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Balanced Scorecards in Practice

Part 2 by Sarath Amukotuwa, management consultant

In Issue 4 of On Target Online I argued that although balanced scorecards have a key role to play in strategy execution, it is one of several tools and techniques management must use. In this article some of the shortcomings of how balanced scorecards are being implemented, leading to their failure, are examined. Our research of several organisations that have implemented scorecards provides clues on how they can be successfully used in practice.

Kaplan and Norton introduced two new tools, strategy maps and 'balanced' scorecards, to the management lexicon. Scorecards, even if not called as such, predate the publication of their work: see for instance, techniques such as cockpits, tableau du bord and dashboards. In essence, these emphasized the need for an array of non-financial measures, and in the 1980s when Total Quality Management (TQM) and related Japanese management tools were in vogue, many organisations adopted these believing that financial performance would follow operational effectiveness. That these methods have faded is no surprise as shareholders and boards continued to judge organisations mainly by their financial results.

What is interesting is that the Balanced Scorecard Concept (BSC) founded on the same premise gives primacy to financial performance with a key difference. Whereas previously performance measurement made only tacit acknowledgement of strategy, the BSC through strategy mapping made strategy its starting point and explicit. The multiple perspectives on performance promoted in BSC are also very sound. Why then are balanced scorecards not as effective strategy execution tools as claimed in theory?

Based on my research (collaborated by others) are some reasons :

1. A majority of organisations implementing the BSC stop at scorecards and overlook the more important initial step of strategy maps, which clarifies strategy.

2. Strategy is still seen by many firms as the domain of senior executives and once agreed upon at the popular executive retreat or strategy day is largely considered done and dusted.

3. Management reward systems based on existing performance appraisal methods are notably poor in cascading goals.

4. Metrics available in conventional systems provide limited strategic information for scorecards

5. Inappropriate technology is used to enable scorecard systems.

The rest of this article will look at how some organisations are tackling the above issues.

Get the fundamentals right

Organisations undertaking the implementation of a balanced scorecard are well advised to gain a thorough understanding of BSC theory and practice. Developing strategy maps is hard work when compared to constructing scorecards. Obtaining consensus from the most senior executives on what is organisational success is often the first hurdle.

Selecting a proven implementation methodology is important. A read of the Kaplan and Norton books and articles is a must as is researching the numerous other relevant references by various authors and practitioners. Engaging experienced external consultants also helps.

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A common **mistake** by organisations and consultants alike is to fit ***existing*** measures into the *different* perspectives of a balanced scorecard

Cascade the strategy

Research shows that globally a majority of organisations fail to achieve their goals due to poor execution. Collectively, organizations spend billions on strategy consultants each year yet strategy practically stops at formulation. Michael Porter, who has influenced strategic thinking more than perhaps any other author in modern times, states that competitive advantage is achieved by the myriad activities that go into creating, producing, selling and delivering a product or service. Success is attained by performing activities differently (strategy formulation) and more effectively (strategy execution) than competitors. Strategy execution is the sum of all the activities undertaken in an organisation. Yet execution (of activities) is left to lower level managers and operatives, who rarely have a line of sight to strategy.

Without a formal process that closes the loop between strategy formulation and strategy execution (see previous article), execution in most firms occurs in isolation from strategic intent providing limited scope to cascade strategy below top management levels.

Link management goals and rewards to strategic success

A majority of organisations that implement balanced scorecards continue to assess employee performance based on existing performance appraisal systems, which are disconnected from strategy. Individual goals are linked to budgets rather than to strategy. The typical annual or half annual performance assessment rarely touches on strategy or its execution.

To make scorecards really work, management must be prepared to shelve traditional performance appraisal systems in favor of scorecards, which provide continuous and objective feedback on achievement of goals and are the primary basis for judging how well an organisation is tracking against strategy.

Select relevant measures

A common mistake by organisations and consultants alike is to fit existing measures into the different perspectives of a balanced scorecard. Often this occurs by default as most conventional systems provide limited metrics for scorecards.

By far the largest investment by organisations on IT in the past 20 years has been on ERP (Enterprise Resource Planning) systems. Any substantially sized organisation requires the integration provided by these systems. However, not all realize that ERP systems are not a substitute for performance management systems. The latter comprise of specialist management solutions and techniques that focus on process, risk, customer relationship and cost management. Such systems straddle an enterprise and when well implemented provide the appropriate metrics for balanced scorecards. Organisations that have not implemented customer relationship management, enterprise process blueprints and activity based cost management systems, will struggle to find relevant data that feeds a scorecard.

A fifth and very significant reason for disappointing outcomes from balanced scorecards is the adoption of inappropriate technology or none at all for its deployment. In an age where visualization and collaborative tools are widespread, there is a wide choice of technology available to automate scorecards and make strategy the daily business of every employee. This will be discussed in the final article in this series.

The author is an experienced performance management consultant and welcomes feedback on the above. He may be contacted at:
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Practitioners Are From Mars, Academics Are From Venus?

by Dr Basil Tucker,School of Commerce, University of South Australia

In Issue 2 of OnTarget Online, I looked at the gap between academic research and management accounting practice and asked how academic research might be better used by management accountant practitioners. This is Part Two of that article.

