

Management Accountants, Intellectual Capital and Malaysian Companies Leadership

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*This article was written a few years ago. Some of the statistics or facts may have changed now.

Introduction

In today's business, management accountants play a key role in making strategic and operation decisions. The traditional role of management accountant as a record keeper has been largely replaced to strategic adviser. Invariably, the new management accountants' role requires a high level of analytical skills for aiding organizations to develop competitive strategies necessary for greater growth and advantageous competitive position in the industry. International Federation of Accountants (IFAC) defines management accounting as "*....the process of identification, measurement, accumulation, analysis, preparation, interpretation, and communication of information (both financial and operational) used by management to plan, execute, and control within an organization and to assure use of and accountability for its resources (IFAC, 1998).*" This traditional definition of management accountant given by IFAC emphasises its role as a provider of useful information to support management. However, the role of management accountant in today's business world requires more comprehensive evaluation of business operations and its environment considering the fact that business uncertainties are at its pinnacle height and the level of competition is a constant menace and challenge. Hence, it would be more appropriate and advantageous to business if their personnel have a good understanding of business operations and its impact on the bottom line of business. This business acumen will enable them to contribute positively towards the development of competitive strategies and business growth. Inherently, management accountants are quite apt in undertaking this kind of influential role in organizations because they have been equipped with relevant and contemporary business-related cost methodologies through their education and practical training. As such, we are in the opinion that the management accountants should be regarded as existing or potential intellectual capitals in organizations in view of their intrinsic ability to create value through successful implementation of relevant and reliable management accounting systems in organizations. Intellectual capital usually refers to capabilities that can add value to organizations. Management accountants' role requires these capabilities and this will be further explained as we progress with this article. Recognising this fundamental ability, the new management accountant definition has incorporated this attribute. Now, it is more aptly defined as, "*creating value by supporting the formation, selection, implementation and evaluation of organizational strategy with effective resource allocation and information that captures financial and non-financial perspectives of both internal and external environment (CPA Australia, 2009).*"

Intellectual capital is imperative in organizations. It can be perceived as the element that determines the existence of firms. This can be verified with an analysis of the theory of firms. All theories of firms delve into the need of having intellectual capital as the *raison d'être* for firms. From the neoclassical theory of Ronald Coase right up to the recent theories such as resource-based and competitive strategy theories, the emphasis has been on intellectual

capital, albeit not in a distinct manner. For instance, Coase (1936) highlighted the skills of entrepreneur to gather the factors of production in an effort to minimize transaction cost. Schumpeterian theory of firm requires organization to develop technologies that would lead to innovations in order to have an advantage over rival companies (Schumpeter, 1950). The resource-based theory too elaborated on strategic factors that could provide competitive position. These strategic factors should have four characteristics, that is, they must be valuable, rare, inimitable and not substitutable (Barney, 1991). Barney also emphasized the usage of these factors in the development of strategies. He called it the VRIO framework, and it is use to evaluate firm's competencies. Corresponding to the letters in the acronym, four questions are proposed to determine the ability of the firm to capitalize on its competencies to gain competitive advantage (Wheelen & Hunger, 2006):

1. Value: Does it provide customer value and competitive advantage?
2. Rareness: Do other competitors possess it?
3. Imitability: Is it costly for others to imitate?
4. Organization: Is the firm organized to exploit the resource?

Porter (1985) too, stress on ways to gain competitive advantage, inevitably, a vital prerequisite in the issue of going concern of firms. He suggest that this could be done by identifying and using different inputs, formulating new ways of completing activities, tasks, and processes and capitalizing on new technologies to put the firm on a better position than the rivals. In summary, all the theories of firms steadfastly uphold the need for intellectual capital in firms for their existence. It can also be discerned that intellectual capital as the new theory of firm, but, in our opinion, it is too broad in perspective to be proclaimed as one. Nevertheless, intellectual capital is integral in all theories of firms and we are strongly convinced that any new theory of firm will have intellectual capital as the key element.

