most accurate knowledge of the consumption of resources by products was the essential condition for an approach to value, as defined by the early economists. For them, in a pure and perfectly competitive world (but Marxists did not fundamentally challenge this view), the source of value was to be found in the cost of production. In economic theory, there is a consensus on the view that value is determined objectively by the addition of all *production*[4] costs, and that such value has to be recognized by the customer.

As in the early times, direct labor was the main factor in the process of transformation of raw materials, and as such added value[5], it seemed only natural that the embryonic cost analysis systems (such as the one proposed in France by Rimailho in 1928) be structured around the measurement of direct labor

[2] It should be remembered that originally in the ABC acronym, the C for Costing was the leading determinant. The emphasis was on the calculation of (better?) product costs. The emphasis on the implications of "Activity Based" only came later.

[3] The term "work value" is used here to refer to the fact that work is a value in itself and that labor is the principal source of value creation. Work value is traditionally opposed to capital value. It is now often replaced by exchange value, as we will see in the next section.

[4] We include in the term "production" here all activities that contribute to bringing a product in the hands of the customer.

[5] It is in this view that the concept of "valued added tax" is rooted.

hours. Measuring the consumption by labor of internal “support services” (and attaching such costs to the “direct” costs composed of raw materials and direct labor) completed the cost analysis system, thus providing a view of costs calculated by addition, which was coherent with the theory of value. The ability to trace resource consumption to products was the primary characteristic of all “full cost” systems which held such a dominant role in both Europe and the USA following the 1929 crash. The need to trace all costs to products is derived from the need to articulate both cost and value within one and the same analysis: labor creates value and the sum of all costs, first traced to labor and then to products, gives a measure of value.

To be complete, a cost analysis system becomes a cost management system when it also explores and understands the causes and purposes of resource consumption, and identifies the responsibility centers share the ability to control costs.

Any action on resource consumption requires knowledge of the causes of this consumption. The early designers of cost analysis systems made a critical choice in electing production volume as the one major cause for the existence of costs. This choice allowed the development of two critical managerial tools, namely breakeven analysis and flexible budgeting. More recently, the business process view of the organization, on which ABC is founded, led to the recognition of many causes other than volume.

Action on resource consumption requires also that someone be given responsibility for such action. Allocation of decision rights is carried more effectively through budgeting systems than through cost analysis systems, although these two “control tools” are closely linked through the choice of the denominator activity in the allocation of fixed or common costs. Responsibility is deployed along hierarchical and functional lines, which take the form of organization charts. It is not surprising that the confusion between cost pools and responsibility centers appeared very early.

In variable or direct costing systems, causality and direct traceability are limited to materials and direct labor. Management of indirect costs is exercised only through budget mechanisms, and is substantially disconnected from cost analysis.

With traditional “full cost” systems, all costs are traced to products, but the perimeters for the analysis of causality and responsibility are often different (Perrot, 1996).

ABC type systems attempt to reconcile the three dimensions — traceability, causality, and responsibility — by introducing the concept of activity. However, this is insufficient to restore their relevance to cost management systems, as work value is no longer the reference (Lebas, 1996).

COST MANAGEMENT SYSTEMS WHEN VALUE IS CONSIDERED TO BE A CONSTRUCT BY CUSTOMERS

Today the dominant approach to value is exchange value. Such value results from the appreciation and valuation by customers of the various attributes of a product (or service) (Bromwich, 1990). From being inward looking and focused on cost consumption, cost management systems become outward looking and must encompass the interface between the firm and its outside partners. CMSs can no longer be restricted to supplying information on resource consumption, whether by responsibility center or product, and must now describe the process of value creation by the enterprise. It is only when the cost management system can simultaneously measure resource consumption and describe the value creation process that it will be relevant to the management of any business.

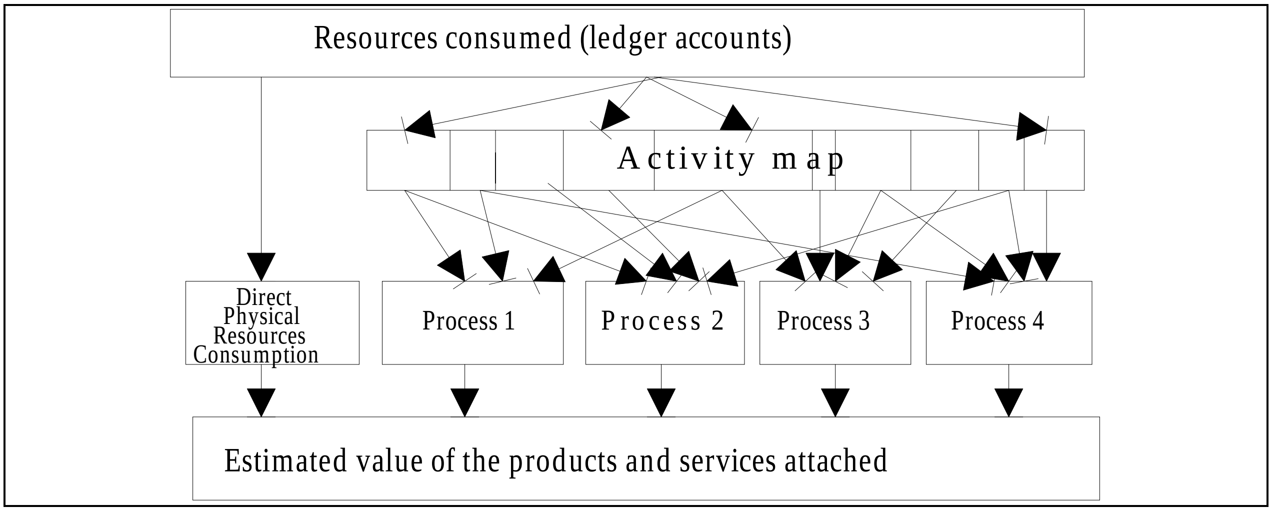


Figure 1 Modeling the consumption of resources

As illustrated in Figure 1, a cost analysis system is built around three successive steps in attaching or tracing costs to objects:

- Costs are first organized, generally by nature, in ledger accounts structured by a chart of accounts.
- In a second step combining responsibility and causality, these costs are attached to activities on the basis of where and how the costs were incurred.
- In the third step, since product attributes valued by the customers are rarely created by one single activity, activities or subsets of activities are combined as a basket of “things people do” which we call processes[6]. Costs are thus attached to processes (Mévellec, 1994).

Example of processes in a pharmaceutical company.
Physical consumption: raw materials.
Process 1: production lines used to obtain the medication in various physical forms such as syrup, powder, capsules, or oral solution.
Process 2: packaging in formats and sizes providing for easy dosing, and in quantities matching medical prescription practices.

This hierarchical structure is in fact a representation of the process of value creation by the firm, and not a cost analysis tool. The issue of costing products (or other objects) is not relevant at this point. What is described is the complex process of resource consumption contributing to value creation. However, the model is silent about value itself. To address the measurement of value itself, however imperfectly, the schema of Figure 1 must be read differently and enriched by mapping the rules about cost attachment (and therefore cost calculation) and cost causality. As shown in Figure 2, the cost analysis system provides an approximation of value. Value is the result of perceived product attributes. These are traced

[6] A process is defined as a set of coordinated activities, delivering one or more attributes which can be valued directly by customers, and not as a chain of operations within an activity, as is frequently the case in U.S. literature dealing with the ABC approach.

to value drivers (descriptors of the process creating the valued attribute) which themselves cause costs. And costs are attached to objects (which are baskets of attributes valued by the customer), but the attachment may not be mechanical and may result from deliberate choices in trying to match costs attached and value perceived.

For example, the level of fineness of analysis may be adjusted to stay in line with the perceived value criteria. If the same level of fineness were used throughout, there might be a glut (if the analysis is fine) or a shortage (if the analysis is coarse) of useful signals, thus preventing decision makers from fulfilling their mission. Let us take the cost of managing a material references as an example. Although some references are more difficult to manage than others, some firms may perceive that customization of references is not a value criterion for the customer and therefore choose to treat all references alike, thus calculating a cost per reference. Other firms, on the contrary will perceive that customized references are a critical component of value, and will therefore introduce classes of references to acknowledge the different consumption of resources each induces, so that the cost calculated be more in line with value.

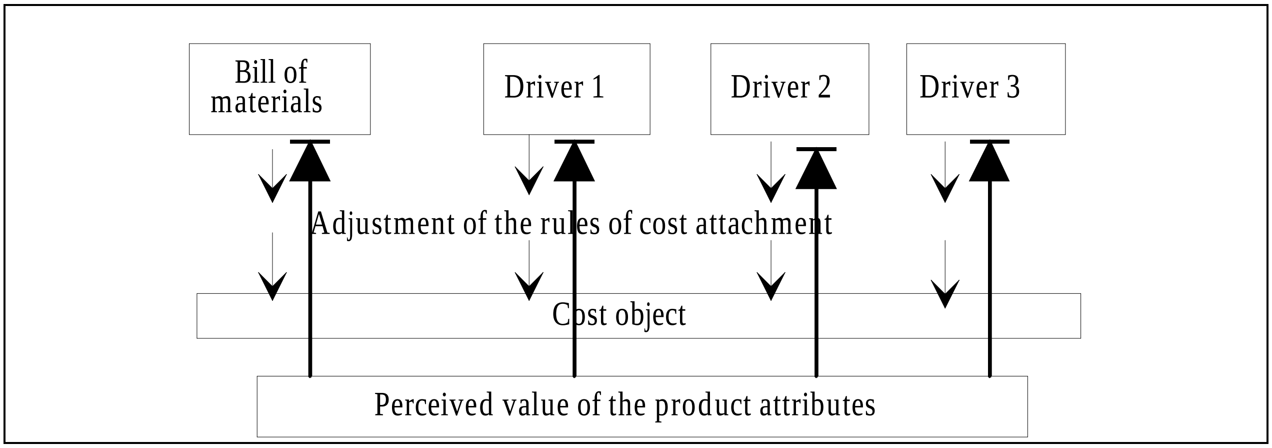


Figure 2: Value simulation mechanism

However a product cost is but a mere estimation of the minimum exchange value the firm hopes to obtain from its customers, and as such reflects the firm's model of its own value-creation processes.

The product cost must be handled carefully as the two approaches described in Figures 1 and 2 differ in terms of reliability of information (Shillinglaw, 1989). Figure 1 describes the flows of costs. The information produced in that context can be considered as exact, precise and traceable. The contents of ledger accounts are known precisely, as are resource consumption by activities as long as their scope is defined. Furthermore, aggregating subsets of activities into business processes does not alter the quality of the information produced in the preceding steps.

The valuation approach illustrated in Figure 2 is entirely different. The cost of a product is essentially an *ad hoc* aggregation of precise data, and therefore not an objective measure because the process of aggregation is, as illustrated in the previous paragraph, not objective at all. A cost analysis system is therefore the locus of many decisions through which the firm defines what they call value.

A COSTING SYSTEM IS A LEARNING PROCESS ABOUT DESCRIPTORS OF VALUE

Historically, direct labor played a central part in costing systems in all industrialized countries because labor and work value were closely linked. These costing systems of yesteryear, which we judge so severely today, deserve rehabilitation.

Not only did they provide accurate models of resource consumption, but they provided a valuation of products which was coherent with the prevalent value concept of the time, namely work value, as mentioned above. If we accept this argument, we must revise our interpretation of ABC systems. **Their originality may lie more in an enhanced capacity for simulating the process of construction of the value perceived by the customer, than in a search for "exact" product costs**. This supposes, as indicated above, that the grouping of activities into processes must reflect the process of value creation in the firm. The output from each process must correspond to one, or a combination of value-carrying attribute(s), on which the firm's strategy is based.

However, in contrast to what we see in many ABC-type costing systems, a value-creating process is not limited to the traditional issues of complexity, quality, or lead time. These issues are indeed important in creating perceived value. However they are not managed for their own sake, they are second tier attributes to the creation of more global first tier attributes. For example, if a strategic (first tier) attribute is considered to be customer service, the supporting attributes can be seen as customization (give each customer a product that is tailored to their needs), quality of deliveries (the quantity shipped must correspond to the quantity ordered), as well as timeliness (deliveries are made on the agreed upon date). It is only when all facets of customer service are managed together that we will be able to manage simultaneously cost (of creating the attribute – whether first or second tier) and value (the customer-perceived value of customer service)

The simultaneous management of all facets is not necessarily simple. Let us focus on the customization process. It is extremely likely that the driver chosen to characterize this process will be the "customer-specific component". The costing system will produce a fixed cost for the management of any customer-specific part. To simulate the value (calculate the cost) created for a specific customer, we would simply multiply the number of specific components it requires (regardless of the actual quantity of each component used — what matters here is the fact that "a" component be used) by that fixed cost per reference. The cost per component of handling standard components is likely to be much lower than that of customer- specific ones. In other words, the system attaches a lower value to standard components than it does to customized ones. That construct is in line with the customer's viewpoint that all customized components are not equally valuable. The key components used to make the product are probably valued at higher levels by the customer, than possibly inexpensive to purchase, often-invisible parts used to assemble these components. If we had considered the two types of components, both of them customer specific, as equivalent in terms of their handling cost, we would not have reflected fairly the value from the point of view of the customer.

What must be underlined here is that the choice of this or that rule in cost attachment is the result of a preference for an estimation of the value (assumed to be perceived by customers) over a more accurate measure of resource consumption.

The customer does not have a clear view of the value of the object which it wishes to acquire, and therefore evaluates (and possibly discusses with the provider) the various components of its value (drivers) and their intensity level. This discussion leads to the establishment of an exchange value. It is then up to the enterprise to analyze what it perceives as value drivers. Are the ones selected relevant? And can they be used effectively in commercial "discussions" on the value of the object? Are the cost-attachment rules in line with perceived value? Do we spend enough resources on the process creating this value attribute to be competitive?

In the end, costing systems can be useful in the management of value in the firm only to the extent that they explicitly recognize this "second phase" as illustrated in Figure 2. It is only by opening the debate on how to best link value (as perceived by customers) and costs incurred to produce this value, that management accounting makes an effective contribution to value-creation management for the firm.

However, value even if imprecisely defined at time *t*, evolves continuously, even only as a reaction to the supply of alternative baskets of attributes by competitors. It is therefore crucial for the management accountant to make sure the structure of the CMS is adaptable enough to follow this evolution. For example, a firm may have described its value-creating processes on the assumption that customers are interested in products and the way these are being made available only to discover that now the customers are looking for "a complete solution", thus wanting the firm to provide most of the intermediation activities the customers were fulfilling themselves. In this case the value attributes, and thus the processes and the value and cost drivers, must be redesigned to fit the new strategy required by the customer.

EVOLUTION OF COST MANAGEMENT SYSTEMS

While standardization in the area of cost analysis extends no further than general methodology, we nevertheless observe extensive homogeneity of practices in all developed countries (Fioleau et Mévellec, 1995), which is akin to a *de facto* standardization. For example, throughout the manufacturing sector direct labor is the dominant cost driver (expressed in hours or in monetary units), while in agribusinesses it tends to be weight or volume, and in service industries it often is throughput time or capacity consumption. This is the result of increasing knowledge about competition, and indeed organizes the basis on which competition is exercised.

By trial and error, enterprises "learn" to recognize value-driving attributes, and take the appropriate steps to determine the cost of obtaining these attributes. Value creation then serves as a common basis for the dialogue between producers and consumers. However, while customer-value creation is the principal basis of competitiveness, because the CMS reflects the value-creation process, businesses tend to forget value and focus essentially on costs as a basis for competition.[7]

Once a value driver has been recognized as relevant, each firm wants to know the costs attached with greatest possible accuracy. Figure 3 shows the theoretical cycle of evolution of cost management systems: in step 1, firms modify their representation of the value-creation processes in a search for more relevant costs (for example, moving from homogeneous production cost pools to an ABC representation). Once they feel satisfied with the description of their approach to value creation, in step 2 they work on improving their redefined "processes" (generally the major part of Activity Based Management), before moving to step 3, where they search for more accuracy in costing. However as most firms choose the same value drivers, once the benefits of more accurate costing have been exhausted in a cost-based competitive strategy, firms must go back to step 1 to redefine the description of value creation along the lines of different value-driving attributes (Cyert *et al*. 1993) on which they want to compete (a differentiation strategy). At each step, the management accounting system has to be adapted or refined. It is often a slow process, and many organizations are not fully aware of the need that they have to go

[7] Most benchmarking databases available on internet focus on costs and not on value. See for example www.apqc.org, www.best-in-class.com, or www.thgi.com.

continuously through all three steps, and they long for the possibility to settle in one of the positions (generally position 3). The extreme case of confrontation strategy (Cooper, 1995) is simply a description of a situation in which management accounting goes through all three steps at a rapid pace. In a confrontation strategy, the management accounting procedures must, as shown by Cooper (1995), be extremely flexible and must pair relevance and accuracy in real time.

It is doubtlessly not by chance that the debate on relevance and accuracy has taken on such proportions during the 90's. Low inflation and relatively low economic growth have made it easier for customers to sharpen their vision of value, in turn increasing the urgency for enterprises to have simultaneously a more accurate description of what they offer, more efficient processes, and a more accurate knowledge of their costs.

In more general terms, we can form a hypothesis that cost management systems follow the evolution of global economic competitive bases. In a world of scarce resources, cost management systems must contribute to optimal resource allocation. In such a context, it is logical that costs were attached through direct labor and raw materials, the two essential value drivers. Highlighting these two cost bases, reflected in the emphasis on material productivity and direct labor efficiency, generated behaviors that made possible satisfying more customers with the same resource pool.

Our hypothesis about the evolution of cost management systems offers an explanation for the disappearance of homogeneous cost pool accounting in the USA during the 50's. Around that time the marketing function took a leading role in firms. The notion of value carried by marketing was radically different from that previously and implicitly accepted. Henceforward since market relations dictated value, what would be the point in continuing to operate complex costing systems whose results were "disqualified" and no longer representative of value. As valuation of inventories remained a requirement, a costing system was still needed but it should be as simple as possible and limited to the production function. Thus the "plant-wide rate" approach replaced the detailed approach that existed before.

Today, resources are generally not scarce (there is even an oversupply of labor), and priority is no longer given to achieving material and labor economies, but to identifying the sources of customer value. All managerial information systems, and, among them, cost management systems, must therefore focus on value created, and not on resources consumed. This leads to a simple rule for the reconstruction of cost management systems: resources consumed must be accumulated in cost pools based on value driving process, and no longer on the basis of economic factors that must be used sparingly.

New cost management systems must recombine, in a single procedural rationality, resource consumption causality and measurement, efficiency of use, and valuation by customers. These new cost systems will form a double-loop learning process (Argyris, 1976), with the first loop focusing on process reengineering and continuous improvement (stage 2 in Figure 3), while the second loop concerns the interpretation of information about customer expectations, through the simulation of value by attributing costs to objects and calculating margins (the move from stage 3 back to a new stage 1 in Figure 3.)

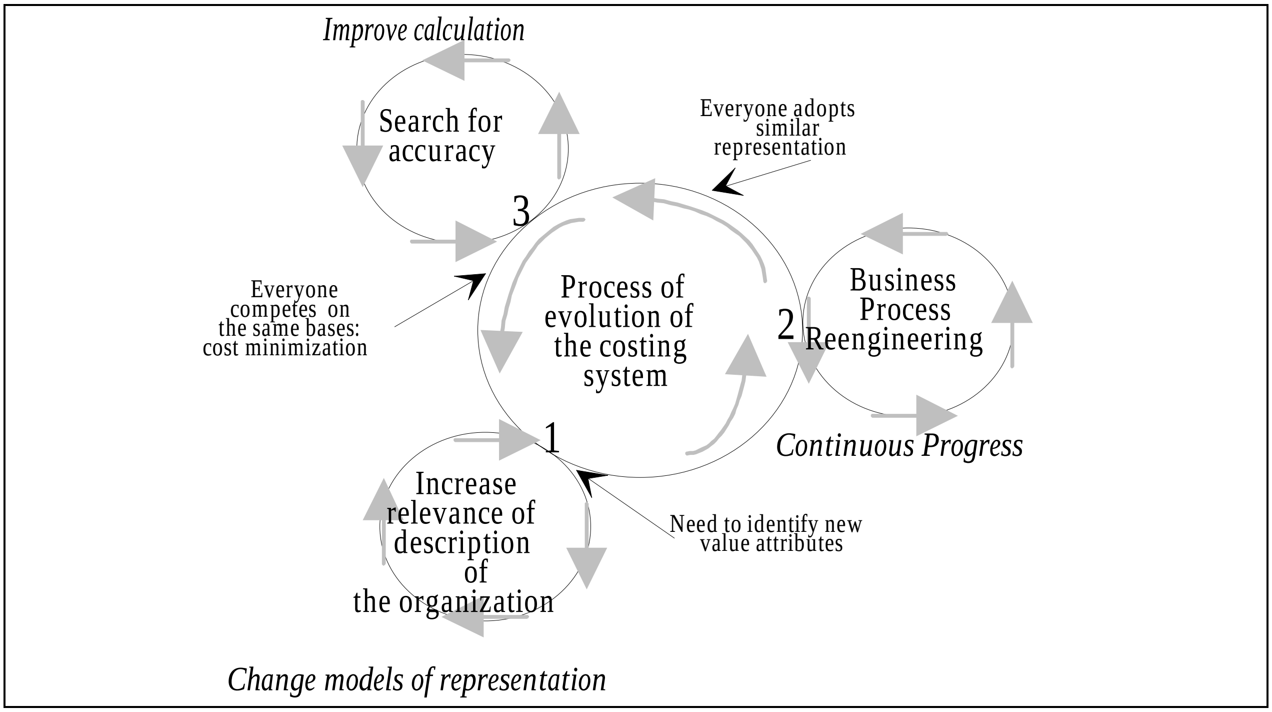


Figure 3: The dynamics of the evolution of cost systems

CONCLUSION

The problem of value-creation management for stakeholders of a firm is substantially more complex than that of measurement of value created for shareholders. The latter are only one of many stakeholder groups, and because capital is essentially no longer a scarce resource, they can only hope to receive a residual value as a result of the efficient use of the resources provided by all stakeholders.

Management accountants must therefore concentrate their thinking on the notion of value in its widest possible sense. The future of management accounting is closely linked to the ability of this profession to develop and maintain business operating models, which enable management, and all employees, to think simultaneously in terms of costs and value. With respect to this essential need for change, a computational approach is rarely a good counselor: on a spreadsheet, a dollar or a Euro of cost is indistinguishable from a dollar or a Euro of value, yet their meaning is completely different. The priority requirement is, in fact, not for changes in computational software but in the social software used (Berry, 1983) — in shifting the implicit conventions that we use to decode and understand the operations of a firm, to refocus their primary objective on value creation.

REFERENCES

Argiris C. (1976), Double Loop Learning in Organizations, *Harvard Business Review*, September-October.

Berry M. (1983), Une technologie invisible? L'impact des instruments de gestion sur l'évolution des systèmes humains, *CRG*, Ecole Polytechnique.

Bromwich M. (1990), The Case for Strategic Management Accounting: the Role of Accounting Information for Strategy in Competitive Markets, *Accounting Organizations and Society*, vol. 15.

Cooper, R. (1995), *When Lean Enterprises Collide*, Harvard Business School Press: Boston,

Cyert R.M., Kumar P. and Williams J. R. (1993), Information, Market Imperfections and Strategy: *Strategic Management Journal*, vol. 14.

Fioleau B. and Mévellec P. (1995). Les sources de la normalisation dans le calcul des coûts, *Revue Française de Gestion*, Novembre-Decembre.

Lebas M. (1996), Méthode ABC in *10 outils clés du management*, Editions du GO-LPM.

Mévellec P. (1994). Activity-Based Costing: a Call for a French Approach, in *Articles of Merits*, New York, IFAC.

Perrot P. (1996), La dynamique coût-stratégie, le cas de l'industrie laitière, *Management science doctoral thesis*, Nantes 1996.

Rimailho Lt. Cl. (1928), *Etablissement des prix de revient.* CGOST report.

Shillinglaw G. (1989), Managerial Cost Accounting: Present and Future. *Journal of Management Accounting Research*, vol. I, fall.

ABOUT THE AUTHORS

Pierre Mévellec, Ph.D., is Professor of Management Accounting at the University of Nantes. He is in charge of a post-graduate program in management accounting. After ten years of teaching economics, operations research, and financial accounting, he spent two years in industry as a management accountant. He since specialized in cost systems design and management accounting research.

He has published two books and a great number of articles on ABC/ABM. He received the FMAC Outstanding Article Award in 1994. His consulting practice leads him to work with or advise large firms and public organizations engaged in the introduction of innovative management accounting practices.

Professor Mévellec can be reached at: mevellec@iae.univ-nantes.fr

Michel J. Lebas is Professor of Management Accounting and Management Control at the H.E.C. School of Management, France and a free-lance consultant. He was educated both in France and in the United States. After a brief career as an economic analyst for an American multinational and later as a staff consultant in the New York office of Price Waterhouse, he joined the academic profession while maintaining his free-lance consulting practice.

His field of research and consulting concentrates on strategic cost management, cost measurement and management, advanced practices in management accounting and performance management systems. He represents the French *Ordre des Experts Comptables* and the *Compagnie des Commissaires aux Comptes* on the Financial and Management Accounting Committee of the International Federation of Accountants

His recent publications include chapters in three major international collective works, a Glossary of Accounting English, and a management accounting textbook. His articles have been published in many French and international academic and professional journals.