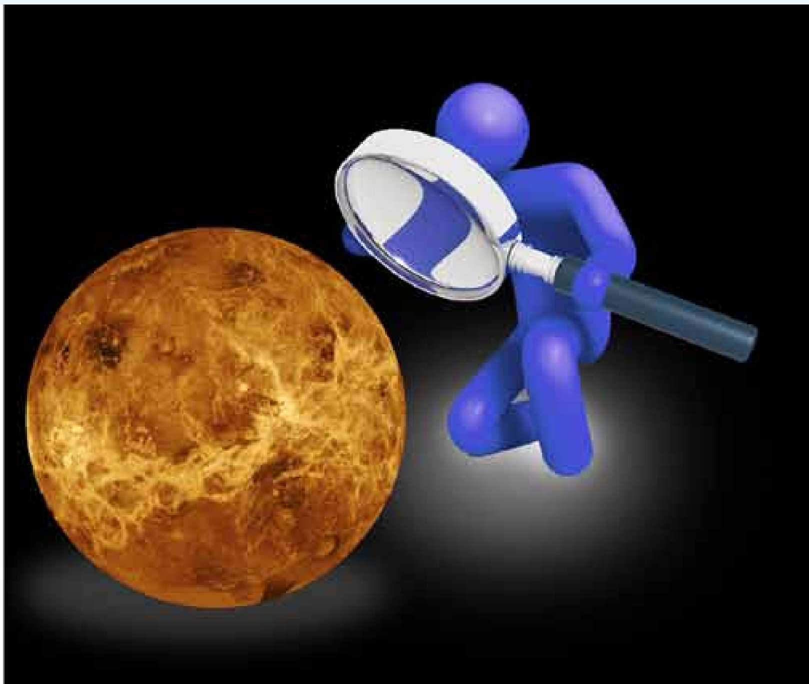
You cannot be serious…?

This was one of the many comments made by tennis player, John McEnroe in the late 70s and early 80s. McEnroe could very well have been talking about the relevance of some academic research. Consider the following examples of published research undertaken by university academics. Each of these papers have won prizes:

- ***Veterinary medicine:*** for showing that cows with names give more milk than cows that are nameless.
- ***Physics:*** for analytically determining why pregnant women do not tip over.
- ***Biology:*** for discovering that fleas that live on dogs jump higher than fleas that live on cats.
- ***Psychology:*** for demonstrating that when people pay close attention to something, it's all too easy to overlook anything else - even a woman in a gorilla suit.
- ***Management:*** for demonstrating mathematically that organizations would become more efficient if they promoted people at random.

In some quarters, these examples reflect a poor perception of academic research and how it is valued. Demonstrating the use and usefulness of academic research is an issue facing most applied disciplines, and management accounting is not immune to this scrutiny. This issue is important if the ultimate purpose of management accounting research is to improve management accounting practice, rather than to simply describe or understand it. On a more general level, it raises fundamental questions about the relationship between academics and practitioners; and more broadly, about the role of academic research in society.

From April to September last I investigated the research-practice gap in management accounting. Much has been written about the subject – certainly by academics – but rarely have the views of practitioners been sought, and they were my focus. The aim of the research in the first instance was to ascertain the extent to which practitioners felt there was a gap between the research activities of management accounting academics in universities, and what is done in practice. From there, the research sought to identify the main reasons for this gap.



Practitioners are certainly *open* to the results of management accounting *research*

The results are interesting.

A view from the field…

Overwhelmingly, the view of practitioners is that there is definitely a separation between the research endeavours of academics and what is done in 'the real world'. Most of those consulted felt that research should ideally inform what management accountants do in practice. However, the fact that academics and practitioners appear, in the spirit of this article's title, to be on different planets was, although regrettable, not a major concern.

"They don't miss you- - it's like never having a mobile phone – they don't see it as important. Whether it is or not is beside the point" as one practitioner put it.

The principal barriers preventing the use of research in practice were found to be two-fold: first, difficulties in understanding academic research papers; and, second, limited access to research findings. We (academics) are seen to speak with our own jargon, are overly focussed on theory, use complex statistical techniques, and include numerous, (irritating) bracketed references in the text. In addition, practitioners rarely read academic journals, academic presentations to industry are rare, and practitioners rarely attend academic conferences. In short, practitioners often view the findings of research to be difficult to read – if indeed they are able to find what research has been written – and it seems as though practitioners really are from Mars, and academics really are from Venus.

All is not lost?

Despite the pessimistic picture presented by these findings, the project did suggest a way forward. Practitioners are certainly open to the results of management accounting research – anything that may lead to a competitive advantage, higher productivity, greater efficiency or enhanced quality, is something to which management accountants are likely to be receptive. The challenge appears to be one of marketing: how might academic research be packaged in a form that is practioners-friendly, useful, and relevant? As any marketer will know, product positioning can be a difficult task. Nevertheless, the precedent for research engaging with and informing practice clearly exists. Best selling popular books such as *The Balanced Scorecard, In search of excellence, The seven habits of highly effective people* (to name only three) all have their origins to a greater or lesser extent in academic research. Their popularity attests to the claim that if academics can demonstrate they have something valuable to say, practitioners will listen; an argument supported by the findings of this project.

Where to from here…

Clearly emerging from this research project is the central role that professional bodies like ICMA can play by acting as a conduit between the worlds of academia and practice. Newsletters, seminars, workshops – in fact many of the activities of professional accounting bodies – serve to demonstrate the mutual value to both academics and practitioners resulting from a closer engagement between research and practice. Practitioners and academics may live on different planets, but we do inhabit the same solar system. Each has its role, and each can contribute to the other. Efforts to bridge the gap may reap dividends for natives of any planet.

President's Report to the Sixteenth Annual General Meeting of the Institute

12 December 2011

I am pleased to report that a number of successful outcomes were achieved during the Institute's sixteenth year following its 1996 incorporation.