Inherent in the new management accounting definition, management accountants as strategic advisers need to think about ways to create value for organizations to ensure continuity and supremacy in the business world. It all started when Kaplan and Johnson (1987) highlighted the inadequacy of management accountant to fulfil this new emerging role. In their words, the inadequacies could be summarized as "*too late, too distorted, and too aggregated*" with regard to the management accounting information. Therefore, the information provided is not relevant for manager's planning and control decisions. They cite three shortcomings of management accounting information. First, the phrase "*too late*" refers to the inability of management accounting system (MAS) to provide timely information in order for the managers to make the right decision to improve productivity. Many of the reports are released at the end of the month where its relevancy to operations has lapsed. Second, the phrase "*too distorted*" is in reference to the inaccurate method used in product costing. The traditional method (absorption costing) does not capture the cost information correctly in view of changes that had taken place in organizations. Firms use more overheads as inputs caused by technological changes. Inaccurate product cost leads to detrimental pricing decisions. Third, the phrase "*too aggregated*" laments the aggregated nature of accounting reports which are more suitable for external reporting. Day-to-day operational decisions require specific and detail reports. The conventional MAS lacks comprehensiveness for managers to make the right decision to improve productivity and profitability. Other factors too have contributed towards the need for better information. For example, heightened global competition requires firms to prop up their act quickly and constructively or risk survivability. As a solution to this degradation of importance, it is necessary for management

accountant to change in their approaches and play a strategic role where he becomes a reliable conduit for value creation.

The article aims to show the link between management accountant and intellectual capital. The role and tasks that are normally acquainted with management accountants are rudimentary in the creation of competitive edge for organizations. It also aims to exalt the position of management accountants in organizations by describing their key role in value creation through the changes that had taken place in management accounting techniques to accommodate the changes in business environment. It also provides some evidences from Malaysian companies pertaining to accountants and intellectual capital. The paper continues with an explanation of the meaning of intellectual capital. Subsequently, it provides practices engaged in by management accountant in the process of creating value. Next, it briefly provides some examples of successes of accountants in the Malaysian business environment. Finally, it summarizes and concludes by reiterating the immense contribution of management accountant to value creation.

Intellectual capital explained

Many have the notion that intellectual capital is the same as intellectual property. This is not true because intellectual capital is a much broader concept than intellectual property. Briefly, intellectual property only relates to copyrights, trademarks, trade licences, patents and other similar rights obtained by companies. These intellectual properties are subsets of intellectual capital. Initially there was much confusion and debate about the definition of intellectual capital. But now, the advocacy has settled to some common understanding.

In a dynamic and volatile current state of economy, consistent with theory of firms, firms have to attain sustainable competitive advantage to stay ahead to ensure their perpetual viability and prominence in industries. Utilization of their organizational resources in the most strategic manner is imperative to improve their effectiveness and efficiency, resulting in an increase in their competitiveness (Amit & Schoemaker, 1993; Grant, 1991, 1996; Schoemaker and Amit, 1994). To achieve sustained competitive advantage, Aaker (1989) delved into the need for an active and skill management process to identify strategically relevant skills for the future market, and to implement structured programmes to consolidate and enhance organizational resources.

Organizational resources can be termed as capital in an accounting perspective. Basically, capital can be categorized into three types – financial, physical, and intellectual capital (IC). Financial capital refers to resources like cash and cash equivalents such as marketable securities. Physical capital includes tangible items that are permanently held in a firm, such as building, machinery and equipment. IC was initially identified as intangibles in accounting, and it is still being used interchangeably to represent IC. It is believed that IC, till to date, has not been comprehensively defined, this explain the confusion between IC and intellectual property. There are still questions remained unanswered regarding the composition of IC. However, according to Stewart (1997), “...IC is intellectual material – knowledge, information, intellectual property, experience – that can be put to create wealth”. Many researchers have resorted to explain IC by way of classification in an attempt to identify its components. Edvinsson and Malone (1997) categorized IC into five main area of focus:

Financial, Customer, Process, Renewal and Development, and Human. Whereas Karl Sveiby (1997) classified IC into three areas: Employee Competence, Internal Structure, and External Structure. In a condensed form, IC classification has revolved around the popular tri-partite classification of human, organizational, and customer capital indicators (Miller *et. al*, 1999).

Research on IC evolved in the early 1980s, where the general notion of intangible value, quite commonly labelled as goodwill, was the main theme of interest (Guthrie, 2001). Then, the emergence of the “information age” during the 1990s resulted in a vast difference between the market value and the book value of companies listed in the stock exchanges. This “information gap” entails explanation. Hence, the concept of IC has been discerned as the most logical nexus for this difference in value.