Professor Lebas can be reached at: lebas@hec.fr

Making the Transition from Functional Cost Center "Big Brother" To Value Adding Key Team Member: [*]

A Paradigm for the Changing Role of Management Accountants in a Customer-Focused, Quality-Driven, Value-Added World

Steven P. Landry, Ph.D., *Assistant Professor, Department of Accountancy and Law*
School of Business, Hong Kong Baptist University

Wai Yee Canri Chan, CPA (USA)

ABSTRACT

Global competitive forces require organizations to meet ever changing customer demands in increasingly faster and satisfying ways. Many leading firms have responded by adopting quality-driven, customer-focused, valued-added strategies. This new paradigm requires management accountants to rethink information systems design and information provision. Moving away from traditional concepts such as functional reporting and measuring of productivity and profitability to a new paradigm which requires a focus on customer value, cross-functional systems, and continuous improvement, management accountants have moved beyond the role of watchdogs to value-adding team players within organizations. Management accountants' new customer-focused, value-adding roles help organizations to employ information and learning as strategic competitive advantages.

INTRODUCTION

In the latter half of the 20th century many leading competitive firms have shifted away from a mass production perspective of meeting customer needs, with its accounting focus on costs and reports engineered to top management control specifications, to a quality perspective of meeting customer demands. The redirection resulted primarily from a change in perspective of how organizations refocused themselves to stay competitive in an increasingly dynamic global environment (Malcolm 1996). This new perspective, in turn, entails a very different accounting perspective. The new quality focus requires that all aspects of an organization, including management accounting, continually adjust and improve to meet an every changing and increasingly complex market place. For accountants, this means a shift away from its formerly functional focused cost emphasis and top management oriented reporting perspective, where those within the organization perceived only the watchdog role of the management accountant sort of in the Orwellian "Big Brother" guise, to a more work process improvement and customer added value perspective.

NEW STRATEGIC QUALITY FOCUS REQUIRES A NEW MANAGEMENT ACCOUNTING PHILOSOPHY

Some common elements emerge which directly affect management accountants in quality focused firms. First, these firms start from a position of thinking in terms of adding value from a customer perspective with regard to everything done within the organization. This entails having an attitude of continuing to

[*] **This article was submitted by the Hong Kong Society of Accountants, China.**

improve across all aspects of the firm as well as beyond the firm vis-à-vis suppliers and customers (Cooper 1998a, 1998b). Given this focus, top management should establish the firm's vision and should share information to influence employee behavior, allowing those at lower levels greater authority and responsibility to make decisions (Cole 1993). Strategies should allow for the flexibility to permit real-time adaptations necessary for achieving evolutionary success (Watson 1993).

Secondly, top management should identify key success factors that will ensure organizational success. For quality driven firms, critical success factors represent those characteristics, conditions, or variables that have a direct influence on customers' satisfaction with the organization's product or service that result from the organization's processes, and, hence, are critical to the success of the organization (Watson 1993). Critical success factors represent measurable or observable aspects of the organization's business processes, which, when performed well, should result in the continuing growth of the firm. Management accountants play a pivotal role in designing and maintaining systems that collect, aggregate, and disseminate information in ways that assist in measuring critical success factors to ensure alignment with the strategic quality focus. In quality driven organizations, management accountants adjust their work in terms of linking information produced to the demands of internal and external customers and thereby to the customer-focused, quality-driven, value-added strategic direction of the organization. In doing so, they help improve the work processes of the organization which in turn adds value to the firm's output. However, ensuring successful transition to the new strategic quality focus requires more than just a new philosophy. Implementation requires a workable paradigm.

THE NEW PARADIGM FOR MANAGEMENT ACCOUNTANTS

Bounds, et. al., (1994) suggest that a new paradigm exists in the global economy. Specifically, they contrast the traditional mass production, management science (MP/MS) firms with the continuous improvement firms (CPF) as typified by Japanese companies such as Toyota, but now mimicked by many other firms. Essentially, the MP/MS firms focused on productivity issues such as production quantities, profitability, etc. The CPF firms, on the other hand, have pursued a focus of a different nature. In particular, these organizations have given higher attention to continuously improving work processes to enhance quality in order to deliver value-added products and services. This has entailed a major shift in the role of management accountants which revolves around five themes, depicted in Figure 1, namely, (1) customer value strategy, (2) cross-functional systems, (3) continuous improvement, (4) learning as a competitive advantage, and (5) information.

Figure 1: **Five Themes**

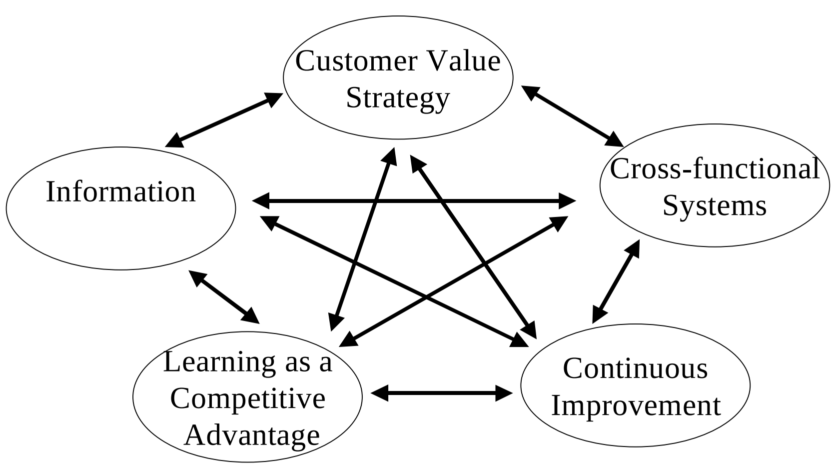


Table 1 summarizes the following discussion by denoting the five themes and the contrasts of old and new paradigms for each.

Table 1

	The Old Paradigm	The New Paradigm
1) Customer Value Strategy		
Definition of customer value	Organization determines value	Customer determines value
Quality	Tradeoffs among quality, cost and scheduling Sort out the bad products before being sent to customers	Seek synergies among quality, cost and scheduling Reduce defects, costs and make performance to schedule more predictable
Information and measurement		
Focus	Focus on internal measures of efficiency, productivity, costs, and profitability	Internally focused measures, but link to customer value in a broader measurement system
Time horizon	Short-term focus	Both long-term and short-term focus
Key internal stakeholder	The boss	Customers
Key external stakeholder	Stockholders	Customers
2) Cross Functional Systems		
Perspective	Negotiate across functional boundaries to obtain minimal cooperation to achieve internally-set objectives	Managers define, own & optimize across functions and use cross-functional systems to obtain customer value
Hierarchy	The hierarchy is tall with many levels of managers, and it emphasizes functional lines of authority	The hierarchy is flat with fewer levels of managers, and it emphasizes teamwork
Technology	Computerize complexity and reduce labor problems	Eliminate complexity and use technology to optimize customer value

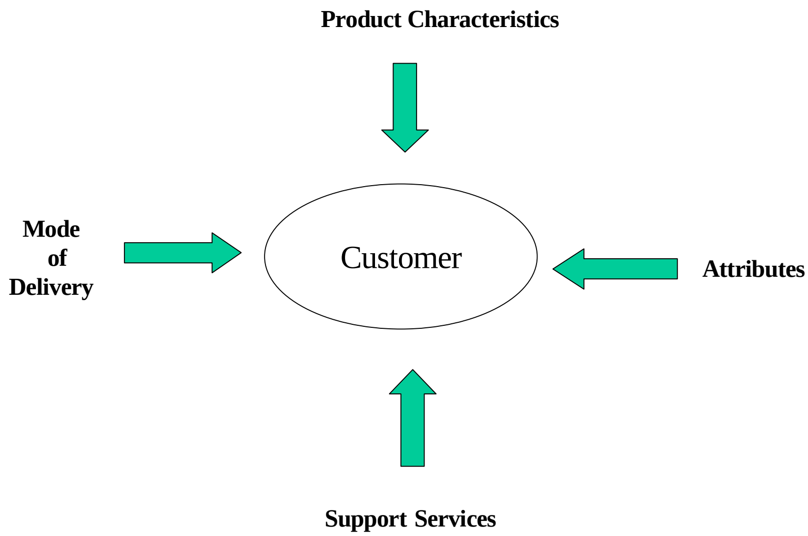
Table 1 (continued)

	The Old Paradigm	The New Paradigm
3) Continuous Improvement		
Approach	Accomplish improvement through trial and error	Use the scientific method to study proposed changes and their effects
Decision making perspectives	Politically expedient or serve short-term personal objectives	Serve long-term, strategic purposes
Managerial roles	Primarily administer existing systems and maintain the status quo	Challenge the status quo to gain strategic improvement Consistently upgrade and modify existing systems
Focus	Improve business result through the imposition of quotas and targets	Improve business results through improving the capabilities of systems Focus on the means as well as the results
Control	Rate individual performance, review regular reports, and evaluate performance as either bad or good	Study variation to understand the causes of poor performance and make changes in systems to improve performance
4) Learning As a Competitive Advantages		
Customer value focus	Cost-focused perspective of management accountants concentrates on a single aspect of customer value	The new quality customer-focused perspective focuses on all aspects of customer value
Perspective on change	Resistance to change	Imperative to continuously learn how to solve the complex customer value problem
Learning advantage	Must purchase "learning" from outside the organization	Learning as an internal resource represents a competitive advantage
5) Information	Perceive information gathering and provision as an opportunity cost	Information gathering considered benefit enhancing (normal part of the work process) as opposed to costly

Customer Value Strategy

As shown in Figure 2, CPF firms implement customer value strategy through the business plan by offering value to customers in many ways, including product characteristics, attributes, mode of delivery, support services, etc (Bounds 1994). Understanding customer value strategy requires understanding, quality, information measurement, and key stakeholders recognizing that the customer determines value, not the organization.

Figure 2: **Customer Value Strategy**



In the new paradigm, managers seek synergies among quality, cost, and scheduling, not just trade-offs (Cooper 1998b, Nowak 1997, Malcolm 1996). Improving quality by reducing variation in outputs reduces defects, reduces costs, and makes performance to schedule more predictable (Bounds 1994). Quality is more broadly defined than just product quality. Quality applies to every aspect of the organization, and, must be managed into the processes and systems, not just inspected into the products. Thus, information needs, to include demands on management accountants, become broader in scope.

The old paradigm focused on internal measures of efficiency, productivity, costs, and profitability (Bounds 1994). This represented the tradition of management by objectives and tended to be short-term in focus. Unfortunately, managers often did not understand how this internally focused information related to customer value. In the new paradigm, managers still use internally focused measures, but they are linked to customer value in a broader information system (Cooper 1998a and 1998b, Bounds 1994). Managers interpret measures in terms of the impact of customer value in both the long-term and the short-term. The consequence for management accountants means that variables incorporating such impacts must be identified and measured.

The two paradigms also differ in terms of the target audience of the information provided. In the old paradigm, the key external stakeholder is the stockholder and the key internal stakeholder is one's boss (Bounds 1994). Information is prepared and used to serve the goals of the key stockholders and internal bosses (Bounds 1994). By contrast, the new paradigm treats the customers, both internal and external, as the key stakeholders. Providing value, and therefore information, to these customers is deemed the key to serving all other stakeholders in the long-term.

Cross Functional Systems

In the old paradigm, managers simply negotiated across functional boundaries to obtain minimal cooperation in order to achieve desired internally-set objectives (Bounds 1994). By contrast, new paradigm managers define, own, and optimize across functions and use cross-functional systems in order to obtain customer value. Differing from old paradigm firms, new paradigm firms possess flat hierarchies with fewer levels of managers, and emphasize teamwork as opposed to functional lines of authority to attain objectives.

Teamwork requires proper employment of technology to design systems and obtain information that cuts across all barriers, particularly functional barriers, to ensure team achievement of goals. Unfortunately, old paradigm managers use technology to help them with overly complex systems that have grown up in the organization or to eliminate people problems by replacing people with machines (Bounds 1994). In the new paradigm, managers prefer to eliminate complexity rather than automate it or computerize it. Managers use technology only to optimize systems that provide information that adds customer value.

Continuous Improvement

To keep pace with the changes in the environment, new paradigm managers change organizations by continuous improvement, which means a constant striving to change and make things better (Bounds 1994). According to the Deming framework, continuous improvement is based on the premise that managers must continuously reduce variation in performance by acting on the system of causes and raise the level of performance by system design and redesign (Deming 1986, Bounds 1994). Thus, management accountants must realign systems and information delivery to meet managers' new needs in terms of continuous improvement.

The new paradigm requires a new philosophy incorporating changed approaches, decision making perspectives, managerial roles, focus, and control (Bounds 1994). As for approach, in the new paradigm, managers use the scientific method to study proposed changes and their effects, and they make decisions that serve long-term, strategic purposes. Concerning managerial roles, managers challenge the status quo to better meet future demands while constantly upgrading and modifying existing systems to meet both current and future demands. In terms of focus, new paradigm managers improve business results by improving the capabilities of systems. They focus on the means as well as the results because they have assumed responsibility for improving systems. Finally, managers statistically study variation to understand the causes of poor performance and make changes in systems to improve performance.

Learning as a Competitive Advantage

In the customer-focused firm, the ability to learn is considered a competitive advantage (Watson 1993). Market forces dictate that for a company to survive it must meet customer demands in a leading, cutting edge way. Cole (1995) noted that following is a losing proposition. If you are producing last year's product for the current year because your competitors were successful with that product last year, then your competitors this year will still be one year ahead of you in meeting customers' new demands. New paradigm firms attack this problem in their approach to learning, especially with respect to learning about customer value.

Customer value derives from much more than using a product or service. Rather, it comes from each aspect of the use process. Whereas, the traditional cost-focused approach concentrated just on a single aspect of customer value, the new approach focuses on all aspects of customer value simultaneously.

Thus, new paradigm firms learn how to solve the complex customer value problem holistically and continuously. As an added benefit, continuous learning allows an organization to build internally a resource that other firms do not possess and must purchase at some cost, thus putting those “have-nots” at a cost disadvantage in the market place. Learning, however, is built upon the groundwork of information, and it is to this final theme that the discussion now moves.

Need for Information in the Continuous Improvement Organization

The firms that practice continuous improvement provide a continuous flow of new, relevant information in terms of improving work processes and in turn add value to their output. These firms are able to take advantage of an increased flow of information to generate organizational learning for the continuous improvement of products and production processes (Cole 1995). Management accountants, therefore, must think in terms of broadening the information flow from the organizations’ systems to meet the demand necessitated by those seeking to improve work processes.

The continuous improvement organization starts with the premise that all in the organization should understand the overall purpose and operation of the business. According to Deming (1986), the major benefit of statistical process control lies in its ability to teach managers to see the work of the organization as a unified system rather than as a collection of specialties. People are far more likely to change and improve parts of the work processes of the organization if they understand the process as a whole (Cole 1995). The process of change, however, begins with individual perceptions. In turn, potential change perceptions increase with the amount of relevant information available and the number of people who obtain it (Cole 1995). It is precisely in this arena of information provision that the continuous improvement firm is said to excel (Cole 1995).

The creation of information as well as the horizontal and vertical flow of information are crucial to the process of continuous improvement which in turn has been argued as crucial to competitiveness, growth, and survival. Consequently, managers and management accountants take on the role of information conduits as opposed to depositories of information (Cole 1995). Management accountants, therefore, should harness the inherent advantages of the continuous improvement organizations by considering systems for information delivery that enhance work process improvement creativity.

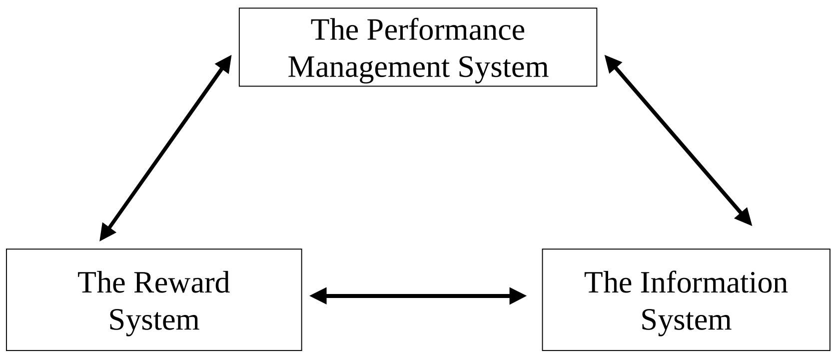
REDESIGN SYSTEMS AND STRUCTURES TO PROVIDE NEW MEASUREMENTS AND NEW FORMS OF INFORMATION

Performance improvement comes from process/system improvement as well as improving people (Bounds 1994). People need to have tools to perform their jobs and they must have obstacles removed that hinder their ability to perform. In the continuous improvement, value-adding firm, managers understand that quality, productivity, and customer value are by-products of the work that people in the organization do in improving processes and systems (Bounds 1994). If they are by-products, they cannot be specifically worked. Instead, one should manage causes (processes or systems). The important questions become: what are the critical systems, how do we improve them, and what information (tools) do we need?

Three systems, as shown in Figure 3, that hold the key to focus people in the “right” direction and allow them to own responsibility for their work processes are (Belasco, 1993):

1. Performance management system
2. Information system
3. Reward system

Figure 3: **Align and Interconnect Systems**



Organizations typically involve management accountants to some degree in all three of these systems to ensure the systems link with the strategic quality focus of the firm and with each other.

With regard to the performance management system, top management still determines, or articulates the overall objectives or parameters. Management should insist that standards be set between performers of work within the organization and both internal and external customers. Performers and customers should meet frequently to agree on performance expectations. Then the organizations' performers should meet with others in the organization to coordinate required activities. Finally, expectations should be reduced to specific, quantifiable, measurable numbers.

Management accountants can significantly aid in this process by guiding people in terms of ensuring that the "right" things, in terms of value-added outcomes, are being measured, and by ensuring the availability of the information whereby everyone knows the agreed-to expectations in relation to the customer. Furthermore, management accountants should focus on optimizing organizational performance rather than maximizing functional end results (Bounds 1994). For instance, management accountants should ensure that optimizing productivity in manufacturing does not lead to ignoring quality and compromising customer value. Measures of performance must be carefully chosen to avoid such negative results.

In the value-adding organization, management accountants should ensure that the information system makes customer-related performance visible to every person in the organization without requiring that the information go through third parties. In other words, the information should be directly accessible. The data needs to be "real data in real time" (Belasco 1993). The information should be based on continuing conversations between the performers within the organization and the customers. Information coming directly from this interaction directly represents the best source of feedback on performance of the organization as perceived by the customers thus allowing for better focused continuous improvement.
The reward system should be set up with the idea that great performance is expected, measured, and rewarded (Belasco 1993). The idea is to assure the consequences of behavior. Consequently, management accountants should assure that the organization pays for results (customer-focused, valued-added, process improvements) and not effort (putting in the hours). Monetary and nonmonetary rewards should be blended. Furthermore, "owners" of the work processes in the organization should be consulted in the development of the reward system. This aids fairness and motivation. Involving as many as

possible in the design of the reward system also expands the "brain trust" and brings more ideas to the table.

Systems and structures send powerful messages to people not only in the organization, but also to those outside the firm such as suppliers and customers. Unfortunately, these systems all too often act as obstacles and prevent the achievement desired. In effect, non-optimal systems can prevent the attainment of top performance and indeed cause the organization to suboptimize the value of its output from the perspective of customers. Systems that streamline and improve processes do so by identifying and eliminating nonvalue-added aspects, or "waste", inherent in the work processes of the organization.

FOCUS ON AND ELIMINATE "WASTE" IN PROCESSES

Only customer-focused, value-adding, high-quality organizations doing high-quality work can survive global competition. Many organizations, unfortunately, have not realized that eliminating waste, defined simply as nonvalue added work, is linked to the creation of high quality (Conway 1992). Most waste is hidden in work processes where it remains unless and until the organization specifically searches for it (Conway 1992). Failing to focus the organization's systems and information on ferreting out this waste means that it gets passed on to customers. Eliminate that waste and customers will receive a value-added output.

Conceptually, there will be little other than real value-added work in anything provided an organization eliminates waste (Conway 1992). Waste is simply the difference between the way things are now and the way things would be if everything were perfect. To help think about waste, Conway (1992) suggests four general categories:

1. Waste of material
2. Waste of capital
3. Waste from lost opportunities or sales
4. Waste of people's time, energy, and talent

Once classified, management accountants must think in terms of how to adapt the organization's processes and systems to identify, quantify, and eliminate these forms of waste.

Waste of material is generally the most obvious form of waste. Organizations can and do quantify material waste in terms of scrap, obsolescence and the like. However, material waste can also be found in improper specifications that fail to meet customer needs, variation in the quality of material used or produced, and other ways not captured by traditional information systems. Management accountants need to consider how to alter the organization's systems in order to capture these new concepts of materials waste, and, importantly, to allow real time correction.

Waste of capital generally does not show up on organizations' charts of accounts. Yet several items on the balance sheet such as receivables, inventory, and PP&E (property, plant, and equipment), usually tie up a considerable amount of a company's capital. To check for waste of capital, the organization should examine whether the capital is idle or active. For example, receivables not collected on time is idle capital. "High" levels of inventory represent idle capital. Idle inventory ties up capital that could be used elsewhere; it takes up storage space; requires personnel to handle it, count it, and generally perform custodial duties over it; it is subject to obsolescence; and it hides quality defects. PP&E waste occurs when there is excess capacity, bottleneck operations, unnecessary backup, and over-specification. Traditional accounting systems may not address such wastage. In the new paradigm of adding value from a customer perspective, management accountants, similar to managing material waste, must consider how to adapt systems to provide information to address such new concepts of waste.

Waste of human resources generally means that most organizations do not properly utilize the talent and skills of the workforce in their employ. The result is often seen in firms announcing restructurings. A need for restructuring implies that management allowed waste to accumulate and failed to create systems that gave people full-time, meaningful work that created value for customers. Such reductions result because of failure by the organization to properly plan and to better manage its resources such as material and capital as noted above. To compound the problem, these organizations do not redesign their hiring and training processes to prevent such “human resource waste” returning.

Waste from lost sales or opportunities can be the most serious form of waste, yet it generally never makes its way into the financial statements. Lost sales can occur from a number of problems such as product problems, pricing problems, poor market positioning, lack of communication with customers, and a host of other reasons. Usually, such waste occurs because of a failure on the organization’s part to realize that the first line people in the organization and customers are the people who know best why these problems occur. Redesigning systems, and processes, within the organization to take advantage of customers’ the first line people’s input can provide the data and information on how to eliminate these problems on a continuous basis.

CONCLUSION

This article has illustrated the new environment confronting management accountants; has raised pertinent issues, particularly from the new paradigm of a customer-focused, quality-driven, value-added organization; and has provided guidelines and suggestions in order to redirect the role of management accountants. In the past, particularly in the traditional MP/MS firm, management accountants have been perceived as monitors for upper management. Management accountants have not necessarily been viewed as helpful to others within the organization nor as adding value to what the organization does. In contrast, in the new continuous improvement paradigm, management accountants have a much needed role to fill. Specifically, the new paradigm requires customer-focused information and systems that help the organization to redesign its work processes to meet its strategic intent. By reorienting toward measures of work processes aimed at reducing waste and adding value, then management accountants become team players striving with other managers and workers trying to improve the work performed by the organization. Thus, in an intensely competitive global environment where timely and proper information provision can mean the difference between success and failure, management accountants assist organizations in delivering value-added products and services.

REFERENCES

Belasco, J. A. and R. C. Stayer. 1993. Flight of the Buffalo. New York: Warner Books, Inc.

Bounds, G.L., L. Yorks, and G. Ranney. 1994. Beyond Total Quality Management: Toward the Emerging Paradigm. New York: McGraw-Hill, Inc.

Cole, W.E. and J. W. Mogab. 1995. The Economics of Total Quality Management. Cambridge, Massachusetts: Blackwell Publishers.

Conway, W.E. 1992. The Quality Secret: The Right Way to Manage. Nashua, New Hampshire: Conway Quality, Inc.

Cooper, R. and R. Slagmulder. 1998a. The scope of strategic cost management. Management Accounting (February): 16-18.

_________________________. 1998b. Cost management beyond the boundaries of the firm. Management Accounting (March): 18-20.

Deming, W. E. 1986. Out of the Crisis. Cambridge, Massachusetts: MIT (CAES) Press.

Malcolm, I. 1996. The value of benchmarking management reporting. Management Accounting-London (June): 18-20.

Nowak, A. 1997. Strategic relationship between quality management and product innovation. Mid-Atlantic Journal of Business (June): 119-135.

Watson, G.H. 1993. Strategic Benchmarking. New York: John Wiley and Sons, Inc.

ABOUT THE AUTHORS

Steven P. Landry, Ph.D., CPA(USA), CMA, CFM, is currently visiting Hong Kong Baptist University while on leave of absence from the University of Hawaii at Hilo (UHH) in Hawaii, USA, where he is an associate professor of accounting. He received his doctorate in accounting from the University of Colorado at Boulder, USA, and has been on the faculty at UHH since that time. He is a US CPA (Certified Public Accountant), a CMA (Certified Management Accountant), and a CFM (Certified in Financial Management).

