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## Merging Made Messy: unifying the Canadian accounting profession

#### By Sigmund Lee

It looked so easy on paper. Traditional professional differences between Canada's accounting groups were eroding such that it no longer made sense for practitioners to compete aggressively. So following months of talks, in January 2012 the Canadian Institute of Chartered Accountants (CICA), Certified Management Accountants of Canada (CMA Canada) and the Certified General Accountants of Canada (CGA Canada) presented their members with a proposed framework for uniting the country's accounting profession.

The result thus far appears to be an industry more confused than before the merger began with support unraveling amid fears of losing professional distinctions given the clout of chartered accountants who almost outnumber the other two groups combined. Sigmund Lee, a member of ICMA (Australia) and a Canadian resident, is critical of the process. In his opinion the merger dream will not be realized. Merging accounting bodies is indeed a difficult strategy to execute successfully. In 2006, merger discussions between the ICMA and IMA ended acrimoniously, and in Australia members of the two largest bodies attempted a merger which was rebuffed by the Chartered Institute. Time alone will tell if Sigmund's skepticism is the ultimate Canadian reality.

We stress that the opinions expressed in the following appraisal of the dynamics and politics of the Canadian process are those of Sigmund Lee, ICMA (Australia) and not those of the ICMA.



How do you merge three major accounting bodies consisting of 39 separate accounting entities? You can't unless the government mandates it. In Quebec, the government facilitated the merger of the CMA, CGA and CICA and adopted a single designation – The Chartered Professional Accountant (CPA). In other provinces, the rivalry

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build up over the past century, the distrust, the disrespect of the CGA and CMA by the CICA, http://www.cga-manitoba.org/news\_media/news\_blog/12-07-05/CEO\_Merger\_Update\_July\_1. aspx and the loss of identities have basically killed the possibility of the total merger of Canadian accounting bodies in my view.

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The CGA and CMA are allowed to **audit** and do the same things as the chartered accountants **blurring** the lines separating all *three* bodies CICA members still consider the CGA and CMA as inferior cousins. This was evidenced by an answer given by Mr. Kevin Dancey, President and CEO of CICA, when trying to sell his case for unification to CGA Canada's Board of Governors in April. During the Q & A session, Mr. Dancey was asked whether the merged body, CPA Canada, would commit to negotiating future mutual recognition agreements on behalf of all CPA members. Disappointingly, his response demonstrated a lack of respect for CGAs and CMAs and should be a defining moment for anyone who believes CICA's unification vision is intended to deliver professional equity. Mr. Dancey stated unequivocally that, if necessary, CPA Canada would be prepared to sign an MRA that only supports legacy chartered accountants. This is one example of how the current proposal could differentiate and discriminate between classes of CPA members.

In the good old days, the chartered accountants had the coveted auditing rights. Today, however, the differences between a CA, CGA and CMA are no longer as clear cut. The CGA and CMA are allowed to audit and do the same things as the chartered accountants blurring the lines separating all three bodies.

I personally believe that for Canada, and I do not presume to set similar standards for other countries, a single accounting body would give the accounting profession a single voice and deliver the efficiencies that can be achieved from a single body and better international recognition.

Doctors, lawyers and engineers have been able to work out their differences. They list their specialty after their title. Why can't accountants in Canada do the same?

It is my view that unless the government forces the issue or there is an attitudinal change among some of the parties such that ultimately all show mutual respect for each other, the vision of one body governing and representing all accountants in Canada will never become a reality.







On Target Online - exclusive or not?



# **C** Institute News

### Navitas Program

The Institute is pleased to announce that the first CMA program run by Navitas will be held from November 16-18. This is a very important step for the ICMA in Australia because it opens opportunities for candidates not currently enrolled in a university environment to participate in our education programs. See the Institute website for details http://cmawebline.org

#### Skilled Occupation List (SOL)

The Institute has been invited to lodge a submission with the Australian Workforce and Productivity Agency (AWPA, formerly Skills Australia) supporting retention of the Management Accounting designation on the SOL for the 2013/4 fiscal year.

This is an extremely important aspect of our campaign to be appointed an assessment authority for the designation. If the Management Accounting designation were to be removed from the list it leaves us with no cause to fight for. A submission is currently being prepared and will be lodged with AWPA next month.





ICMA council members are currently debating an interesting policy issue that is worth sharing with the membership. The key issue is about member services, and the case in point focuses on the distribution target of *OnTarget Online* 

The protagonists in the debate line up as follows.

Some say that *OnTarget* should be distributed to members only and when posted on the website parts of the publication should be locked allowing member only access. The rationale for this argument is that the e-Mag is a service to members and as such should only be available to them.

