

THE PYRAMIDS AND PITFALLS OF PERFORMANCE MEASUREMENT

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It has become increasingly important for organisations to develop systems of performance measurement which not only reflect the growing complexity of the business environment but also monitor their strategic response to this complexity. The need for good performance management is an ongoing issue which should be addressed by the management of all organisations.

This article considers issues which are central to the understanding and assessment of performance measurement within any organisation. The main issues requiring consideration by management are:

- linking performance to strategy
- setting performance standards and targets
- linking rewards to performance
- considering the potential benefits and problems of performance measures.

In attempting to establish a clear link between performance and strategy it is vital that management ensures that the performance measures target areas within the business where success is a critical factor. The performance measures chosen should:

- measure the effectiveness of all processes including products and/or services that have reached the final customer
- measure efficiency in terms of resource utilisation within the organisation
- comprise an appropriate mix of both quantitative and qualitative methods
- comprise an appropriate focus on both the long-term and short-term
- be flexible and adaptable to an ever-changing business environment.

The last point stresses how important it is that performance measurement systems are dynamic so that they remain relevant and continue to reflect the issues important to any business. There are a number of models of performance measurement which can be used by management. This article considers the 'performance pyramid' of Lynch and Cross (1991)¹. The model represents an acknowledgement by the writers that traditional performance measurement systems were falling short of meeting the needs of managers in a much changed business environment.

Lynch and Cross suggest a number of measures that go far beyond traditional financial measures such as profitability, cash flow and return on capital employed. The measures that they propose relate to business operating systems, and they address the driving forces that guide the strategic objectives of the organisation. Lynch and Cross propose that customer satisfaction, flexibility and productivity are the driving forces upon which company objectives are based. They suggest that the

status of these driving forces can be monitored by various indicators which can be derived from lower level (departmental) measures of waste, delivery, quality and cycle time. The performance pyramid derives from the idea that an organisation operates at different levels each of which has a different focus. However, it is vital that these different levels support each other. Thus the pyramid links the business strategy with day-to-day operations.

In proposing the use of the performance pyramid Lynch and Cross suggest measuring performance across nine dimensions. These are mapped onto the organisation - from corporate vision to individual objectives.

Within the pyramid the corporate vision is articulated by those responsible for the strategic direction of the organisation. The pyramid views a range of objectives for both external effectiveness and internal efficiency. These objectives can be achieved through measures at various levels as shown in the pyramid. These measures are seen to interact with each other both horizontally at each level, and vertically across the levels in the pyramid.

George Brown (1998)² explains what Lynch and Cross refer to as 'getting it done in the middle' focuses on business operating systems where each system is geared to achieve specific objectives, and will cross departmental/functional boundaries, with one department possibly serving more than one operating system. For example, an operating system may have new product introduction as its objective, and is likely to involve a number of departments from design and development to marketing. At this level, performance focus will be on three needs. First, there will be a focus on the need to ensure customer satisfaction. Second, there will be a focus on the need for flexibility in order to accommodate changes in methods and customer requirements. Third, there will be a focus on the need to achieve productivity which necessitates looking for the most cost effective and timely means of achieving customer satisfaction and flexibility.

At the bottom level of the pyramid is what Lynch and Cross refer to as 'measuring in the trenches'. Here the objective is to enhance quality and delivery performance and reduce cycle time and waste. At this level a number of non-financial indicators will be used in order to measure the operations. The four levels of the pyramid are seen to fit into each other in the achievement of objectives. For example, reductions in cycle time and/or waste will increase productivity and hence profitability and cash flow

The strength of the performance pyramid model lies in the fact that it ties together the hierarchical view of business performance measurement with the business process review. It also makes explicit the difference between measures that are of interest to external parties - such as customer satisfaction, quality and delivery - and measures that are of interest within the business such as productivity, cycle time and waste.

Lynch and Cross concluded that it was essential that the performance measurement systems adopted by an organisation should fulfil the following functions:

The measures chosen should link operations to strategic goals. It is vital that departments are aware of the extent to which they are contributing - separately and together - in achieving strategic aims.