The continuing dialogue with relevant Australian government departments and agencies once more delivered a dividend when the Management Accountant category was maintained for a second year in the Australian Government's Skilled Occupation List for General Skilled Migration.

The focus of our engagement with government for the last semester of the year was to continue pressing a request for ICMA status as an assessment authority for migration to Australia, and further recognition of the CMA qualification by Australian authorities. To this end, a comprehensive submission was lodged with Skills Australia. The submission included the results of a major research study commissioned by the Institute, which analysed the demand for and the role of management accountants in the Australian economy. A summary of the outcomes from that research project will be published in the Year Book.

Another important initiative was to define the management accounting body of knowledge and the skills required in its application, which will appear also in the Year Book. I note for the record that the information was used extensively in the ICMA's communication with government and other agencies.

Continuing Professional Development (CPD) was introduced in 2011 as a pilot program so that members had an opportunity to submit feedback on the recommended model before it became final. The final format for the CPD program will be launched on 1 July 2012.

The ICMA continues to encourage the development of corporate reporting and assurance and was also very active in the areas of carbon accounting and assurance. A number of important research and development programs were facilitated during the year under the auspices of the two organisations the ICMA sponsored for this purpose, The Institute of Certified Carbon Analysts and Auditors (ICCAA) and The Institute for the Advancement of Corporate Reporting and Assurance (IACRA).

A very important initiative for 2011 was the conversion of our newsletter broadsheet On Target into a full periodical resulting in five issues of *OnTarget Online*. Feedback has been most encouraging, and we are focused on developing this publication into an important source of information globally for and about the management accounting profession.

The Institute continues to foster world class research in the area of management accounting and related disciplines. Two issues of its research journal, the Journal of Applied Management Accounting Research (JAMAR) were published in 2011 and are available in both print and online.

A major project initiated in 2011 was to begin the task of reaching out to other professional bodies identified for their focus on management accounting as a specialist profession. We were extremely grateful to obtain government funding to assist us with this project, and a number of exploratory meetings were held in June. The project progresses following the initial meetings attended by our CEO and senior Vice President.

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[A very **important** initiative for 2011 was the *conversion* of our newsletter broadsheet ***On Target*** into a full periodical]

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In addition to special projects the ICMA continues to focus on activities central to its core mission. These are:

- To foster the work of our current branch network.
- To increase the number of branches.
- To facilitate greater communication with members.
- To increase member benefits. In this regard a CMA membership lapel pin was sent to all members and exceptionally well received. I have found my pin often provides a great introductory opportunity for me to explain about management accounting and the work of the ICMA!
- To build greater awareness of the Institute both in Australia and in all countries where it is represented.
- To encourage membership growth and membership retention.
- To increase the opportunity for non -accounting graduates to attain ICMA membership after undergoing the required education and training.

The ICMA management accounting library is an initiative that began some years ago. The holdings have increased substantially, and the important task of cataloguing the material has begun. The ultimate objective is to develop a system allowing the material to be made available to all our members and students; more information will be published in *OnTarget Online* as it becomes available.

I am very happy to report that over the year we had a 30 per cent increase in membership despite the extreme difficulties experienced in many economies as a result of the Global Financial Crisis. This increase comes on top of the 19 per cent experienced in the 2010 year. Just over half of the membership is in Australia with 48 different countries making up the balance. We can truly claim to be a global professional body. As reported previously, a major project for 2012 will be to foster a global management accounting community using the power of social media. Although this project will fulfil a public service objective it will also have a positive influence on membership numbers.

As the outgoing president I thank the members and the ICMA council for providing me with the opportunity to lead our Institute for a two year term. In that time much has been achieved but most importantly, the foundation for the future has been strengthened. I wish the incoming President, Michael Vincent, all the best for his term of office and know that the future of the ICMA is assured as it passes into a very safe pair of hands.

Derek Maullin

Advocacy Project

The ICMA is continuing to engage with government in Australia to promote understanding of the profession and to ensure wherever relevant that its specialist nature is recognised.

In February, an important meeting was held with the Australian Bureau of Statistics (ABS) in Canberra. Leon Duval CEO, and Professor Janek Ratnatunga, Education Chairman, represented the ICMA and met with three ABS officers.

The purpose was to assist ABS personnel responsible for collecting data relevant to all aspects of the accounting profession to determine those criteria that distinguish the role of a management accountant from that of a generalist or compliance focused accountant.

The officers were provided with a copy of the latest update of a document detailing both the management accounting body of knowledge and the practical experience required by its practitioners. Mr Duval and Professor Ratnatunga also introduced the emerging issues that will occupy the profession in the future, i.e. accounting for carbon and managing risk by strategic audit.

An extremely positive outcome from the meeting was an invitation to submit ICMA's definition for management accounting which the ABS will consider for use as the standard. A definition is being prepared to be forwarded to the ABS shortly.

[An extremely **positive** outcome from the meeting was an *invitation* to submit ICMA's ***definition*** for management accounting]

Important Initiatives in 2012

A belated happy new year to our members who schedule their lives by the Gregorian Calendar. To those following other systems I am sure that our best wishes for a happy, successful and healthy period ahead will never be taken amiss!

My congratulations to the new ICMA President, Michael Vincent. I am sure that during his term of office the organisation will benefit enormously from his stewardship. My thanks also to the outgoing president, Derek Maullin, who remains a member of the council in an ex-officio capacity. During his presidency the ICMA took a number of extremely important steps, and he leaves the position able to look back on a very successful term of office.