Others, however, take the view that an electronic publication with unlimited circulation potential should be one of the prime marketing tools for the ICMA and for attracting new members. Building circulation and increasing membership creates value for members in many different ways of which enhancing the Institute's public profile and potentially boosting our advocacy projects for the profession are but two. Yet another possibility is for gaining sponsorships and thus reducing operating costs and freeing up resources that can be directed to providing more member benefits.

The discussion essentially goes to the heart of what members receive in return for their annual subscriptions. ICMA fees are relatively low compared with similar institutes, nevertheless we deliver the core services provided by others- post nominals, membership of a professional body which has a professional program with tertiary credibility, a research publication, a magazine and a year book. We are constantly searching for ways of providing more services and benefits, but are always conscious of the budgetary restrictions placed on us by a low fee structure

My personal view is that *OnTarget* should be used to create opportunities for sponsorship, marketing and membership growth. This assists the ICMA to boost resources and to appropriate funds for its public advocacy programs while creating opportunities for offering additional membership benefit programs.

What is your view? Please click on the link below to comment ontarget@cmawebline.org

We welcome feedback and will publish a selection of replies.

Leon Duval CEO, ICMA



In this issue we introduce a new series focusing on management accounting strategies for the evolving workplace. The following article relates to the HR aspects of Management Control Systems as a model for integrating Generation Y recruits into an organisation.

## **Building Structures to Innovate**

by Leon Duval

The message is clear. Firms competing in dynamic environments must embrace processes for a re-engineering and innovation of their products and markets plus the capability by which these are identified, created and delivered. Such is the thrust of recurring themes about the pace of change, shortening lifecycles and the need for innovation appearing in management literature and various business publications.

A failure to recognise and manage the inexorable pace of change within environments and competitive landscapes will catapult the organisation into a death spiral that may not be retrievable after its myopic management has been terminated and replaced by a new team appointed to restore competitive ability.

But is this really new? Humans have both confronted and facilitated change from time immemorial as have the management teams running organisations. Way back in 1955, Peter Drucker, recognising that nothing remains constant, warned management teams that to survive and succeed they must both master the economic circumstances faced and embrace an imperative to alter them by "conscious, concerted action". He also exhorted management to always consider both the present and the long-range future:

"a management problem is not solved if immediate profits are purchased by endangering the long-range profitability, perhaps even the survival, of the company. A management decision is irresponsible if it risks this year for the sake of a grandiose future"

Observing that:

"In every case where present and future are not both satisfied, where their requirements are not harmonized or at least balanced, capital, that is, wealth-producing resources, is endangered, or destroyed".

What Drucker could not foresee was the pace of change organisations would confront in the 21st century although the master did understand this long before most, and managing change through innovation emerged as a dominant theme in his later work.

Management theory recognises that organisational structure or "architecture" is shaped by the choice of strategy. This has given rise to the axiom that "structure follows strategy" also known more formally as the "standard conceptualization in management studies".

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A failure to recognise and manage the inexorable pace of change... will catapult the organisation into a death *spiral* 







It therefore follows that when strategy is fashioned to embrace and meet the challenges of dynamism the organisational architecture built to execute that strategy must accommodate an imperative that innovation is both supported and encouraged.

Three categories of innovation are commonly identified, two of which describe the continuous incremental changes required to maintain efficiency during the ordinary course of an organisation's life. These are *incremental* innovation processes, when small improvements are made to existing products and operations, and *architectural* innovation processes, applying technological or process advantages to fundamentally change some component or element of the business.

These two innovation categories are mandatory if an organisation is to sustain competitive advantage within familiar or existing markets where an extant product offering is produced and delivered. They should also be viewed as problem oriented, devoted to rectifying short term problems and, therefore, distinguished from actions required to overcome the potential future cash flow deficits that would result from a total loss of competitive capability through the obsolescence wrought by external dynamics.

When the pace of change mandates moving out of comfort zones into new markets with new product in order to sustain competitiveness, a *discontinuous* change process is required i.e. innovation designed to meet the opportunities presented by strategic windows.

**Discontinuous innovation** describes the radical advances that profoundly alter the basis for competition in the industry. It is innovation driving fundamental change that by its nature mandates the creation of new and often radically different organisational structures.

Its impact can be clearly understood when examined in relation to the quantum shifts in strategic direction periodically initiated by organisations in response to environmental changes. Most of the time, organisations pursue a particular strategic orientation and any change occurs within that context. The external environment in which the organisation operates is, however, subject to changes, sometimes slowly but occasionally in dramatic shifts, forcing the existing strategic orientation to be moved out of sync with its environment. This disconnected state necessitates a revolutionary need for a quantum change process so as to realign organisational strategies with prevailing realities.