Studies on IC deliberated on issues of developing an IC framework, indicators of IC, measuring, management, and reporting of IC. Researchers such as Kaplan, Norton, Sveiby, Edvinsson, Malone, Stewart, Roos, and Johansson are great contributors to the volume of literature on IC. Kaplan and Norton (1992) developed the Balance Scorecard that emphasized on an all-round measures strategically linked to an organization’s objectives. They stressed on the need for non-financial measures based on customer, business processes, and employees’ growth perspectives to reinforce organizational resources vital to sustain competitive edge. Sveiby (1997) suggested another approach to the development of an IC framework. He introduced Intangible Asset Monitor, where it identifies the intangible assets in an organization under the classification of external structure assets, internal structure assets, and employee competence. It provides a guideline to managers on the utilization of intangible assets in coordination with the organization’s tangible assets. Edvinsson and Malone wrote about the Skandia Navigator, which was implemented in Skandia, Inc. when Edvinsson was the company’s Director of Intellectual Capital. This tool outlines the components that make up the IC, methods for managing them, and reporting on their development. Similarly, there are many other measuring tools for IC such as Technology Broker (Brooking, 1996), IC-Index (Roos et al, 1997), Value Added Intellectual Coefficient (Pulic, 1997), Economic Value Added (Stewart, 1997), Value Chain Scoreboard (Lev, 2002), and etc.

The nexus between management accountant and intellectual capital

From the beginning, management accountants’ role has always been to create value to organizations. More so now, where the creating value aspects in management accounting are more visible and ever-demanded. In order to project this attribute, it is important to understand how the methods in management accounting have evolved over a period of time. It can be noted that new additions to management accounting practices tends to emphasize its ability to create value in many areas of business operations. Here, we will illustrate some of the areas where management accounting methods have gradually progressed to enhance the ability to create value in organization.

Product costing

Product costing aims to provide a costing for a product produced in order for management to set a price and also for making price-related decisions. These decisions are important as it determines the marketability of the product, market penetration, and in essence the

company's profitability and sustainability. Having such great impact, it is utmost important for management accountants to design a manufacturing accounting system (MAS) that could provide detail and relevant product cost data to support their information needs. Hence, the management accountants' role in this process is crucial for the value creation of the organization. The evolution of product costing methods can clearly depict how management accountants have initiated changes in MAS to enhance the value creating ability of the organization.

Initially, the product costing is done through what is now called the traditional costing method, or before the introduction of activity based costing, it is known as the absorption costing or indirect costing method. At that time, it is described as a method sufficient enough to provide valuable information for pricing decision and it is widely used in mass production type of manufacturing processes. Then, the business competition was lacking and competitive position was more determined by the new technology or innovation acquired by companies as the rate of introduction of new technologies and innovations is slow. Moreover, many of the companies operations were much labour-intensive and the utilization of this absorption methods does not distort the product prices very much. Therefore, the urgency to look for alternative methods of product costing was not serious. Basically, traditional costing estimates the product cost by summing up its direct material, direct labour and manufacturing overheads. There were no problem in ascertaining direct material and direct labour to units of product as it can be allocated directly. But, the issue was how we allocate overheads since overheads are not specific to one kind of products. So, the traditional costing system used an arbitrary allocation method to absorb the overheads to units of products, and the absorption rate is calculated based on certain prime costs or prime activities. This arbitrary allocation was not critical at that time because the prime costs were a major component of the total product costs. Overheads were comparatively small and its effect on total product cost was minimal.

However, manufacturing process has changed drastically from 1970s onwards. Emergence of new technologies to facilitate manufacturing processes has changed the cost components of product. Advanced technologies such as robotics, computer aided design, computer aided manufacturing and flexible manufacturing processes have transformed organizations from being labour-intensive to capital-intensive structure. Thus, the direct labour cost has reduced whereas the overhead cost has increased. Using the traditional costing method to account for product cost in today's business environment has become flawed. These led to wrong pricing of products and subsequently, losing its competitive position. This problem became more acute as the business competition is intensified. Thus, the need to have a much improved product costing system has become imperative and critical in organizations to sustain its competitiveness.

Cooper and Kaplan (1988) proposed the activity-based costing system (ABC) in order to estimate more accurately a product's cost. It must always be remembered that, as in the case of traditional costing, activity-based costing is also an estimation of product cost. However, in this new system, the degree of accuracy of estimation is enhanced because it employs an allocation of overheads procedure associated with the number of activities performed in an operation processes. In other words, it discards an arbitrary, plant-wide allocation basis used in traditional costing to a detail activity-based allocation basis relating to specific tasks to produce a product. This method compensates well to the changes in business environment in relation to the increase in overhead component in total product cost. Many proponents of ABC normally highlight its advantages over traditional costing through examples. This paper

is not intended for that purpose. Nevertheless, it is quite appropriate to remark the advantages as these advantages have contributed towards better product costing system and consequently towards better price-related decisions. Comparatively, traditional product costing data may result in a product being undercosted or overcosted. Inaccurate product cost leads to wrong price-related decisions. For instance, assume that through the implementation of traditional costing, a product has been undercosted. Management may have priced it low based on cost data and experienced favourable hike in sales and market share. But, the bottom line of the firm was not improved. This is 'hidden losses' due to undercosting and the same can be incurred when overcosted. ABC avoids these 'hidden losses' and this would be considered has the main advantage over the traditional costing system.