Dr. Landry's research, teaching, and consulting primarily focuses in the management accounting area as it pertains to the interaction of management control systems design and information provision for organization decision makers. He has worked at leading US companies to include Procter & Gamble, Hewlett-Packard, and Ford Motor Company. He has published articles focusing on the continuous improvement trend to include topics such as audit considerations with respect to TQM (Total Quality Management), the evolution of Finance/Accounting functions into Self-Directed Teams at Hewlett-Packard, and ABC (Activity-Based Costing) implementations.

Wai Yee Canri Chan is a resident of Hong Kong and is currently a PhD candidate at the University of South Australia. She has received an MS (Accounting) from Curtin University of Technology, Australia, and is a US CPA (Certified Public Accountant).

Her dissertation research focuses on how financial accounting information affects decision making behavior. In particular, she is interested in the effects of international variables such as differing international tax rates, fluctuating foreign currency exchange rates, and multinational corporation incentive compensation schemes on financial statements and how changes in those factors affect decision making behavior. She is also interested in the relationship and interaction of financial accounting with management control in terms of common information systems.

Role of Management Accounting in a Network Economy *

Subrata Chakraborty, *Professor, Dean*
Indian Institute of Management Lucknow, India

INTRODUCTION

Recent years have been witnessing increasing discontinuities. There are quite a few successful knowledge businesses that came to be created lately, literally overthrowing several age-old practices and taken-for-granted assumptions of business. Many tend to attribute the recent changes to the so-called information revolution. However, information on a "stand alone" basis does not seem to cause the discontinuities we witness. It is the relentless act of connecting everything with everything else that appears to provide the basic impetus to discontinuities, giving rise to new forms of business — hitherto unknown and unseen — on a somewhat continuous basis, thus forcing many long-held business theories to go into oblivion. Today's global economy stands networked in which growth prospects arise from creation of value as opposed to the earlier belief that outpacing competition helps you grow. To cope with changes of external environment, growing organizations of current times are viewing themselves differently. Instead of seeing themselves as hierarchical reporting structures these organizations have changed their orientation to one of a network of relationships, which are being put to work to create value for the ultimate user. The earlier approach of organizing work on the basis of operational conveniences and/or specialized narrow skills is thus all set to make room for newer philosophies to guide organizational work. New philosophies are being put into use not only to facilitate quicker identification and speedier removal of all constraints of value creation and delivery, but also to aid in running the organizational systems in manners that could promote a culture of maximization of value for customers — both external and internal.

To make matters worse, today's customers are much more discerning than ever before and are also becoming more demanding, as they seek to derive increasing greater value from their spendings. Wealth in this new regime seems to be flowing directly from innovation, not optimization. Need of the hour, therefore, is to do right things rather than doing things right. Perfecting the known does not appear to be of much help any longer since business today is growing from seizing the unknown. With every passing year the best is getting cheaper in a networked globe making it a cruel world for those hoping to make a buck. Prices seem to be on a downward slide, probably going to settle down near the free whereas, quality is completely open-ended at the top (Kelly, 1998).

In such an environment, "what would be the roles of management accountants?" "what kind of value they can possibly add and how?" are questions that arise in many minds. This paper constitutes a humble attempt to grapple with these questions so as to gain some understanding on the kind of roles accountants are to play if they are to become a part in this overall effort or superior value creation.

* **This article was submitted by the Institute of Chartered Accountants of India.**

CRITICAL BUSINESS ISSUES

In a market where being value driven provides the competitive advantage business is being left with little choice but to orient itself towards its customers. Many have begun to advocate use of tools like market-perceived–quality profile and customer-value maps (Gale 1994) to achieve appropriate external alignment and also to streamline activities within. The following seems to emerge as crucially important organizational abilities for survival and growth.

- Understanding how a customer sees provider's performance vis-a-vis that of competition, as assessed through her/his use experiences
- Capturing the above information and translating in ways that help everyone to focus on things that are important to provide more satisfying and delightful experiences to customers
- Having strategies for continuous value enhancement and helping every one understand why those strategies are important
- Identifying and managing key business processes that must work well for the most important customer needs to be met
- Thinking about entirely new products/services that can help remake what the customers think about a product category

Traditionally businesses have been inward looking, working through an operating chain comprising of supplier-input-process-output-customer (SIPOC). The current need is to reverse the sequence of activities in this chain with customer coming at the forefront. To imbibe the total philosophy behind this reversal requires an entirely new business mindset, not just refocusing of activities.

The companies are on the lookout for a method of business planning that could permit action learning. Secondly, they also desire to have a strategic navigation system in place that can provide data on both financial performance and customer value performance. All these call for bringing a long-term competitiveness orientation in business, in place of the short-term financial focus our organizations have been traditionally used to. Such a change becomes necessary because business challenges of today seem to revolve around the need to make a smooth and purposeful transition from "reverse engineering" to "break-through engineering", from an "efficiency-centered" to a "creativity-propelled" mode of competitive stance; and from "knowledge exploitation" to "knowledge exploration" in new critical areas (Koh, 1998). Therefore, the classic questions business faces today are:

- What business should it be in?
- How should the results be measured?
- What financial measures are appropriate (accounting versus cash flow measures)?
- How should capital be allocated across businesses?
- How to create good linkages among company's budgeting, strategic planning, capital investment, and performance and review systems?
- How to identify where opportunity lies for greater value creation?
- What measures to put in place in order to assess whether the company is on the path to continuous improvement with regard to its customer offerings?
- Should the company be a one-nation or a global business?

Clearly, accountants' roles are to be carved out of the above, although accountants by themselves, may not be in a position to answer all of these questions in their entirety. Nonetheless, accountants can play quite meaningful roles in strategy development for exploitation of emerging opportunities, including exploration of new ones by providing timely signals. However, for this to happen the accounting function has to develop its own new mind-set so as to take on to its emergent role of "insight provider", while moving out of its mould as a "transaction processor", that it has played so far. Clearly accounting orientation is to shift more towards planning from that of reporting. The real challenge is to make it possible.

UNDERSTANDING CUSTOMER VALUE

To be able to meaningfully link accountants' roles with the rest of the organization it is important to clearly understand what customer value means. Many authors have defined customer value from many different perspectives. However, a definition provided by Anderson, Jain, and Chintangunta (1993) which says, "Value in business markets is the perceived worth in monitory units of the set of economic, technical, service, and social benefits received by a customer firm in exchange for the price paid for a product, taking into consideration the available suppliers' offerings and prices", may be useful for us since this takes note of things both internal and external to the organization. Perhaps a simple way to start the analysis of customer value would be to treat it as the ratio of "Got" to "Cost". Broadly, this would imply that the provider firm ensures that the "Got" for the customer always exceeds her/his "Cost". Greater rewards would flow if it can make sure that this ratio, in case of a provider firm's supply, works out higher in customer's comparison with that of competition. However, to make this an operating reality there is need to streamline and monitor a firm's value delivery process. More importantly, the concept of customer value is to be made a purposeful management tool within an organization, because people involved in creating and implementing customer value delivery strategies need a common framework for thinking about customer value. An essential lesson the sellers have to learn is consequences that customers want (or do not want) in use situations, since business grows by providing the desired consequences in use. To produce these consequences the providing organization must identify the following (Woodruff, 1997), making sure that interpretation of each of these is free from provider biases:

- What do target customers value?
- Of all the value dimensions that target customers want, which are most important? Why?
- How well (poorly) are we doing in delivering the value that target customers want?
- Why we are doing poorly (well) on important value dimensions?

To create an internal organization that answers the above four questions on an ongoing basis there is need to develop managers' mental models towards shaping customer value delivery strategy decisions. It is here that accountants are expected to play their role effectively, given their ability to bear on the problems, and decision-making challenges, of operating managers. Undoubtedly, therefore, the accounting focus needs to be shifted to value dimensions from now on.

PUTTING A VALUE DELIVERY PROCESS IN PLACE

To have an effective value delivery process a firm ought to have a value delivery strategy. This would mean identifying the "hows" of creating the benefit consequences in desired use situations that management wants to accomplish for target customers through the product offer. To create consciousness of this, and the guiding operating mindset, accounting has to play a key role by answering questions like, "what adds greater value?" or, "what are the constraining factors in value creation and/or delivery?" on an ongoing and continuous basis.

To move on the operational plane, the strategy must get translated into internal customer value processes and requirements. One element in this translation task is the identification of internal organizational processes specifically designed to deliver value. These processes may lie within a single department or cut across departments. Accountants, with their inherent analytical capability, should be able to devise appropriate measures and to provide the much needed interdepartmental glue, working out a systematic process identifying corresponding techniques for converting customer value dimensions into internal product and process requirements.

An important aspect of translation of strategy is the implementation of a customer value delivery approach. This brings to the surface certain difficult issues such as assigning accountability of different parts of value delivery processes. One crucial issue is tracking of performance. Traditionally, organizations had been good at tracking their financial performance; whereas in this changed situation, they need also to be adept at tracking customer-value delivery performance. Accounting professionals, and with their help the others, must reconcile with the fact that customer value-related data are relatively softer, less quantitative, and require a broader set of information tools than what dominates current practice.

ROLE OF ACCOUNTANTS

As indicated earlier, accountants have to move closer to business planning and directioning as opposed to their traditional preoccupation of information providing. It must orient itself to help line executives find answers to questions like (Davenport and Beers, 1995):

- What is the real purpose any process in use is currently serving?
- To what degree is it meeting the real needs of customers?
- What performance objectives it is achieving?
- How is it going to aid business as environment changes?
- What aspects of the process may be eliminated?

Traditionally, accountants had been in the area of measuring, analyzing, and reporting what has happened. However, time has come for the accountants to realize that what has not happened may hold more potential opportunities for the firm than what has happened. Hence, they need to be much more proactive in their work, making enough room to create a "bias for learning" in organization members, instead of remaining overly obsessed with past performance. To make a beginning, accountants must attempt to quantify judgments in a form that enables their value to be assessed. In order to be effective in today's competitive marketplace, line executives need analytical help to understand which customer segments are easy to retain, which provide the healthiest margins, and which are better left to the competition. Likewise, senior managers would want financial data that help them to forecast operating profit by products, services, and distribution channels, in a form that is merged with relevant operating and market data so that they can plan and allocate resources sensibly (Iversen and Moran, 1998). Accounting has to face up to these challenges.

Accounting should be able to provide guidance on how to achieve required cost efficiencies, improve output quality, and reduce processing cycle time. Accountants are to therefore work hand in glove with business-unit managers to create key indicators of operating performance at all company levels, as opposed to their habitual mode of functioning as isolated historians. Instead of spending too much time on managing the numbers they must now focus attention towards company's long-term growth strategies, which among other things, would include tracking and identifying what the target customers are likely to value in the future. Through their analytical skills, they need to clearly bring out what is important for business growth, and also widely share the ideas that are necessary for organizations to progress and grow.

Instead of focussing attention on counter-productive efforts to reduce unit product costs, the accountants must now shift their focus on activities that would increase profits and help their organizations to remain on a path of continuous development and growth. The critically important message the accounting community must internalize is: financial control is no longer required to minimize the cost of achieving a given output — the focus has shifted to maximizing value of output from given resources. To many, this may appear as just the two sides of the same coin. The reality however is, the coin does not remain the same any longer. This is the lesson accountants must learn and help others to learn.

REFERENCES

1. Anderson, J.C., Jain, D.C., and Chintagunta, P.K. (1993), "Customer Value Assessment in Business Markets: A State-of-Practice Study". Journal of Business to Business Marketing 1(1), pp 3-30.
2. Davenport, T.H. and Beers, M.C. (1995), "Managing Information about Processes", Journal of Management Information Systems, 12(1), pp 57-80.
3. Gale, B.T. (1994), Managing Customer Value, The Free Press, New York.
4. Iverseen, K. and Moran, G. (1998), "Transforming the Role of Finance", Ivey Business Quarterly, Spring, pp 32-38.
5. Kelly, K. (1998), "New Rules for the New Economy", Span, 39(5), pp 3-9, 55-58.
6. Koh, A. (1998), "Organizational Learning in Successful East Asian Firms: Principles, Practices and Prospects", Technological Forecasting and Social Change, 58(3), pp 285-295.
7. Woodruff, R.B. (1997), "Customer Value: The Next Source of Competitive Advantage", Journal of Academy of Marketing Science 25(2), pp 139-153.

ABOUT THE AUTHOR

Professor **S. Chakraborty** is currently the Dean (Development and Resource Mobilization) at the Indian Institute of Management, Lucknow, India. He has been engaged in teaching and research of many facets of management for more than 25 years, thereby contributing towards refinement of knowledge and understanding. He has published extensively, and has been a keynote speaker in many International and National conferences. His research work has appeared in journals like, International Journal of Quality and Reliability Management, International Journal of Operations and Production Management, International Journal of Production Research, Quality Forum, Total Quality Management, IAPQR Transactions, International journal of Management and Systems, Productivity, Sankhya, Opsearch, Omega and several others. His work “Cost Management for mass customization” was adjudged as one of the most outstanding contributions of the world during 1995-1996 in the area of Financial and Management Accounting and has won the prestigious IFAC (International Federation of Accountants) AWARD.

His research work “Vendor Development Strategies” received the citation of excellence having been cited with the Highest Quality Rating by ANBAR Electronic Intelligence which reviews all papers that appear in top 400+ management journals every year, published throughout the world. This work of Professor Chakraborty is retained in ANBAR Hall of Excellence at U.K. for winning the citation of excellence in 1996.

Professor Chakraborty has conducted a number of focussed programs for top and middle management personnel and consulted widely with many different types of organizations, big and small, drawn from various sectors of the Indian economy.

He is currently engaged in extending the concepts of quality in nontraditional areas such as library and information services, health care and family welfare, education, judicial and police services, etc. His present research interests are in the area of identifying culture-compatible systems and ways of managing organizational configurations, both being focussed on developing better interfacing abilities in our work organizations to cope with the turbulent environment they face today.

Professor Chakraborty is currently in the Governing body of the National Institute of Health and Family Welfare, New Delhi and sits in the technical advisory committees, academic boards of many institutions and training resource centers, apart from being in the editorial board of several leading publications. He is a member of the celebrated literati club of the MCB University Press U.K. by virtue of his published contribution.

At IIM, Lucknow he held many positions like, member of the Board of Governors, Chairman of Post Graduate Program, Chairman of Quantitative and Systems Group, and has also headed two committees set up at two different points in time to draw up a prospective plan of the Institute.

New Opportunities for Management Accounting in Supporting Value Creation [*]

Piero Mirra, *Financial Analyst in Barilla Alimentare SpA, Italy*

ABSTRACT

An integrated approach of strategic planning is the process in which managers try to maximize rights of stakeholders, starting from corporate planning based on a few top priorities and following with a deployment of it to operating levels. Among different strategic objectives, one of the major ones is certainly the creation of shareholder value, either in terms of dividends paid or in terms of capital gained. Given this assumption, the issue is how management accounting should support value creation.

The aim of this article is

- *To provide a state of the art of management accounting role in adding value*
- *To identify key trends that are speeding the evolution of management accounting toward more value-adding activities*
- *To analyze some tools that management accountants could utilize throughout the whole planning and controlling process in order to support value creation*
- *To briefly review the main consequences on organization of this evolution*

Fundamental results of the study are that management accounting is going to be more involved in activities targeted to generate business growth, to optimize financial resources allocation, and to continue the cost control/reduction; the management toolkit is widening and more complete professional skills are required of management accountants to adequately support shareholder value creation.

Even if this study is based on the experience of the Italian economic system, the guidelines of the article are valid also for other countries, and generally for all developed markets.

CREATING SHAREHOLDER VALUE

Approaching an article on how management accounting can support value creation, it is essential to define the meaning of value and to understand when a company is generating value.

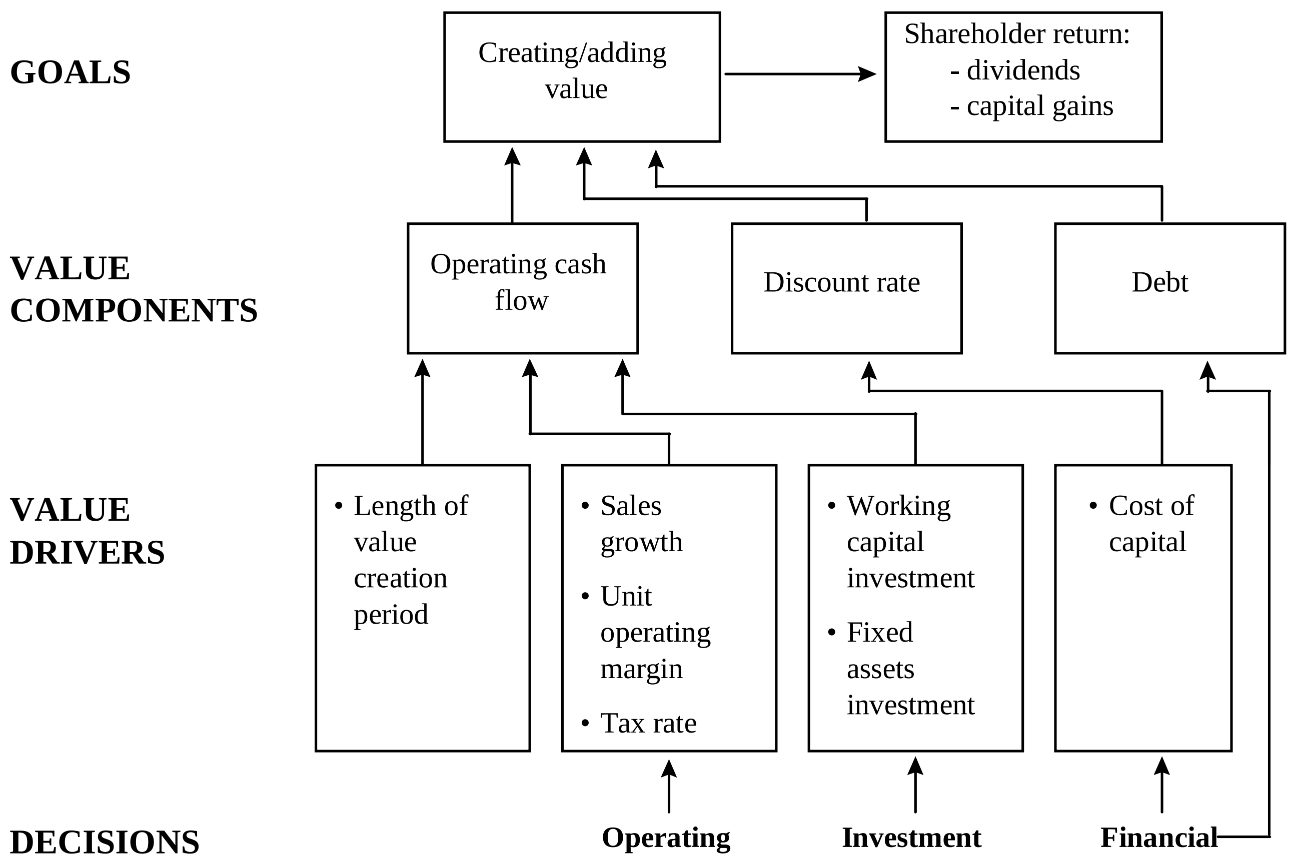
The definition of shareholder value is commonly based on financial measures, since famous authors have demonstrated that strategies have to be assessed on the basis of economic advantages that they guarantee to the shareholder, either in terms of dividends paid or capital gains.

[*] **This article was submitted by Ordine Nazionale Dottori Commercialisti, Italy.**

Alfred Rappaport in his *Creating Shareholder Value* study, stated that cash flows are the source of value. Cash flows are discounted at a rate representing the cost of capital: this rate reflects the risk of the investment and the financial structure of the company. As a consequence of this approach, we can state that a strategy creates value only if it allows the company to achieve results above the cost of capital.

How decision making (from day-by-day to long-term decisions) may affect the creating of value is summarized in the following scheme.

Figure 1 : How decisions affect value



MANAGING AND MEASURING VALUE: NEW OPPORTUNITIES FOR MANAGEMENT ACCOUNTING

In the course of time management accounting has passed throughout different historical phases, and in each one it has been required to answer to different needs.

It is possible to identify the period of mass/large scale production, in which the main objective is the maximization of efficiency, with a clear production-oriented approach: during this stage management accounting is essentially in charge of cost control through the standard cost methodology. The following period is characterized by a market-oriented approach, in which the issue is to rationalize capacity utilization, allocating it on more profitable products: management accounting is key in product portfolio optimization through the direct costing/unit contribution analysis. Then in crisis periods, overhead reduction becomes one of the most popular management issues, and the aim of management accounting is to elaborate and apply tools like the zero base budgeting (ZBB), overheads value analysis (OVA), and business process reengineering.

Notwithstanding different historical phases and different focusing of management accounting, we can actually state that the common objective of all these activities has always been company value creation. According to the scheme seen in **Figure 1**, all activities mentioned above have been mainly focused on the improvement of unit operating margin through the cost control/reduction. What has changed throughout the years has been the competitive environment and as a consequence, the way management accounting has contributed to the value- creation objective.

Some trends are fundamental guidelines for the future role of management accounting in supporting value creation.

More mature market: With the growing intensity of competitiveness, there is a continuous reduction in competitors' time to react to whatever marketing activities are performed. As a consequence, companies can count less and less on a consolidated strength position. Markets are extremely reactive, resulting in shorter product life cycles, and this needs a reduction of time-to-market.

In a situation like this, the ability to provide timely answers is the key, so there is a stress of the trade-off between timely and certainty of information that management accountants provide to decision makers.

One of the solutions seems to be the elaboration of an effective, and at the same time, "slim", reporting system, to provide the right information at each level of the organization: it emphasizes the role of management accounting as the guide for management decision. An application of this principle could be a Balanced Scorecard (also known as *Tableau de Bord*), an integrated reporting system based on the establishment of the decisional levels and responsibilities, identification of related mission and objectives, and selection of the most appropriate indicators to monitor the reaching of objectives. It is clear that the issue is to determine the best indicators for success factors in modern business (quality, time-to-market, etc.). In the following paragraphs we are going to examine such tools in greater depth.

Turbulence / unpredictability scenario: The uncertainty of the competitive environment has a great impact on business planning capacity and on the possibility of effective performance measurement. The contribution of management accounting in facing this uncertainty is to evaluate the effect of environmental change on business performance and on the real possibility of achieving goals, and also to provide timely action plans that reflect changed circumstances.

Typical tools that satisfy this need are the flexible budget and contingency planning. The first links the budget to the external variables influencing business performance (e.g., raw materials price) and the second elaborates alternative/emergency plans to be implemented when a certain event happens that makes the base plan ineffective.

Customer satisfaction as a base for competitiveness: In a market characterized by excess supply — demand that *makes* the market — a key competitive advantage is customer satisfaction. As a consequence, an increasing number of companies are thinking of their business in terms of service level, direct marketing, and customer loyalty. The effect on the organization is the creation of a cross-functional approach where processes are driven by a common objective — give value to the client, both internal and external.

The effect of this change on the management accountant is double. On one hand it requires a shift of role to that of “teammate”, fixing common objectives in different positions to favor this horizontal approach; on the other hand, the management accountant has to define a different accounting system able to reflect this process-oriented organization. For example, activity based costing (ABC) provides a mechanism, through a cost driver system, to link products with all activities that generate indirect costs, in order to have a product cost that accounts for all processes involved directly or indirectly.

Resulting from this evolution of the competitive environment, management accounting is going to be more involved in activities targeted to generate business growth, to optimize financial resources allocation, and of course, to continue cost control/reduction. The attention to results and the increasing importance of value creation are going to be the *fil rouge* leading management accountants in their business planning, controlling, and in development activities.

On the basis of the above considerations, we can state that a different role for the management accountant is being defined, a more complete figure that has to show solid professional skills in terms of

- In-depth knowledge of the business
- Knowledge of organizational structure and information requirements
- Capacity to communicate with each level of organization
- Authoritativeness
- Timeliness of response
- Broad-based approach to problems based on in-depth/analytical capacity

TOOLS IN MANAGING AND SUPPORTING VALUE CREATION

According to the above description of management accounting, people acting in those positions are called to support top management in decision making and in particular, throughout the entire planning and controlling cycle. They can use a wide range of professional tools to better perform their role. The intensity of the usage varies on the basis of the following: the business situation (life stage of the business), the company’s competitive situation (leader or follower), organizational issues (growing vs. mature company; big- or small-sized), and the professional skills of the people.

The objective of this paragraph is to analyze different tools available for management accounting in creating or adding value, both directly and in order to support top management decisions.

Figure 2 represents the scheme of this process and the tools that management accountants could use to support value creation.

Management accounting can support the planning process through the mentioned tools. We are going to analyze the most innovative and value-adding ones more carefully and precisely. This brief review is not going to be exhaustive, so we provide you with selected references for further details.