The diagram below illustrates the extent of the shifts required when selecting a strategy based on discontinuous innovation. The organisation is forced to venture from the comfort provided by familiarity with its core competencies in both markets and product offering and to shift its operations either into new products, new markets or both. When the organisation moves into new markets with new products the shift is, in effect, a quantum leap, and the level of innovation required would fall under the discontinuous category involving high levels of uncertainty and significantly raised risk profiles.



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An outstanding example of discontinuous innovation was undertaken by the United States navy in the 1950s when a team led by Admiral Hyman Rickover developed the nuclear power plants that allowed submarines to remain submerged for extended periods. They achieved this breakthrough innovation by taking the technology that created the atomic bomb, a weapon of destruction, and effectively transforming its applications for totally different purposes since the same designs were used also to create the first nuclear powered generating facilities.

Building organisations that embrace discontinuous innovation create a number of seemingly incompatible anomalies that need to be successfully reconciled before the constant process of radical change is successfully absorbed into the structural fabric.

The first is the incompatibility in cash generation capability between structures supporting innovation and those supporting existing products and markets. Innovation, referred to as a process of *explore* in the literature, sucks up large quantities of cash before the new product or service is market ready. This cash requirement is commonly serviced by the existing product range - the *exploit* capability - the result being that the organisation requires a structure capable of supporting both explore and exploit activities.

#### The Scope of the Ambidextrous Organisation HBR April 2004 p80

Alignment of	Exploitative business	Exploratory business
Strategic Intent	Cost, Profit	Innovation, Growth
Critical Tasks	Operations, Efficiency Incremental innovation	Adaptability, new products Breakthrough innovation
Competencies	Operational	Entrepreneurial
Structure	Formal, Mechanistic	Adaptive, loose
Controls, Rewards	Margins, productivity	Milestones, growth
Culture	Efficiency, low risk Quality, customers	Risk taking, speed Flexibility, experimentation
Leadership Roles	Authoritative, top down	Visionary, involved

Ambidextrous leadership

Different alignments held together through senior team integration Common vision and values and common senior team rewards This is when real incompatibilities and tensions arise. Building a culture focused on innovation must by its very nature tolerate an appetite for risk taking and allow creativity to flourish, whereas structures designed to support efficiency and stability avoid excessive risk and strive for reliability and conformity. In addition, innovation is fostered through experimentation and stimulated by failure, whereas if maximum value is to be extracted from existing capabilities, failure is discouraged and processes are tightly controlled by the introduction of highly standardised routines. The diagram below, reproduced from an article published in the Harvard Business Review April 2004, clearly sets out some of the tensions and incompatibilities that need to be reconciled when attempting to sustain structures that are designed to exploit together with those designed to explore.

The solution offered is that of the ambidextrous organisation which provides a mechanism allowing seemingly incompatible components to be embraced within one structure.

The word *ambidexterity* is derived from the Latin ambos, "both", and "dexter", right (as opposed to left) thus, ambidexterity is *right on both sides*. The ambidextrous organisation has a dual approach allowing for alignment and efficiency when managing today's demands while at the same time being adaptable to changes. It has been designed to support innovation and the exploration of potential strategic windows while maintaining an effective cash generating capability. By identifying and reconciling incompatibilities between the structures required for innovation and those that support a mature and stable cash generating capability, it becomes a structural solution to meet the demands of dynamic environments in which constant discontinuous change is necessary.

What does an ambidextrous organisation architecture look like? The diagram on page 7 clearly illustrates one example. It depicts two parallel organisation capabilities living within one corporate body. CoreCo focuses on the exploit capability and maintaining the existing cash flow generating structure, while NewCo, for which the raison d'être is future oriented, focuses on the opportunities provided by exploiting the potential of strategic windows.

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The critical difference between this model and simply putting in place two conventional structures lying side by side is the integration facilitated by the Executive Sponsor, who while ensuring the two structures are culturally and structurally distinct, ensures they are permanently linked. This is achieved by convincing CoreCo personnel that they should not view Newco as a threat to their future when emerging products and technologies threaten to replace existing ones. They are encouraged to view NewCo as the structure guaranteeing a future and ultimately a future in which they will participate. This presumption encourages CoreCo to support NewCo's activities by offering resources for successful outcomes.

By the same token, NewCo personnel are encouraged not to reject the experience and history embedded in the processes and capabilities of CoreCo. Although made to forget and break away from the strictures of the past they are encouraged to borrow and apply what is valuable in supporting their own focus.