In summary, the product cost under the ABC system equals the cost of raw material and the sum of the cost of all value adding activities to produce it (Cooper and Kaplan, 1988). In order to implement this system, the initial task is to identify all the activities to produce a product. Even at this juncture, improvement in operations can be instituted. The activity identification process can lead to identification of non-value adding activities which should be eliminated for the process to be efficient and save cost. If elimination is done, the product will be cheaper to produce and could be sold to customers at a lower price. The elimination of non-value adding activities and 'hidden losses' can provide a competitive edge for the organization, subscribing to the rudiments of an intellectual capital attribute.

Barriers to entry crumble easily with the advent of new technologies. New competitors are always on the look out for opportunities. Any products with abnormal returns are likely targets. So, organizations are seeking new ways to reduce product cost in order to fortify their invincibility and improve profitability. Cost reduction is emphasized in product costing. Though ABC does have the cost reduction capabilities, it was more confined to cost incurred during a manufacturing process. What is needed is a holistic approach that will scrutinize every phase of a product to reduce its cost and assure profitability. Hence, it is time for management accountants to revisit MAS to seek alternative solutions to product costing that could support the current information needs. Life cycle product costing was introduced to scrutinize cost of product commencing from the research and development stage until the product is discontinued. An analysis of cost under each stage of product life cycle indicates that the potential to reduce cost is the highest at the planning and designing phase though, in comparison with other phases, the actual cost incurred is lower (Hundal, 1997). Therefore, the life cycle product costing method suggests that management should emphasize the planning and design phase in order to reduce the overall cost of the product. For instance, an improvement on the product design may lead to cost saving in terms of cheaper direct materials used without compromising quality, reduction in production activities, improved quality and functionality of product, minimal breakdowns and reworks and less environmental liabilities. Unlike the traditional costing and ABC, life cycle product costing cannot be use for reporting purpose. It is an internal mechanism to conduct a holistic assessment of product cost as an aid to accurate pricing of product to avoid 'hidden losses' and also to improve cost, quality and production processes. This clearly shows that the inclusion of life cycle costing in MAS can lead to the creation of value to organizations.

The frequency of strategic and operational decision making in organizations has become more significant. This is due to the dynamic business environment that encompasses all firms in today's world. More specifically, the decisions made by rival firms to gain a competitive position in the industry and the volatility of the economic environment in countries due to global influences are always a looming threat. There are myriads of uncertainties and

turbulences as compared to the lure of stability during yesteryears. In telecommunication companies, the problem is so acute with so many players trying to gain control of the industry as the fad of using mobile technology in all areas of transactions is assumed to be giving abnormal returns to them. Thus, we see dynamic changes in capacity availability and usage, pricing strategies and promotional initiatives. There was a dire need for product costing methodologies to cater for different decisions made in relation to products and real time operational and environmental factors. With online analytical processing (OLAP) technology that is available now, furnishing real time information for better decisions is possible. Hence, management can readily have product information in order to decide on a course of action to improve on profitability of the business. This new method is known as dynamic costing. It is a costing method that aims to provide solution based on the variability of dynamic and inconsistent operations. Simmons (2005) explains that “*dynamic costing is the process of modelling the operations of the business to reflect how costs and profitability will vary with changes in any of the cost drivers and how changes in activities can affect the behaviour of those drivers*”. Unlike the other costing methods described, this new costing method emphasizes on the need to enhance contribution per time unit. This is because the previous costing methods have failed to recognize that time is a constraining resource and if we could increase the contribution per time unit, then the overall profitability will also be increased (Preiss and Ray, 2000). Industries such as telecommunication, logistics, hospitals and food sectors tend to utilize this method for better profitability.

