Corporate Trends

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This is a brief introduction to the Balanced Scorecard and the potential benefits to be derived with the support of enabling technologies. Lastly we share some of the critical success factors in implementing and using an automated Balanced Scorecard tool.

AUTOMATING THE BALANCED SCORECARD

With rapid changes in technology, competition and regulations, the formulation and implementation of strategy must become a recurrent and contributory process. Organisations today need a tool to communicate their business strategy as well as processes and systems to help them implement and gain feedback about the strategy. This is where the Balanced Scorecard ("BSC") approach can function in enabling organisations to manage and measure their business performance.

BSC provides an approach which integrates an organisation's strategic business objectives with balanced performance measures, as a basis for monitoring planned achievement whilst offering an indication of future performance. The following benefits can be derived from using the Balanced Scorecard approach:

- Aligns performance measures with business strategy through "cause-and-effect";
- Focuses on "leading indicators" which generate new growth, as opposed to looking back to what has happened;
- Clearly communicates strategy to all levels of the organisation;
- Serves as foundation for budgeting, individual performance planning and evaluation; and
- Allows management to monitor achievement of the strategic plan and adjust the plan for internal and external conditions.

Balanced Scorecard Concept

The Balanced Scorecard was developed by Robert Kaplan and David Norton, and provides management with a comprehensive framework that translates an organisation's strategic objectives into a coherent set of performance measures.

The Balanced Scorecard provides a snapshot view of the organisation's performance and health to its senior management team. Unlike traditional performance indicators which are based on financial indicators, such as the profit and loss statements, the scorecard provides a balanced view of the organisation's performance by taking into account four perspectives of financial, customer, internal processes, and learning and growth.

By requiring management to select a limited number of critical performance measures within each of the four perspectives, the scorecard focuses management's attention on the organisation's strategic vision.

Benefits of the Balanced Scorecard

A Balanced Scorecard provides a full set of indicators that motivate current actions of the organisation and drive the future performance of the organisation. In addition, the scorecard provides a balance between short-term financial performance and long-term growth opportunities.

Pure financial indicators stress more on post-mortems to explain shortcomings in past performance, i.e. looking at shortcomings that have already occurred. These pure financial indicators are termed "lagging indicators". On the other hand, the Balanced Scorecard provides a framework that indicates the results of actions already taken as well as operational measures on customer satisfaction, internal processes and the organisation's innovation and improvement activities - all operational measures that are drivers of future financial performance. These operational measures are the "leading indicators" which focuses on generating new growth, as opposed to looking back to what has happened.

The Balanced Scorecard will convert the organisation's strategy into outcomes that will help to create an organisation that is focused on continuous improvement, and allows management to monitor achievement of the strategic plan and adjust the plan for internal and external conditions. This is crucial as most organisations fail to turn their visions/ strategies into actions. In addition, organisations that have adopted the Balanced Scorecard approach have acquired much visibility into its internal operations and issues of all their organisation functions. This in turn enables management to monitor and chart organisational progress against plans/budgets.

Components of the Balanced Scorecard

A generic Balanced Scorecard consists of four perspectives, as illustrated in Figure 1 below:

- Financial;
- Customer;
- Internal Processes; and
- Learning and Growth.

For the above four perspectives, relevant measures need to be derived from the organisation's vision and strategy.