The changing of the guard in our lay leadership ranks heralds also a new era for our Corporate Governance procedures as we prepare to meet the emerging challenges of the constantly shifting external environment. Our membership profile is beginning to equalise between Australian domiciled members and those living in other countries. Additionally, many of the overseas locations are displaying strong sustained growth in their membership numbers, particularly Hong Kong, Indonesia, the Philippines and UAE. Our governance processes need to recognise this emerging trend, and rather than the ICMA council being Australia centric, it needs to incorporate representatives from the emerging growth centres.

For this reason, the ICMA council has been remodelled to co-opt representatives from the emerging growth centres as members. In order to make this innovation practical we are currently investigating a number of applications that will allow all members of council to attend meetings conducted in cyber space.

An additional reason for this change is the shift to a greater reliance on professional staff. In past years running the ICMA relied heavily on volunteers, the result being that council members gave up large amounts of their personal time and resources to support the Institute. The introduction of professional staff into the management and structure of the organisation is now beginning to alter the role of the ICMA council allowing its members to adopt a more strategic rather than tactical focus. This emerging trend will also allow the council to evolve into the equivalent of a Board of Directors with scope to consider appointing suitable non-member candidates as independent 'directors'.

These steps will strengthen the governance procedures of the ICMA and ultimately deliver a greater public profile for it in the business community.

In 2012 a number of important initiatives are being planned.

1. Continuing to lobby government aimed at increasing recognition for Management Accounting and for the ICMA as its representative in Australia.
2. Creating a management accounting community in cyber space utilising the opportunities provided by social media applications.
3. Developing a world class CPD program.
4. Increasing the number of opportunities within Australia for undertaking the CMA programs.
5. Opening opportunities for non- financial managers to transition into ICMA membership.

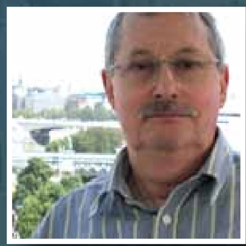
I am pleased to report that a number of very important initiatives have already been taken in most of these areas, and over the year we will inform you as they are introduced.

Finally, a number of members are sending letters to the editor of our eMag, and as you know some have been published. We would appreciate much more feedback and encourage members to take this opportunity and to use the medium of *OnTarget Online* to share their views with the wider management accounting community. We also encourage you not only to send us letters but also to contribute to the publication itself allowing others to share your knowledge and experience.

Leon Duval

CEO, ICMA

Introducing the new ICMA President



Michael Vincent followed two careers over more than 40 years in the workforce, firstly in banking and finance, then in academia. He worked in all areas of banking from retail to corporate, finishing his banking career in international trade finance. As an academic, Michael taught banking and finance and then conceptually developed and taught couses in risk management.

The Concept of Risk Management in the 21st Century Business Environment, Part Three

Policy Setting for Risk Management

by Michael Vincent, ICMA Vice-President

[Our **responsibility** as management accountants is to make *effective* decisions within the parameters of the information ***available*** at the time]

In the first instalment we looked at the need for understanding why the management of risk is vital in the turbulent business world we all face. In the second instalment we examined the accepted standard for risk management and outlined the process to implement an effective system within the corporate setting.

However, an understanding of the need for risk and ability to apply the process is not enough for a management accountant who is a source of advice and counsel to the senior management team and the board, or indeed as a member of the senior team or board.

The Australian Risk Policy Institute (ARPI) will soon release the Risk Policy Model 2012 which should be a compulsory tool in the management accountant's armoury. ARPI has kindly agreed for a copy of the model to be placed on the ICMA website.

We are in perilous times with the threat of a recession worldwide, and in some jurisdictions a double dip approaches. The quicker we act decisively with care and a strategic understanding of the risks we are about to encounter, the better placed we will be for survival. Remember that in the business world survival is not compulsory but must be earned every day.

We have seen catastrophic failures of strategic decision making and policy settings by both the public and private sectors. Failure to recognise the vulnerabilities facing networks or systems has resulted in systemic risk overtaking us all to the point where system failure in total is not a bad nightmare but a reality. An examination of the behaviour of the leaders in the EEC demonstrates a fundamental lack of understanding of the exposures that are obvious to any thinking person, and the absolute abrogation of their responsibilities demonstrates graphically the extent of system or network failure.

The remainder of this article is an overview of the ARPI policy model thinking and hopefully will whet your appetite to download and read the full document when uploaded to our website. It simply states that the traditional approach to risk management has failed or rather the people implementing the management of risk have failed the system. We need to move to the development of policy that allows the process to be effective and not procedural.

The following quotation from the draft document gives a sense of the approach; this extract is copied with permission of ARPI.

"Our sense of order and certainty is declining under the strain of change, which is arriving from both expected and unexpected sources; we live in a world of increasing uncertainty and disorder. Challenges to our systems are increasingly happening.

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These are proving resistant to conventional analysis in no small part because no system assumes its own failure. And, addressing systemic problems challenges governance structures, our skills base and our organisational capacity. Crucially, there is a need to know how to use the human sensing of the unknown or the unpredictable to meet new problems.

Being able to discriminate between unfocused fears and genuine intuitions of what may happen is an important weapon. When systems fail, using tried and true methods to solve the ensuing problems is likely to fail. The best weapon is creative thinking or people's ability to foresee. There needs to be less reliance on protocols and what has been done in the past.

As a result, in our increasingly turbulent and unpredictable world, making the systems within which we live and operate (business, economy and society) more resilient is the challenge we all face. When we talk about resilience we mean reducing vulnerability so that our systems are better able to deal with increased pressures from sudden shocks and the inevitable challenges from our interconnectedness and interdependence, as well as our scientific and technological advances. We also mean being able to make the most of the opportunities some of which can arrive just as unexpectedly and are too often missed.