It is imminent that product costing methods introduced by management accountant invariably seek to attain value for the organization and customers. From the traditional costing method which provides basic cost information about a product to the more sophisticated method of dynamic costing that aims to provide accurate information in volatile situation, all methods unwaveringly attempts to enhance an organization’s ability towards improving profitability and sustainability. As such, it is appropriate and distinct to classify management accountants as a reflection of intellectual capital in an organization.

Budgeting

Budgeting is an important tool in the planning process of all organizations. Without a budget, the effectiveness and efficiency of operations could be affected which lead to wastage of scarce resources. In the current business environment, it will be a disaster to organizations if they continue ignoring inefficiencies. Thus, budgeting is vital for better planning. Budget also plays an important role in resource allocation, communication, motivation, control, performance evaluation and rewards in organizations. Management accountants usually take the main responsibility in coordinating all responsibility centres in organization to formulate the budget. As a budget coordinator, it is necessary for him to support all departments with the required information and provide them with a format and a platform to negotiate and renegotiate on budget targets to be in line with the organizations’ objectives. To a larger extent, it can be acclaimed that management accountants are vital cogs to ensure the organization budgeting wheel runs smoothly towards the attainment of objectives. The intellectual capital attribute in management accountants must prevail to have an effective budget. In order to that, the management accountants must always understand business operations and environment to develop a budget that can add value in terms of operational effectiveness and efficiency, and consequently, enhances competitive position and growth.

Like product costing, budgeting has also evolved according to the vagaries of dynamism of business changes. Conventional or traditional budgeting is the most common budgeting

method. It is specifically a mechanism that provides a quantitative summary of business operations for a forthcoming or planned period. Since budgeting is a forecast for a future period, many attempts has been made to improve on the forecast. Some companies undertake rolling or continuous budget in order to have a more realistic estimates. Some implemented zero-based budgeting to minimize the habit of incorporating prior period inefficiencies. But, all these budgets fall within the ambit of conventional budget. With changing business environment, many companies becoming disillusioned about the benefits of conventional budgeting. Bellis-Jones (1992) highlighted some of the problems with conventional budgeting:

- Conflicting with the empowering philosophy of total quality and continuous improvement.
- Estimation is done on limited knowledge.
- Poorly translates strategy into action.
- Overemphasis on inputs.
- Fail to recognise the crucial role of cross-functional business processes.

This calls for new methods for budgeting to overcome some of the problems cited above. Again, management accountants are made responsible as budgeting is within their job specification. Some of the new methods that have evolved in this process is better budgeting and beyond budgeting. Better budgeting focuses and improves the strategic aspect of traditional budgeting by taking into consideration the non-financial key indicators (Marino, 1997). Better budgeting consists of five principal approaches and techniques which are activity based budgeting (ABB), zero based budgeting, value based management, profit planning, rolling budgeting and forecast (Neely et al., 2003). Whereas Fraser & Hope (2003) defined beyond budgeting as “an innovative and more flexible approach to budgeting that avoids many of the pitfalls of traditional budgeting”. This approach aims at ensuring coordination through group and market agreements which will result in a more efficient and effective way of ensuring forecasting, coordination and motivation irrespective of the individual organization (Weber & Linder, 2005).

Other areas

Apart from product costing and budgeting discussed above, there are many others areas where management accountants play a pivotal role in value creation. His supporting role can be associated with every aspect of management tasks. Generally, it can be discerned that product costing supports decision making, budgeting aids in planning, standard costing and cost improvement methods help control and performance measurement techniques evaluates and reinforces performance. Let us look at some of the techniques used in cost improvement and performance measurement to illustrate how management accountants structure the MAS to support value creation.

There are many cost improvement techniques, namely, activity-based management, target costing, customer profitability analysis, kaizen costing, business process reengineering, just-in-time management, total quality management and many more. Many may argue that these methods evolved from management taxonomy rather than from management accounting perspectives. However, not all methods are a derivation from management thoughts. Activity-based management and customer profitability analysis are offspring from ABC costing. The issue of ownership of specific methods is always a futile indulgence. More importantly, it has

to be seen how the new methods can be supported in all aspects to improve on its implementation and outcome. As management accountants, they are obliged to support with the necessary information to allow feasibility analysis, planning, monitoring and control of every cost improvement initiative in organizations.

Two cost improvement methods to be explained here to indicate value creation are activity-based management and target costing. As mentioned earlier, activity-based management (ABM) is an extension from ABC costing. Identifying activities that consume resources are fundamental in ABC costing. At the same time, these activities identified have to be evaluated with regards to its necessity to value creation. So, in ABM, the initial step is to identify all the activities. Then, these activities are evaluated on its value-adding capacity. All non-value adding activities are investigated to understand the root causes that drive them. Finally, actions are taken to eradicate the root causes and progressively, minimizing or eliminating the non-value adding activities. By doing so, the cost of producing a product is improved.