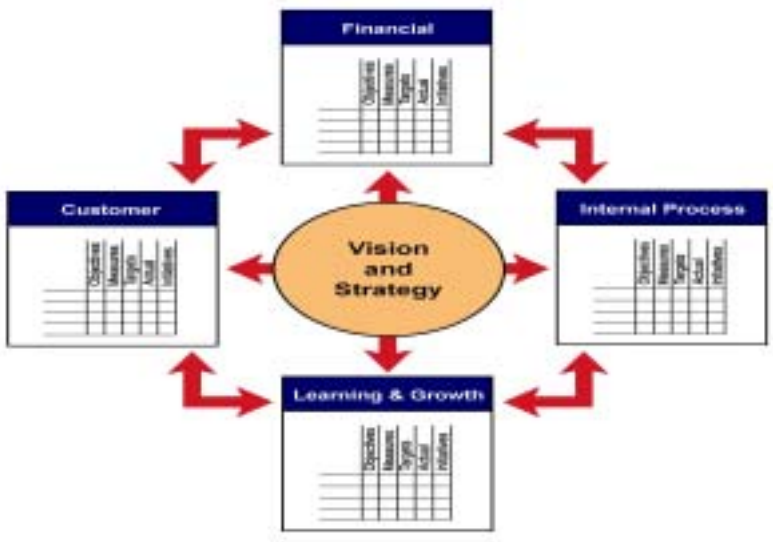

Figure 1 - The 4 perspectives of the Balanced Scorecard

Financial Perspective

Financial measures are valuable in summarising the readily measurable economic consequences of actions already taken, i.e. they are the traditional forms of performance measurement. Financial performance measures indicate whether a company's strategy, implementation and execution are contributing to bottom-line improvement.

Financial measures are usually in the form of the organisation's Profit & Loss Statements, Balance Sheet, financial ratios, etc.

Customer Perspective

Here, the organisation identifies the customer and market segments in which it will compete and be measured against. This perspective should include specific measures of the value propositions that the organisation will deliver to its customers.

Internal Processes Perspective

In this perspective, the organisation identifies the critical (or key) internal processes in which the organisation must excel. Measures for these processes concentrate on the internal processes that will have the greatest impact on customer satisfaction and achieving the organisation's financial objectives.

Learning and Growth Perspective

This perspective identifies the infrastructure that the organisation must build in order to create long-term growth and improvement. Intense competition necessitates the need for organisations to constantly improve their capabilities for delivering value to customers and shareholders.

Enabling Technology Support

Management and maintenance of the scorecards and their related critical performance measures are dependent on support from key enabling technologies, as illustrated in Figure 2.

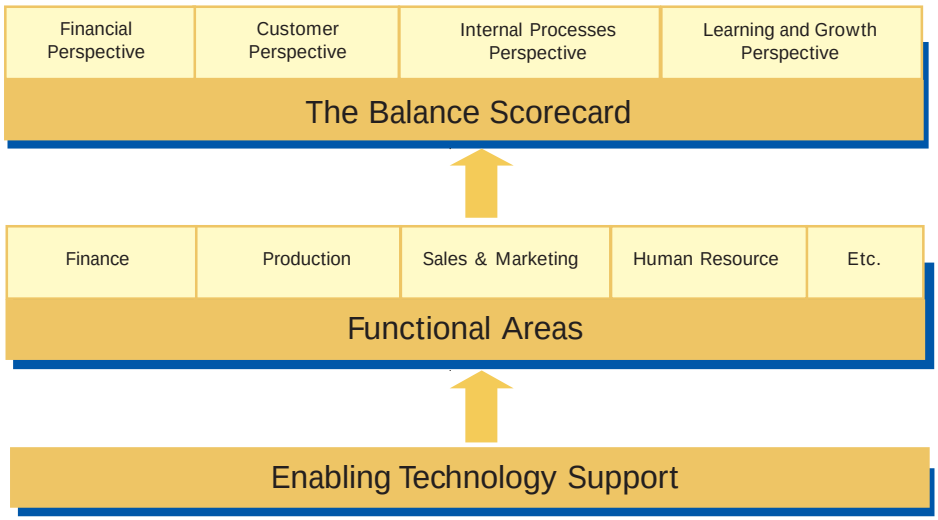

Figure 2 - Support of enabling technologies

Since the development of the Balanced Scorecard by Kaplan and Norton, practitioners have gradually progress from the traditional "pen and paper" method of managing their scorecards towards automated scorecard solutions. Technology has been seen as a key enabler and support tool for many applications, such as accounting and finance, human resource management, and customer relationship management. The Balanced Scorecard is no exception.