Competitive solutions are not likely to be sufficiently robust to meet modern demands.

As residents of this planet, we are each faced with the potentially catastrophic implications of failure to find a way to work together to bring about a greater sense of order and certainty which provides a more sustainable, safer and just world. Leaders, therefore, need to be thinking about collaboration, not competition, as the way to handle future risk."

Risks need to be identified, categorised, mitigated and reviewed but to undertake these tasks as a process leads to a compliance mentality within the corporate structure, and the real threats and vulnerabilities are missed. Policy mixed with a human commitment is the key to creating a system that has the potential to be self-learning.

Leadership and commitment set the scene for self-learning and survival within an interconnected world.

[Leadership and **commitment** set the scene for self-learning and *survival* within an interconnected ***world***]

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Cost Behaviour, Part One

by John Donald, Lecturer, School of Accounting, Economics and Finance, Deakin University, Australia

[As a management accountant, you must be able to provide **relevant** information on costs, including how they are *caused* and how they may ***change***]

Accurate cost behaviour information can be vital for effective management decision making, hence management accountants need to understand how costs can change in response to changes in their organisation's activities.

As a management accountant, you must be able to provide relevant information on costs, including how they are caused and how they may change. In many cases, an examination of past cost behaviour can enable accurate predictions of future costs. The process of using data on past costs, and the corresponding levels of activity, to construct meaningful relationships between them is called *cost estimation.* Cost estimation and cost prediction will be covered in the next instalment of Student Notes. They are important topics because they provide the information needed for decision making techniques such as cost-volume-profit analysis and flexible budgeting (also to be covered in future Student Notes).

You will recall that cost drivers are the factors which cause costs to be incurred. Most costs are driven by the level of an organisation's various activities including sales or production volume. However, there are other important non-volume based cost drivers such as the number of production batches. For example, the cost of electricity used for operating a baker's oven will depend on the length of time that the oven is on. Assuming that each batch of bread is baked for the same time, the electricity cost driver will be the number of batches baked and not the number of loaves of bread produced. It is usually more costly to make a large number of small batches than a small number of large batches. When automated equipment is being used to make batches of different products, each production run will require an equipment setup activity. This activity consists of changing the tooling and settings of equipment in preparation for making a new component or product. The setup cost driver will be either the number of times the activity is carried out (i.e. the number of production runs) or the time that each setup takes. The number of units made is *not* the key factor driving this particular cost. It is important to remember that changing the way things are made can affect costs just as much as changes in the level of production volume.

Common Cost Behaviour Patterns

Costs may react in different ways to changes in activity levels thus creating many different cost behaviour patterns. The challenge faced by management accountants is to identify how a particular cost changes over time (assuming that it does change) and what causes it to change. The aim is to determine whether there is a true cause and effect relationship between the level of an activity, i.e. the chosen cost driver, and the cost in question. There has to be a logical relationship which can be readily explained by the production manager. Just because two things increase simultaneously at the same rate (i.e. they appear to be highly correlated) does not necessarily mean that one causes the other.

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Most costs are assumed to behave in a linear (straight line) manner but there are some costs which behave in a curvilinear manner or which increase in a series of steps. The assumption that most costs are linear means that it is easy to calculate the relevant *cost function*. This is a mathematical description of how a cost changes with changes in the level of its cost driver. A cost function can be plotted on a graph which has the level of the cost driver shown on the horizontal (or 'x' axis) and the total amount of the cost shown on the vertical (or 'y' axis).

The general form of a linear cost function is simply the formula for a straight line:

$y = a + bx$

where:

y = the estimated total cost amount (y is called the *dependent variable*)

a = a constant which represents the component of total cost that does not change as the level of activity changes

b = the slope coefficient i.e. the amount by which the total cost amount increases for a one unit increase in the level of activity.

x = the actual (or expected future) level of activity (x is called the *independent variable*)

It should be noted that assumptions about cost behaviour are usually valid only within a restricted range of activity called the *relevant range.* If the planned level of activity falls outside the relevant or 'normal' range, caution is needed if past cost data is used to predict future costs. Large increases or decreases in output can cause costs to change due to the addition of new production capacity (e.g. leasing more equipment) or the reduction of existing capacity by, for example, the elimination of unwanted equipment and staff. We will return to this point shortly.