The measures chosen must make use of both financial and non-financial information in such a manner that is of value to departmental managers. In addition, the availability of the correct information as and when required is necessary to support decision-making at all levels within an organisation.

The real value of the system lies in its ability to focus all business activities on the requirements of its customers.

These conclusions helped to shape the performance pyramid which can be regarded as a modeling tool that assists in the design of new performance measurement systems, or alternatively the re-engineering of such systems that are already in operation. See Figure 1.



Figure 1: the performance pyramid (Lynch and

Cross, 1991)

David Otley (2005)³ has observed that other related frameworks exist, such as the results and determinants framework by Fitzgerald et al (1991), the balanced scorecard by Kaplan and Norton (1992) and Neely et al's performance prism. A common thread in all of them is that performance measures should:

- be linked to corporate strategy
- include external as well as internal measures
- include non-financial as well as financial measures
- make explicit the trade-offs between different dimensions of performance
- include all important but difficult to measure factors as well as easily measurable ones
- pay attention to how the selected measures will motivate managers and employees.

Setting standards and targets

To set standards and targets, management could choose to make use of

benchmarking and/or target costing while being mindful of the critical need to link rewards to performance as appropriate.

Benchmarking

Benchmarking is 'a continuous, systematic process for evaluating the products, services, and work processes of organisations that are recognised as representing best practices for the purposes of organisational improvement' (Spendolini 1991)4. The most common approach is process benchmarking, where the standard of comparison is a 'best practice' firm which may be entirely unconnected with the benchmarking organisation. It may not even operate within the same industry. The objective is to improve performance. This is best achieved through the sharing of information which should be of mutual benefit to both parties taking part in the benchmarking programme. As a result of receiving new information, each party will be able to review their policies and procedures. The process of comparing respective past successes and failures can serve as a stimulus for greater innovation within each organisation.

Target costing

Target costing should be viewed as an integral part of a strategic profit management system. The initial consideration in target costing is the determination of an estimate of the selling price for a new product which will enable a firm to capture its required share of the market. It is then necessary to reduce this figure to reflect the firm's desired level of profit, having regard to the rate of return required on new capital investment and working capital requirements. The deduction of required profit from the proposed selling price will produce a target price that must be met in order to ensure that the desired rate of return is obtained. The main theme of target costing is, therefore, what a product should cost in order to achieve the desired level of return. Target costing will necessitate comparison of current estimated cost levels against the target level. This must be achieved if the desired levels of profitability, and hence return on investment, are to be achieved. Where a gap exists between the current estimated cost levels and the target cost, it is essential that this gap is closed.

Performance rewards

Management will encourage employees to achieve organisational goals by having rewards linked to their success or failure in achieving desired levels of performance. It is critical that management establish an appropriate performance-rewards linkage. Management should consider a rewards package comprising both financial and non-financial rewards. Typical organisational rewards include salary increases, bonuses, promotion, and recognition. Employees may also earn intrinsic rewards through a sense of achievement and perceived success. Management should also give serious consideration to the establishment of 'negative rewards' or 'punishments' which should be linked to failure to achieve desired levels of performance. These may include failure to obtain potential rewards, demotions, and possibly the loss of employment.

Potential benefits

There are several potential benefits for an organisation that implements a reward scheme:

- Rewards and incentives can make a positive contribution to strategy implementation by shaping the behaviour of individuals and groups. A well-designed reward scheme will be consistent with organisational objectives and structure.
- There is evidence which suggests the existence of a reward scheme provides an incentive to achieve a good level of performance. Moreover, the existence of effective schemes helps not only to attract but also to retain employees who make positive contributions to the running of an organisation.
- Key values can be emphasised by incorporating key performance indicators in the performance-rewards mechanisms which underpin the scheme. This helps to create an 'understood environment' in which it is clear to all employees the performance aspects that contribute to organisational success.
- An effective reward scheme will create an environment in which all employees are focused on continuous improvement.
- Schemes that incorporate equity share ownership for managers and employees alike can encourage behaviour which, in the longer-term, focuses on actions aimed at increasing the market value of the organisation.