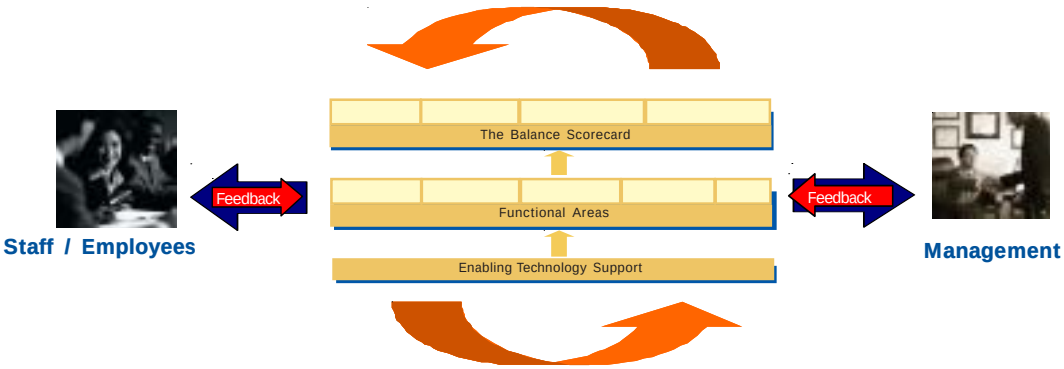

Figure 3 - Continuous communications cycle

As illustrated in Figure 3, scorecard solutions supported by enabling technologies can accelerate the speed by which information is disseminated between management and staff. Key performance indicators ("KPIs") are captured and the resulting information is then distributed to management and employees for monitoring purposes. Feedback from both management and employees can also be captured and recorded, in order to improve and/or manage the performance measures.

In the same process, strategic directions from management are disseminated to employees in the form of objectives and KPIs. Feedback and KPI results are accomplished by employees which then form the basis by which management evaluate the effectiveness of their strategies.

Why Automate?

While it is generally more feasible and cost effective for smaller enterprises to maintain and manage a manual scorecard based on the traditional "pen and paper", the current computing power that is available within our desktop computers enables us to put the available spreadsheet capabilities to good use.

Spreadsheet software such as OpenOffice.org's Calc, Lotus SmartSuite's 1-2-3 and Microsoft's Excel can be utilised to create basic scorecards (with cascading and drill down capabilities). At KPMG Business Advisory Malaysia, we have developed similar scorecards to showcase the potential of desktop/laptop applications in harnessing the functionalities and potential of such applications.

Capabilities from within such spreadsheet software can support small-to-medium sized organisations that are seeking support from enabling technology tools in the management of their scorecards. At the organisation or strategic level, spreadsheet tools that reside in desktop computers are more than adequate to support the day-to-day management of the organisation's scorecards. Similarly, spreadsheet software can also be applied to support scorecard management at the functional or departmental levels (in organisations with around 5 functional areas), or organisations with a small number of employees (20-30 employees). However these basic scorecards have their limitations as the complexity of the scorecard increases.

In larger organisations, inevitably more sophisticated and powerful scorecard solutions are required to cater to the complex organisation / reporting structures and large number of employees. In addition, sophisticated scorecard solutions are necessary to support groups of organisations with large numbers of subsidiaries.

Automated Balanced Scorecard solutions can be implemented through various means, depending on the size, business/operational complexities, requirements and IT infrastructure of the organisations. The following are the three common scorecard solutions, adopted by organisations of various sizes and in various industries globally:

- Standalone scorecard solutions on personal computers, operated by a single user;
- Local area centralised performance management systems, integrated with an organisation's major applications; or
- Global centralised/distributed performance management systems, consisting of full web-based integration covering an organisation's major operations globally.