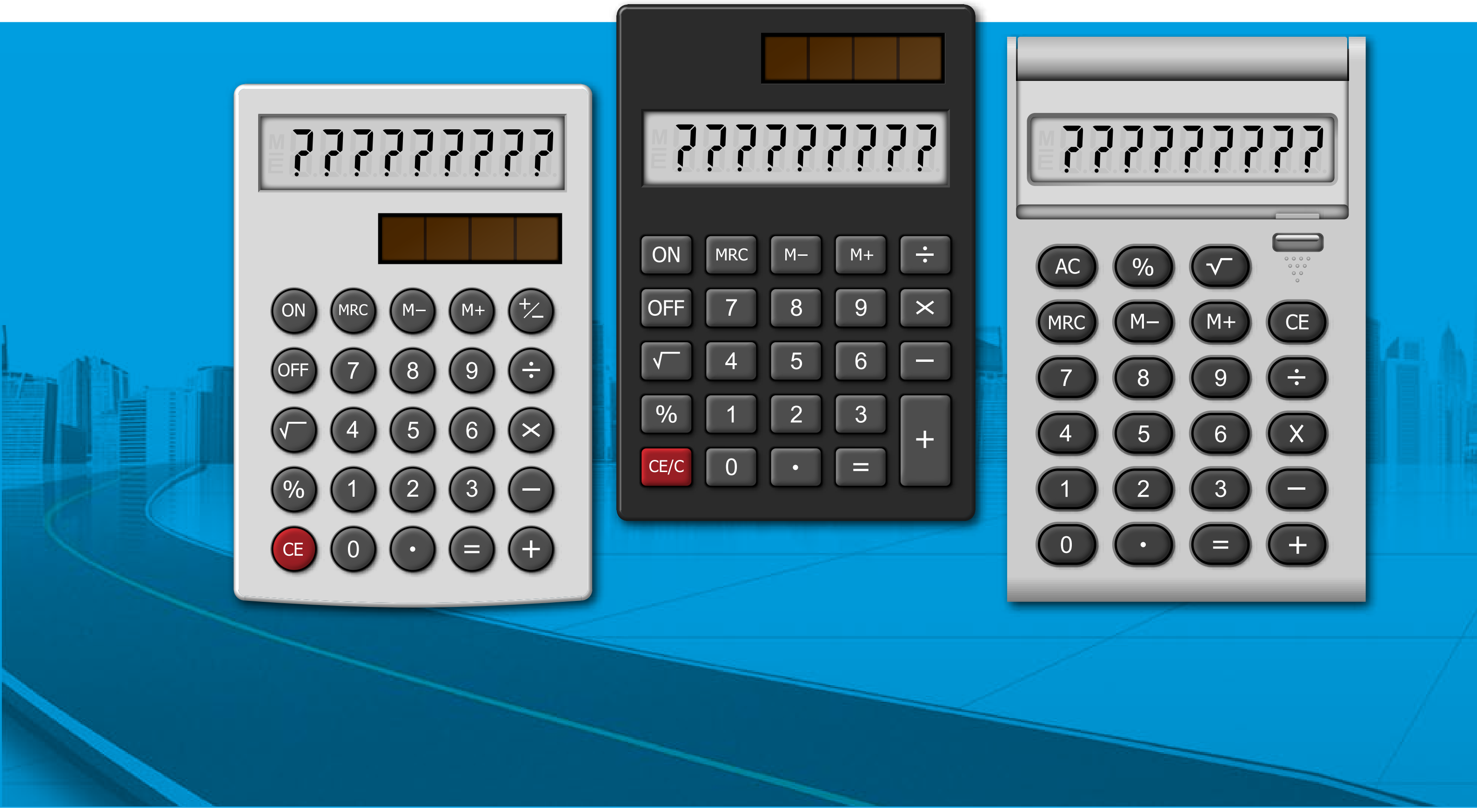
The three principal categories of cost behaviour are fixed, variable and mixed (or semi-variable).

(i) Fixed costs

These are costs that remain the same in total dollar amount regardless of changes in the level of activity within the relevant range. Examples would include straight line depreciation of equipment, rent on factory buildings, and council rates or insurance premiums costs. The wages paid to a production supervisor or a factory manager would also be a fixed amount per annum provided that they are not paid extra for working overtime. These costs (which are really expenses) are all based on time and not on some measure of activity or output. Because the total amount of a fixed cost remains constant, it means that as production volume increases fixed cost per unit decreases.

Fixed costs are sometimes referred to as 'capacity costs' as they arise from providing the facilities needed to carry on production, for example, factory buildings and the equipment they contain. A capital intensive manufacturing firm such as a car maker would have a greater proportion of fixed costs than a labour intensive business such as a retail store.

The cost function for a fixed cost is $y = a$, which is the formula for a horizontal straight line. However, the value of 'a'(where the total fixed cost line intersects the y axis in **Diagram 1** below) is an estimate of total fixed costs only if the zero level of activity (shutdown) is within the current relevant range.



What happens to a fixed cost if the activity level goes outside the relevant range? It may increase or decrease in a step-wise manner as illustrated in **Diagram 2**. A stepped fixed cost remains the same in total within the various ranges of the level of an activity or output, but the cost total increases in steps as the level of activity increases from one range to the next.

Diagram 2 illustrates a situation where a company normally produces between 2000 and 3000 units per annum using three leased machines, each of which has a maximum output of 1000 units per annum. The annual rental is $50, 000 for each machine, so the company's total fixed cost of operating machinery is currently $150, 000 per annum. If planned output increases or decreases from the current level it may be possible to change the number of machines being leased (if the lease permits this) so the total fixed cost amount for machinery will step up or down according to which output range the company decides to operate at.

(ii) Variable costs

A variable cost is a cost that changes, *in total,* in direct proportion to changes in the level of activity. If the level of an activity doubles, and a related cost also exactly doubles, then the cost can be classified as a variable cost with respect to that particular activity. On a per unit basis, however, a variable cost remains constant while the activity level is within the relevant range. The amount of the variable cost per unit is represented by the coefficient 'b' in the cost function for a variable cost: $y = bx$. The value of b is the slope or gradient of the variable cost line. **Diagram 3** graphically illustrates a variable cost.

Examples of variable costs would include direct labour costs (assuming that production workers can easily be hired or fired as planned production goes up or down) and direct materials costs. If the cost of direct materials is a constant $10 per production unit then the total direct materials cost in dollars will be 10 times the number of units produced. The total cost of fuel used by delivery vehicles would usually vary directly with the number of kilometres travelled. Commissions paid to sales people are normally a defined percentage of sales dollars and so will vary in direct proportion to sales revenue.