Target costing is a Japanese concept practiced in companies since 1970s. Horvath (1993) describes target costing “as a comprehensive set of cost planning, cost management and cost control instruments which are aimed primarily at the early stages of product and process design in order to influence product cost structures resulting from a market driven requirements”. This costing method recognizes the heightened need to understand customer needs and value and incorporating that information into the product design. In this way, the marketability of the product can be assured. Thus, target cost initially determines the selling price by surveying the market for its price, quality and functionality of products. Based on the targeted selling price, it work backwards to ascertain the cost of the product and the firm’s ability to produce at that predetermined cost. If there is a shortfall, meaning the production cost is more than the targeted allowable cost, an investigation will be conducted to identify areas for cost improvements. The whole life cycle process of the product is scrutinized and broken down to its minute detail in order to locate cost savings opportunities. For example, a product design engineer can be asked whether there is possibility of altering the build of materials in such a way that expensive materials are replaced with cheaper ones without compromising on quality or functionality of products. Obviously, there are many other examples that can be cited about the value of target costing in cost reduction. For our purpose, target costing is an invaluable tool for value creation.

Performance measurement is another area for value creation. The old adage of ‘you have to measure in order to manage’ is quite apt in pointing out the fundamental nature of performance measurement. Without a system of measurement, we would not able to report our achievement and assess effectiveness and efficiency of our performance. Historically, MAS has always been improving its performance management system to accommodate the challenges in the business environment. A chronological elaboration of the reporting formats succinctly illustrates the role played by management accountants in helping the organizations to achieve its objectives. In the beginning, reports are drawn out for the whole organization. This is what made Kaplan and Johnson (1987) to comment as “too aggregated” and not relevant for decision making. This reporting style is more suited for external users. However, for planning and control of operations, the managers require more detail reports. The concept of responsibility accounting was introduced to enable functional, departmental or segmental reporting and instil responsibility and accountability in managers. Employee empowerment became more evident in organizations and job fulfilment propels management towards effectiveness and efficiency. Transfer pricing was another performance measurement

instrument used within the concept of responsibility accounting to enhance managers' performance. It helps to achieve goal congruence between organizational and divisional objectives, motivate managers and provide a much more accurate measurement of divisional performance with a motive to alleviate the problem of disgruntled managers' perception of inequity in organizations. These measurement systems were not adequate to support the changes that have been taking place in the business environment. There must be a more robust measurement system that could thrust the organization into profitability and supremacy. This is when measurement system identified intellectual capital as the core for building growth in firms.

There are many proponents of intellectual capital form of performance measurement. In management accounting, Kaplan and Norton's (1990) balance scorecard (BSC) has gained popularity. Many firms have opted to use this model to institute a whole round measure of their performance. In other words, segmental reporting is further broken down to the level of individual performance measures in line with the organization's strategies. The BSC concentrates also on non-financial measures which were quite forgotten in the older performance measurement system. It asserts the fact that financial outcomes are caused by activities. If these activities are controlled, there will be an impact on the profitability of organizations. Hence, the BSC is developed by detailing the cause and effect relationship between measures. Kaplan and Norton (1996) define the BSC as an approach that "*translates an organization's mission and strategy into a comprehensive set of performance measures that provides the framework for a strategic measurement and management system*". Specifically, the BSC helps managers to identify the drivers of future performance and categorize them under the proposed four perspectives, namely, financial, customer, internal business process, and learning and growth. The financial perspective provides a summary of outcome measure or past performances, where as the other three perspectives detail the performance that is necessary in these areas in order to attain the financial outcome. It emphasizes on the linkage between the organization's financial objectives and the value drivers. For example, under the financial perspective, firm's profit would be a measure and it is linked to customer satisfaction measure under the customer perspective. Customer satisfaction can only be achieved through higher quality products, an internal business process perspective measure. And this higher quality can only be achieved through highly trained employees. Training will be considered as a measure under the learning and growth perspective. It clearly reflects the procedure required to add value to organization.

Table 1 summarizes the link between management accounting tasks and intellectual capital. Recapping the methodologies employed by management accountants, it is indeed a reflection of intellectual capital at work. All efforts have been streamlined to achieve greater value and entrench the organizations in an enviable position among their competitors.