The reasons for many organisations adopting an automated scorecard approach are many, one of the major justifications being the ease of managing complex scorecards and monitoring numerous performance measures for the purposes of reporting to senior management. In the next section, we will examine several key benefits and disadvantages derived from automating the Balanced Scorecard.

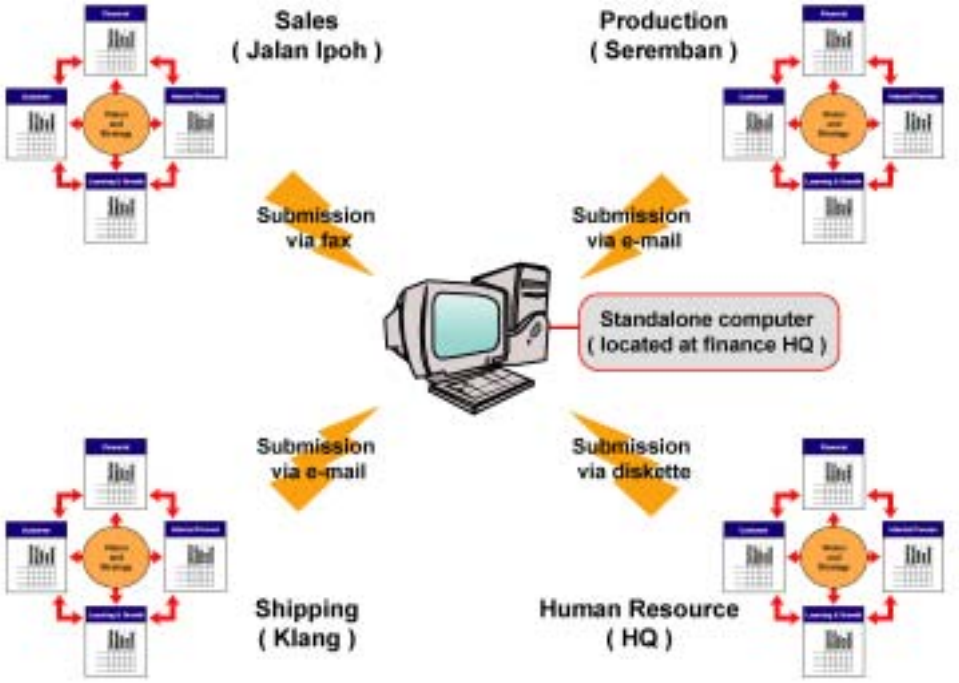

Figure 4 - Manual scorecards submitted to a central location to be monitored centrally

As described above, standalone scorecard solutions are suitable for small-to-medium-sized organisations. Fairly simple scorecard solutions (as illustrated in Figure 4) ranging from those that are developed on spreadsheet software to off-the-shelf solutions could be deployed fairly rapidly and inexpensively for smaller organisations. These solutions, especially the spreadsheet variant, require manual input of performance data into the solutions by a user. For small-to-medium-sized organisations, these can be achieved without much degradation to efficiency and timeliness of the scorecard reports.

The benefits of such standalone scorecard solutions are their relatively low ownership costs and ease of installation. Such solutions are also relatively easy to use and operate, requiring very little training time and investments.

However, standalone scorecard solutions may not have the capabilities to support real-time, on-line demands of larger corporations with diverse business operations and business units.

This is where such organisations will have to look towards more sophisticated and integrated solutions.

Local Area Centralised Performance Management Systems

While standalone solutions may have the capabilities to support the larger organisations, the complexity and voluminous performance data inherent in such organisations generally renders these standalone solutions inefficient. Imagine the man-effort required in order to compile, collate, enter and generate reports manually in an organisation running on multiple application systems!

Larger organisations with multiple systems running on an intranet (or local area network ("LAN")) would be better off integrating their systems to a centralised Balanced Scorecard engine (as illustrated in Figure 5). There is a number of scorecard solutions available in the market today capable of supporting the more complex business structures and their demands for real-time monitoring and reporting.