The New York Times is a fascinating and topical case study illustrating this process of "forget" and "borrow". After a very unsuccessful attempt to move into the online space with their masthead publication, management realised that print and digital were completely different media. Attempting to create a digital presence using a print media capability was found to be impossible because the resources employed in this division were unable to forget the expertise that made them successful in their own conventional space. This myopia blocked the ability to innovate and develop the knowledge required to create and sustain a very different news and communication medium.

Management then applied ambidextrous architecture principles to create a dual purpose organisation along the lines of the CoreCo, NewCo model. CoreCo continued to publish and innovate within the boundaries of print media, and NewCo was freed of the shackles that previously bound the digital personnel into sticking with convention and tradition. NewCo, however, had some enviable advantages over a conventional start up like the NYT brand name, direct access into news channels and existing data bases



Govindarajan, V., & Trimble, C. (2005). Organisational DNA for strategic innovation. p50

of advertisers. Although they were able to forget the processes required for delivering print media they could borrow the intellectual property on which it had built its successful past.

There are many other models and approaches to the ambidextrous or dual purpose form. It is hoped that this brief introduction to a potential solution for building structures allowing inherent incompatibilities in design to be resolved will encourage further reading on the subject.

#### References

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Govindarajan, V. and C. Trimble (2005). "Organisational DNA for strategic innovation." California Management Review 47(3): 47-76.

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The ambidextrous organisation has a dual approach allowing for alignment and efficiency when managing today's demands



In this issue we introduce a new column of practical tips and advice for better managing processes and problem solving on a day-to-day basis, commencing with Matthew Schott's Financial Modelling Excel tip aimed at those lacking a strong command of all functions around this task.

## Substance and Form(at)!

by Matthew Schott, ICMA (Australia)

We are all familiar with the accounting term "substance over form". It defines the importance of presenting the economic substance over the legal form in financial statements.

I prefer the term "substance and format" for management accounting purposes. As management accountants we need to provide information that helps managers with decision making, and how this is formatted is vital. Consistency and clarity of format are fundamental to providing information that managers can trust and comprehend to add value. In effect, for the economic substance to be understood by managers, whether financial or non-financial, the format must be right.

Delivering consistent and clear formatting can involve transforming data in Excel, often from multiple sources. These are some of my preferred methods for achieving these aims in Excel management reports with a couple of common issues I have found in the field and preferred ways of treating them.

Firstly, the most common issue I encounter is when the base data is in \$ units and for presentation it is transformed into \$ thousands (or \$ millions etc). A common way to treat this is to use the Paste Special > Divide function. This is quick and simple but poses a couple of issues:

- 1. It changes all data that has been selected and pasted over causing SUM functions to all divide again, so in effect double division has occurred for totals.
- The base data has lost integrity as it has been manipulated to contain a new number. Note that where the original data was simply a number, the new number will show no traces of manipulation and this can cause confusion later.

The preferred way to change the data and overcome these issues is to use the Format method as follows:

- 1. Select range > Right click Format Cells > Number tab > Select Custom from list > place cursor in "Type:" box
- 2. Using the example above (\$ units into \$ thousands) we would type the custom code:

"\$#," each comma effectively removes"000s", so a second comma would turn \$ thousands to \$ millions. To add two decimals use "\$#.##,".

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Note: the structure of custom code is as follows:

positive numbers; negative numbers; zeroes; text.

So when you are building a custom format remember to include rules on all necessary components, not just positive numbers. There are many rules on syntax for custom formats Google "Excel custom format syntax", and you will find many resources explaining them including how to change the colour for numbers e.g. red for negative.

Benefits of the Format method are that the base data is not altered, therefore:

- 1. The formatting has only changed the presentation layer to make the information clearer by removing detail. This leaves an audit trail of the original source data and no chance for error.
- 2. The data will sum correctly every time as the base data integrity has been maintained.

Secondly, a common change made to Excel data is to switch the sign of the data. For example, accounting system data where revenue is a credit (a negative when exported to Excel) and it is changed into a positive number for management with the same change needed for expenses. Again there are a few ways to approach this sign switch issue. You could simply go to each cell to make a sign change which is time consuming and error prone. Alternatively, use the custom format code approach discussed above by building a code that makes positive numbers appear negative and vice versa. I think this approach is a good option depending on the data users and audience, but it can be cumbersome to switch views depending on the circumstances. Another way could be to use the Paste Special > Multiply function by copying a cell that contains "-1" and pasting it to all cells. But the data will be permanently altered, which is not ideal as discussed, so I commonly use a variation of this approach, as follows:

- 1. Enter "-1" into a cell somewhere outside of the range you want to manipulate e.g. A1.
- 2. Then link this cell to another cell with an anchor e.g Cell A2 = A
- 3. Now Copy Cell A2 > Paste Special Multiply to the base data, except for SUM or other functions in the range.