Figure 2: Tools in supporting value creation (overleaf)

PLANNING & CONTROLLING CYCLE		Management Accountants' Related Tools
PLANNING	Environment & Market Understanding / Scenario Planning ↓ Mission & Vision statement ↓ Strategic Planning	• Market key trends • Business life cycle • Industry analysis • Value chain analysis • Growth/Share analysis • Market attractiveness/competitive position analysis • Portfolio analysis • Resource allocation / optimization • Strategy assessment • Risk management - "what if" analysis • Strategic Alliances: - Joint Venture - Merging & Acquisition - Value Managed Relationships
PERFORMING	Strategy Implementation	• Continuous Monitoring
MEASURING	Results Assessment	• Economic Value Added • Discounted Cash Flow Analysis • Variance and Ratio analysis • Product Line Profitability
LEARNING	Share Learnings	• Competitiveness: - Core Competence: Distinctive Capabilities Organizational Learnings - Competitor Profiling: Competition analysis Benchmarking Relative Cost Position

MARKET UNDERSTANDING SUPPORT: With these activities, management accounting supports understanding the market and the competitive environment, with the aim of identifying key issues for success in a business. For this objective, interesting tools are:

Industry Analysis: This tool helps management to understand the long-term attractiveness of an industry, on the basis of the analysis of five forces: competitive intensity (level of concentration, differentiation, and barrier to exit); threat of new entrants (possible barriers to entry); threat of substitutes (risk of substitution by alternative products/technologies); bargaining power of suppliers (e.g. concentration in the supplier’s industry, weight on the supplier’s clients portfolio), bargaining power of buyers (e.g. concentration in the buyer’s industry, weight on the total purchase volume, switching costs). This model is very useful in deciding whether to enter a sector, to invest in an industry, or to analyze the opportunity of establishing strategic alliances with suppliers or buyers.

Business Life Cycle: This theory is based on the assumption that each business (like each product) has four typical stages: introduction, growth, maturity, and decline. The first two stages are typically resource absorbing, with modest profitability and high level of investment; the second two are (for the companies that survive to a normal concentration process) cash generating and with a low level of investment. Even if the length of life cycle is different from business to business, the latest trend sees the reduction of the business/products life. This trend is related to the strengthening of competitiveness that leads to a continuous effort to develop new technologies/products in search of long-term competitive advantage. As a consequence of this trend, companies now face a shorter period of generating cash.

STRATEGIC PLANNING SUPPORT: This is the stage in which a strategic plan is drawn up, on the basis of understanding the industry, the mission statement, and with the goal of achieving a long term competitive advantage that can lead to economic value creation. Related tools are

Resource Allocation/Optimization: When investment opportunities are huge, financial resources are limited by definition, and investment must be rationalized using a portfolio model that considers the trade-off between different business units or products. This model is strictly related to the business life cycle, because of the different financial profiles of businesses in the various stages of their life. Portfolio analysis can be carried out by two tools that evaluate businesses on the bases of market attractiveness vs. competitive capabilities.

Growth/Share matrix: This allows businesses to analyze from two perspectives: market growth (investment opportunity) and relative market share (potential profitability). It is based on the assumption that a growing market offers a good investment opportunities, while high market share is usually linked to high profitability. It is a useful tool for financial planning.

Market attractiveness/competitive position analysis: This is a multivariate method of analysis that allows one to forecast financial needs of a business/products portfolio and to prioritize related opportunities.

Value Chain Analysis: This analysis divides a business unit into different homogeneous activities (logistics, manufacturing, selling, etc.). Each activity is assigned the related costs and the contribution to the competitive advantage is estimated. This tool is mainly useful to support a cost advantage strategy (e.g., through the understanding of the cost driver of activities, a competitive benchmark, and the evaluation of outsourcing for non-core activities) or a differentiation strategy (e.g., enhancing/creating value for customers through an effective integration with the client’s value chain — especially for business-to-business markets).

Strategy Assessment: Once this assessment has identified some strategic options, it is possible to check the soundness of the possibilities through dynamic simulation models ("what if analysis") that can assess the risk of each hypothesis and the sensitivity of plans to different issues that can affect strategy (e.g., the effect of a change in the raw materials price or in the exchange rate) . These models should consider investments, cash flow generated, and the risk of the business (considered in the discount rate of cash flow) in order to use net present value (NPV) as a measure of the value added to the company.

Strategic Alliances: The economy for the 90s is characterized by generally mature markets, with tough competition and low growth rates. Consequently, there is a trend to concentrate on a few, bigger market players. Through strategic alliances companies try to achieve a stronger market position, to acquire competencies in areas of weakness, or to integrate with the buyer's/customer's value chain.

The issue of integration with suppliers is particularly important because of the stress on quality and customer satisfaction that we underlined before. Firms have different strategic purchasing options varying from a traditional approach (fragmented supplier base, with separate design/engineering and an adversarial negotiation base to obtain lowest price) to a vertical integration. An intermediate step could be the value managed relationship (VMR), based on a single or a small number of suppliers, joint design, frequent communication, long-term commitment based on the optimization of the total value chain, and the lowest cost system for both partners. The application of this methodology in different industries have shown that the main areas of saving are

System costs:

- Rationalize order process
- Optimize truck utilization/delivery size
- Optimize inventories
- Reduction of redundant quality controls
- Reduce reject rates
- Reduce time of supply
- Increase of service level

Product design/engineering

- Technological specification reduction
- Joint design/engineering
- Joint investment and implementation
- Identify substitute products and materials

Volume/price:

- Scale efficiency
- Learning curve exploitation
- Cost based pricing
- Long-term guarantee
- Fixed cost coverage

The result of this new relationship between buyer and supplier is the shift from a win-lose solution to a win-win alternative. The role of management accounting is to evaluate potential savings and also to play the role of teammate in this integration process.

PERFORMANCE MEASURING: is the step of the planning process in which management accounting is normally involved. We want now to review it from a value-oriented point of view, and not from the more traditional accounting-oriented standpoint.

Economic Value Added Measuring: This activity aims to measure the impact of strategy on the company's value. It is based on the assessment of the cash flow generated in a certain period. Discounted cash flow analysis considers net cash flow (operating cash flow — net cash earnings, less change in working capital and capex plus financial cash flow less changes in financial structure and dividends paid), discounted at a rate representing the average cost of capital for the company (weighted average between equity and debt). In this way, we will have the firm value; deducting financial debt we obtain equity value. The difference between equity value before and after the implementation is the value given by the strategy to the company. This analysis is performed not only ex-post to determine the value brought by the strategy, but also in several other cases:

- Financial planning of a business
- To assess the company's value in merging & acquisition activities
- Portfolio management/optimization, to achieve an overall balance between cash users and cash generators in a business portfolio
- To test assumptions behind business plans and assess sensitivity to fundamental value drivers of the business ("what if" analysis)

Related to the last issue there is the possibility to make an evaluation of the degree of risk of each business plan. Risk management is another key issue for management accounting. One of its tasks is to check the soundness of strategy.

As we have seen before, if we analyze the theme from a shareholder's value standpoint, strategy measuring activities are based on financial tools due to the following reasons:

- Shareholder value is given by the cash generated by the business; net income could be misleading and dangerous. This is true for example if we consider two companies with the same net income, but one is mature with low investment level, while the other is fast growing, needing a high level of investment. If we analyze only the profitability, we would miss the fact that the two companies have different cash flows and the second, even if growing, could have some trouble to fund the investment needed to grow.
- Time has value — money has different valuations depending on when you spend or receive it. Everyone prefers to receive a certain amount of money immediately rather than to receive the same amount after 10 years because of the value of time. Net present value allows one to compare different values in a time-adjusted manner.
- Financial measures can also account for different risk profiles of investment. If investors have different investment alternatives, they will ask to choose on the basis of the risk/return relationship of each option. Discounted cash flow analysis takes account of the investment risk in the discount rate according to the following weighted average cost of capital (WACC) formula:

$$\text{W.A.C.C.} = (\%\ \text{equity})*\text{cost of equity} + (\%\ \text{debt})*\text{debt}*(1 - \text{tax rate})$$

where the cost of equity is as follows:

Cost of equity = risk free rate + risk premium

where the risk free rate is normally the rate of return of long-term public bonds, while the risk premium is:

Risk Premium = Beta * market risk premium

The beta index is the measure of the risk of the specific project/company, whilst the market risk premium is based on the historical trend that shows the difference between average stock market return and risk free bonds.

Specific company risk indicators are quite difficult to determine. It is useful in this case to consider industry indicators, provided by different official and reliable operators, and to revise these indicators on the basis of experience and the managers' deep knowledge of business.

Although value measuring is based on cash flow methodology, nonfinancial measures are still useful to identify areas that can be managed to increase cash flow and ultimately to increase shareholders' value. This is the case, for example, of ratios analysis (that answers key questions about profitability, turnover, leverage, liquidity, and coverage issues) or variance analysis.

The aim of financial or accounting measures is to assess only the bottom-line result (profit, ROE, cash flow) of management performance. The issue is the absence of intermediate steps of measuring/controlling between strategic objectives and financial results. In other words, the problem is to monitor the striving for objectives, at each level of the firm. The solution seems to be an integrated reporting system, also known as a balanced scorecard or Tableau de Bord. Following the approach originally developed by D. Norton and R. Kaplan, business can be monitored under four different points of view:

- Customer perspective (satisfaction, retention, market share)
- Internal perspective (efficiency, response time)
- Growth perspective (innovation, new business opportunities)
- Financial perspective (return on investment, economic value added)

This tool widens the focus of business reporting, historically limited to financial measures. With this methodology, financial measures are only one of the perspectives, probably the one that reflects the economic value added of others.

Figure 3 represents an example of the most suitable performance measures for three different kinds of company with different strategies. The first case is a consumer goods company (e.g., food manufacturer), the second case is a business-to-business firm (e.g., mechanical components for automotive industry), and the last example is a service firm (e.g., banking or insurance). Our choice is to maintain the same measures for financial perspective, to stress the fact that different objectives in the other perspectives can lead to similar financial results. The approach is to identify strategic objectives first (figure 3.a) and then to select measures that best fit with these objectives (figure 3.b).

Once more, this brief review is not exhaustive on the theme, but it is representative of how new methodologies can support management accounting in performing its new role.

Figure 3.a: Strategy/Objectives

	CONSUMER GOODS	BUSINESS TO BUSINESS	SERVICES
STRATEGY	Establish our products as best value for money	Establish our company as best partner for quality improvement of value chain	To satisfy our client through most innovative services based on the reliability of our firm
FINANCIAL PERSPECTIVE	• Survive • Sustainable growth	• Survive • Sustainable growth	• Survive • Sustainable growth
CUSTOMER PERSPECTIVE	• Price/quality excellence • Establish our brand as the preferred one in the product category • Category management with trade	• Become the preferred partner for our customer • Guarantee a high level of service • Customer satisfaction	• Customer satisfaction • Customer retention • Increase service level
GROWTH PERSPECTIVE	• Enter new business opportunities • Develop exclusive technologies • Feed the growth pattern	• Establish solid value managed relationship • Technological leadership • Innovation leadership • Increase of bargaining power	• Human resources excellence • Integration with clients • Innovation
INTERNAL PERSPECTIVE	• Maximize efficiency • Rationalize our product/brand portfolio • Respect of product development plan	• Maximize efficiency • Excellence of production process • Time to market reduction	• Maximize efficiency • Accelerate break even on new client • Employees satisfaction

Figure 3.b: Strategy/Measures (overleaf)

	CONSUMER GOODS	BUSINESS TO BUSINESS	SERVICES

STRATEGY	Establish our products as best value for money	Establish our company as best partner for quality improvement of value chain	To satisfy our client through most innovative services based on the reliability of our firm
FINANCIAL PERSPECTIVE	• Cash flow • Return on Equity/ investment • Sales growth • Unit margin	• Cash flow • Return on Equity/ investment • Sales growth • Unit margin	• Cash flow • Return on Equity/ investment • Sales growth • Unit margin
CUSTOMER PERSPECTIVE	• Market share • Relative quality • Conformity to quality standard • Price index • Brand awareness • Brand image/values perceived • Quality of distribution • Trade service (punctuality, fulfillment, freshness)	• Market share • Service level (punctuality, fulfillment, speed) • Conformity to standard • Supply flexibility • Price/performance ranking • Customer loyalty • Weight on total customer's supply	• Market share • Customer satisfaction survey • Customer retention • Time of waiting at the front end • Time of answer • Solutions by phone/ remote solutions • Field coverage/visit frequency
GROWTH PERSPECTIVE	• New product initiatives • New business (weight on total Turnover) • Investment per business • New technologies development • Product portfolio balance	• N° of integration / partnerships • New product development / new technologies • % of new products internally developed • % of new product patented • Concentration of suppliers / customers markets	• Human resources management (level of education, training programs) • Exclusive solutions (% on total) • Innovative services (% on total) • Partnership with business clients
INTERNAL PERSPECTIVE	• Unit cost • Labor intensity • Capacity saturation • O/H incidence on net sales • Item rationalization (SKU's reduction) • ABC products/brands • Timing respect for new product launches	• Unit cost • Inventory reduction • Benchmark vs. alternative suppliers • Production process throughout time reduction • Investment per unit sales • Time to market reduction	• Unit cost by customer • Unit cost by new customer (cost of acquisition) • Sales per employee • Front-end/back office people ratio • Time of dispatching for each affair/request • Level of automation of back office procedures • Human resources turnover

SHARE LEARNINGS ACTIVITIES: In a fast-evolving environment, one of the tasks of management accounting is to support the development of the organizational capability to respond/adapt in a timely and flexible way to changes. This means to quickly diffuse and share the information and the knowledge gained; support the organizational learning. Below, two main areas in which share learning is essential are briefly reviewed.

Core competencies: These are special skills or know-how that create a differentiable customer value. It is often something related to organizational processes, personal knowledge, or professional skills of people acting in a firm that confers the distinctive character that customers perceive as value adding. Companies are always investing more in these competencies to achieve a competitive advantage and in this way to build up barriers to the entry of new rivals. In some industries these kinds of leverage could be more effective then other marketing activities, especially in the service industries where the delivery of value to the final client is crucial. The role of management accounting in this area could be the defining of specific indicators that can analyze the effectiveness and the development of the core competencies. For example, customer retention measurement is a good indicator of the relationship between an organization and its clients.

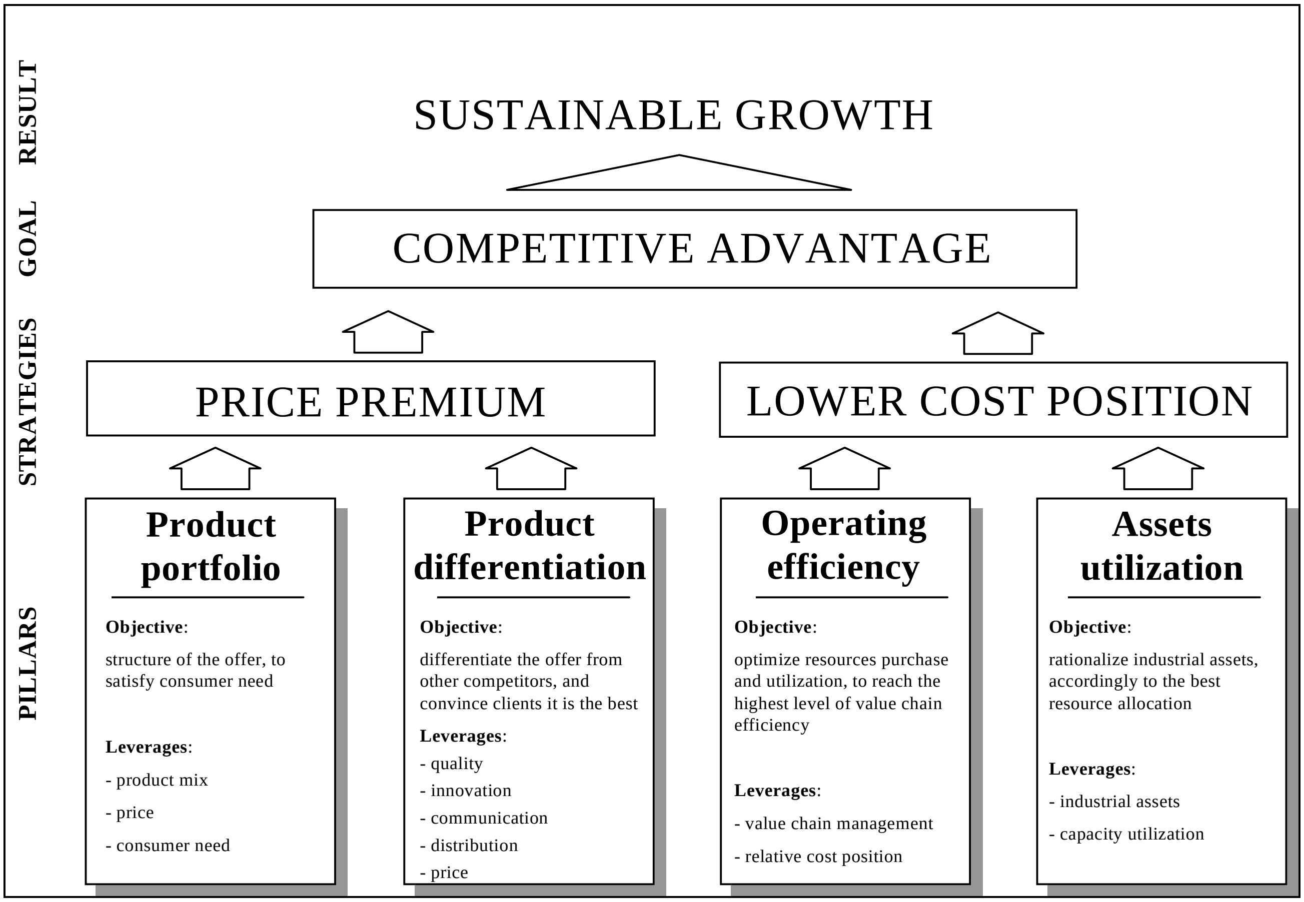
Competitor profiling: This is a powerful tool that provides understanding of competitors' strengths and weaknesses, with the aim of using this knowledge to gain a competitive advantage. A good understanding of the other players better positions a firm to prevent competitors' counteractions and to evaluate their intentions. Competitive assessment structures the analysis along the following dimensions:

- Financial performance: revenue trend, cost trend, and comparison
- Business portfolio: portfolio breakdown by product, customer, or sales channel
- Strategy assessment: strategic positioning and future direction
- Specific capabilities: exclusive competencies

These dimensions should allow management accounting to identify strategies pursued by competitors (e.g. cost leadership vs. price premium) and provide top management with the information to develop a distinctive positioning. **Figure 4** represents the scheme to manage information with the aim of understanding the strategic positioning of a competitor, and on which leverages it is founding this strategy.

Another objective of competitor profiling is to make a direct comparison between different operations in order to identify the most efficient practices (in terms both of revenues and costs). This tool is normally known as best demonstrated practices (BDP), or benchmarking. This kind of analysis identifies concrete actions to improve the relative cost position, taking as the source of comparison external cases such as competitors or other industries and internal cases such as different plants within the same firm.

Figure 4: framework of competitive analysis



Concrete steps to develop a benchmarking cost are

1) Identify several districts/plants that produce same products or services under similar operating situation
2) Analyze cost data on a unit base
3) Find the existing relative cost position for each plant/district reviewed
4) Construct the potential/ideal best practice using the lowest cost per unit for each cost component/phase of the production process of all plants/districts
5) Calculate the savings from achieving the identified BDP
6) Prioritize cost areas for further analysis according to their size and the likelihood of reaching the BDP
7) For each cost component/phase, identify reasons and causes for differences
8) Develop a list of concrete actions to reach the BDP and achieve the potential savings identified

SOME ORGANIZATIONAL ISSUES

As a conclusion, we would like to underline two consequences that the evolution of management accounting towards value-creation activities will have on an organization.

Impact of change on Small-Medium Businesses: On the basis of experience, management accounting can be an independent organizational unit when the business has reached a "critical mass", varying according to the kind of industry, but that we can identify in approximately 5–10 $MM of turnover. At this size, a company could need someone to organize and support the budgeting process. But to see management accounting also performing business development activities, we probably have to look at companies with more than 50–100 $MM.

Because of this requirement, there are few management accounting value-added competencies shown in a great number of small-medium sized companies. Thus, the first issue is who can provide these competencies. The first kind of solution could be the utilization of external consultants to provide the professional skills that the company is missing. But these services are expensive and only few can afford it. The other solution seems to be a widening of competencies of actors from other firms who perform their activities in adjoining/complementary areas. An example of this approach is the greater involvement in value- supporting activities of internal auditing — in Italy as granted by the *Collegio Sindacale.* This organ, established by law with the aim of safeguarding all stakeholders' rights, has been monitoring until today an ex-post controlling role. The *Collegio Sindicale* now possibly can provide a firm with more value-oriented activities, trying to fill the gap of competence that the competitive environment change is creating.

Corporate or Business Unit level: A second issue is whether management accounting should be centralized at a corporate level or should be at a business units level. There are pros and cons for each possibility. The first solution can guarantee an organic management of different business, whereas the second solution assures rapid reaction and flexibility to market changes.

It seems possible to identify an effective division of competencies as follows:

Corporate level:

- Business portfolio management
- Corporate strategic guidelines
- Tax and financial corporate support
- Corporate value creation measuring

Business Unit level:

- Business planning support
- Integration between planning, performing, and measuring
- Support to horizontal learning process and creation of a cross-functional knowledge network
- Measuring of business contribution to value creation

SELECTED REFERENCES

Allan, Gerald B. and John S. Hammond. "*Note on the Boston Consulting Group Concept of competitive analysis and corporate strategy*". Harvard Business School, 1975

Bartlett, Christopher A. and Sumantra Ghoshal. "*Beyond strategic planning to organizational learning: lifeblood of the individualized corporation*". Strategy & Leadership, January 1998.

Brealey, Richard A. and Stewart C. Myers. "*Principles of corporate finance*". McGraw Hill, 1988

Brunetti, Giorgio. "*Le nuove sfide del controllo di gestione*". Riprogettare l'impresa - Il Sole 24 Ore, 1992

Copeland, Tom and Tim Koller. "*Valuation: measuring and managing the value of companies - second edition*". John Wiley & Sons, 1994

Fifer, Robert M. "*Cost Benchmarking functions in the value chain*". Planning Review, May/June 1989

Hamel, Gary and C.K. Prahalad. "*Competing for the Future*". Harvard Business Review. July/August 1994

Hax, A.C. and N.S. Majluf. "*L'evoluzione del concetto di pianificazione strategica*". Direzione Strategica, IPSOA, 1987

Kaplan, Robert S. and David P. Norton. "*Putting the balanced scorecard to work*". Harvard Business Review, September/October 1993

Kotler, Philip. "*Marketing management: analysis, planning, implementation & control, Seventh Edition*". Prentice Hall Inc., 1991

Meyer J. and Launois S. "*Il controllo budgettario*". Ed. Franco Angeli

Merli, Giorgio and Alberto Sportoletti. "*Un pannello di controllo per performance e obiettivi strategici*". L'Impresa, 6/1998

Porter, Michael E. "*Competitive Strategy: Techniques for Analysing Industries and Competitors*". The Free Press, 1980

Porter, Michael E. "*Competitive advantage: creating and sustaining superior performance*". The Free Press, 1985

Porter, Michael E. "*From competitive advantage to corporate strategy*". Harvard Business Review, March 1987

Rappaport, Alfred. "*Creating shareholder value: a new standard for business*". The Free Press, 1986

Rappaport, Alfred. "*CFO and Strategist: forging a common framework*". Harvard Business Review, May/June 1992

Schoemaker, Paul. "*How to link strategic vision to core capabilities*". Sloan Management Review. Fall 1992

Senge, Peter M. "*The fifth discipline: the art and practice of the learning organization*". Doubleday, 1990

ABOUT THE AUTHOR

Piero Mirra graduated from the University of Rome (La Sapienza) with a Degree in Economics, and from the Profingest School of Bologna with a Master in Business Administration (*Master in Gestione d'Impresa*)

He is currently Financial Analyst in Barilla Alimentare SpA, one of the biggest Italian food companies (Pasta, sauces, and bakery products) active world-wide. He works in the area of Finance Management of the Bakery Business Unit, where he performs activities like strategic planning support, market analysis, competitor profiling, investment assessment, and integrated reporting.

He also worked as management consultant with Bain Cuneo & Associati, part of the world-wide network of Bain Company, dealing with projects of business planning, merger & acquisition, privatization, and business process reengineering.

Towards a Concept of Accounting as Value Creator: Issues, Possibilities and Ways Forward *

Mohammad Adam Bakar, Ph.D., *Associate Professor*

Ainun Haji Abdul Majid, *Lecturer*

Both at the Accounting Department, Faculty of Business Management, UKM, Malaysia

ABSTRACT

This article seeks to present arguments that traditional ways of viewing accounting as existing to perform scorekeeping, attention directing, and problem solving roles is neither helpful in elevating its position nor useful in enhancing its importance in organizational functioning. We would like to suggest that for accounting to be relevant and its roles to be better appreciated, research and reform efforts done in accounting must not be made in the name of improving or illuminating services it renders or in carrying out those functions. Rather, we contend accounting can be more dominant and its contribution can be better valued, if it is viewed from the perspective of its contribution in enhancing value of the organization through stakeholders' value creation.

INTRODUCTION

The standard normative prescription of accounting presumes that it carries out scorekeeping, attention directing, and problem solving roles. Its main preoccupations were related to the provision of information on costs and (financial) benefits of organizational actions, the setting of financial standards and norms, the representations and reporting of organizational performance, and the planning and control of resources. Research and reforms carried out in accounting were designed to facilitate activities in furtherance of economic rationale for action. Insights provided are frequently used to form a basis to fine-tune the technology and practice of accounting — to improve the efficiency of its services and to enhance its organizational effectiveness. Accountants are mere information providers and seldom (if ever) directly involved in decision-making processes of organizations. In fact, what gives accounting its raison d'être is its ability to offer a particular economic reality of organizational activities and outcomes (cf. Raun, 1961; Golembiewski, 1964; Gandhi, 1976; Hopwood, 1983).