Notice that the cost line in **Diagram 3** starts at the origin, which is the point where the x and y axes intersect. At zero units produced, total variable cost is also zero, while the uniform slope of the cost line reflects the constant variable cost per unit within the relevant range. If variable cost per unit does change at certain levels of activity, the variable cost line will be made up of a number of short straight segments each covering a certain range of activity

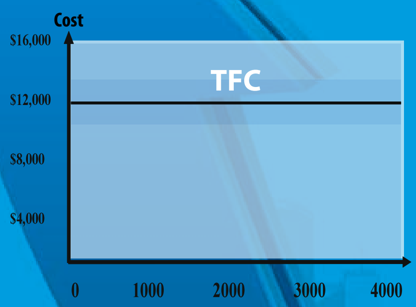


Diagram 1: A Fixed Cost

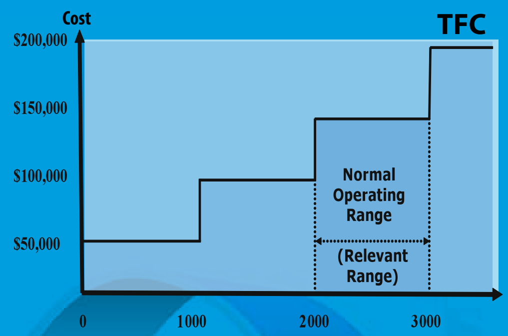


Diagram 2: A Stepped Fixed Cost

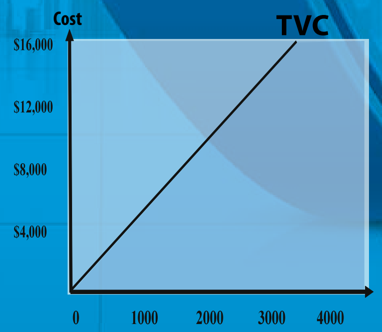


Diagram 3: A Variable Cost

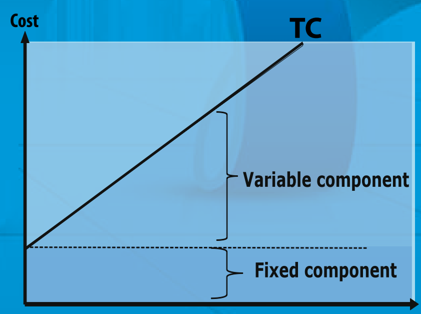


Diagram 4: A Mixed (or Semi-Variable) Cost

and each having a different slope. The variable cost line will, if the ranges are small enough, take on a curvilinear shape. If variable cost per unit steadily increases as the level of activity increases, the cost line will curve upwards i.e. its slope will become steeper. For example, the cost of electricity per kilowatt-hour may increase each time that total electricity consumption for a period (in kilowatt-hours) passes a certain level. When the level of activity rises and causes electricity consumption to reach a cost change point, the slope of the electricity cost line will increase for the next range of activity.

(iii) Mixed costs

The costs considered so far have been either completely fixed or completely variable. However, there are some costs, called mixed or semi-variable costs, which have both fixed and variable components as shown in Diagram 4. For example, an electricity bill will usually include a fixed supply charge for a certain time period as well as a charge for the total amount of electricity consumed during that period. Even if production lines had been completely shut down for the whole of the billing period, and no electricity had been used, the fixed supply charge must be paid. This is the minimum cost of keeping electric power available for the factory. It represents the fixed component of total electricity cost i.e. the amount of cost where the cost line in **Diagram 4** intersects the vertical (y) axis. It is also the value of the constant ‘a’ in the cost function for a mixed cost: $y = a + bx$. As previously mentioned, b is the variable (or incremental) cost per unit of activity.

Mixed costs are usually reported in total in the accounting records. How much of the cost is fixed and how much is variable is sometimes unknown and must be estimated. The ways that this can be done will be explained in the next instalment of Student Notes.

Why is it important to know which costs are fixed and which are variable? This information is useful for management decision making, for instance, when considering whether to sell a certain quantity of output to a special customer at a unit price which is less than the full production cost per unit. An understanding of the costs that will increase with the level of activity, compared to those costs that will remain constant over the relevant range of activity, also assists managers in determining how cost reductions will add to the firm’s profitability. But beware; fixed costs per unit should be used carefully for internal decision making because they will vary as output varies. If fixed cost per unit decreases, it simply means that total fixed costs are being spread over more units and *not* that total fixed costs have changed. A final, but important, point: determining whether a cost is fixed or variable depends on the time horizon. The longer the time period, the more likely it is that a cost will be variable. The so-called ‘short run’ is a period of time for which at least one cost remains fixed. In the long run, *all* costs are variable.

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Our first member of the Month for 2012 is **Nava Subramaniam,** Professor of Accounting and Associate Head of Research in the School of Accounting, Economics and Finance at Deakin University, Victoria, Australia. Nava's research interests include auditing, corporate governance, public sector accounting, management accounting and control system design, and accounting education; she has received two large Australian Research Council Linkage grants partnering with various industry organisations. Nava is widely published in accounting journals, speaks regularly at national and international accounting research conferences and professional seminars and is a former ICMA councillor.

[*Management* accountants have become ***important*** with the downturn in the global economy]

Q. What attracted you to management accounting?

A. The ability to have real influence; knowing that your advice will help build the company. As a management accountant you work hand-in-glove with the managers of a business, providing them with both the numbers and assessment of other forward leading indicators to help them set the course for the future – the financial world's equivalent of being an architect and of designing a house to stand strong in all conditions.