Over the years, these scorecard solutions have evolved from a purely "Balanced Scorecard solution" into one that encompasses the organisation's performance management, and are generally known as "performance management solutions".

Such performance management solutions are the truly "automated" scorecard engines, capable of capturing data from the various sources (e.g. host applications, accounting/financial systems, datawarehouse, etc.) and multiple platforms (e.g. Unix, Windows, etc.), and ultimately generate reports to management/users on a real-time basis. Such performance management solutions are equipped to support organisations with LAN infrastructure and minimal global operations.

These solutions are generally reasonably priced for a minimal number of users and since they rely on the organisation's existing IT infrastructure, there is usually minimal additional infrastructure costs required.

One of the major factors to consider in implementing such solutions is the complexity of integration. The inherent integration risks cannot be underestimated, but if carried out properly this will result in an integrated performance management solution that is not only efficient, but relatively inexpensive to operate (e.g. reduced configuration/ maintenance, training and down-time costs).

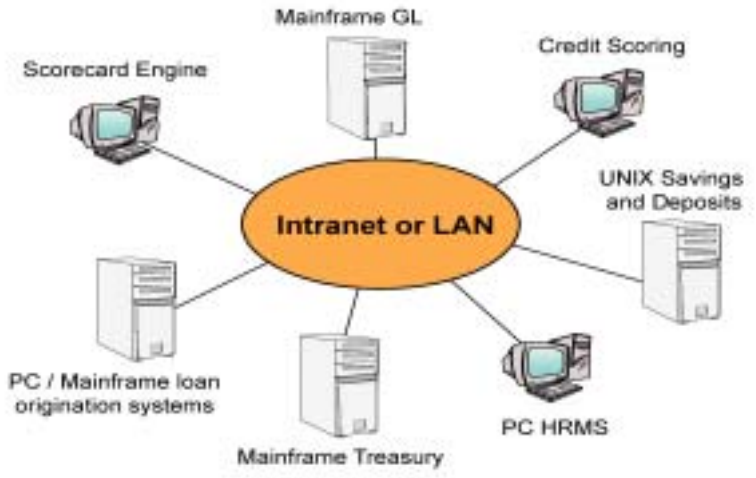

Figure 5 - Local area centralised monitoring and integrated with the organisation's major applications (e.g. via the organisation's intranet)

Global Centralised/Distributed Performance Management Systems

In a world dominated by the forces of globalisation, and mergers and acquisitions, organisations have evolved from a backyard industry to one that is borderless and spans all regions. Measuring and monitoring the performances of organisations with such diverse range of operations and business units is a challenging task.

However, with the advent of the internet and information technology, there exists automated scorecard solutions capable of supporting the management of business performance in these organisations. These web-based scorecard or performance management solutions can assist what Kaplan and Norton calls "strategy-focussed organisations" to manage their business performance efficiently and effectively through a comprehensive set of tools to capture, measure, monitor and report business performance.

These enterprise-wide performance management solutions depend on the speed of the internet and mobility of cellular technology to process and disseminate performance measures in real-time mode. With the "always on" capabilities of the internet and cellular technology, these solutions can meet organisations' demands for on-line connectivity and high availability.

Such performance management solutions can be deployed according to either of the following architectures:

- Centralised; or
- Distributed.

In a centralised architecture (as illustrated in Figure 6), an organisation's LAN-connected systems are integrated via its LAN whilst its global operations are connected via the internet. Performance data is captured from the relevant application servers or repositories and processed in a centralised performance management system (in this case, located in the Balance Scorecard Department) and the resulting reports are then channelled to the CEO (or Senior Management) in the form of Balanced Scorecard or Performance Reports.