The benefits of this approach are that you now have a dynamic cell A1 that allows you to switch the view from positive to negative just by changing the number contained. The drawback is the need to avoid pasting this into cells with functions such as SUM as these will also be affected and cause errors. This technique is, however, a simple way to change data consistently and can be used in other ways for different objectives. To add sensitivity to the range for example, you could input 1.1 for a 10 per cent increase in all data. You will also see the cells pasted to will have the original number multiplied by the anchor cell [e.g.  $100,000 \times (A 1)$ ] which allows for checks against source data.

The techniques discussed may seem inconsistent, but to provide information that is clear and consistent often involves using different methods that allow for accuracy and flexibility depending on the situation.

Tips and practical hints for this column are welcome, please send your ideas to the editor at ontarget@cmawebline.org

## **Overhead Rates and Absorption versus Variable Costing**

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

## Applying overhead to work in process

In the second instalment of Student Notes ('Cost Concepts, Categories and Flows') I mentioned that manufacturing overhead costs are applied (or allocated) to products by using *overhead rates*. However, if products are to be costed as soon as they have been produced, it is necessary to establish at the beginning of each period (which usually comprises 12 months) a *predetermined overhead rate* (or POR). This rate is then used during the period to apply overhead to products (as explained below). A costing system which calculates product unit cost as the total of (i) actual direct materials cost, (ii) actual direct labour cost and (iii) an *applied* amount of overhead cost, is known as *normal costing*. If *actual* overhead costs were allocated to products it would be necessary to wait until the end of each financial year when the actual overhead costs for the period could be determined. This system (called *actual costing*) is of little use to management as decisions have to be made *during* the year.

In order to establish a predetermined overhead rate, management must:

- Estimate the total amount of manufacturing overhead cost for the next 12 months.
- Select a single volume-related cost driver such as direct labour

hours, direct labour cost or machine hours. The choice will depend on which factor best reflects the major cause of overhead in that organisation.

• Estimate the level of manufacturing activity measured in terms of the volume-related cost driver that has been selected.

The predetermined overhead rate is then calculated by dividing the estimated overhead amount by the estimated level of activity to arrive at a rate per unit of the chosen cost driver. If the cost driver is direct labour hours, then

POR = <u>estimated total manufacturing overhead</u> <u>estimated total direct labour hours</u>

During the period, overhead will be applied to products at the predetermined overhead rate by multiplying this rate by the actual amount of the cost driver used.

e.g. estimated overhead costs for the year: \$200,000

cost driver: direct labour hours

estimated direct labour hours for the year: 10,000

predetermined overhead rate \$200,000/10,000 = \$20 per DLH

actual DLHs worked on batch number 230 was 25 DLH

overhead applied to batch number 230 = 25 DLH x 20 = 500





In the ledger, a single Manufacturing Overhead account is maintained. All the actual manufacturing overhead costs incurred are debited to this account, and credited to Cash at Bank or to a payable account. All the overhead applied (i.e. POR x DLH used) is credited to the Manufacturing Overhead account and debited to Work in Process. Any balance in the Manufacturing Overhead account (a temporary or holding account) at the end of the year represents either over or under-applied overhead. If the actual overhead incurred was greater than the applied overhead there will be a debit balance representing under-applied overhead, while if the actual overhead incurred was less than the applied overhead there will be a credit balance representing over-applied overhead. At the end of each year it is necessary to close the Manufacturing Overhead account and to dispose of any balance so that the final cost records are as close as possible to the costs which would have been shown had actual overhead costs been used. The balance is usually disposed of by transferring the full amount to the Cost of Goods Sold account. Thus, a debit balance in the Manufacturing Overhead account that represents the under-applied overhead amount will increase the cost of goods sold when it is transferred, while a credit balance that represents over-applied overhead will reduce the cost of goods sold.

#### Absorption versus variable costing

So far, we have assumed that **all** manufacturing overhead costs are to be included in the calculation of product unit cost. This assumption is the basis of the costing system known as absorption costing. All of a product's manufacturing costs, both variable and fixed, are said to be 'absorbed' by the product. An alternative approach is to include only the variable manufacturing costs in product unit cost and to treat fixed manufacturing overhead as a period cost i.e. as an expense on the income statement. This system is known as variable costing (or sometimes as direct costing). We will now examine these two costing systems and see how they can affect profit determination and also inventory values on the balance sheet. We will also consider their usefulness for managerial decision making.