Q. You are an academic now but have you practical experience in management accounting?

A. Yes, I worked as a management accountant for over three years, and it was a wonderful experience in understanding issues related to performance reporting, costing etc. I appreciate the real hands-on impacts accountants have in industry, and being part of providing relevant and timely data for managers to work on was a truly humbling experience. I was interested in being an educator and when the opportunity presented I elected to undertake a PhD. The creative opportunities offered by research continue to captivate me.

Q. Why did you join the ICMA?

A. My experience working as a management accountant and researching in the area as an academic seemed to be a good fit with the organisation's objectives and mission.

Q. Are there any recognisable trends in management accounting education e.g. changing expectations of the course?

A. Carbon pricing will challenge management accountants to manage such costs more effectively and efficiently. Meeting this challenge is essential in a carbon constrained world though difficult to fit into an undergraduate degree.

Q. Which areas of management accounting are your students most interested in following as a career?

A. Costing, strategic management accounting and sustainable practices.

Q. Do you think there are big differences between theory and practice?

A. Yes, I do. There is not enough support and engagement from industry in Australia for academic research. It does not help that the traditional manufacturing sector has shrunk. We will need to improve our service industry management accounting skills and delivery.

Q. If so, how can these differences be overcome?

A. I believe there should be more professional engagement and researchers undertaking more industry relevant projects.

Q. How do you see the role of management accountants in this post GFC world?

A. Management accountants have become more important with the downturn in the global economy. Companies are now more frugal and cost conscious and as a result there is a greater focus on efficiency and on assessing all of the risks to a business across operations and on having a whole-of-company plan to manage these risks and continue to grow.

Q. What are your thoughts on the future of the profession?

A. Risk, uncertainty and sustainability – the management of these are particularly important in today's changed world, and management accountants are uniquely placed within an organisation to critically assess the challenges ahead and provide advice to management on the best way forward.

In each issue *On Target Online* turns the spotlight on someone of interest and achievement in our ranks. All branches are invited to nominate members they consider to be outstanding management accountants who have contributed both to their profession and the wider community. Nominations should be accompanied by a brief outline of why the nomination is significant and contact details for the nominee. Please address contributions to the editor ontarget@cmawebline.org

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Hong Kong 2011 Report

Events & Activities Highlights

Certificates Presentation to Foundation Members

The academia cocktail reception and presentation of certificates was held in January 2011 to acknowledge the support from academics in Hong Kong and to present certificates to our Honorary President, Honorary Advisor and newly recruited Foundation Members who are highly renowned educators and business leaders in their fields.

Foundation members (senior academics) receiving certificates from Mr Allen Wong, CEO, Hong Kong Branch

Recipients pictured in left column from the top:

Professor Judy Tsui, Vice President, International and Executive Education, The Hong Kong Polytechnic University

Professor Ted Chen, Professor & Head, Department of Accounting, Hong Kong Shue Yan University

Professor Phyllis Mo, Department of Accountancy, City University of Hong Kong

Dr Sidney Leung, Associate Head, Associate Professor, Department of Accountancy, City University of Hong Kong

Dr Peter Cheng, Acting Head and Associate Head, School of Accounting and Finance, The Hong Kong Polytechnic University

Recipients pictured in the right column from top:

Dr Edward Fung, Dean of the Community College and Further Education, Lingnan Institute of Further Education

Dr Charles Wong, Director, School of Continuing & Professional Education, City University of Hong Kong

Professor Lui Yu Hon, Director, The Open University of Hong Kong LiPACE

Dr Donald Chan, Head (Business and IT Studies), School of Continuing Education, Hong Kong Baptist University

Comments to Government Departments

The Hong Kong Branch was invited by the HKSAR Legislative Council and the Financial Services and The Treasury Bureau to provide comments on "Preparation of Simplified Financial and Director's Reports" in July and December 2011 respectively.

Our Executive Committee conveyed our comments and point of view to the respective government departments and would be pleased to involve those members who are interested to contribute in the future.

The Philippines

Schedule of events for 2012

CMA Batch 24 from 7 January - 31 March 31,
Crowne Plaza Galleria Manila, Philippines

CMA Batch 25 from 5 May - 21 July 21,
Crowne Plaza Galleria Manila, Philippines

CMA Batch 26 from 1 Sept - 17 Nov,
Crowne Plaza Galleria Manila, Philippines

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Networking with Professional Bodies as pictured left to right

- The Hong Kong Branch participated as a co-organizing partner at the Association of International Accountants joint seminar on valuation for M&A Transactions and its impact on financial reporting at the Hong Kong Polytechnic University in May 2011.
- A team of senior business leaders and government officials from Jiang Xi and Xián visited the Branch office in November 2011.
- The London Chamber of Commerce and Industry's CEO visited the Hong Kong Branch in October 2011 where Mr Allen Wong greeted the CEO, Mr Nigel Snook (third left) and his team


Corporate Social Responsibility

- The Branch supported Help Actually's Gala Premier on Margin Call in November 2011 where Ms Janice Cheung , the founder and CEO is pictured presenting a memento of the occasion to Mr Allen Wong
- Our member, Mr Santos Li, volunteered his expertise and time to assist the Hong Kong Neuromuscular Disease Association to audit their 2010-2011 annual accounts as a community service on behalf of the Hong Kong Branch


CMA Seminar Room Rental

The Branch premises in Wanchai is offered to our members for event / workshop rental subject to a minimal fee and availability. Interested parties please contact our secretariat as below.

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Sat: by appointment only

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