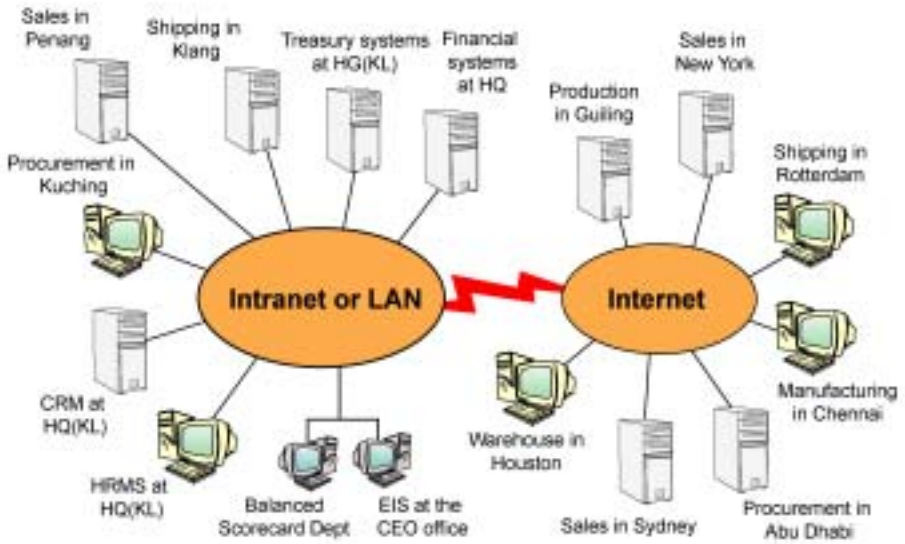

Figure 6 - Example of a web-based, fully integrated centralised performance management system

Because of its web-based design, these performance reports can be retrieved from any where in the world as long as there is access to the internet and the necessary authorisation. Crucially, the introduction of broadband cellular networks and internet-ready mobile phones has indeed given new meaning to the terms "on demand", "always connected" and "mobility". What this means is, an organisation's performance can be monitored and decisions made on real-time information provided by its performance management systems anywhere, anytime giving rise to reduced lag time and improved competitive advantage.

Such benefits do come at a cost, however, as such sophisticated performance management solutions are expensive and complex to implement. Inherent integration risks are multiplied due to the need to integrate the organisation's global operations and their related application systems, servers and repositories. This is further discussed in the following section on Critical Success Factors. Moreover, internet access introduces a new dimension of security and data integrity risks that the organisation will have to consider and mitigate.

Another approach in deploying an integrated performance management solution comes in the form of a distributed architecture (as illustrated in Figure 7). A distributed architecture is a hybrid solution, consisting of one (or multiple) local area hubs connected via the intranet, integrated using the power of the internet.

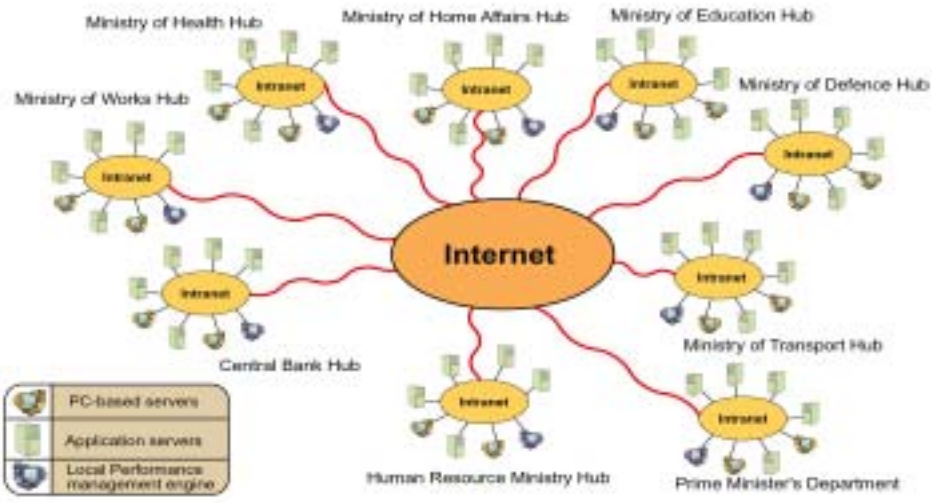

Figure 7 - Example of a web-based, fully integrated distributed performance management system

A distributed architecture channels processing power to the smaller, autonomous hubs, ensuring that these hubs are responsible for managing their individual hub's performance. A distributed performance management architecture is suitable in the case of a very large and complex organisational structure, e.g. global multinational organisations with diverse operations, or even any forms of federal government).

