When it comes to non-financial performance measurement methods, E3 requires candidates to know the performance pyramid and the building-block model, as well as the ubiquitous balanced scorecard.

By Adrian Sims

This is the second of two articles on management control methods. The first, which appeared in July’s FM app, covered financial performance measures, but I will focus here on the development of non-financial metrics.

Concern about the effects of relying too much on financial performance metrics prompted a surge of interest in non-financial measures in the 1980s among accounting professors and other management theorists. Both groups of academics were in fact describing what leading businesses were already doing.

Accounting professors in the US and UK focused on the poor quality of the management information provided by profit-based performance measures. In 1985, for instance, Harvard’s Robert Kaplan wrote an article, “Accounting lag – the obsolescence of cost accounting systems”, that criticised management accounting for failing to keep pace with the businesses it sought to control. One aspect of this failure, he argued, was the inadequacy of its performance metrics.

Emerging commercial trends at the time included lean manufacturing and initiatives such as quality, innovation and customer care.

The management theorists contributed two themes to the debate. The first was a more strategic view of a business, its place in the wider commercial environment and the shareholder value it created. This encouraged managers and investors to focus less on short-term profits. The second was an organisation-al management perspective that combined the popularity of management by objectives with the increased use of IT into what another Harvard academic, Robert Eccles, termed a “performance measurement manifesto”. This called for more measurement of all processes and a willingness to extend performance measurement beyond budget holders to encompass operative staff and suppliers.

Further considerations have since arisen over the ensuing decades, including a growing concern about risk, corporate social responsibility (CSR) and business ethics, and the challenges of managing networked organisations. These aspects also require performance...
The balanced scorecard

The balanced scorecard was developed in 1987 by US firm Analog Devices. Its progress was followed by a number of academics, with the most famous study resulting in a 1992 article in Harvard Business Review by Kaplan and consultant David Norton called “The balanced scorecard – measures that drive performance”. Because of its rapid adoption, the BSC has become the best-known model of multi-dimensional performance measurement. It has been examined several times in P2 and E3, most recently this May.

The BSC has four “perspectives”, by which Kaplan and Norton seem to mean sets of measures. The double-ended arrows on the diagram above denote the relationships between the perspectives – eg, the internal business processes have implications for finance because they generate costs and sellable throughput but may also require investment.

For example, under the customer perspective a firm may have the following:
- **Objectives** – eg, become the market leader and deliver a high-quality experience for customers.
- **Measures** – eg, share of total sales in sector and percentage of customers who would recommend us to other buyers.
- **Targets** – eg, increase sales volume by 15 per cent this year and attain a 95 per cent recommendation score.
- **Initiatives** – eg, recruit more sales staff and run a course in customer care.

In E3 you may be asked to suggest initiatives for a company and propose a performance measure for each initiative.

The benefits of using a BSC are that it:
- Enables senior managers to monitor and communicate all aspects of the strategy and how goals should be achieved, without being limited to monitoring only the financial results.
- Discourages managers from focusing too much on short-term financial results.
- Can be used to influence strategic changes by communicating a new strategy as objectives for all functions.
- Enables performance measures to be derived for non-financial activities.

Problems achieving congruence between performance measures can be a particular weakness of the BSC. For example, does a commitment to improvements in learning and growth support the objective of improving the financials? Kaplan and Norton refer to “vertical vectoring”, by which they mean ensuring that all the non-financial measures can be reconciled back to improving the financial measures. But what financial measures do we have that incorporate the future benefits of initiatives in, say, learning processes? If the financial measures are still profit-based, they may be adversely affected in the short term by efforts to improve customer care.

The performance pyramid

This model for multi-dimensional performance measurement was popularised by Richard Lynch and Kelvin Cross in their 1991 book *Measure Up!* It takes its lead from the strategic requirement for

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an organisation to “fit with its environment”, which is represented by its external effectiveness in the market. This is denoted on the left half of the diagram above. The internal efficiency of the organisation, represented on the right half, determines its financial performance.

Supporters of the performance pyramid claim that it is better than the BSC in the following two ways:
- It’s hierarchical, requiring senior managers to set objectives for each level of the organisation. The performance measures that emerge from these are specific and appropriate to each level.
- It’s process-focused – ie, it explicitly considers how processes combine to achieve the organisation’s goals. The measures interact horizontally – eg, cutting the production cycle time should shorten the delivery time. They also interact vertically – eg, cutting the cycle time should also increase productivity.

Another key feature of this model is its recognition that financial and non-financial measures can support each other. For example, increased flexibility should improve a company’s market position by meeting customers’ needs more effectively, while also improving its financial performance by increasing revenues and reducing fixed costs.

**The building-block model**

This emerged from a 1996 CIMA-funded research report entitled “Performance measurement in service industries: making it work”. Its authors, Philip Moon and Lin Fitzgerald, proposed a model based on dimensions, measures and standards. The dimensions are the six things to be measured. These are subdivided into results – the summary measures of success – and determinants – the factors behind those results. They are:
- **Competitiveness** (result): measures such as market share and relative cost.
- **Financial performance** (result).
- **Quality of service** (determinant).
- **Flexibility** (determinant): ability to alter volumes or specifications quickly.
- **Resource utilisation** (determinant): the percentage of full capacity in each process or asset that’s being used.
- **Innovation** (determinant): product and process improvements, and the time it takes to implement these.

The measures are the three qualities of effective performance metrics. These are:
- **Clarity.** Measures should be understood by the people responsible for them.
- **Motivation.** Measures should encourage people to act in a way that is congruent with the organisation’s goals.
- **Controllability.** Managers should have authority over all factors affecting the measures for which they are responsible.

The standards are the three characteristics of an effective performance management system. These are:
- **Ownership.** Those responsible for achieving the measures should feel they had some involvement in setting them.
- **Achievability.** Targets should be realistic as to avoid demotivating people.
- **Fairness.** People must feel that the overall system is equitable and applies equally to everyone in the organisation.

An approach to setting operational performance measures that students find helpful involves seeing the operation as a process and recognising the possibility of setting measures at points along that process. Suppose, for example, that a firm wants to improve customer retention by giving a better service in its call centre. It can use so-called lead indicators, which relate to inputs that enable the operation to be successful – eg, the number of trained staff in the call centre. Then it can use coincident indicators, which determine whether the activity is being performed successfully or not – eg, the average wait before a call is answered. And then it can use lagging indicators, which determine whether the activity has had the desired impact or not – eg, the customer retention rate.

The approaches I have described in this article are not without their problems, of course. The main ones include:
- The potential for measures to conflict with each other. It would be stressful for managers to be evaluated on measures that pull in opposite directions – eg, cut costs, but also improve customer service.
- The potential for distraction. Managers may waste their time responding to additional performance measures rather than running their departments.
- Increased costs. Bringing in more performance measures requires more people and time to monitor them.
- The risk of ossification. The processes and goals of businesses may change, but measures that do not alter accordingly may obstruct progress.
- The lack of some key perspectives. None of the approaches described here has dimensions covering CSR, risk management, stakeholder relations or the performance of business partners.
- The lack of an external dimension. None of the models measures the readiness of an organisation to respond to outside threats or opportunities.

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