Under absorption costing, a certain amount of fixed manufacturing overhead cost is attached (applied) to each unit of output. This means that under absorption costing unit manufacturing cost includes direct material, direct labour, applied variable manufacturing overhead and applied fixed manufacturing overhead. Thus, when a unit is sold the fixed overhead cost per unit is

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All of a product's manufacturing costs, both variable and fixed, are said to be **'absorbed'** by the product



# The key issue with these two *costing* systems is really one of *timing*



included in the expense 'Cost of goods sold' shown on the income statement. If the unit is unsold, the fixed overhead cost per unit is included in the closing balance of the asset account called 'Finished Goods Inventory' which is shown on the balance sheet. When the unit is eventually sold, the total absorption unit cost (including the amount of fixed manufacturing overhead cost per unit) will come out of the Finished Goods Inventory account and become part of the Cost of Goods Sold account (which is closed off at the end of each period to the Profit and Loss account).

With variable costing, the *total amount* of fixed manufacturing overhead cost is expensed in the current accounting period, irrespective of how many units were produced and sold. Unit manufacturing cost, therefore, includes only variable costs i.e. direct material, direct labour and applied variable overhead. When variable costing is used, it is necessary to divide the total amount of manufacturing overhead into its variable and fixed components by using a cost analysis technique like the High-Low method. Remember that variable costs change in total in direct proportion to changes in the level of output (or the level of the cost driver such as direct labour hours or machine hours) but on a per unit basis they remain constant. Variable manufacturing overhead costs would include the costs of electricity, fuel oil used for furnaces, indirect labour and indirect materials such as solvents or the detergents used to clean equipment. By contrast, fixed costs remain constant in total even though the level of output may vary within a certain range. Fixed manufacturing overhead costs would include factory rent, council rates, insurance premiums on the factory buildings and equipment, and the salary paid to the factory manager.

The key issue with these two costing systems is really one of timing: the time at which fixed manufacturing overhead costs are charged against revenue i.e. either when units are sold (absorption costing) or when units are produced (variable costing). Any difference between the number of units produced and the number of units sold allows us to make the following two statements:

- When *production is greater than sales*, absorption costing profit will be greater than variable costing profit, because some of the fixed manufacturing overhead cost incurred in the current accounting period is held in an inventory (asset) account under absorption costing, whereas under variable costing the total amount of the current period's fixed manufacturing overhead is expensed.
- 2. When production is less than sales, absorption costing profit will be lower than variable costing profit, because some of the fixed manufacturing overhead costs incurred in the previous accounting period will be included in the current period's cost of goods sold, in addition to all of the current period's fixed manufacturing overhead costs. Under variable costing only the total amount of the current period's fixed manufacturing overhead costs is charged against revenue—the previous period's fixed manufacturing overhead costs were expensed in the previous period.

Of course when *production equals sales* (and also over a long period of time), both methods will show the same profit because the same amount of fixed manufacturing overhead will be expensed.

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With variable costing profit is a function of sales volume only, provided that selling prices and cost structure remain unchanged. However, with absorption costing profit is a function of both sales volume and production volume i.e. it is influenced by changes in the level of finished goods inventory even when prices and costs remain constant. The following example illustrates how profit reported under the two costing systems can differ when sales in units is higher or lower than production in units. The example covers two consecutive months for a company, XYZ Ltd, which makes and sells only one product, and which commenced operations at the start of January 2012. It, therefore, had no inventory on hand at the start of 2012. Costs and production information for January follow (table 1):

Data for January 2012	
Number of units produced	10,000
Number of units sold	8000
Unit sales price	\$100
Manufacturing cost per unit:	
Direct materials	\$25
Direct labour	\$15
Variable manufacturing overhead	\$5
Fixed manufacturing overhead (\$200,000 / 10,000 units)	\$20
Absorption costing unit cost	\$65
Variable costing unit cost	\$45
Non-manufacturing costs	
Variable selling and administrative expenses (\$5/unit sold)	\$40,000
Fixed selling and administrative expenses	\$60,000

table 1

The following two income statements show the calculation of January profit under both costing systems (table 2,3):

XYZ Ltd Absorption Costing Income Statement for the month of January 2012	
Sales revenue (8000 units x \$100)	\$800,000
Less: Cost of goods sold (8000 units x \$65)	\$520,000
Gross profit	\$280,000
Less: Variable selling and admin. expenses (8000 units x \$5)	(\$40,000)
Fixed selling and administrative expenses	(\$60,000)
Operating profit before tax	\$180,000

table 2

XYZ Ltd Variable Costing Income Statement for the month of January 2012	
Sales revenue (8000 units x \$100)	\$800,000
Less: Variable cost of goods sold (8000 units x \$45)	(\$360,000)
Variable selling and admin. expenses (8000 units x \$5)	(\$40,000)
Contribution margin	\$400,000
Less: Fixed manufacturing overhead (total amount)	(\$200,000)
Fixed selling and administrative expenses	(\$60,000)
Operating profit before tax	\$140,000

table 3

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variable costing *profit* is a *function* of sales volume only Profit in January was \$40,000 higher under absorption costing because only \$160,000 of January's fixed manufacturing overhead (8000 units sold x \$20/unit for FMOH) was included in cost of goods sold. The \$40,000 of fixed manufacturing overhead that was applied to the 2000 units not sold was not expensed but carried forward as part of the balance in the Finished Goods Inventory account. Under variable costing the *full amount* of January's fixed manufacturing overhead (\$200,000) was expensed.