This view of accounting has been criticized as being outdated, narrow in interpretation, and shallow in perspective. It tells little about the organizational nature of accounting and in some ways, put forth a view of accounting that is what it isn't and can become what it was not. By being concerned only with costs and benefit assessments, standards and norm setting, performance reporting, and resource planning and control, accounting was able to create only an economic visibility of the functioning of a modern organization. But such a visibility is rather technical and views accounting in a rather uninvolved manner. Accounting is seen as simple, its phenomenon taken for granted, and accounting issues assumed to be non-problematic. Accounting, it seems, is a relatively independent art and existed rather detached from the context in which it operates (Hopwood, 1983; Kaplan, 1984; Burchell et al., 1980).

* **This article was submitted by the Malaysian Institute of Accountants.**

Recognizing the need to incorporate the wider roles that accounting plays, researchers and accounting reformers are urged to adopt a new approach that views accounting from more holistic and process-wide viewpoints. They must aim to understand meanings given to accounting in the settings in which accounting exists. They must also change their focus — from regarding accounting as a passive phenomenon to one that is in itself actively involved in shaping, molding, and even playing a role in the construction of the setting of which it forms a part. It is only by doing so that insights provided can shift our attention away from the focus on technicalities — the often functionalist presumptions of the earlier analysis and the atheoretical stance, which failed to highlight the broader understanding of accounting in practice and what might be at stake in the accounting endeavor. (Burchell et al., 1980; Hopwood, 1983, 1990; Berry et al., 1985).

However, this latter view of accounting, to a large extent, is also concerned with the origins of the accounting functions — scorekeeping, attention directing, and problem solving. We felt that research and reform efforts carried out under the new approach were still dominated by concerns of accountants to enhance the effectiveness of these roles based on values they espoused. We contend that such a stance is still inward looking, internally motivated, and self-reflecting because it uses criteria set by accountants themselves. It gives an impression that those (research and reform) efforts are designed by accountants to give them legitimacy of existence and reinforces the (traditional) roles assigned to it. Further, such efforts undervalue the larger role accounting must perform in providing the institutional framework for organizational activities. What is needed, we believe, is to view the role of accounting beyond its own domain. We need to adopt a new perspective, which looks at the roles of accounting from the outside and uses values set by other organizational participants for accountants to meet.

ACCOUNTING AND VALUE CREATION: THE ISSUE

We want to propose that the wider role of accounting is that of creating and enhancing the value of organizations through shareholders', managers', and customers' value creation. Besides encompassing and superseding its traditional functions, the value-creation role will give accounting a wider and more external and dominant outlook befitting its position as an (if not the most) important input to decision making.

Boland & Pondy (1983) is one of the earliest works to capture both the technical and dynamic nature of accounting. Based on Scott's (1981) reviews of the development of organization theory in this century, they drew out issues from two case studies. The first was the process of budgeting in an American university and the second, a research to study the roles that accounting analysis plays in a decision to close a school. The university budgeting was carried out in a climate of financial constraints caused by a declining student population and reduced state funding. The decision to close the school, in the second case, was done in response of declining enrolment. From the analysis, they concluded that there is enough evidence to suggest that accounting possesses a dual feature — the rational and the natural. Other researches on the same issue such as those by Berry et al. (1985), Ansari & Euske (1987), Ansari & Bell, (1989) and Covaleski & Dirsmith (1988) support Boland & Pondy's analysis.

A common feature of these studies is that they attempt to understand accounting in action. They focused on accounting practices and are concerned with trying to understand the rationales for actions of participants and the role accounting plays in facilitating them. Their analyses show that, in its rational state, accounting defines economic realities of organizational actions, thus fulfilling its constitutive or 'given' roles — scorekeeping, attention directing, and problem solving. At the same time, its natural feature allows accounting to provide a common language defining what is real, dignifying certain questions as important, and stopping other as inappropriate or irrelevant. Its natural form also establishes a system to define new frames of reference, frameworks for an adaptation to external and internal environments, and unwritten rules to regulate the allocation and use of scarce resources.

An important feature of their findings is the demonstration that the usefulness and the nature of use of accounting information relies not on how the best accountants want accounting to be. Rather, it depends on how the recipients of the information intend to use the it, and even what parts of it. In other words, accounting information is defined as meaningful only within a specific context and only by those who consider that the information adds value to a decision they are making. It is for these reasons that we feel value-creation aspects of accounting should be the focus and should be emphasized as the new concept to understand the wider role of accounting in organizational functioning.

ACCOUNTING AND VALUE CREATION: THE POSSIBILITIES

A new approach is thus needed to focus on the positive, value-creation aspects of accounting, and to emphasize it as the wider role of accounting. A new perspective and perhaps a new language are also required to provide understanding of it. This is because conceptualizing accounting as a creator of value is somewhat different from viewing them from the scorekeeping, attention directing, and problem solving perspectives. Even though it is recognized that each of the scorekeeping, attention directing, and problem solving roles creates value, each limits accounting to a particular area of activity, and in so doing, loses sight of the core responsibility — to create value for the collectivities.

In the quest for new ways to establish a competitive edge, organizations employ various efforts to create and enhance their economic values. Conceptually, economic value added (EVA), shareholder value added (SVA), and economic value creation (EVC) are concepts that refer to similar principles. Armitage & Jog (1996) view them as frameworks, which represent ways to link strategic decisions at senior level with the operational drivers used by frontline managers and employees. These concepts are used both as principles to value companies and as valuation tools to improve decision making throughout the organization. Others, such as Jancsurac (1998), describe the concept as “that value which customers perceived as something worth paying for”, whilst Bughin & Copeland (1997) define them as “values created for shareholders above normal expected levels of return”. Rappaport (1998), on the other hand, explains value creation (in a merger situation) as the difference between post-merger value of the combined company and the sum of the stand-alone values of the buyer and the seller.

Four main questions must be asked and answered to highlight the roles of accounting in value creation.

First, *how are values created?*

One can advance a simple proposal to demonstrate the possibility of accounting in value creation. For instance, it is expected that, and this is a taken-for-granted assumption, accountants must provide timely and accurate information to decision makers. Giving timely and accurate information, which enables its recipients to make good decisions, provides a service of great value to the organization. More forcefully stated, by producing timely and accurate information, accounting creates values that benefit managers, who in turns create further value to the organization. In other words, by providing the framework within which decision-makers and other organizational members can create value, accounting creates a broader and more pervasive value for the organization.

The second question is -- *In what ways and with what performance criteria can we measure value created in organizations?*

The types of value created by unit managers' actions can be related to enhancing value to shareholders and customers. In fact, creating stakeholders' value should be what all managers must be concerned with. Bughin & Copeland (1997) argue that such a focus boosts productivity and liberates resources that benefit stakeholders of all kinds in the long term. Jancsurak (1998) suggests that focussing on consumers will make them continue buying the products and enable firms to define their market niches. Goh & Pritula (1996) provide evidence that organizations can increase their market share when they are focussed on activities that create value to shareholders and customers. Finally, Armitage & Jog (1996) highlight cases to suggest that creating managerial value contributes in guiding their strategy and in monitoring their performance, which subsequently maximize shareholders' wealth.

A variety of value criteria has been suggested to be used as measures for shareholders' value creation. Bughin & Copeland (1997) used the above-normal expected levels of return whilst Shiely (1996) employed the difference between market value of the firm and the capital invested in it as measures of values created. On the other hand, Goh & Pritula (1996) suggested the increase in value as a percentage of average common equity as the criterion, whilst Armitage & Jog (1996) calculated value created as the entity's net operating profit after tax (NOPAT) minus a charge for its use of capital.

Organizations will be able to gauge that their customer value creation activities (such as improving customer services and translating innovative technologies into products attractive to clients through the use of technology and human resources), are effective if they are able to maintain competitive edge, attract new and satisfy the needs of existing customers and consumers. Several criteria have been suggested to measure value created. Langley & Holcomb (1992) and Holcomb (1994) propose effectiveness, efficiency, and differentiation criteria as measures of customer value creation. They argued that for customer value to b created, their requirements in certain critical result areas must be met. These key result areas include product guarantee, availability (places, quality, quantity, and price), convenience of placing orders and length of order cycle, timeliness and consistency of delivery, completeness of shipments, and market standing. Harker & Hunter (1995) suggest convenience in product delivery and access, precision in product functionality, cost effectiveness in the design of delivery capabilities, adaptability to market and customer needs, and penetration of customer markets and households as criteria that can measure values created for customers.

Finally, since the responsibility to maximize shareholder value and to satisfy customer requirements rest with the managers and executives, their value too must be created and measured. Bickford (1990) suggests specific achievement of multiyear performance goals or a standard that is based on the relative value of the company's share compared to shareholders' value in similar companies. Goh & Pritula (1996) proposed more specific criteria. The first is the increase of cost management skills (measured by the increase in the firms' economic value as a percentage of their average common equity). The second is based on their capabilities to combine hardware, network, and database capabilities to reduce costs and manage their business better. Finally, managers value creation can be measured based on how well they adapt to a performance-oriented organizational culture that strives for profitable growth.

The third question is -- *What is the process through which organizational value can be created?*

Hirst & Baxter (1993) suggest that there are three perspectives of information use. First, information is used as rational instruments (*instrumental* perspective) to improve decision quality. Normally, from this perspective, information is used to a) provide answers about the consequences of adopting a particular course of action, b) learn (or reduce uncertainty) about a problem and its associated alternatives and outcomes, c) promote dialogue in circumstances where there is conflict over decision objectives, and d) promote ideas (or trigger creativity) in ambiguous choice settings (Earl & Hopwood, 1980).

In contrast, information may be used in a political fashion — as ammunition, to promote and perpetuate the preferences of powerful chosen participants. In this case, information is collected and presented selectively to shape or define problems and solutions to suit certain purpose(s) of the dominant group. This is labeled as a *strategic* perspective. Finally, the use of information may be construed from a *symbolic* perspective whereby a decision-maker uses information based on the meanings or the evocative qualities he or she attached to it and the decision situation. The chosen behavior is to promote an image of rationality and neutrality.

Organizational value can thus be created if the information chosen enables managers to make better decisions which will eventually lead to enhanced customer value and finally to greater value created for shareholders.

Preston (1986) found that the process of informing was twofold. First, managers arrange to inform each other predominantly through interactions and formal reporting channels. Second, managers arrange to inform themselves through observation and keeping of personal records. This means that the more similar the information that managers receive is to what they already have, the more effective the arrangement and the greater the chance that value will be created.

The final question then is -- *How can accounting, and the information it provides, creates value?*

The possibility for accounting to create value is great indeed because the accounting system is able to command powerful attention in organizations. Vancil (1979) notes that this may be due to the ability of accounting to a) provide a detailed sets of rules for an organization to impose on itself, b) aggregate activities of an organization and express them in financial terms that facilitate comparison, c) mandate a reality containing data that are hard to ignore, and d) make things visible so that managers can obtain new insights into their business. Swieringa & Wieck (1987) provide the fifth reason, namely, the system initiates and sustains forceful actions.

Hopwood (1990) pointed out that accounting has great potential to create value because it can play a significant role in facilitating change processes in organizations. He posits that by creating a particular visibility in the organization, accounting can make things visible that otherwise would not be. Records can even be kept of phenomena that can never be seen. For example, no one has ever perceived a cost or a profit. They are abstract and conceptual phenomena, creations of human intellect shaped by economic, social, and institutional forces. As Vancil (1979) puts it, " … Breaking return on investment into its components of profitability and turnover can clarify the structure of profit and loss in operations. Essentially, accounting is a way of making things visible." (in Swieringa & Wieck, 1987, p. 294).

Secondly, Hopwood argued, by functioning as a calculative practice, accounting is implicated in the objectification of phenomena, making subjective and abstract concepts appear real and seemingly precise.

The combination of calculative and visibility elements of accounting can be a potent weapon for value creation. By being able to convert an idea to a fact, accounting can be used as a concrete instrument of organizational governance and control. At the operational level, many activities can be brought into the calculative sphere. In doing so, new organizational interdependencies can be created and couplings between accounting and other aspects of organizational life can be forged. Explicit interrelationships can thus be established. Accounting data can now be used to control costs, identify problems, assess alternative ways of solving problems, and select and implement solutions. These initiatives put accounting and the information systems it creates, into a strong position to be used as active participants and important instruments to articulate actions that create value for organizations.

At the more strategic level, accounting and its information systems can be used to reflect the practices of accountability. Roberts (1990) found that, at the strategic level, accounting was used to supplant the dominance of non-accounting logic, thereby giving it power to act as a source of discipline. Further, accounting provides a framework for top management to institute change in the name of (economic) rationality. Accounting provides a framework for organizational members to be informed, to define and redefine their views of what is right and what is not, and finally to make their decisions. Perhaps this capability is the reason why a particular accounting control system could create a climate that works for and against both the successful formulation and the successful implementation of strategy. These observations suggest that accounting and the way its information system is designed are powerful mechanisms for value creation at the strategic level of the organization.

ACCOUNTING AND VALUE CREATION: THE WAY FORWARD

So far we have put a case for a new perspective of the scope of accounting in action — that is to create value for organizations. This value creation can be done through accounting if it provides an institutional framework, and if its information system is designed to give managers (the decision makers) the informational input that can add value to decisions they make. Through such focusing, products produced and services rendered can satisfy customers' needs and demands. In so doing, accounting contributes positively to organizational profit and value, creating shareholder value.

How are these results possible? At the operational level, because accounting was able to integrate diverse requirements and to make organizational actions visible, accounting becomes a language for economic discourse. Its vocabulary can influence perceptions and infuse dialogue, thereby allowing alternative actions to be expressed. Its calculative capabilities further contribute by objectifying and operationalizing abstract phenomena. In all, these capabilities enable accounting to be involved in both the revelation and construction of new domains of economic activity, as well as their resultant value creation for organizations.

Technically, this means that accounting can be used to ensure purposive, rational, and goal-directed behavior, as well as promoting consistency and coordinating organizational actions and processes (Preston, 1986). As such, accounting is readily accepted as a tool that must be used in allocating scarce resources. Further, accounting logic is appropriate for determining economic consequences of actions and in making choice(s) amongst alternatives (Swieringa & Wieck, 1987). Besides, as Brunsson (1990) argues, by securing such compliance from decision makers, organizational actions can be mobilized. Accounting provides the framework and language that allow the value-creation potential of an organization to be defined and developed.

Accounting information systems can also be used both to shape and to incorporate expectations of organizational members. Swanson (1978) observed that reports are generated, not simply to inform, but also to influence one's superior by marshalling certain needed 'evidence'. Samuelson (1986) noted that intentions can shape the expectations that are held of the (management accounting) system, resulting in both positive and negative responses. Pseudo-participation, biases, and 'game-playing' are but a few of the influences that lead to negative impact on organizations and that adversely affect the value-creation potential of accounting. In addition, accounting may be used to imitate the behavior and attributes of financially successful organizations and also as some kind of insurance against financial waste (in case of budgeting), which in turn contributes positively to value creation.

Gordon et al. (1978) suggest that accounting and its information can be used to influence decision makers because in a decision process, accounting information is an integral part. Decision makers, they noted, usually adjust their decision processes when the accounting process is changed if they want to keep the overall process unchanged. This feature of accounting makes it useful as a value creator because it can be used as mechanism to highlight forces affecting the relative transactional efficiencies of alternative ways of organizing.

At the more strategic level, Ezzamel & Bourn (1990) argue that accounting's contribution lies in its abilities to perform three functions. These are a) to shape the perceptions of decision makers in relation to (strategic) issues at hand, b) to provide early warning by screening out irrelevant information to reduce perceived time pressure and surprise, and c) to buffer the impact and cope effectively with crises by shifting priorities and perceptions that rely on information it provides. The value-creating potential of accounting at the strategic level rests on its system to provide a learning mechanism that generates ideas, so that decision makers can improve their surveillance capabilities of their working environment.

At the strategic level, accounting can also act as a change agent. Hopwood (1990) argues that accounting can play a role in strategically changing managerial awareness and realigning their view towards a particular direction because it can turn abstract concepts into concrete facts. Accounting has the power to shift patterns of organizational visibility so that concerns of the external world can permeate and influence internal organizational affairs. Lateral linkages can thus be formed across functional units and organizations, rather than only up and down within the same bureaucratic hierarchy. That is, for accounting to be more relevant and able to create value for organizations, accountants must not only provide internal data — accounting must now seek to provide information concerning both the firm's markets and its competitors' products (cf. Bromwich, 1990; Colignon & Covaleski, 1988; Simons, 1987, 1990).

Finally, a political scientist, Barber (1966, p.65) argues " … around and beneath the technical considerations another set of meanings, involving the interplay of communication and power, is to be found. Insofar as knowledge is power, communication systems are power systems". Pettigrew (1985) suggests that a power relation is a causal relation between preferences of an actor regarding an outcome and the outcome itself. Power involves the ability of an actor to produce outcome s consonant with his perceived interests. An actor's power is derived from his possession and control of the (power) resources, and his ability to skillfully use them.

The above description of power reflects the possibility of accounting information being used in the communication system designed to aid decision making. Since accounting systems can be used as the formal systems of authority, relations can be considerably modified by the control of communication channels to propagate hidden agendas. Thus, accounting can be used as a mechanism to offer an image of reality, however biased it may be. Such an image may then create a climate conducive to accounting information being used for facilitating economic and social activities of organizations. This may, in turn, become a part of the technology of control within organizations, shaping the activities and relationships, which accounting then reports upon. The challenge, therefore, is for accountants to design a system of accountability that adds value to managers' decisions, which in turn, create value for organizations.

CONCLUDING REMARKS

In this article, we put forth a view that the "real" and the wider role of accounting is value creation. We present arguments that indicate that this role can be achieved through the design of accounting systems that provide information, creating managerial value. This in turn contributes to customer value creation, contributes to profitability, and ultimately enhances organizational value. Once this is achieved, the organization can reward shareholders, thus creating shareholder value.

At the outset, we feel that this new perspective will highlight the more dominant role of accounting in organizational functioning. Accounting is unique in that it is able to integrate various organizational actions and processes. It possesses features that can visualize abstract concepts and turn them into hard facts, which become conduits through which economic discourse enters the world of practice. All these contribute into accounting becoming a common language through which organizational members understand the impact of organizational activities. Used wisely, accounting provides a potent weapon to create organizational values.

However, the actual relationships and the organizational value creation process articulated above are never so simplistic as the description suggested. Accounting is neither a static phenomenon nor are all its activities mirrored in the financial sphere. The dynamic and changing nature of accounting makes the process problematic, although still capable of value creation. Tentative though this idea is, we submit it for debate and more discussion.

REFERENCES

Armitage, H.M., and Jog, V. 1996. Economic Value Creation. CMA Magazine. 70:21-25

Ansari, S., and Bell, J. 1989. Symbolism, Collectivism and Rationality in Organizational Control.. Unpublished Working Paper.

---------- and Euske, K.J. 1987. Rational, Rationalizing and Reifying Use of Accounting Data in Organizations. Accounting, Organizations and Society. 12:549-570.

Berry, A.J., Capps, T., Cooper, D., Ferguson, P., Hopper, T. and Lowe, E.A. 1985. Management Control in an Area of the NCB: Rationales of Accounting Practices in a Public Enterprise. Accounting, Organization and Society. 10:3-28.

Bickford, L.C. 1990. Rewarding Executives for Shareholder Value Creation. Journal of Compensation and Benefits. 6: 53-56

Boland, R.J. and Pondy, L.R. 1983. Accounting in Organizations: A Union of Natural and Rational Perspective. Accounting, Organizations and Society. 8:223-234

Bromwich, M. 1990. The Case for Strategic Management Accounting: The Role of Accounting Information for Strategy in Competitive Markets. Accounting, Organizations and Society. 15:27-46 Accounting, Organizations and Society. 12:207-234

Brunsson, N. 1990. Deciding for Responsibility and Legitimation: Alternative Interpretations of Organizational Decision Making. Accounting, Organizations and Society. 15:47-59

Bughin J. and Copeland T.E.. 1997. The Virtuous Cycle of Shareholder Value Creation. McKinsey Quarterly. 156-168

Burchell, G., Clubb, C., Hopwood, A., Hughes, J. and Nahapiet, J. 1980. The Roles of Accounting in Organizations and Society. Accounting, Organizations and Society. 5:5-27

Colignon, R. and Covaleski. M. 1988. An Examination of Managerial Accounting Practices as a Process of Mutual Adjustment, Accounting, Organizations and Society. 13:559-579

Earl, M.J. and Hopwood, A.G. 1980. From Management Information to Information Management. The Information Systems Environment. North Holland, 3-13

Ezzamel, M. and Bourn, M. 1990. The Roles of Accounting Information Systems in an Organization Experiencing Financial Crisis. Accounting, Organizations and Society. 15:399-424

Ghandi, N.M.. 1976. The Emergence of Postindustrial Society and the Future of the Accounting Function. The International Journal of Accounting. 11:33-49

Goh, Y. and Pritula M. 1996. The New Value Creators in Healthcare. McKinsey Quarterly. 193-199

Golembiewski, R.T. Accountancy as a Function of Organizational Theory. The Accounting Review. 333-342

Gordon, L.A., Larcker, D.F. and Tuggle, F.D. 1978. Strategic Decision Processes and the Design of Accounting Information Systems: Conceptual Linkages. Accounting, Organizations and Society. 3:203-213

Harker, P.T. and L.W. Hunter. 1995. Engineering Products for Customer Value. Bank Management. 71: 52-58

Holcomb, M.C. 1994. Customer Service Measurement: A Methodology for Increasing Customer Value through Utilzation of the Taguchi Method. Journal of Business Logistics. 15: 29-53

Hopwood, A.G. 1990. Accounting and Organizational Change, Accounting Auditing and Accountability, 3:7-17

----------------------1983. On Trying to Study Accounting in the Contexts in Which it Operates. Accounting, Organizations and Society. 8:287-305

Jancsurak, J. Wanted: Value Creation. Appliance Manufacturer. 46:57-59

Kaplan, R.S. 1984. The Evolution of Management Accounting. The Accounting Review. 390-418

Langley, C.H. and Holcomb, M.C.. Creating Logistics Customer Value. Journal of Business Logistics. 13:1-29

Preston, A. 1986. Interactions and Arrangements in the Process of Informing. Accounting, Organizations and Society. 11:521-540

Raun, D.L. 1961. Accounting for Decisions. The Accounting Review. 460-471

Rappaport, A. 1998. Calculating the Value Creation Potential of a Deal. Mergers & Acquisition. 33:33-45

Roberts, J. 1990. Strategy and Accounting in a U.K. Conglomerate. Accounting, Organizations and Society. 15:107-126

Samuelson, L.A. 1986. Discrepancies Between the Roles of Budgeting. Accounting, Organizations and Society. 11:35-45

Scott, W.R. 1981. Developments in Organizational Theory 1960-1980. *American Behavioral Scientist.* 407-422

Sheily, J.S. 1996. Is Value Management the Answer? Chief Executive. 119:54-58

Simons, R. 1990. The Role of Management Control Systems in Creating Competitive Advantage: New Perspective. Accounting, Organizations and Society. 15:127-148

------------- 1987. Accounting Control Systems and Business Strategy: An Empirical Analysis. Accounting, Organizations and Society. 12:357-374

Swanson, E.B. 1978. The Two Faces of Organizational Information Accounting, Organizations and Society. 3:237-246

Swieringa R.J. and K.E. Wieck . Management Accounting and Action. Accounting, Organizations and Society. 12:293-308

Vancil, R.F.. 1979. Decentralization: Managerial Ambiguity by Design. Homewood: Dow Jones-Irwin

ABOUT THE AUTHORS

Dr. Mohammad Adam Bakar graduated with a Bachelor of Accounting (Hon) degree from the Universiti Kebangsaan Malaysia in 1981. He joined the Faculty of Business Management, UKM in the same year and has served the university since. He received his postgraduate education at the University of Aston, UK (MSc in Operational Research and Systems Analysis: 1981-1982) and the prestigious Manchester Business School, UK (PhD: 1987-1991).

Dr. Adam is now an Associate Professor in the Accounting Department, Faculty of Business Management. He specializes in accounting and finance-related management and organizational-type research and is familiar with both quantitative and qualitative methodologies. He teaches research-related courses such as research methodology, epistemology, research in accounting/business, and management and organizational theories for post-graduate students. In research, he is involved both in carrying out application and academic research and in the supervision of doctoral and masters theses and work projects for final year students. Dr. Adam is also involved in consulting work for public and private sector organizations — the latest being Perbadanan Kemajuan Negeri Perak, BESTA Distributors (M) Sdn. Bhd. and Percetakan Nasional Malaysia Berhad.

Dr. Adam has just completed his term as the Director of the Development Center, UKM. He was also the Treasurer of Kelab Reakreasi UKM (1992-1997), a member of the Management Accounting Practice Committee of the Malaysian Institute of Accountants and sits on the MIA Research Board. Previously, Dr. Adam was the coordinator of the Accounting Matriculation, the MBA for Executive programs, and the Head of the Accounting Department.