The Malaysian Story

There are many examples of management accountants spicing up the business world, and it is very prevalent in Malaysia, let alone other countries. Tan Sri Tony Fernandez is a trained management accountant who parades an illustrious resume for revving up the budget airline industry in Asia. His flagship airline company, Airasia, has mustered enviable growth and received various kinds of awards within a short span of time. The number of route networks is alarming and also, one among the pioneers to venture long haul budget airline. An analysis

of its operations will distinctly point out the different management accounting methodologies discussed above. For example, in order to reduce airport charges, we can witness the plane landing and taking off within a short duration of time. To do that, the staffs have to be efficient in managing their tasks. Innovative or revolutionary cost saving is extremely crucial for budget airlines. Tan Sri Fernandez even suggested to build its own airport to control airport charges. In a meeting, when he was asked how he would finance such an enormous investment, he jokingly quipped to attendees to donate as they walk out of the meeting room. This reflects his versatility to find creative ways to achieve his objectives, though the example can be regarded as out of context.

Table 1: The link between some management accounting tasks and intellectual capital

Management Accounting Tasks	Management Accounting techniques	Intellectual Capital Attributes (contribution to value creation)
Product Costing	Activity-based Costing (ABC)	An effort to produce more accurate product cost to help managers price the product correctly in a highly competitive business environment. Enable to make better decision on product mix and market penetration or share to increase profitability and growth.
	Life Cycle Costing	Initiated to have better product pricing to ensure long-term profitability and also to improve process and design effectiveness and efficiency
	Dynamic Costing	Utilizing the real-time technology to improve contribution per time unit
Budgeting	Better Budgeting	Incorporating non-financial indicators in the budgeting process. Emphasizing on drivers to achieve specified objectives
	Beyond Budgeting	To cater for dynamic business environment and turbulences by encouraging adaptability
Cost Improvement	Activity-based Management	Capitalising from the implementation of ABC to evaluate each activity and its value to the process and business resulting in cost savings
	Target Costing	Help to identify cost and process improvement necessary to match the expectation of customers.
Performance Measurement	Strategy Scorecards (Example: Balance Scorecards)	Identify business critical success factors and its corresponding drivers. Establishing relevant targets for business profitability and growth.

There are many other companies in Malaysia that has management accountant at the helm. Most of the government-linked companies (GLCs) tend to favour accountants as their managing directors because they have proven with good results. At one time, the GLCs were poorly managed and always a burden on the taxpayers. But, after revamping the management set-up with accountants leading and making strategic decisions, it is quite obvious that these companies have commanded lavish praise from all quarters. The GLCs are now plying their trades globally in order to boost up their income and competitiveness.

One GLC that had pulled out from an impending grave is the Malaysian airline company, Malaysia Airlines System (MAS). A senior executive, Datuk Idris Jala, from Shell company was entrusted the job to carry out the restructuring exercise. Restructuring the Malaysian flag carrier is not an easy feat when it has gloomy track records that stained its reputation. Though Datuk Idris Jala is not trained in management accounting, many of his initiatives are commonly used in management accounting. He identified that there was a mindset problem with the airline personnel. He insisted on a major work culture change. One example that he

quoted to the press was how he improved revenues from excess baggage charges by almost 300% within the first 10 days by providing the right incentives which amounted to a cut from the baggage collection charges. This is a case of having the right performance measurement system that incorporates appropriate incentives in line with workers motivation. Cases on mishandling and lost baggage too, are reduced by putting the right measures and incentives. There are many other instances like this for operational improvement and also strategic initiatives that had turned the company around to profitability. Now, Datuk Idris Jala has been made a full minister in charge of developing national level key performance indicators and he was succeeded by a young accountant who toiled with him during his tenure as the managing director of the national carrier. The table below provides a partial list of accountants heading large firms in Malaysia.