Now assume that in February 8000 units were sold, but planned and actual production was only 6000 units. This means that in February, 2000 units that were made in January were sold along with all the 6000 units made in February. Costs and production information for February follow (table 4).

The table shows that although the total amount of fixed manufacturing overhead was the same in February as in January (\$200,000), the amount applied per unit increased because the planned and actual production levels were both 2000 units lower in February compared to January. The fixed manufacturing overhead per unit in February was \$33.33 instead of \$20.00 as in January. This caused February's absorption unit cost to be higher at \$78.33 compared to the January amount of \$65.00. The 2000 units remaining from January's production represented the opening Finished Goods Inventory for February and they were carried in the accounts at their unit cost for January (\$65) i.e. at a total amount of \$130,000 (2000 units x \$65). As noted above, this carrying amount included \$40,000 of January's fixed manufacturing overhead (2000 x \$20/unit). When the 2000 units were sold in February this \$40,000 became part of cost of goods sold expense for February. Hence, under absorption costing, the cost of goods sold amount for February included a total of \$240,000 of fixed manufacturing overhead [(6000 x \$33.3333\*) + (2000 x \$20)] compared to only \$200,000 under variable costing. As a result, the absorption costing profit for February was \$40,000 lower than the variable costing profit, as shown in the two income statements (table 5,6).

\*four decimal places are used to avoid a significant rounding error

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Data for February 2012	
Number of units produced	6000
Number of units sold	8000
Unit sales price	\$100
Manufacturing cost per unit:	
Direct materials	\$25.00
Direct labour	\$15.00
Variable manufacturing overhead	\$5.00
Fixed manufacturing overhead (\$200,000 / 6000 units)	\$33.00
Absorption costing unit cost	\$78.33
Variable costing unit cost	\$45.00
Non-manufacturing costs	
Variable selling and administrative expenses (\$5/unit sold)	\$40,000
Fixed selling and administrative expenses	\$60,000

table 4

XYZ Ltd	
Absorption Costing Income Statement	
for the month of February 2012	
Sales revenue (8000 units x \$100)	\$800,000
Less: Cost of goods sold (6000 units x \$78.3333*)	(\$470,000)
(2000 units x \$65.00)	(\$130,000)
Gross profit	\$200,000
Less: Variable selling and admin. expenses (8000 units x \$5)	(\$40,000)
Fixed selling and administrative expenses	(\$60,000)
Operating profit before tax	\$100,000

table 5

XYZ Ltd Variable Costing Income Statement for the month of February 2012	
Sales revenue (8000 units x \$100)	\$800,000
Less: Variable cost of goods sold (8000 units x \$45)	(\$360,000)
Variable selling and admin. expenses (8000 units x \$5)	(\$40,000)
Contribution margin	\$400,000
Less: Fixed manufacturing overhead	(\$200,000)
Fixed selling and administrative expenses	(\$60,000)
Operating profit before tax	\$140,000

table 6

	January Profit	February Profit	Total
Absorption costing	\$180,000	\$100,000	\$280,000
Variable costing	\$140,000	\$140,000	\$280,000

table 7







Notice that the absorption costing profits reported in January (\$180,000) and February (\$100,000) are different but the sales revenue was the same in both months (\$800,000). In contrast, variable costing shows the same profit for each of the two months (\$140,000). The reason for this is that variable costing always deducts the full amount of fixed manufacturing overhead each month as a period expense - none of it is carried forward to a future month as part of an asset account balance (i.e. in Finished Goods Inventory). Under variable costing, if total sales revenue, total variable costs and total fixed costs remain constant so will operating profit. This is not so with absorption costing, because some of the total fixed cost amount for a period may not be expensed in the current period but in a future period.

Notice also that because there was no opening Finished Goods Inventory balance at the start of January and there was no closing Finished Goods Inventory balance at the end of February (i.e. for January and February taken together total sales in units was equal to total production in units), the profit reported for the two-month period was the same under both costing systems. See table 7.