Figure 7 illustrates the case of a distributed performance management architecture in a typical federal government. Each hub consists of a federal ministry, generally under the supervision of the minister. Within each ministry are the various departments and sub-units at both federal and state levels. In a complex structure such as this, each hub is responsible for the performance of that particular hub, with all hubs reporting to a central monitoring centre. In the case of the federal government, the central monitoring centre is the Prime Minister's Department.

In a distributed network, common information can be shared across the numerous hubs even though the data owner resides in a particular ministry, e.g. civil servants' training hours and details are generally maintained by the Human Resource Ministry or under one of its departments but such information may be required by the other hubs for the purposes of monitoring and managing the "Learning and Growth" perspective of the BSC.

Ultimately performance management reports are compiled, collated, processed and reported at the highest level of the Executive, i.e. the Prime Minister and his Cabinet. By combining the capabilities of distributed computing and the internet, such performance management solutions can form the basis of a forward-looking, performance-centric government.

The performance management benefits derived from a distributed network are numerous, ranging from the ability to share knowledge/information to allowing a nation's Executive the ability to communicate the government's strategy and visions to all levels of the government. In addition, such a design enables inefficiencies and potential deviations to be rectified at all levels of the government.

Regardless of the automated scorecard or performance management solutions in use, organisations will invariably need to be aware of the pitfalls, as is the case with any IT implementation. Towards this end, we will examine some of the major critical success factors in implementing automated Balanced Scorecard solutions.

Critical Success Factors

Throughout the history of IT implementation, pitfalls and issues abound. As time progresses, the level of technology sophistication and "user-friendliness" amongst software solutions improves. However, increased sophistication comes with it ever increasing complexities in managing the implementation of such software solutions, including automated scorecards or performance management solutions. In this section, we will examine the key critical success factors towards a successful scorecard implementation. These critical success factors are generic and are a necessary consideration in any automated scorecard implementation.

1. Managing expectations

One of the most challenging aspects in an IT implementation project is the management of stakeholder and user expectations. Since the dawn of the IT era last century, information technology (and information systems) have been perceived as a "cure-all" to an organisation's inefficiencies and ineffectiveness.

Automated Balanced Scorecard solutions are no different, where stakeholders perceive scorecard implementations to be no more than buying a packaged solution "off-the-shelf" that can be installed and operationalised in a matter of days.

However, nothing can be further from the facts. Depending on the magnitude of readiness and complexity of the organisation's Balanced Scorecard framework, implementing an automated scorecard solution can take weeks, even months before such solutions can "go-live".

Organisations that have never put in place Balanced Scorecards before will never be ready to adopt its automated equivalent. At this stage, should the organisation move towards a Balanced Scorecard approach, a detailed scorecard framework will need to be developed, and depending on the depth of coverage, can take weeks (in the case of a detailed strategic-level scorecard) to months (in the case of a scorecard framework covering strategic-level, functional-level and employee-level scorecards).

In addition, project managers will have to ensure that stakeholders and project sponsors are aware of the capabilities (and indeed, the limitations) of the scorecard solution being implemented. Realistic timelines should also be developed to take into account organisation readiness, integration and change management, to name a few.

Similarly, users' expectations need to be managed lest there exist expectation gaps. These gaps can include capabilities/limitations of scorecard solutions, ease of use with minimal training or guidance, and ease of maintenance.

Closely related to the topic of managing expectation is the subject of change management which we will explore below.