Puan Ainun Haji Abdul Majid graduated with a Master of Accounting from the University of Manchester in 1990 and Bachelor of Accounting (Hon) from the Universiti Kebangsaan Malaysia (UKM) in 1987. She joined the Faculty of Business Management, UKM in 1987 as a tutor and was subsequently promoted to lecturer in 1991.

Puan Ainun was also a coordinator for Accounting Matriculation Program of UKM from 1995 to 1997. She currently teaches at both the Masters and Bachelor Degree level and is also a supervisor at the Masters level. Her research projects include budgeting for higher learning institutions, management accounting systems in a hospital, cost analysis at UKM, and a transfer pricing system in a private organization.

Puan Ainun is a committee member of the Malaysian Examination Board, Malaysian Accounting Academician Society, Case Writing Association Malaysia, Research and Education Services, International Management Accounting Conference 1995, UKM-USK International Conference. She is Treasurer for the International Education Management Convention 1996 and is the Chairperson for the Plenary, International Management Accounting Conference 1998.

Management Accounting as an Instrument for Influencing Behavior and Increasing Knowledge and Innovation

María Begoña Prieto Moreno, Ph.D., *Professor, Economics Department, University of Burgos, Spain*

ABSTRACT

This article aims to illustrate the importance of management accounting information systems as mechanisms for increasing knowledge, which is a decisive factor if firms today are to increase wealth.

Accounting information systems used by management, as instruments for measuring expected behavior, as well as for measuring their results and regulating incentives, play a basic role in learning and the capacity for innovation.

Furthermore, the article includes specific cases taken from the business world which show evidence of the link between theory and practice.

1. INTRODUCTION

The general idea underlying this paper is based on the consideration of Management Accounting as an essential instrument for influencing behavior and increasing knowledge and innovation, determining factors in the creation of wealth in firms today.

The appraisal that human knowledge is imperfect and the subsequent need for processes that ease its constant acquisition and transmission, was foreseen by Hayek (1945) in his classic article on the decentralized nature of knowledge in society.

Behavioral aspects of conduct, which accounting systems serve, confer upon their utility a previously unknown potential — an explanation of why companies choose a specific accounting procedure at specific moments.

Information systems are not neutral with respect to the behavior of the persons who use them. And as people do not react passively to information, their design is a decisive factor in the attainment of goals.

The choice of an adequate design for the accounting system — an economic understanding of the firm, based explicitly on the economic problem of the optimum assignation of scarce resources — can contribute decisively to an improvement in the assignation of these resources.

It seems reasonable to assume that the choice of internal accounting procedures could affect the “game” of renegotiation, which occurs when an unforeseen contingency arises. Thus, the influence on the renegotiation may depend on the knowledge that the two parts possess, received through information, or more precisely, from the design, distribution, and application that have been made using the information. The knowledge of the firm and the right decisions are going to depend largely on the initial choice of procedure for the internal accounting information system.

2. THE ROLE PLAYED BY MANAGEMENT ACCOUNTING IN FIRMS TODAY, AS AN INSTRUMENT FOR CREATING VALUE

2.1. Its Role as a Mechanism for Influencing Behavior

Management accounting, by making it easier to envisage processes and behavior, serves as an informative base for evaluation and control of global and individual performance. It plays a fundamental role in motivating members of the firm, encouraging specific forms of conduct and penalizing others. It permits the creation of a process of induction of behavior, the goal of which is to motivate the individual towards collaboration in favor of the firm, in which he develops his initiative and responsibility and from which he receives the corresponding rewards. In this way, management accounting limits opportunist behavior, thus avoiding dysfunctional decisions.

In fact, management accounting, as an instrument which signals expected behavior and is useful in measuring its results and regulating incentives, plays a vital role in learning and the capacity for innovation. Its usefulness as a mechanism for control and guiding in the learning process comes into its own in the specification of the system for measuring and evaluating performance, which is none other than the specification of the objective function of the firm.

Firms today move in highly competitive markets, where technological innovation is constant and where the key factors which determine success are grouped around goals such as: manufacture of high quality products and services at low cost, in the shortest time possible, optimum service to clients and attention to the staff of the firm itself.

These premises have unfailingly led to the introduction of organizational innovation, which has led to the introduction of internal accounting information systems as mechanisms of basic control and motivation, centered on measuring and monitoring these elements and focussed on supplying relevant information to the different levels of decision-making members making up the firm.

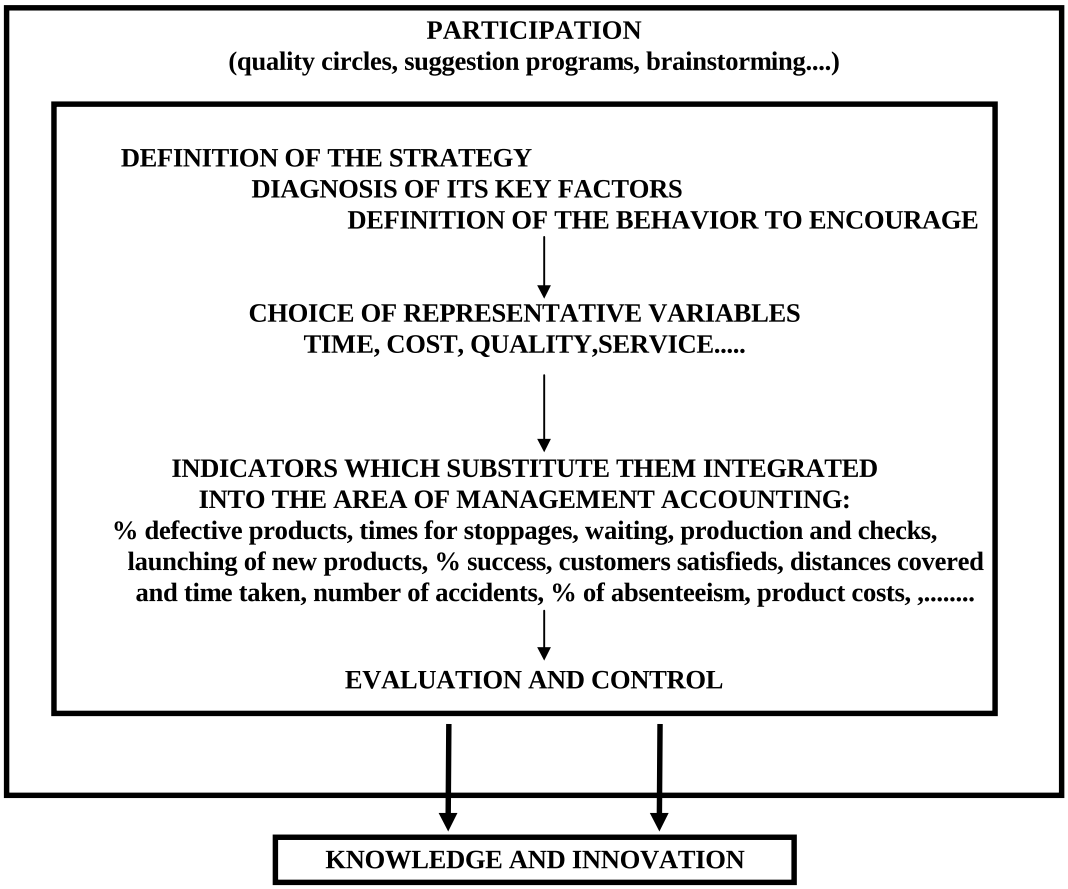
Therefore, it is the reports drawn up by management accounting that are used to evaluate the advantages and inconveniences of alternative courses of action for the firm, guiding the behavior of its members, and encouraging actions that contribute to increasing knowledge and innovation — the principal boosts to the value of the firm — subsequently permitting successful exploitation of opportunities that present themselves in the current changing environment.

Consequently, internal accounting processes are designed in such a way that they serve both for planning and control of routine operations, as well as for the adoption of specific decisions and for formulation of the general policies of the firm. In fact, they attempt to bind planning and control of routine operations with the formulation of strategic goals, which in one way or another must be incorporated into these processes.

Management accounting once again emphasizes certain questions, which have been neglected in the last few decades, but for which it has always had available mechanisms for measuring.

We are referring to the introduction of variables, related to the strategic goals of the organization and to the behavior sought if these goals are to be reached. As these are normally generic goals (minimum cost, maximum quality, minimum time, optimum service, etc.), quantifiable indicators are sought to measure and to substitute for them and at the same time set goals and courses of action for them. These variables therefore represent the manifestation of the firm’s strategy. Since they are linked to the process of evaluation of the employees, they can be measured and corrected.

Among the indicators that the aforementioned variables refer to, special attention is paid to non-monetary indicators, which together with monetary ones, are present both in operative and managerial reports as well as in those drawn up for the strategic planning of the firm. They are concerned with measuring the performance of a specific activity (for example, indicators of quality and elapsed times) or of specific behavior (for example, productivity, safety, and absenteeism).

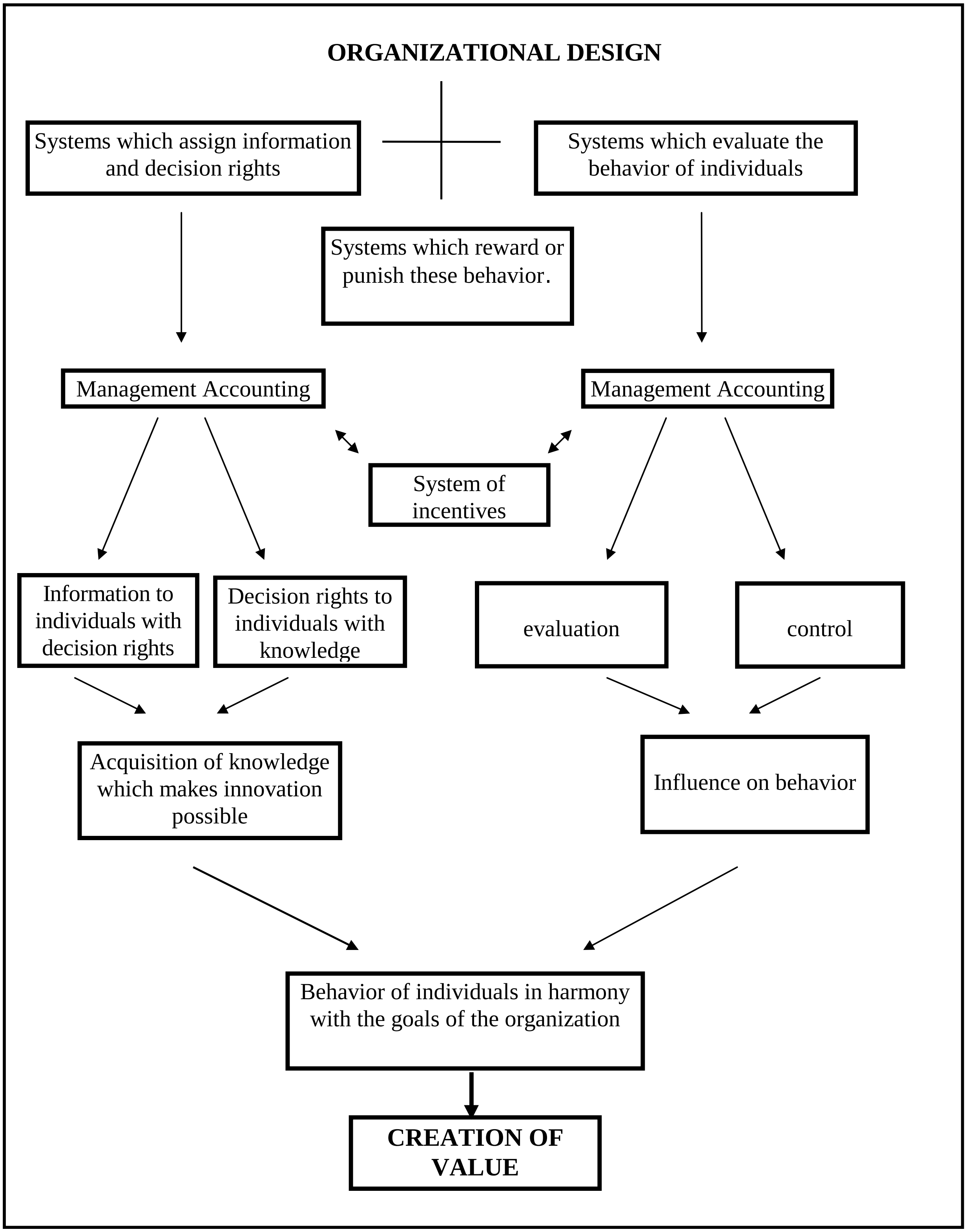


2.2. Its Role as a Mechanism for Increasing Knowledge and Innovation

In agreement with the ideas set out, management accounting systems become important strategies when transferring knowledge to individuals with adequate decision rights, or the said rights to individuals with knowledge.

The performance of an organization depends on the location of decision rights near to the knowledge relevant to decision making. When a piece of knowledge is valuable for decision making, then it will be beneficial to situate the decision where this knowledge is located.

Now, since all members of the firm have private interests, the simple delegation of decision rights signaling the objective function that each member must maximize, is not enough to reach this objective. A system of control is necessary that binds individual interests more closely with those of the organization. Management accounting, as a fundamental part of the control system, specifies the system of measurement and evaluation of the performance of each unit of the firm and of each deciding agent. Together with this, a system of reward or punishment will come into play, binding reward with performance, thus completing the control system. Bearing these considerations in mind, from a viewpoint of the global organizational design, the role assumed by management accounting can be summarized as:



Here we should point out, however, that the role assumed by management accounting in firms today is clearly reinforced by informal control mechanisms that foment participation in the exercise of the decision process, or at least in some of its phases (initiation, ratification, introduction, and monitoring). The search for conditions that favor learning and thus improve efficiency is carried out for this reason. Training and participation techniques are integrated that feed the process of initiation and encouragement of actions, which finally are translated into greater knowledge, making innovation possible.

Only in this way can one move from learning based on making routine and developing skills in the use of resources, to learning based on the development of strategic capacities — those capacities that are difficult to imitate or substitute for, and on which the firm can base its competitive advantages.

Participation is fundamental if one is to reach a congruence between the individual’s and the organization’s goals, as well as to complement the formal control systems. Participation favors assignation and assumption of decision rights as well as the introduction of means permitting evaluation of one’s own performance, improving execution, and evaluation of one’s work.

This system requires a precise mechanism for global control that allows one to channel, coordinate, and evaluate efforts made. Information systems that depend on management accounting intervene a great deal at this moment. It is these systems that show superiors the efforts of their subordinates. At the same time, if they are correctly distributed and communicated, they transmit to the employees what is essential in the development of the firm, and provide the confirmation of their own efforts. They allow for evaluation of progress and avoid personal conflict.

The introduction of channels of transmission and discussion supplied by management accounting, such as work groups, brainstorming, quality circles, and suggestion programs etc., foment participation and permit management accounting to reach its full potential as a guide for learning, motivating the acquisition of knowledge and encouraging innovation — the principal boosts for the creation of value in the firm.

3. SOME EXPERIENCES

Once the theoretical arguments on the role of management accounting as an instrument capable of generating value within the firm have been outlined, we go on to give brief details of some case studies that verify in the real world of business the considerations put forward.

3.1. Analysis of an Explanatory Case

During the last ten years we have been able to observe the changes that have taken place in management accounting in a large multinational company in the automobile industry situated in Burgos (Spain). The evolution of the company in the period 1988–93 was documented in the article “Changes in internal accounting information systems: Analysis of a case”. In it, through ideas similar to those set out here, we attempted to achieve convincing explanations for these changes and for the role played by management accounting in this company, whose strategic mission consisted of “becoming the world leader” and whose goals were expressed in the following way: “produce and supply top quality products, on time, and at competitive prices”.

Specifically, the introduction of new management accounting procedures was structured on the company developing a wide range of generic principals and norms. The basis of these principals — approximation to clients / suppliers; knowing the causes of problems and checking them at once in situ; formation of work teams, whose objectives were to seek cooperation and encourage knowledge and innovation; etc. — formed the basis on which the company wanted to lay the foundations of individual’s behavior, supported and strengthened by putting into practice basic norms, which were reflected in procedures and measurement systems that permitted control and improvement. In this way, principles, norms, and accounting procedures supported and complemented each other in the management process in order to achieve the general goals of the organization.

Thus, the design of management accounting was linked with that of the expression of the norms on which the company based its competitiveness: cooperation, safety, quality, productivity, volume of production, and reduction of costs. Management accounting incorporated in its analysis a series of monetary and nonmonetary indicators that identified and measured the efforts made by all the agents of the company to achieve the goals enumerated in these norms. It equally permitted their comparison with the values of the previous period, with the standard set by the company, and with other factories in the group.

Some of the indicators we observed, focussed on attaining the norms set by the company, referred to questions such as:

Safety	**Cooperation**	**Quality**	**Time**	**Personnel**	**Productivity and Productive Capacity**
• No. of days lost through accidents • No. of consecutive days not lost • Absenteeism through accidents at work	• No. of monthly meetings of quality circles • Level of partici-pation • Reports examined • No. of solutions proposed for specific problems • No. of sug-gestions directed at improvements	• % of defective final products • % of useless final products • % of waste of raw materials	• Process time • Time machines are stopped • Time for changes	• Evolution of the number of workers and their work situation • Flexibility and distribution of staff • Partici-pation in training courses	• Direct work force / unit of production • Total work force / unit of production • % occupation of productive capacity • Monthly production in units and by weight

The use of these indicators, together with the application of standard costs focussed on the activities in the process, and of exhaustively reviewed monthly budgets, permitted improvements in the process of assigning resources, and finally increased the resulting value of cooperative effort.

In summary we concluded that:

- The changes observed in the internal accounting information systems conformed to a large extent to the profound structural changes that had taken place in the last few years, to technological information, and the need to adapt to an increasingly competitive environment;
- Greater environmental uncertainty and complexity required new forms of organization of economic activity, new information systems, planning, control, and therefore, new accounting procedures;
- The design of organizational routines and of internal accounting information systems occurred simultaneously and in close connection. The latter proved to be a variable endogenous to the general design of the organization and a crucial factor in the acquisition of the organization's strategic goals;
- Internal accounting information systems formed part of the efficient contractual technology of the firm as mechanisms for coordination, motivation, and control of all those participating in the organization, thus contributing to an improvement in processes of assignation of resources, augmenting the global efficiency of the organization, and increasing the resulting value of the cooperative effort;
- Accounting procedures generated positive economic effects, in that they served to coordinate common knowledge disseminated in the organization and to encourage negotiation and cooperative agreement, thus reducing conflict of interests and opportunist behavior in the heart of the organization, by means of adequate incentives;
- Changes observed in internal accounting information systems seemed to respond, in accordance with what has been said before, to the need to link planning and control of routine operations with strategic goals, and
- New procedures served, above all, as transfer guides for all that was essential to the development of the firm, but also as mechanisms to visualize and control processes, activities, and behavior, always with the aim of reducing asymmetric information problems and thus reducing contractual and production costs, which different ways of organizing economic activity involve.

3.2. Analysis of Exploratory Cases

Looking from an exploratory viewpoint rather than from an explanatory one, we summarize and analyze some cases[1] which have already appeared in other publications. All these case were firms that had introduced activity based costing (ABC) as a model for cost management (Prieto, 1997, pp.121-177).

After analyzing these cases and discussing the theory of the accounting model established in them, we generalize on some of the partial conclusions obtained from these studies with regard to results obtained after introducing the new cost models. The conclusions are summarized as follows:

- That the new model provides greater knowledge of those processes that create value

[1] Alcatel, Grupo Aracil, Airline Industry, Chemical One, Siemens Electric Motor Works, Jhon Deere Components Works, Kanthal, Hewlett Packard, Siemens, Tektronix, Chrysler, Perfumes Puig ….

- That it permitted all the company staff to reflect on which variables were determining that assigned goals were achieved
- That its introduction was linked to a greater use of techniques of participation in order to feed the process of initiation and incitation towards actions that lead to acquisition of greater knowledge, which the results reached had made possible
- That it highlighted malfunctions that made internal reorganization possible
- That it implied a large increase in nonfinancial indicators
- That it had supposed increases in productivity and a reduction in the duration of cycles

The cases selected confirmed the general hypothesis that integral management accounting models, because of their capacity to combine financial and nonfinancial indicators, are a useful mechanism for easing transfer of knowledge (specific), influencing behavior, and encouraging innovation, which are determining factors in the creation of wealth.

Schematically, we can represent the model by the illustration on the following page.

3.3. Analysis of an Experimental Case

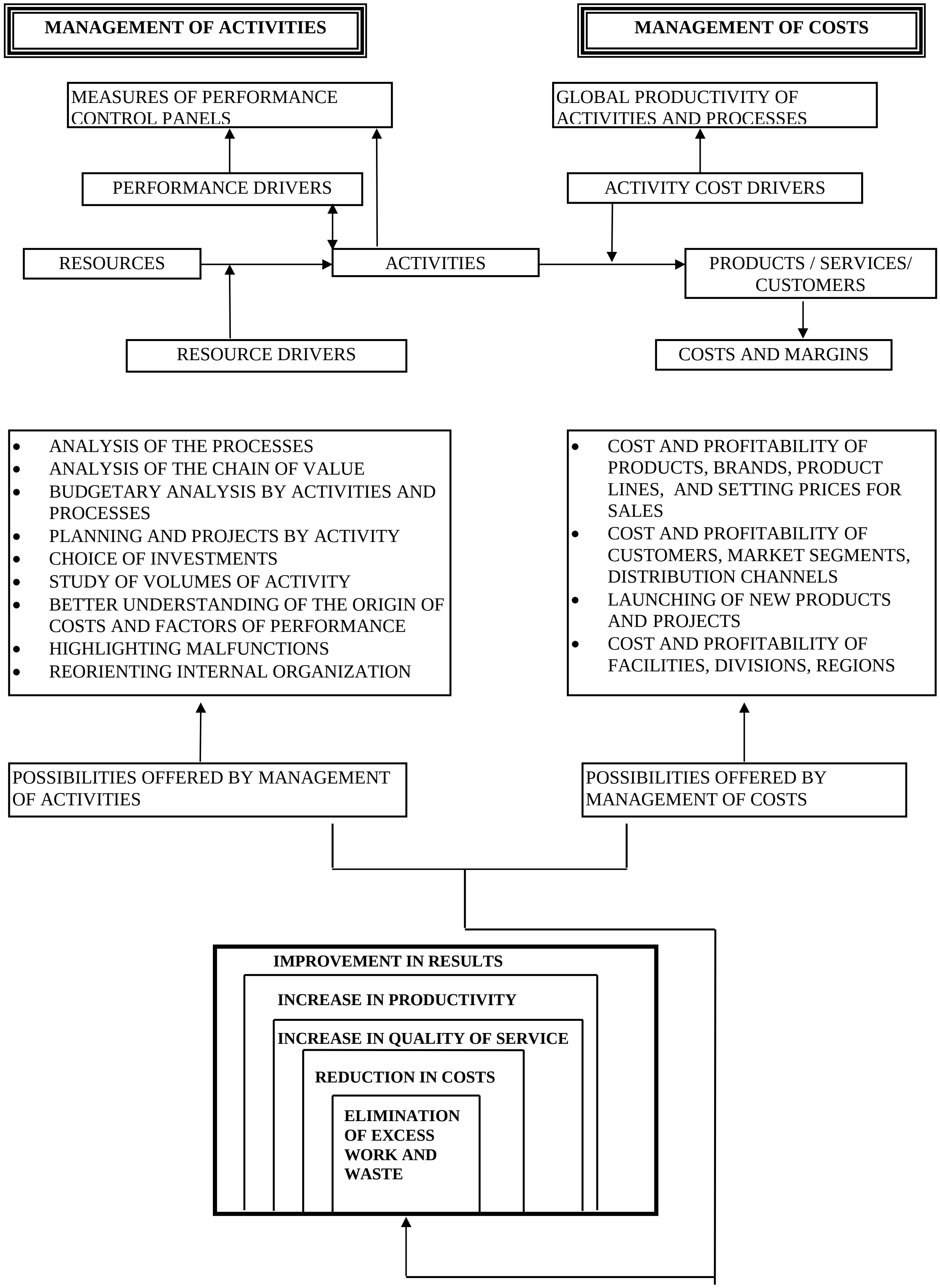
Recently, in the same line of investigation, we have dealt with the design and introduction, with computer technology, of a model of management accounting in an industrial firm[2]. The objective: to calculate the cost of different activities performed by the firm as well as to control and improve their evaluated performance. Equally, it allows one to obtain, in real time, the costs of more than forty references which can be produced.

The firm belongs to the car industry and manufactures parts for the large multinationals in the sector. Before the firm requested our study, the only control was that of storage of materials. The rest of the costs (almost 50 percent) were attributed to products through standard cost drivers, established in a fairly random way. The degree of control over these was virtually nil. This was the gap we managed to fill.

The introduction of time and deadline indicators for each of these activities, together with the incipient introduction of certain indicators of quality meant bringing the workers nearer to the design of the system. Up to this time workers had had no part in this and there existed underlying problems of motivation. This was one of the basic reasons that lead the management to introduce new procedures.

Once again, the experience of this case brings to light evidence of the role of internal accounting information systems as mechanisms for motivation and control capable of integrating knowledge dispersed within the firm.

[2] This study was requested by the firm itself, under Section 11 of the University Reform Law.