If sales in units for a period is the same as production in units, both costing systems will report the same profit. However, in any period where sales in units is different to production in units the difference in profit between absorption costing and variable costing is directly related to the fixed manufacturing overhead cost per unit and the change in the number of units in ending inventory, as shown in the following formula.

χ

# Profit difference =

Change in units in ending inventory (Production - Sales)

# Fixed manufacturing overhead cost per unit

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### Summary

A variable costing income statement is particularly useful for short-term decisions, such as whether to make or buy a component, and for pricing - especially when variable selling and administrative costs are included. Under variable costing, profit is a function of sales. The classification of costs, as fixed or variable, makes it simple to project the effects that changes in sales volumes and prices have on profit. Managers find this useful for decision making. For many decisions, variable costs provide a good measure of the incremental costs that need to be assessed. Also (as you saw in the last Student Notes), cost volume profit analysis requires a variable costing format for the income statement. However, fixed costs are an important part of the total cost of running a business and must be carefully managed. Variable costing provides a useful perspective of the impact that fixed costs have on profits by bringing them together and highlighting them, instead of having them scattered throughout the statement.

On the other hand, in the modern business environment, with a high level of fixed manufacturing overhead, a relatively small percentage of manufacturing costs may be assigned to products under variable costing. Also, in the longer term a business must cover its fixed costs too, and many managers prefer to use absorption unit cost when they make cost-based pricing decisions. Some argue that fixed manufacturing overhead is a necessary cost incurred in the production process so that when fixed costs are omitted the unit cost of the product is understated and profit per unit is overstated. However, absorption product costs include unitised fixed overhead, which can result in sub-optimal decisions, especially as fixed costs are not incremental costs in the short term. With variable costing, fixed costs are not 'unitised', but instead are included in total on the income statement as an expense in the period in which they are incurred. This avoids the costing inaccuracies that can arise from incorrect forecasts of production levels and the amount of fixed cost per unit. With variable costing, a product's unit cost does not change with changes in production levels. As a result, variable costing is preferable for managerial decision making, even though it is not allowed by Australian accounting standards for profit determination (AASB 102 Inventories requires the use of absorption costing).

## **F** Member of the Month

Since its inception almost two years ago, it has fallen largely to the editor and CEO to nominate members for this popular section in which we honour individuals and their contributions to our Institute.

Now it's over to you, the membership. In appealing to you for nominations we seek to broaden the scope and range of those who are recognised for their achievements and accomplishments - people unknown to us who you consider deserving and interesting. Self nominations are acceptable

so don't be modest if you feel you have something significant to share with your fellow management accountants.

We look forward to receiving your nominations addressed with brief career details to this link *ontarget@cmawebline.org* 

Below is a reminder of some of our Members of the Month featured from past issues.





#### clockwise from top left

**Nava Subramaniam** is 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

**Henry Ong** of Manila has an outstanding record of achievement in expanding the ICMA profile in his region providing a role model for branch development and management. He is a businessman and the CEO of the ICMA's Philippines education partner.

**Robert Stewart** is the member responsible for putting together and publishing *On Target* for the decade preceding its recent transformation to an e-Mag.

**Yogendra Chhetri** of Kathmandu, Nepal works in the finance and administrative unit of the UNESCO Nepal Country Office and is something of an ICMA ambassador in his region.

**Dr Nalaka Godehewa** is the ICMA branch President in Sri Lanka and Chairman Sri Lanka Tourism with broad corporate experience in a number of industries.

**Basil Tucker** lectures in the School of Commerce at the University of South Australia. Before entering academia in 2003 he worked as a management accountant consultant and has had much to say in these pages about the differences between theory and practice.

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





## CMA (Australia) Sri Lanka Branch Members' Annual Get-Together

ICMA (Australia) Sri Lanka Branch Members' Annual Get-together was held in August.



Prof. Janek Ratnatunga handing the first membership card to Asanka Ratnayake (CMA).



Left to right, Shammel Javadh, Country Manager, Sri Lanka & Maldives, Australian Trade Commission, Kapila Dodamgoda, CEO Sri Lanka Branch and Ruwan Rajapaksha, CMA Council Member.



Chintana Jayasekera, Council Member handing a special gift pack to Chandrima Rodrigo, CMA.



Members enjoying the event.

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\* South Australia Professor Janek Ratnatunga, PhD CMA Branch President University of South Australia

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- \* Western Australia Dr. Vincent Ken Keang Chong Branch President UWA Business School

http://cmawebline.org

- \* Nothern Territory Professor Gweneth Norris, PhD CMA Branch President Charles Darwin University
- \* Queensland Dr. Richard Whitwell, PhD CMA Branch President Central Queensland University