2. Change management

In the fast-paced business world of the new millennium with its numerous channels of communications within our reach, we are susceptible to taking communication for granted. Effective communication is key in any organisation's progress. Apart from communicating key strategic messages to employees, organisations also communicate day-to-day events such as promotions, organisational policies, etc. Similarly managing change in the face of implementing Balance Scorecard solutions must be seen as a crucial piece of the implementation life cycle.

There are many aspects of change that an organisation has to managed, such as communicating variations to business processes, policies and procedures. However, change management encompasses more than just an organisation's processes and technology. It is also crucial for organisations to manage the people aspect, especially people's inherent resistance to change.

3. Managing implementation and integration issues

The entire implementation journey, commencing with the development of scorecard framework to integration, training, testing and "go live", is fraught with challenges. Developing a practical and working scorecard framework is in itself a challenging task that takes considerable effort and time. Firstly, senior management views and visions are solicited to develop the strategic objectives of the organisation. Secondly, the necessary performance measures (or KPIs) are assigned to these objectives.

These performance measures subsequently need to be analysed and assigned to the lower level scorecards, and if necessary cascaded to the individual. Once the performance measures are identified and agreed, a mechanism has to be put in place to identify the source(s) of these performance measures. In smaller organisations, performance measures are usually extracted from a minimal number of sources, invariably from sources such as the organisation's financial system, human resource system and a number of registers or files.

In larger and more complex organisations however, the task of identifying the sources of data (or information) is a painstaking task requiring the analysis of the organisation's network architecture and data structures. Subsequently, a decision has to be made to determine whether information residing within the organisation's IT systems need to be integrated with its performance management system.

4. Commitment and support

The last, but not least, of our Critical Success Factors is commitment. Commitment in this context is two-pronged:

- Commitment from the organisation and project team to see through the successful implementation of the automated performance management solution.

  The lack of top-level commitment and user acceptance of the implemented solution are generally seen as a bane in most IT implementation projects. In a lengthy implementation project, an organisation's focus and direction may vary and/or its principal sponsors/champions replaced. Likewise the constant variations/ replacements to project team members and/or users. Hence, project priorities get shifted resulting in diminished importance being placed upon a scorecard project.

- Commitment from the organisation (both management and users) to carry out continuous improvements and to subscribe to the objectives and ideals of the Balanced Scorecard approach.

  A high degree of sustained commitment is also required to ensure continuous monitoring and improvement to the operational scorecard solution - e.g. key objectives of the BSC are revised to constantly revised to meet the strategic directions of the organisation, KPIs and targets are continuously monitored, reported and adjusted to reflect an acceptable level of improvement over time, and a 360° feedback mechanism is put in place to ensure regular communications of strategic directions and performance recognition from management and performance/views are obtained from employees.

Conclusion

The concept of a "balanced scorecard" approach in providing a clear direction on the areas organisations need to measure (instead of focusing on the "financial" aspects only) is a widely accepted form of performance *measurement* ever since its development and introduction to the business community in the 1990s. Since the turn of the new millennium, the Balanced Scorecard has evolved into a *management* system - where its concept is used not only to measure an organisation's performances in the four perspectives (financial, customer, internal processes, and learning and growth) - but also widely used to communicate an organisation's strategic directions to all levels of the organisation and manage their performances across all processes, functions and employees.

The advent of enabling technology and the exponential growth of its processing power and speed have brought about a paradigm shift in the way the Balanced Scorecard is applied. Decision makers now have the luxury of real-time access to their organisations' performances anywhere, anytime. Such decision making tools accord them with an almost instant decision making capability in order for their organisations to stay ahead of the competitors.

While adoption of a fully integrated, automated, real-time performance management solution in Malaysia is concentrated on a relatively small number of organisations currently, it is inevitable that more organisations will move towards such a solution over the next 2-3 years to pull ahead of their competitors and remain competitive globally. The question is, when will your organisation begin to put an edge on your leading indicators?

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