4. CONCLUSIONS

Summarizing the role assigned to management accounting, according to the theory proposed, as a strategic element capable of influencing behavior and increasing knowledge and innovation, thus creating value in the firm, we can argue the following points:

A) The information provided by management accounting allows a reduction in the asymmetry of information and uncertainty by facilitating a visualization of processes and behavior. By reducing its asymmetric character, it limits ex-ante strategic behavior, which is manifested in the tendency of the parties to reveal false information, thus permitting better use of resources, which in turn leads to good cooperation. This information will be decisive if individuals are to achieve better knowledge of the operations they perform and to perfect the decision-making process, finally understanding how the share of surpluses or losses may affect them.

B) Internal accounting information — through inclusion of prospectively and retrospectively quantified indicators, of those variables of the system of economic circulation, both quantitative and qualitative, the firm wishes to encourage in order to achieve proposed goals — signals the level of those variables to be reached, and serves as a transmission guide of everything that is essential for the development of the firm and induces desired behavior. Thus the need for the said indicators to be in close connection with the strategic goals and for there to be an adequate network to communicate the information.

C) It limits ex post opportunist behavior, thus avoiding dysfunctional decisions, by using procedures which permit information to be obtained about effort and actions of the agent. At the same time, it guarantees the contractual compensation of the principal. That is to say, it guarantees fulfillment of the agreement and acts as a system which regulates incentives — monetary and non-monetary. It therefore acts as a mechanism of supervision and guarantee of the behavior of the two parties to the contract.

D) It makes it possible to introduce elements related to the behavior of agents not incorporated in the contracts, but which could affect them or affect other means of discretional compensation. It therefore also acts as a mechanism of influence and motivation.

E) It is useful to separate decision management from decision control. This favors decentralization of decision rights, encouraging their location together with the knowledge relevant to decision making, thus improving the performance of the organization.

The previous effects, coordinated with those originating from systems of incentives and assignation of decision rights, may decisively influence acquisition, transmission and application of knowledge.

When introducing these systems, psycho-social aspects related with individual styles, interpersonal relations and intrinsic needs must be considered.

The usefulness of management accounting as an instrument for global control of processes and of behavior is clearly reinforced by informal control mechanisms which foment participation in the exercise of decision rights or, at least, in some of their phases — initiation, ratification, introduction, and monitoring. The search for conditions to favor learning and, hence, improve efficiency is made to this end. Techniques of training and participation are integrated. They feed the process of initiation and incitation to action and then become translated into greater knowledge, making innovation possible and favoring initiation in the decision process.

REFERENCES

AZOFRA, V. Y PRIETO, M.B. (1996): *La Teoría Positiva de la Contabilidad en los Sistemas Internos de Información Contable*. Instituto de Contabilidad y Auditoría de Cuentas. Ministerio de Economía y Hacienda. Madrid.

BAIMAN, S. (1990): "Agency Research in Managerial Accounting: A Second Look". *Accounting, Organizations and Society*, vol 15, nº 4; pp. 341-372.

BRICKLEY, J.; SMITH, C. Y ZIMMERMAN, J.L. (1996): *Organizational Architecture: A Managerial Economics Approach.* Ed. Richard D. Irwin.

CARMONA MORENO, S. (1989): "La contabilidad como instrumento de legitimación". *Técnica Contable.* Tomo XLI, pp. 350-358.

HAYEK, F.A. (1945): "The Use of Knowledge in society". *The american Economic Review,* vol. 35, nº4; pp. 519-530.

JENSEN, M.C.; MECKLING, W.H. (1996): "Conocimientos específicos y generales y estructura organizativa". *Harvard Deusto Business Review,* Enero/Febrero, Nº 70.

KAPLAN, R.S.; NORTON, D.P. (1996): "Using the balanced scorecard as a strategic management system". *Harvard Business Review*. Vol. 74, Nº 1. January-February.

LEBAS, M. (1991): "Comptabilité analytique basée sur les activités, analyse et gestion des activités". *Revue Francaise de Comptabilité*. Nº 226. Septembre pp.47-63.

LEBAS, M. (1992): "L'ABM ou le Management Basé sur les Activités". *Revue Française de Comptabilité* 237, (Septembre); pp. 61-66.

PRIETO, M.B. (1993): *"Cambios en los Sistemas Internos de Información Contable. Análisis de un caso"*. Microficha. Servicio Publicaciones Universidad de Valladolid.

PRIETO, M.B.(1997):Modelos Contables de Gestión para el actual contexto: Un recorrido desde la construcción teórica al contraste empírico. *Estudios Financieros*, nº175, pp.121-176

ZIMMERMAN, J.L. (1995): "*Accounting for decision Making and Control*". Ed.Richard D. Irwin.

ABOUT THE AUTHOR

Begoña Prieto Moreno is Doctor in Economic and Business Sciences in the University of Valladolid (Spain). She is a professor in the Economics Department of the University of Burgos in the subject of Management Accounting. She is a teacher of the doctorate program “New Tendencies in Management and Business Administration” in the Department of Economics and Business Administration of the Universities of Valladolid and Salamanca. She is a teacher and the Coordinator of the doctorate program “New tendencies in Business Management” in the Department of Economics of the University of Burgos.

Begoña is also a member of the central committee of the Organisation of Educational Economists (OEE) of the General Council of the Spanish College of Economists, and a member of the official Register of Spanish Auditors (R.O.A.C). She is a member of several Associations related with Accounting and Business administration: Asociación Española de Contabilidad y Administra-ción de Empresas (A.E.C.A.), Asociación de Contabilidad Directiva (A.C.O.D.I.), Asociación Española de Profesores Universitarios de Contabili-dad (A.S.E.P.U.C.).

Begoña is working on the following lines of investigation: Empirical Verification of new tendencies in Management Accounting, explanation of changes in organizational design, the role of management accounting in firms today, and design and introduction of information systems in management accounting.

Shareholder Value Analysis - Its Use in Measuring Value Creation *

Roger Mills, *Professor of Accounting and Finance at Henley Management College, and Consultant Professor to PricewaterhouseCoopers on Shareholder Value.*

ABSTRACT

This article is extracted from the Faculty of Finance and Management of the ICAEW's publication "Shareholder Value Analysis".

Companies are complementing traditional profit and cash-based performance measures with value-based measures. This article examines some of the reasons behind this and highlights the problems associated with using profit-related information to measure business performance.

The article focuses on shareholder value analysis (SVA) which is just one of the methods of measuring a company's ability to create value. SVA is an approach which focuses upon both the short term and the long term, thereby overcoming many of the concerns of more traditional measures. It can be applied to an organization as a whole to gain a corporate perspective of the value-creating potential of the business portfolio. However, it also offers great potential benefit when applied at business unit level to evaluate the value-creating potential of the parts of the overall organization which together make up the whole.

The ideas behind value-based management (VBM), and its use in business planning are explored, and the concept of value drivers are explained.

The article concludes that focusing on value, whatever the precise method adopted, can only help business to ask the right questions about whether the business can satisfy the many demands of its many stakeholders.

INTRODUCTION

The business world of today is turbulent and organizations of all types have to make choices about how to manage scarce resources in a climate so often characterized by considerable and rapid change. In recent times, the need to link strategy and finance has become all too clear, and it has been recognized that in addition to the comparison of possible courses of strategic action in conceptual terms, there is always the need to convey their potential outcome in meaningful financial terms[1]. The key word here is meaningful, and there have been growing concerns with the traditional focus upon short-term profit and increasing awareness of the need to manage for longer-term value.

Shareholder value analysis is an approach which focuses upon both the short term and the long term, thereby overcoming many of these concerns. It can be applied to an organization as a whole to gain a corporate perspective of the value creating potential of the business portfolio. However, it also offers great potential benefit when applied at business unit level to evaluate the value-creating potential of the

* **This article was submitted by the Institute of Chartered Accountants in England and Wales, UK.**

parts of the overall organization which together make up the whole. This involves viewing the overall organization as a portfolio of business units, each of which has responsibility for the generation of business value. When seen this way, shareholder value is primarily the aggregation of the value generated by each business unit.

Whilst a number of ‘new’ approaches focusing upon shareholder value have been developed, the discounted cash flow principles which underpin shareholder value calculation in most cases are not new, and are well established in project finance and investment appraisal procedures for evaluating major projects, such as acquisitions[2]. What is different about its application in this case is the focus of attention upon valuing the whole corporation and the use of such a valuation approach to facilitate the management of a business. Whichever method is chosen, the key benefit is not so much the precise number that comes out at the end, but what is learned from applying the process, particularly in terms of what drives value in the business.

The notion of shareholder value has been attracting considerable interest[3]. There are well-publicized examples of larger companies that are pursuing the development of a shareholder value approach. Whatever the size of the business, however, moving the focus away from simply looking at short-term profits to a longer-term view of value creation will help the business to stay ahead in this increasingly competitive business world.

CONCERNS WITH TRADITIONAL PERFORMANCE MEASURES

Although a growing number of companies are realizing that profitability should not be the only measure for the business, there are still many companies for which profitability is by far the most common objective and measure of performance [4,5].

There are now a number of pressures on companies which demand that, instead of focusing on achieving higher profit levels, they should be looking at the long-term value of the business. The pressures driving companies towards this view include:

- Poor correlation between shareholder return and profits.
- Investors looking at long-term value.
- Reported profits are not comparable between companies.

Poor correlation between shareholder return and profits

Total shareholder return (TSR) is usually calculated as the return that shareholders receive in both dividends and capital appreciation of their shares.

Studies have found that there is little if any statistical relationship between total shareholder return and earnings per share growth and virtually no relationship at all with return on equity[6], yet many companies are still using profit as their only measure of performance. Even where companies state that their objective is to maximize shareholder value, often directors’ bonuses are still based on short-term profitability or earnings per share targets.

A considerable amount of empirical research has demonstrated that there is a significant relationship between cash flow and share prices[7]. The results of recent research at Henley Management College[8] demonstrate this. Using a sample of 98 firms listed on the London Stock Exchange over the period 1979 to 1992, strong evidence was found that cash flow variables have incremental information content beyond that contained in accrual earnings, although both accrual earnings and cash flows were found to be important determinants of stock returns for UK companies.

Investors looking at long-term value

Investors are increasingly looking at long-term value. When valuing a company's shares, the stock market places a value on the company's future potential, not just its current profit levels.

Often company announcements about capital expenditure, research and development, and new investments are treated as positive and not negative factors by the market, even though these may have a detrimental effect on short-term profits.

Evidence that stock markets look at long-term cash flows, rather than short-term profits is demonstrated by the floatation of Orange (a UK mobile phone provider)—which was a loss-making company at the time of floatation. The new biotechnology companies clearly have a value despite the fact that many currently have no products.

Many stock market analysts are now using some method of SVA that focuses on the relationship between economic returns and return on capital to value companies.

Reported profits are not comparable between companies

Traditional short-term measures of performance like profit or earnings, unlike cash flow, may often be subject to accounting distortions making it difficult to compare between companies. These distortions can be created by:

- **Interpretation of accounting rules** Simple decisions, such as the length of depreciation on an asset or the method of valuing stock can change reported profits significantly.

- **Different countries' reporting requirements** Reported profits can differ significantly between countries. One of the most significant differences is the treatment of goodwill, where current UK practice is to write-off goodwill immediately against reserves in the balance sheet, rather than to amortize it over a number of future years' profits.

VALUE-BASED MANAGEMENT

The principles of shareholder value can be used very much as a tool to facilitate corporate planning with its application being reserved for use at the center for purposes such as portfolio planning. It can also be used as a method and process for managing the business as part of what is typically referred to as value-based management (VBM). If applied as a core part of a VBM program, there are some very real implementation issues that have to be faced. Amongst these VBM implementation issues is performance measurement, and increasingly linked with it is what has been termed 'scorecarding', via an approach known as the 'balanced scorecard'. The term the 'balanced scorecard' is associated with the development and use of a set of measures expected to give managers a broad view of the business in terms of all key measures, financial and nonfinancial, that drive performance[9 10].

Some advocates of shareholder value argue that if the business manages to create value, then, ultimately, the interests of all the other stakeholders of the business will be maximized. The argument centers on the fact that if the business is successful, it will generate value for employees, suppliers, and customers. The danger of focusing too much on this approach is that financial value becomes the only goal, and sight of the key value drivers of the business can be lost. For example, certain activities such as a customer satisfaction program could actually decrease value in the short term through the impact of the initial costs, but increase longer-term value by higher sales and margins. The balanced scorecard aims to measure these performance indicators. The key is to link them to value, but not to focus on short-term value alone.

SHAREHOLDER VALUE ANALYSIS (SVA)

Shareholder value analysis (SVA) is one of the many techniques developed for measuring shareholder value.

SVA uses the present value (PV) approach commonly used for purposes of investment appraisal [11]. Using it, the value of a corporation can be estimated by developing a future cash flow forecast for a finite time horizon and the period beyond which is then converted into a present value by discounting at the cost of capital.

The shareholder value of the business is then worked out by taking away the market value of any debt and obligations and adding any value not included in the PV calculation (e.g., from outside investments). Dividing this result by the number of ordinary shares in issue provides an estimate of the shareholder value per share.

Value drivers

Potential future benefits are typically translated into cash flow forecasts using the key business factors that drive value creation. These are often known as ‘value drivers’. In generic terms these can be expressed as follows:

- Sales growth
- Operating profit margin
- Cash tax rate
- Working capital investment to support future growth — known as incremental working capital investment (IWCI)
- Fixed asset investment to support current levels of activity—known as replacement fixed capital investment (RFCI) — and to support future growth —known as incremental fixed capital investment (IFCI)
- Weighted average cost of capital (WACC)
- Competitive advantage period

Free cash flow

Cash flows are determined with reference to the first five value drivers. The resulting cash flows are known as ‘free cash flows’ and represent the cash freely available to the providers of debt and equity (and/or other long-term sources of funds). Funding requirements are not deducted in arriving at these free cash flows, but are taken into consideration via their inclusion in the calculation of the weighted average cost of capital (WACC) used as the discount rate. These free cash flows should be estimated over a competitive advantage period beyond which the company is assumed only to earn its cost of capital and then they together with any residual (terminal) value are discounted to a present value using WACC.

The uncertainties of the future should encourage cash flow forecasts to be prepared and the application of scenario analysis. Using such analysis, the effect on overall value of changes in the value drivers can be examined. For example, the application of this approach in the analysis of a major acquisition target in the chemicals sector established that the operating profit margin was extremely sensitive to change. In fact, relatively small improvements could be seen to contribute to substantial increases in value. The importance of the margin was understood by the management of the target, but its relative significance in terms of potential value creation was not. As a consequence of the takeover that occurred, the acquirer was able to improve margins and hence, value substantially.

Value driver analysis in practice

One of the key distinguishing features of most shareholder value approaches is the focus of attention upon using managerial judgements as expressed in the form of value drivers to generate value estimates. By understanding what it is that drives performance in terms of shareholder value, it is considered that management will be able to focus upon what really matters. However, not all value drivers will be equally important and by building a value model it is generally possible to identify those which have the greatest impact upon value.

Some value drivers can be broken down by activity and process. For example, the operating profit margin, which for any given year is the difference between revenues and costs, may be heavily influenced by competitive factors, which may or may not be controllable. However, the influence capable of being exerted by management in terms of activities and processes cannot be ignored. This being so, the costs could be looked at in terms of activities that influence them.

Value drivers need to be capable of being disaggregated to make them meaningful in managerial terms. This is because the key objective is to link value creation with managerial action. Only by looking at the value drivers in such terms can a meaningful SVA system be seriously contemplated. One way in which this can be achieved is by drawing upon the principles of the balanced scorecard which was outlined earlier.

ECONOMIC PROFIT AND OTHER APPROACHES

While SVA and a focus upon free cash flows represent one popular shareholder value approach, there are others that should be noted. Economic profit measures, as popularized by economic value added (EVA™), have attracted considerable attention in recent times. With these approaches the focus of attention is on the economic profit created per time period, such economic profit being generated if the return on economic capital exceeds the cost of capital. One important issue is ensuring that the true economic capital is reflected in the calculation, often requiring adjustments to numbers provided in published financial statements.

The economic profit approach is often extended to form a view about whether market value has been added. Quite simply, if all prospective economic profits are discounted at the cost of capital and aggregated, the result indicates whether long-term value to the shareholder will be created.

Economic profit is by no means the only other approach that is being adopted. Others that may be encountered are cash flow return on investment (CFROI) and approaches that focus upon valuing equity cash flows rather than free cash flows.

CONCLUSION

Many organizations are embarking upon the quest for value in the recognition that such an approach may help them face the challenge of managing in an increasingly turbulent and uncertain business environment. What is more, it may be appropriate to use more than one measure. The large US company, Monsanto, is a good example of this. It is applying CFROI to link corporate actions with market expectations. In addition, it has adopted the economic value added metric for managing its business units.

What is the real benefit of adopting the valuation metrics? All approaches can be seen as offering a means of asking the right questions about whether the business can satisfy the demands of its many stakeholders. As to which is best, the jury is still out. There is little doubt that there will be continued effort on the part of the proponents of all to demonstrate that their metric is best. It is considered that their advantage over the traditional alternatives is that they all force tough questions to be asked, which might otherwise be neglected.

REFERENCES

[1] Mills, R W *The Dynamics of Shareholder Value: The Principles and Practice of Strategic Value Analysis* Mars Business Associates ISBN 1 873186 07 X (1998) and *Finance, Strategy and Strategic Value Analysis: Linking two key business issues* Mars Business Associates, ISBN 1 873186 04 5, (1994).

[2] Mills, R W *The Use of Shareholder Value Analysis in acquisition and divestment decisions by large UK companies* Chartered Institute of Management Accountants, (1998).

[3] Myers, R *Metric Wars* CFO, October 1996, pp 41-50.

[4] Hayes, R H and Abernathy, W J “Managing our Way to Economic Decline”, *Harvard Business Review*, 58, July-August 1980, pp 67-77.

[5] Hamel, G and Prahalad, C K “Strategic Intent”, *Harvard Business Review*, 67, May June, 1989.

[6] Barron, M and Lawless J “Growth of No Account”, *Business Magazine*, September 1988. Henry, D and Smith, G, Letter to Financial Times, *Financial Times*, 27 June 1991.

[7] Bowen, R M, Burgstahler, D and Daley, L A “Evidence on the Relationships Between Earnings and Various Measures of Cash Flow” *The Accounting Review,* LXI (4), (1986) pp 713-725.

Gomola, M J and Ketz, J E “A Note on Cash Flow and Classification Patterns of Financial Ratios”, *The Accounting Review*, LVIII (1), 1983, pp 105-115.

Rayburn J, “The Association of Operating Cash Flow and Accruals with Security Returns” *Journal of Accounting Research* (1986) 24 *Supplement* pp 112-133.

Wilson, G P “The Relative Information Content of Accruals and Cash Flows: Combined Evidence at the Earnings Announcement and Annual Report Release Date” *Journal of Accounting Research* (1986) 24 *Supplement* pp 165-200

Wilson, G P “The Incremental Information Content of the Accrual and Funds Components of Earnings After Controlling for Earnings” *The Accounting Review* (1987) LXII(2), pp 293-322.

Bowen, R M, Burgstahler, D and Daley, L A “The Incremental Information Content of Accrual Versus Cash Flows” *The Accounting Review* (1987) LXII(4), pp 723-747

Bernard, V L and Stober, T L “The Nature and Amount of Information in Cash Flow and Accruals” *The Accounting Review* (1989) LXIV(4), pp 624-652.

Charitou, A G and Ketz, E “An Empirical Examination of Cash Flow Measures” (1991) *ABACUS 27* (1), pp 51-64.

Arnold, A J, Clubb, C D B, Manson, S and Wearing, R T “The Relationship between Earnings, Funds Flows and Cash Flows: Evidence for the UK” *Accounting and Business Research* (1991) Vol 22, No 85, pp 13-19.

[8] Madani, H H “An Empirical Examination of the Explanatory Power of Accrual Earnings Versus Cash Flows: UK Industrial Sector” PhD Thesis, Henley Management College/Brunel University (1996).

[9] Kaplan, R S and Norton, D P “The Balanced Scorecard - Measures That Drive Performance” *Harvard Business Review* (1992) January - February, pp 71-79.

[10] Myers, R *Metric Wars* CFO (1996) October, p 46.

[11] Rappaport, A *Creating Shareholder Value: The New Standard for Business Performance* The Free Press (1986).

ABOUT THE AUTHOR

Roger W Mills, Btech, MSc, PhD, FCMA, FCIS, FCT, is Professor of Accounting & Finance at Henley Management College. He also is a Consultant Professor to PricewaterhouseCoopers on Shareholder Value. His key research, teaching, and consulting areas are shareholder, strategic, and business valuation; financial aspects of strategy; corporate performance appraisal techniques; applied corporate finance. He is the author of books entitled: "The Dynamics of Shareholder Value", "Strategic Value Analysis" "Finance for the General Manager" and is co-author of an MBA text on accounting and finance. Roger has written numerous articles and contributes regularly to the Journal of General Management Manager Update. He has extensive international corporate advisory experience in the Asia Pacific Region, South America and Europe. He has also worked in Central and Southern Africa, Russia, Australia, New Zealand, and the USA.

Meeting the Challenge:
Management Accounting and Value Creation *

Richard Stewart, *Director of Shareholder Value Management,*
PricewaterhouseCoopers, USA

ABSTRACT

Managers create value by establishing and exploiting competitive advantage. Competitive advantage cannot be achieved by standing still — its achievement requires continual change and improvement.

It is a challenge for management accountants to remain relevant in a period where observers expect that the accounting function will shrink by more than half. The management accounting function must continue to evolve and help to build competitive advantage. This can be done by providing innovative solutions in the areas of strategic decisions, resource allocation, operations, and performance measurement.

These solutions will come from improving management decision quality by a more explicit shareholder value focus and refining the evaluation of other aspects such as risk and investment options. Performance improvement gains can be made by using reporting and remuneration structures to shape the form and culture of organizations in line with the sources of value.

Management accounting can also add value by streamlining its own organization and by being positioned as "knowledge managers" which will be increasingly required in integrated organizations.

The reward for responding to this challenge will be a central role for management accountants not only in the organizations of tomorrow but also in the Accounting Profession of the next millennium.

INTRODUCTION

How do you stay ahead in a changing world? Stay ahead of the changes, goes a common response.

The world of management accounting is changing. The customers of the function, managers, are asking more and more for less cost than ever before. In turn, those managers are having more asked of them.

One of the first questions asked of senior managers is: "how do you create value?" Failing to answer that question adequately is costly — jobs, incomes, and reputations are at stake[1]. Recent market fluctuations bring this question into even sharper focus. Management accountants will not be able satisfy their customers if they cannot help them answer this question.

This article explores what it means for managers to create value and how management accountants can assist using their functional expertise.

---

* **This article was submitted by the Institute of Management Accountants, USA.**
PricewaterhouseCoopers refers to the US firm of PricewaterhouseCoopers LLP and other members of the worldwide PricewaterhouseCoopers organization.

THE CREATION OF VALUE

In generic terms, value creation is the provision of a benefit that is in excess of cost. But for whom should managers create value?

To be successful in the long term, businesses can and should create value for all stakeholders — customers, shareholders, suppliers, employees, and society at large. If value is not created for one of these groups, then the organization will not be able to survive, as disadvantaged stakeholders will eventually curtail the organization's activity[2].

However, as managers are seen in most markets as the agents of shareholders, the creation of value for shareholders is usually advanced as the primary objective of managers. In addition, shareholder benefits and costs are more readily measurable when compared to other stakeholders' positions — a decided practical advantage for this point of view.

For shareholders, value creation means providing a return in excess of the cost of capital. This is more difficult than it looks — it is a competitive concept. The cost of capital is established by opportunity cost — what shareholders could get elsewhere for the same risk. If you are not competing in favorable markets and not doing so better than your peers, it follows that you will not be able to beat what your shareholders can get elsewhere. This means that you cannot create value unless you compete well in profitable markets. Put another way, to create value you need to establish a sustainable competitive advantage[3].

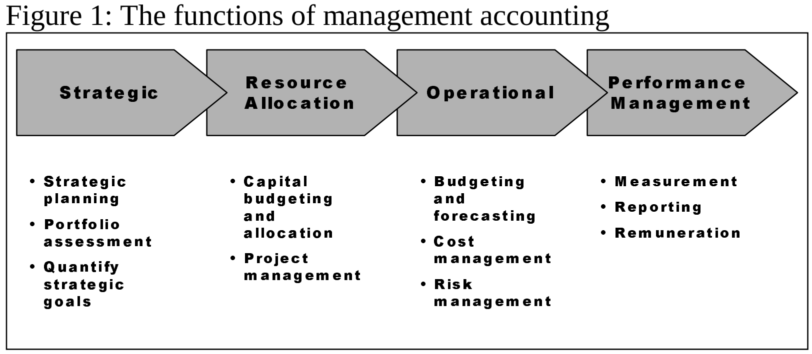
Sustainable competitive advantage means being better than your competitors — making better decisions and performing better than expected. However, the rate at which these advantages can be copied (60–90 percent in one year[4]) mean that rapid innovation and flexibility are critical.

For management accountants to play a role in creating value, all efforts must be focused on helping management teams achieve these elements of competitive advantage.