Table 2: Accountants as CEO in Malaysia

Company	Industry Description	Accountant CEO / Chairman
Maybank	The leading financial services provider in Malaysia	Dato' Sri Abdul Wahid Omar
Bursa Malaysia	Malaysia's Stock Exchange	Dato' Yusli bin Mohamed Yusoff
Sunway Holdings	A leading conglomerate involved in widely diversified products and services	Tan Sri Jeffery Cheah Fook Ling
Khazanah Holdings	The investment holding arm of the Government of Malaysia	Tan Sri Dato' Azman bin Hj. Mokhtar
Tenaga Nasional Berhad	The leading corporation in energy and energy-related business in Malaysia	Dato' Sri Che Khalib Mohamad Noh
Nestle Berhad	The leading consumer products company in Malaysia	Tan Sri Dato' Seri Syed Zainol Anwar Jamalullail
Malaysian Airline System	One of Asia's 5-star leading airline	TengkuDato' Azmil Zahrudin bin Raja Abdul Aziz
AirAsia	World's best low-cost airline in 2009	Dato' Sri Tony Fernandez
Konsortium Logistik Berhad	Leader in the logistic industry in Malaysia	Loo Hooi Keat
Ahmad Zaki Resources Berhad	One of the leading construction company in Malaysia	Raja Dato' Sri Aman Raja Ahmad

One of our exploratory studies to understand the Malaysian board characteristics and companies' value creation also reinforced the notion that accounting and finance knowledge of board members is imperative for better financial performance. Our study constitutes 101 large public-listed companies in Malaysia. Data was hand-collected from the annual reports of 2007. The dependent variable was Tobin's Q (TOBINQ) as a measurement for value creation and independent variables were Hijrah Index (HK) component stock (as a proxy for ethical standing), percentage of accounting and finance knowledge board members (AFBOD), board size (BODSIZE) and size (SIZE) of company as a control variable. We found that there is a significant positive association between percentage of accounting and finance knowledge board members and value creation in these large public-listed companies. Table 3 below shows the result of our exploratory study. Certainly, there is more work to be done in this study for it to be decisive.

It is not an exaggeration to say that the whole country runs under a performance management system commonly advocated in the management accounting abode. The new Prime Minister

embarked on an effort to prioritize the projects to utilize the public funds in a most effective manner. In the same vein as in companies where strategic decisions are formulated based on the identification of critical success factors and subsequently, the development of objectives, measures, targets and action plan, the Malaysian government too designed its performance measurement system subscribing to the same concept. A unit in the Prime Ministers' Department has been set up specifically for this purpose and it is called PEMANDU (Performance Management and Delivery Unit). It is headed by Dato' Sri Idris Jala, former CEO of Malaysian Airline System, in view of his expertise in designing a credible key performance indicator (KPI) framework in the airline company. So far, PEMANDU has introduced two performance measurement systems, one for the government transformation and the other is for economic transformation. Both these plans have many measures and monitoring and reporting mechanisms. All these initiatives seem to have shown desirable results.

Table 3: Regression results of relationship with value creation

Dependent Variable: TOBINQ				
Method: Least Squares				
Sample: 1 101				
Included observations: 101				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.911752	0.741355	2.578728	0.0114
AFBOD	2.412179	1.086889	2.219343	0.0288*
BODSIZE	-0.095869	0.067873	-1.412475	0.1610
SIZE	0.000326	0.019281	0.016886	0.9866
HK	-0.603969	0.355120	-1.700745	0.0922
R-squared	0.096749	Mean dependent var		1.339075
Adjusted R-squared	0.059113	S.D. dependent var		1.602040
S.E. of regression	1.553968	Akaike info criterion		3.767738
Sum squared resid	231.8225	Schwarz criterion		3.897200
Log likelihood	-185.2708	Hannan-Quinn criter.		3.820148
F-statistic	2.570677	Durbin-Watson stat		2.146643
Prob(F-statistic)	0.042697			
*AFBOD is significant at 5% confidence level.				

Conclusion

As discussed in the preceding sections, it is obvious that management accountants' traditional role has changed to more constructive and proactive positions. It is no more confined to the tasks of providing historical financial information for managers, but strategically designing management accounting systems that uniquely identifies vital information for cost improvements, competitive and strategic positions. In other words, they complement in the quest for value creation. Their new role necessitates new analytical methods or approaches where the managers find them enriching and beneficial to organizations. They are probing all the time to seek improvement in every aspect of operations. In this manner, they initiate many value creation investigations and activities. This quality in them has taken some of them to the helm of diverse organizations, let alone finance-related organizations.

In summary, the evolution in methods and approaches used by management accountants is directed towards improving the value creating ability of the firm. There are evidences asserting the value creating ability in terms of better financial performances. Thus, it can be opined that management accountants are a reflection of intellectual capital in organizations as intellectual capital is imperative in value creation.

The writer is the founder and content manager of www.kvk-accounting.com who advocates strongly on building cognitive thinking skills via better understanding of accounting concepts and simulating artificial intelligence process of learning from experiences. He views his exercises on the website as a form of providing these learning experiences.