Some of the principal areas that warrant management consideration in the design of a reward scheme include:

- Whether performance targets should be set with regard to results or effort. It is more difficult to set targets for administrative and support staff since in many instances the results of their efforts are not easily quantifiable. For example, good sales administrators will improve levels of customer satisfaction but quantifying this is extremely difficult.
- Whether rewards should be monetary or non-monetary. Money means different things to different people. In many instances people will prefer increased job security which results from improved organisational performance and adopt a longer-term perspective. For these employees share option schemes might appeal. Well-designed schemes will correlate the prosperity of the organisation with that of the individuals it employs.
- Whether the reward promise should be implicit or explicit. Explicit reward promises are easy to understand but in many respects management will have their hands tied. Implicit reward promises such as the promise of promotion for good performance is also problematic since not all organisations are large enough to offer structured career progression. In situations where not everyone can be promoted, a range of alternative reward systems need to be in place to acknowledge good performance and encourage commitment from the workforce.
- The size and time span of the reward. This can be difficult to determine especially in businesses which are subject to seasonal variations. Activity levels may vary and there remains the potential problem of assessing performance when an organisation operates with surplus capacity.
- Whether the reward should be individual or group-based.
Whether the reward scheme should involve equity participation. Such schemes

invariably appeal to directors and senior managers but should arguably be open to all individuals if 'perceptions of inequity' are to be avoided.

- Tax implications also need to be considered.

Performance measures - benefits and problems

Berry, Broadbent and Otley (1995)⁵ suggest that the following benefits can be derived from the use of performance measures:

- Clarification of the objectives of the organisation.
- The development of agreed measures of activity.
- A greater understanding of the processes within the organisation.
- The facilitation of comparisons of performance between different organisations.
- The facilitation of the setting of targets for the organisation and its managers.
- The promotion of the accountability of the organisation to its stakeholders.

However, they also draw attention to the potential problems that may develop from the use of performance measures by an organisation. These could include:

- tunnel vision
- sub-optimisation
- myopia
- measure fixation
- misrepresentation
- misinterpretation
- gaming
- ossification.

It is vital that management give detailed consideration as to whether there are likely to be problems in using performance measures as targets for the organisation and its managers. Of particular importance is the need to assess whether the use of performance measures will help to provide accountability of the organisation and its employees to the stakeholder. This raises the question of the compatibility (congruence) of individual and organisational goals.

Individual goals may focus on financial and non-financial areas such as remuneration, promotion prospects, job security, job satisfaction, and self-esteem. There may be a conflict for each individual between actions to ensure the achievement of individual goals and/or organisational goals. The list of potential problems cited by Berry, Broadbent and Otley may be illustrated in the context of any type of organisation. The comments which follow are illustrated in the context of what could occur (although should not occur) in a firm of practising accountants.

- Tunnel vision may be seen as undue focus on performance measures to the detriment of other areas. For example, efforts to ensure a staff utilisation ratio of 72%, measured in terms of chargeable hours as a proportion of total hours available, may lead to inadequate documentation of client records and developments in areas such as communication and teamwork.
- Sub-optimisation may occur where undue focus on some objectives will leave others not achieved. For example, an audit partner may be focused on winning

new clients but this may result in inadequate supervision regarding the work of current clients.