MANAGEMENT ACCOUNTING'S ROLE

Defining the role of the management accountant outlines the ways in which they can create value.
For the purposes of discussion, **Figure 1** shows a list of functions that a management accountant can and does perform. These functions extend from assisting decisions at strategic and tactical levels to providing management control through budgeting, cost control and risk management as well as reinforcing performance and organization values through reporting and remuneration practices.

Figure 1: The functions of management accounting



With such a broad role (or potential role), the management accountant has tremendous scope to create value for the organization and its managers.

Many organizations currently have management accountants working in each of these areas. But how can these roles add value?

The following techniques can be used for adding value to a range of these functions.

Better decisions

Most value is created or destroyed at the point a decision is made, as clearly seen in a merger or acquisition context, because the decision is coincident with a stock market announcement. The value creation or destruction is evident in stock price movements[5].

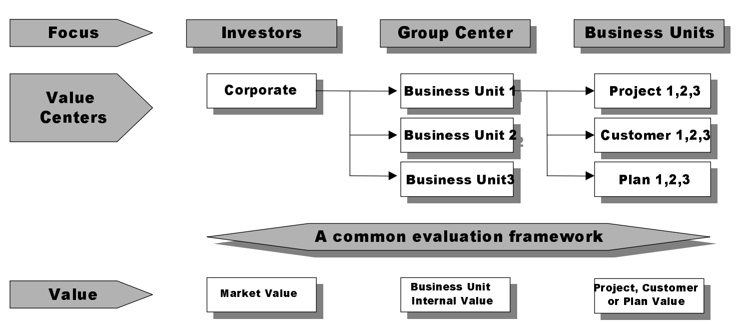
However, the same consequences apply to management decisions such as adding a new product line or investing in plant and equipment. A management accountant can play either a strategic or a resource allocation role in these decisions. Here are some suggestions for better decision making:

Linkage with shareholder value

To make decisions that create value, it is axiomatic that your evaluation techniques should be expressed in value terms. To make decisions that create value, it is axiomatic that your evaluation techniques should be expressed in value terms.

Accordingly, business plans, project evaluations, action plans, and feasibility studies should all be valued. Management forecasts discounted by an appropriate rate can be used for this purpose — keeping a skeptical eye to optimistic forecasts or unrealistically high hurdle rates (both can lead to value-destroying decisions).

Figure 2: Value at all levels of a business



In this way, you can examine all your decisions in the same way that investors look at your business. **Figure 2** shows how a common evaluation framework can be used for "value centers" at all levels within your business. Value centers represent an activity or group of activities that create value. They can be defined in many ways depending on the sources of value in a corporation or business unit and the level of detail of your analysis. However, all value centers should create value; there should be no "cost" centers. What would traditionally have been viewed as such should be considered an integral part of a value- creating function — a more holistic view. Naturally, where functions are spread across a range of value- creating activities, activity based costing can assist this approach.

By using this framework, the objectives and outcomes of each aspect of your organization, each value center, become consistent with the creation of value. Just by removing inconsistency, value can be created — value orientation is an additional benefit.

These are not the only benefits; to successfully achieve this consistency not only provides a platform for operational success but it can give a meaningful basis for providing investors with greater insight into your business. Some of the best examples of this result are Lloyds TSB in the UK and Coca-Cola in the USA — these organizations use shareholder value models both within their businesses and to frame major aspects of their corporate reporting[6].

Risk assessment

If you are to consider all of your decisions in value terms, it is important to understand the financial risks that each decision entails. That is, not only should you understand the likely value that your decisions will create but the variability of that value.

How should you do this? Well, risk analysis is one area where management accountants could adopt techniques used by external analysts.

The plans and proposals you evaluate are similar to the companies that analysts evaluate. Those analysts have built databases based on their experience which allow them to understand the range of probability (and hence risk) of forecasted corporate results.

Analysts must first understand the critical success factors for a business. For one of your projects, these could be factors such as:

- Implementation time frame
- Market penetration rates

Having established these critical factors, analysts use historical experience with similar businesses and/or their experience with particular management teams to obtain a distribution of outcomes for each of the critical factors. You can do the same — but you have the added information that can be gleaned from the major participants in the project (perhaps using secret ballot [Delphi] survey techniques). Once you have an understanding of the distribution of these underlying factors, you can run iterations of a valuation model to obtain a distribution of values for the project or business unit.

This approach has two main benefits. The first is you get an understanding of how likely the "most likely" scenario included in the initial project evaluation is. You may find that the most likely value is actually a "most optimistic" value!

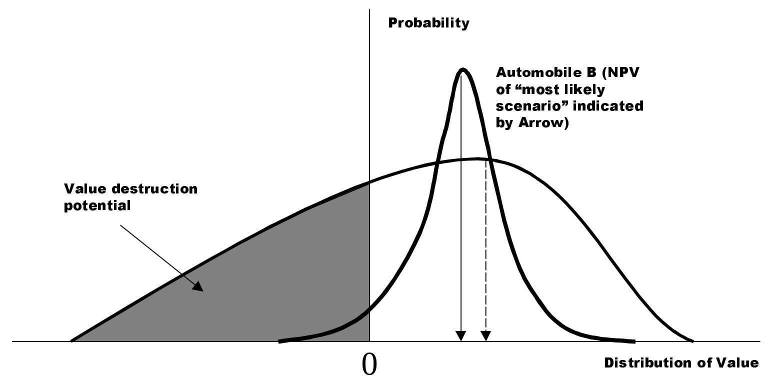
The second benefit comes when you consider the different patterns of value creation from two projects that have a similar Net Present Value (NPV). This is best illustrated by an example. **Figure 3**[7] shows the value distribution that an automobile manufacturer faced when considering two new models. Both had a similar NPVs. Using the cumulative experience of the project team and the track record for similar model types, the potential sales outcomes where computed as described above. Because of the significant retooling and branding that would have been required for Automobile A, it turned out that the volatility of returns was much greater than with Automobile B. By trading off some of the expected value in A for less down-side, management was able to minimize the loss that they were willing to risk, or at least be informed about the scale of risk that they were undertaking.

If the decision your management team makes is significant to the business as a whole, how much value would this information have?

Investment options

Taking the risk analysis further, value can be added by recognizing implied options in investment plans. Traditional discounted cash flow or economic profit analysis by itself does not normally address this point.

Figure 3: Comparison of two automobile projects



To imagine the benefits of using this approach, consider a simple example. Your company is considering an investment in constructing a new type of plant. To construct a full-scale plant is quite risky with this new and unproven technology. However, an initial investment in a small-scale plant will provide the potential to expand at a later date, as well as giving you early market entry to what you suspect might be a very attractive market.

You can wait until the technology is more accepted, which could greatly increase the expected value of cash flows. Either way you have the option of not making the large additional investment. Does this sound similar to a plan that you have had to consider?

Intuitively, there is some value in this option (notwithstanding the risk of competitive changes in the deferral period). This should be explicitly valued[8] especially in plans or projects that have multiple decision points. You may find that using this approach will provide the financial justification for projects that have previously been justified on the basis of "the numbers don't add up but we just have to do this for strategic reasons"!

By using shareholder value evaluation tools, risk profiling, and options to make better decisions, some value can be created. However, to be fully effective in creating and managing value, management accountants need to not only help managers make the right decisions but help them deliver on those decisions in both the short and medium term.

Improving performance

This is an area of considerable debate in academia and industry[9]. The section below summaries some of the key issues that should be considered by management accountants.

Reporting aligned with objectives

Performance measurement needs to reinforce the behavior that is anticipated by management decisions. This means translating "big picture" shareholder value (financial) targets and underlying strategic imperatives into meaningful measures at all levels[10]. These measures can then be reported in the management accounting process.

This approach captures a significant recent development in the area of management reporting and control systems. Addressing strategic issues by, inter alia, inclusion of non-financial measures, is a major way of linking long-term shareholder value to regular (and short-term) reporting[11]. This broadens the scope of management accounting significantly from pure detailed financial reports.

Other things that increase the potential for value creation by management accountants include the ability to make reporting as simple and clear as possible. Transparent reporting liberates resources and allows management to focus on the key variables related to value creation rather than being stuck in a morass of detail.

No corporation operates in a vacuum. Accordingly, the ability of the management accountant to include relevant peer benchmarks on these key variables will also provide value-creating potential. This is improved by regular updating of internal targets and the peer benchmarks to reflect prevailing industry trends[12].

Remuneration linkages

Having excellent reporting is only part of the performance management process. Value creation for shareholders can still sometimes be defeated by what is often termed the "agency problem". That is, the interests of managers and shareholders may not be fully aligned, causing management to act in ways that maximize their own position rather than shareholders positions. This has often been caused by management remuneration being based on short-term financial measures and not necessarily linked to shareholder value creation[13]. Designing a remuneration scheme that reflects strategic and operational targets that are regularly reported on, as discussed above, addresses this issue.

With the interests of shareholders and managers aligned, the management accountant has not only the opportunity to create value for shareholders, but as a direct consequence of this approach, to create value for colleagues.

Flexibility, integration and efficiency

Pundits have observed that the finance function will shrink by 70 percent in the next decade[14]. Management accountants are well placed to deal with the consequences of this change by adopting the following:

- Automated and on-demand reporting. Managers should be able to seek out the information they need on a regular basis and to "drill down" as required. This will minimize the time spent by management accountants on this sort of activity. The reduction in routine activity should improve the efficiency of your departments and allow this resource to be transferred into value-adding activities like decision support and performance management.
- Integration of management accounting teams into operational units. This will allow cross-functional liaison with greater focus on the needs of decision makers. Closer links with operational staff will improve the information richness of management accountants with consequent improvements in the ability to contribute value-creating suggestions.
- Focus on knowledge management. This knowledge can relate to supply chains, markets, and pricing — some of the most valuable information an organization possesses. By linking this information with shareholder value across lines of business, drawing new analytical insights, and promoting coordination across functions, management accountants will truly be able to create value.

The skill sets that are required to adapt to these changes will have to evolve in this context. However, dealing with these issues will enable some of the value created by improved decisions and performance to be shared amongst future management accountants.

CONCLUSIONS

The creation of value for shareholders is one of the most popular topics in business today. The customers of management accountants — the managers themselves, have to respond to this challenge.

This article is a survey of some of the current thinking on value creation that can be used by management accountants. It is not a panacea for the profession. Creating and fostering value means creating a competitive advantage. Management accountants can help to create that advantage through some different techniques in their decision-support functions. These techniques can be integrated with performance management and remuneration practices.

Responding to the requirements of managers will only be part of the way that management accountants can add value. By working closely with management and refining the nature of their function, management accountants can become more efficient and develop the organization's useable store of knowledge — an increasingly recognized contributor to value.

These changes represent a redefinition of the management accounting function. A proactive response will be required to retain and increase the relevance of the profession in the new millennium.

However, creating a competitive advantage, whether it is through product or management accounting process innovation is not a standstill concept. Continual development on all fronts will always be part of the value-creation process.

REFERENCES AND NOTES

[1] Examples of this increasingly prevalent phenomenon are widely reported but for a recent example of the global nature of this issue, see Sue Lecky, Director Action: Board Stocks Down as Shareholders Take Aim", *Sydney Morning Herald*, August 8, 1998, p91.

[2] See Andrew Black, Philip Wright and John E Bachman, *In Search of Shareholder Value*, Pitman Press, 1988, pp14-15 and pp191-192, on this issue.

[3] Alfred Rappaport, *Creating Shareholder Value: The New Standard for Business Performance*, Free Press, 1986, p12.

[4] See Pankaj Ghemawat, "Sustainable Advantage", Reprint # 86507 *Harvard Business Review*, September-October 1986. This article refers to several studies in this area.

[5] See Mark Sirower, *The Synergy Trap*, The Free Press, 1997 for a detailed exposition of this topic.

[6] For a future view on how this development might proceed see Black, Wright and Bachman, op.cit. p268.

[7] Thanks to my friend Maurizio Lualdi for sharing this example with me.

[8] For an appealing methodology for doing this see Timothy A Luehrman, "Investment Opportunities as Real Options: Getting Started on the Numbers", *Harvard Business Review*, July-August 1998, pp.51-67.

[9] For a survey of this debate see Robert G Eccles, "The Performance Management Manifesto", Reprint # 91103 *Harvard Business Review,* January-February 1991.

[10] This material is summarized from John E Bachman, John R Devereaux, Christopher Neenan and Jonathan Peacock, "Value Transformation: Driving Shareholder Value Throughout the Organization", *PW Review*, June 1997, pp. 87-103.

[11] This is one of the major criticisms raised of corporate control systems by Robert S Kaplan and David P Norton, "Using the Balanced Scorecard as a Strategic Management System", Reprint #96107 *Harvard Business Review*, January –February 1996.

[12] For a more extensive discussion of best practice in performance measurement refer to Paul McMann and AJ Nanni, 'Is Your Company Really Measuring Performance', *Management Accountant*, November 1994, pp. 55-58.

[13] See Bernard C Reimann, *Managing for Value: A Guide to Value Based Strategic Management*, 1989, The Planning Forum.

[14] For more detail on expected developments in the finance function see Daniel P Keegan & Stephen Portnik, "The 21st Century Chief Financial Officer – Accounting Will Survive the Coming Century, Won't It?", *Management Accounting*, Vol. 77 (6), December 1995, pp. 24-29.

ABOUT THE AUTHOR

Richard Stewart is Director in PricewaterhouseCoopers' Shareholder Value Management practice, based in New York. Shareholder Value Management assists companies in a wide variety of industries to translate shareholder value concepts into an operational reality. Richard is both an MBA and a Chartered Accountant. He has extensive experience working with some of PricewaterhouseCoopers' major clients across a variety of industries in the USA, UK, Ireland, and Australia.

How Internal Auditors Create Value *

Robert Brewer, CPA, MBA
Vice President of Internal Audit Services
Office Depot Inc.

Alan H. Friedberg, Ph.D., CPA, CISA, CDPR
Professor of Accounting
Florida Atlantic University

ABSTRACT

Internal auditors are in the appraising and advising business; they create value by helping others add value. How internal auditors contribute is best explained by understanding their function. The internal auditor's role includes improving the status of customers, shareholders, other stakeholders, top management, and operations management. To demonstrate the role internal auditors play in the value creation process, the article explores the meaning of "creating value," describes the internal audit function, and illustrates how the internal audit function adds value to each of the positions described.

Internal auditing is an objective, internal activity. It is part of the organization's plan for managing risk; evaluating controls; ensuring compliance with controls, laws, and regulations; and governing the organization. Internal audit functions include understanding and assessing risk; evaluating the adequacy of techniques used to manage risk; providing assurance that control and governance processes are operating effectively and efficiently; and identifying and recommending changes that would add value. IA can provide advice on how to design a proper control system, and provide an independent appraisal on how effective the controls are working.

Organizations have a variety of participants, each with their own needs. The concept of creating value is addressed to individual concerns. The Internal Audit Department through its unique position as an objective observer applies interpersonal and technical skills to identify the most pressing problems and address them. Audit's use of risk assessment and management techniques is applied to both the client's business concerns and his more personal needs to make Internal Audit welcome in most situations. By describing the organizational and individual requirements, it has been shown that Internal Auditing Departments create value to the organization.

HOW INTERNAL AUDITORS CREATE VALUE

Internal auditors are in the appraising and advising business; they create value by helping others, throughout the organization, add value. How internal auditors contribute is best explained by understanding their function in relation to those in the value chain. The internal auditor's role includes improving the status of customers, shareholders, other stakeholders, top management, and operations management. To demonstrate the role internal auditors play in the value creation process, we will explore the expression "creating value," describe the internal audit function, and illustrate how the internal audit function adds value to each of the positions described.

* **This article was submitted by the American Institute of Certified Public Accountants.**

INTERNAL AUDITING

Internal auditing is an objective, internal activity. It is part of the organization's plan for managing risk; evaluating controls; ensuring compliance with controls, laws, and regulations; and governing the organization. Internal audit functions include understanding and assessing risk, evaluating the adequacy of techniques used to manage risk, providing assurance that control and governance processes are operating effectively and efficiently, and identifying and recommending changes that would add value[1]. Internal controls are the cornerstone for an Internal Audit Department. While operations management owns the controls, Internal Audit (IA) is the expert in this area. IA can provide advice on how to design a proper control system, and provide an independent appraisal on how effective the controls are.

The responsibilities of an internal Auditing Department facilitate many of the needs of those with the organization. By helping each group meet their needs, Internal Auditing adds value directly to organizations, members of organizations, and other stakeholders. Example of how Internal Auditing helps satisfy the needs of each group is presented below.

WHAT IS CREATING VALUE? HOW INTERNAL AUDITORS DO IT?

To examine the concept of creating value, you must first ask who is benefiting. One current business philosophy addresses a value chain ending with benefits to the business's customer. Customers are only one of several beneficiaries of a business. Others include owners/shareholders, employees, unions, communities, vendors, other stakeholders in the business's success, top management, and operations management. Each of these beneficiaries has a different set of wants. The audit department must be a business partner with operations in order to be effective change agents for their companies. Internal Audit Departments cannot operate in an adversarial role and still be able to create value. Audit Departments are operating at the optimum level for value creation when their services, advice, and counsel is being sought by operation's management. For example, when the acquisition group is evaluating a potential acquisition, the team assembled to make a purchase recommendation would include representatives from internal audit, human resources, finance, environmental, tax, and legal. In this example Internal Audit is involved from the beginning of the project in a supportive role.

Customers

Customers' goals must be satisfied. Some of these goals are obvious such as providing good value for their money in the sense of pricing consistent with the quantity and quality of goods and services rendered. Today's customers are, however, looking for much more from their vendors. They expect a business relationship in which the vendor is a partner and is meeting all of their needs and expectations. Vendors are no longer a simple supplier; they are part of the team. As such, customers expect vendors to help them enforce their policies and procedures thus reducing the customer's cost of doing business. As part of the team, vendors are expected to contribute to the solution of the customer's problems. In a good relationship, both partners facilitate the other's business without adding to their problems.

Because organizations are working as a team with both their customers and vendors, each party to the team must rely on the performance of the other team members. The spirit of cooperation among organizations is regulated by each organization's controls. Internal audit is responsible for providing an

[1] Adopted from the Competency Framework for Internal Auditing forthcoming from the Internal Auditors Foundation.

independent evaluation of controls and to verify that they are operating properly. Control evaluations include an assessment of the control's ability to capture not only the letter of vendor-customer agreements, but the spirit of the agreement as well. Team participants rely on internal controls to ensure prompt, accurate, reliable, consistent delivery of quality products or services. For example, if the customer relies on just-in-time delivery, the vendor's Internal Audit Department will evaluate not only the controls designed to ensure his organization meets its commitment, but also will look for ways to improve the organization's operations to more effectively meet the customer's expectations. As a further benefit to customers, internal audit may benchmark the vendor's process to ensure the customer is best served. In some circumstances, where trade secrets are not revealed, the vendor's Internal Audit Department may even benchmark processes among customers and provide feedback to help the customers improve their procedures. For example, an Internet supplier provides business customers with best practices from other customers.

Shareholders

Shareholders are represented by the Board of Directors (BOD) and to the Internal Audit Function through the Audit Committee. The needs of shareholders and the BOD are, for the most part, consistent. Both need to maximize return on investment while minimizing risks and variability in earnings. Both must have financial reports that are accurate, timely, and complete. Neither will tolerate fraud or mismanagement. Shareholders depend on activists, financial reports, and regulations to control potential excesses in compensation by the BOD. Board members, like top professional managers, have a fiduciary responsibility to represent the needs of shareholders. However, they also have a personal need to demonstrate their effectiveness. It is likely that the BOD may have needs that, while not in conflict, may not directly support the shareholders. For example, the BOD must have support in making decisions and facilitating the implementation of their programs and dictates.

Accurate and timely financial statements and risk management are critical to shareholders. Stock price and returns depend on the market's confidence in, among other things, the financial statements. Internal audit is an integral part of ensuring that financial statements are an accurate representation of the financial operations of the organization. In fact, internal audit is involved in auditing financial statements in a more detailed way than public accountants who certify that there are no material misstatements. For example, internal auditors may investigate control problems that could have a future impact on the customers' satisfaction and therefore the return to investors. Risk management is an essential part of Internal Audit's function. Some of the critical risks that are audited internally include prevention of poor decisions based on inaccurate or untimely information and ensuring the best use of assets (maximizing the use of working capital, minimizing inventories on hand). Internal audit may also protect value by saving the organization from the impact of non-compliance with rules, laws, and regulations or fraud.

Other Stakeholders

Other stakeholders have an individual or group interest in the success of the organization. They include employees, unions, vendors, and the communities in which the business operates. Other stakeholders rely on the continuous, smooth, consistent operations to provide jobs, taxes, customers, and community service.

Business continuity and smooth operations are major concerns for both shareholders and other stakeholders. Business continuity planning and operational efficiency and effectiveness are a routine part of an internal audit work plan. Internal Audit is instrumental in evaluating the continuity plan and often facilitates operational changes to increase both efficiency and effectiveness. For example, an internal audit procedure called control self-assessment is used to identify and resolve efficiency and effectiveness issues. Internal auditors have learned to act as facilitators to help team members communicate among themselves and with management. This allows solutions that are readily available to be recognized. One organization used control self-assessment to improve safety for its lineman. Management did not understand why their controls were not being followed. A control self-assessment workshop revealed that the lineman knew that the established procedures were unsafe because the equipment in the field operated differently than management understood.

Executive Management

Executive management has a fiduciary responsibility to shareholders to further their interests plus they have their private needs. To fulfill their fiduciary responsibilities, executive management must ensure that the internal control policy and procedures that they establish are sufficient to guide the organization to accomplish its goals, meet legal and regulatory requirements, and serve as protection against errors, frauds, and inappropriate behavior. At a personal level, executive management would like to ensure smooth operations. For example they want to: (1) avoid embarrassment, (2) maximize their personal performance indicators, (3) have confidence that operations are correctly managed so they can focus on strategic issues, (4) demonstrate that they have exercised due diligence when things go wrong, and (5) protect their professional reputation from their own errors and judgment as well as those of their employees.

Executive management has, of course, the same goals as shareholders and they are concerned with the goals of each of the other parties mentioned. They are also deeply concerned with their own personal success. Internal auditing is their primary method of gaining an objective view of their organization and providing a training ground for a stream of future financial leaders. Whether it is used to enforce their policies and procedures or to verify that management's controls will actually lead to the results for which they were designed, internal auditing is the answer. Internal audit's risk management skills are used to focus scarce resources where management needs them most. When a change is needed, internal auditors have the interpersonal skills necessary to facilitate a change.

Internal audit uses its objectivity to tell management "How it is." Rather than "What would please management." For example, management may like to hear how happy employees are, but in fact there may be serious morale issues. If management isn't aware of the problem, they can hardly fix it. Internal Audit provides value by presenting facts with analysis, and recommendations to management.

Operations Management

Operations management, whether they are senior, middle, or lower level managers, are interested in the effective and efficient management of their responsibilities. At a personal level, they need to be seen as a contributor, innovator, and team player. In general, they want to be thought of as being capable of moving up in the organization.

Charged with getting the job done, operations management, not as concerned with executive management's broader worries, is preoccupied with their own pressing problems and the controls needed to manage them. The last thing they need in their often-hectic lives is a nonproductive interruption. Therefore, internal auditors have adopted a cooperative, team-player approach. Internal auditors are seen as spreading the best practices while retarding the use of poor practices; they represent a valuable resource to operations management. Audit recommendations are sold to operations management though a combination of convincing evidence, appropriately timed work, genuine concern for the client's objectives, shared credit, and a knowledge of the larger environment.

CONCLUSION

Organizations have a variety of participants, each with their own needs. The concept of creating value must be addressed to the individual concerns of each class of participants. The Internal Audit Department through its unique position as an objective observer is well positioned to apply interpersonal and technical skills to identify the most pressing problems and address them. Internal auditors have developed an approach to their work that makes them team players rather than a police force. Audit's use of risk assessment and management techniques is applied to both the client's business concerns and his more personal needs to make Internal Audit welcome in most situations. By describing the organizational and individual requirements, it has been shown that Internal Auditing Departments, through their considerable skill set and unique position create value to the organization.

ABOUT THE AUTHORS

Alan H. Friedberg earned his PhD from the University of Florida in 1983. He holds the rank of Professor of Accounting at Florida Atlantic University, and he is a CPA, CISA, and a CDRP. Dr. Friedberg is active with the Institute of Internal Auditors and he has published articles in the following journals: *Internal Auditor*, *Information Audit & Control Journal*, *Internal Auditing*, *Blackwell Encyclopedic Dictionary of Accounting, National Public Accounting, Research in Accounting Regulation*, *The Accounting Systems Journal*, *Controllers Quarterly*, *Selected Readings for CPAs in Industry*, *Advances in Accounting, Information Age*, *Journal of Systems Management*, *EDP Auditor Journal*, *Journal of Accounting and EDP*, *Computers and Education*, *The Virginia Accountant Quarterly*, *Computing and Software Design: Career Directory*, *IIA Educator*, C*omputing and Software Design: Career Directory*, and B*oca Raton Business Journal.*

Robert H. Brewer, CPA, MBA, is Vice President of Internal Audit Services in Office Depot, Inc. He has also held positions such as Director of Audit in a number of companies prior to this. Robert was a member of the American Institute of CPAs and is currently serving as Chairman of the Business & Industry Executive Committee. He is also a member of the West Virginia Society of CPAs and the Institute of Internal Auditors. Robert has been a frequent speaker at conferences on best practices of a company's Internal Audit Department.