- Myopia refers to short-sightedness leading to the neglect of longer-term objectives. An undue focus on generating current client income could be to the detriment of longer-term goals such as practice development or innovations in approaches to the management of client affairs.
- Measure fixation implies behaviour and activities in order to achieve specific performance indicators which may not be effective. For example, using too junior staff on an audit in order to limit costs might result in much re-work, costly delays, and client dissatisfaction.
- Misrepresentation refers to the tendency to indulge in creative reporting in order to suggest that a performance measure result is acceptable. For example, a client survey report statistic might indicate that 95% of respondents indicated their satisfaction with a particular service provided by the practice while in actual fact only a carefully selected 20% of clients were sent the questionnaire.
- Misinterpretation involves the failure to recognise the complexity of the environment in which the organisation operates. Within an accountancy practice, one partner might be focused on the achievement of profit whereas another partner might be focused on winning high-profile clients, and another paying attention to establishing a local reputation. Within such a scenario, the existence of multiple motives creates a complex environment in which the objectives of the principal players may not always coincide.
- Gaming is where there is a deliberate distortion of the measure in order to secure some strategic advantage. This may involve deliberate under-performing in order to avoid higher targets being set. For example, when conducting an audit, a manager might become aware of a potentially lucrative opportunity to supply consultancy services. If such services were not budgeted for in respect of the forthcoming year then the manager would undoubtedly be perceived in a good light when a contract for those services suddenly came to fruition. Another example of gaming would be the restriction of departmental consultancy earnings in one year in order that the target for the next year will not be increased and/or to hold back consultancy possibilities which are in the pipeline in order to create slack.
- Ossification, which by definition means 'a hardening', refers to an unwillingness to change the performance measure scheme once it has been set up. An example might be the use of a standard set of questions in a questionnaire to test client satisfaction with a particular service. Good responses may simply indicate a poorly-structured questionnaire, rather than a high degree of client satisfaction.

Addressing the problems

One should acknowledge that imperfections will exist in any performance measurement scheme. George Brown (1998) has outlined a number of actions that may be taken in order to minimise the impact of imperfections which may exist. These are as described below.

Involving staff at all levels in the development and implementation of the scheme

People are involved in the achievement of the performance measures at all levels,

and in all aspects, of an organisation. It is important that all staff are willing to accept and work towards any performance measures which are developed to monitor their part in the operation of the organisation and in the achievement of its objectives. This should help to reduce the extent of gaming and tunnel vision.

Being flexible in the use of performance measures

It is best to acknowledge that performance measures should not be relied on exclusively for control. A performance measure may give a short-term measure which does not relate directly to actions which are taking place in order to lead to an improved longer-term level of performance. To some extent it should be acknowledged that improved performance may be achieved through the informal interaction of individuals and groups. This flexibility should help to reduce the extent of measure fixation and misrepresentation.

Keeping the performance measurement system under constant review

This should help to overcome the problems of ossification and gaming. Another requirement in overcoming problems is to give careful consideration to the dimensions of performance. Actions that may be taken include quantifying all objectives (however difficult this may appear to be) and to try and focus on measuring customer satisfaction. Efforts to quantify an objective will improve the efforts to understand and take action to achieve the intended output of the objective. Such actions should help to overcome sub-optimisation. Measuring customer satisfaction is a vital goal. Without continuing and improved levels of customer satisfaction, any organisation is underachieving and is likely to have problems in its future effectiveness. Positive signals from performance measures earlier in the value chain are only of relevance if they contribute to the ultimate requirement of customer satisfaction. Once again, tunnel vision and sub-optimisation should be reduced through recognition of this requirement.

Consideration should also be given to the audit of the system. Seeking expert interpretation of the performance measurement system should help in considering the likely incidence of any or all of the problems cited above. It is important that this issue is considered at arms length and is not influenced by the views of those operating the scheme. In addition, maintaining a careful audit of the data used should help to reduce the incidence and impact of measure fixation, misinterpretation, or gaming. This is because any assessment scheme is only as good as the data on which it is founded and how such data is analysed and interpreted. It is also relevant to recognise key features necessary in any scheme. Once again, such measures should help to overcome the range of problems outlined above. Key features will include:

- nurturing a long-term perspective among staff. This may be difficult to achieve where rewards such as bonus or promotion are based on relatively short-term measures.
- trying to limit the number of performance measures. Better to focus on the key events which are likely to result in customer satisfaction. Too many performance measures may simply dissipate effort and could lead to conflicting actions.

- developing performance benchmarks which are independent of past activity. This refers to the need to focus on the way ahead - and how, by appropriate action, to improve from whatever the current situation may be.

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