

Balanced Scorecard Discussion Paper

National Analytical Services Support Service

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Introduction

This paper has been produced to outline a view on the balanced scorecard and how the principles behind it could be applied in pilot work with NHS Trusts. It is structured in two parts; Part one outlines the ‘balanced scorecard’ concept, the principles behind it and a view on applying the principles to “the balanced scorecard done well” in the NHS. Part 2 outlines a proposed approach for addressing the balanced scorecard concept as part of the Information Authority pilots with the Modernisation Agency.

About Balanced Scorecard

The term ‘balanced scorecard’ was first popularised by Kaplan & Norton in a Harvard Business Review article in 1992 and a subsequent book of that name in 1995. Their academic research showed that organisations using a multi-factor set of measures performed significantly better than those relying on financial results alone. Figure 1 shows the different dimensions of performance that Kaplan and Norton identified as necessary to obtain a ‘balanced scorecard’.

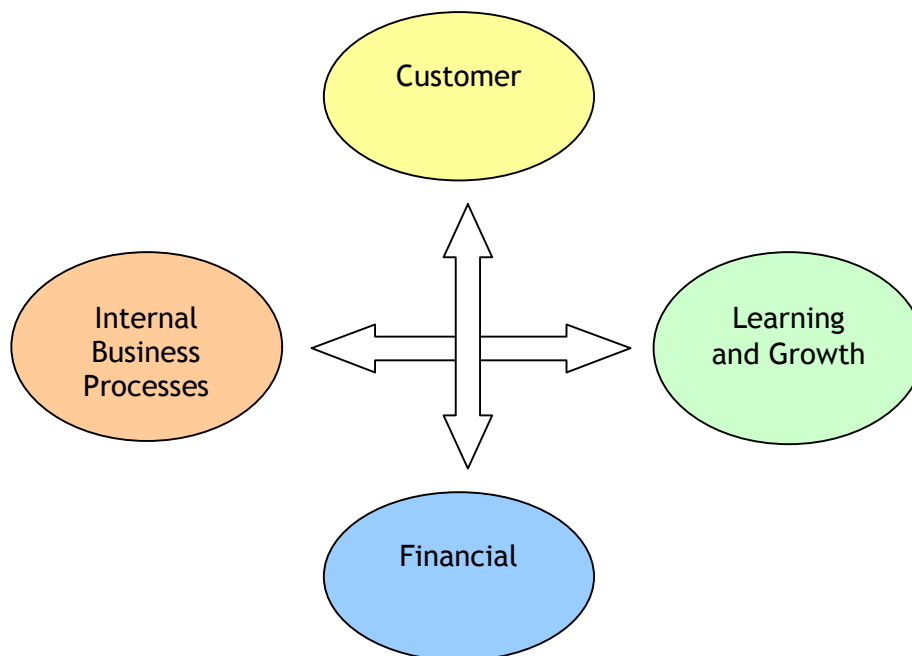


Figure 1.

The concept of a ‘balanced scorecard’ has been widely implemented in commercial organisations. The aim is to create a multi-dimensional measurement system that assists in optimising performance for all stakeholders.

Implementing the Balanced Scorecard

Practical application has varied widely; Some implementers have found implementation difficult. Many implementations have not been very ‘balanced’ and

generally been flawed in application of the original concept and achievement of aims. The authors have updated their approach to try to address some of the problems experienced in implementation.

The balanced scorecard 'done well' requires application and development of the original concept so as to produce a measurement framework that:

- reflects the whole systems nature of the organisation and
- is useful in driving improvement.

The basic components to create a balanced scorecard which gives a systemic view of the organisation and its performance are as follows:

- Creation of a scorecard; A clear, easy to view collection of measures.
- Use of a balance of measures - to gain a balanced assessment of the health of the organisation; Covering the range of dimensions outlined above.
- Ensure there is a clear view of what most needs attention, ie Focus on what is important.

Application of the principles of the Balanced Scorecard in the NHS

We have outlined below how the above principles can be applied in the NHS and considerations we feel are important in the application of the principles.

1. Creation of a scorecard.

A clear, easy to view display for the collection of measures. We suggest that it is helpful to present numerical data as a control panel or dashboard. This would have particular value in providing a means to display and manage the large number of mandatory measures (eg to measure performance against framework (PAF), star ratings, clinical governance).

2. Use of a balance of measures.

There is a fairly broad spread in the performance measures set by the government for performance against framework (PAF), star ratings, clinical governance and we recommend starting with these and mapping how well the collection cover the different dimensions of performance. In particular, better measurement of performance from the start to end of a patient journey covering quality, effectiveness and efficiency of service is important. Gaining an overview of how things fit together as a system will enable focus on different dimensions and provide a starting point for addressing gaps in coverage. Frameworks such as shown by a whole system diagram (eg such as those presented by Deming or Torres) also provide good pictures for identifying different dimensions of performance.

3. Ensure there is a clear view of what most needs attention.

The complexity of NHS organisations and their information needs make this both particularly challenging and particularly important. We suggest three areas for action:

- 1) Clarify the different dimensions / groups of measures and the most critical measures. Ensure the 'balance' outlined in the section on 'Application of the principles...' is covered, so that overall health is visible and not lost amongst the wealth of information on symptoms.
- 2) Mark warning limits - We advise that, where they exist, mandatory targets are displayed against any measures on the dashboard, so that checking

performance against target can be done quickly and easily. However, the problem with an 'over-focus' on targets is that they can encourage short term tampering rather than improving the system and don't help understanding of the capability of the current process to consistently achieve the desired performance.

Instead of setting additional targets we recommend that the performance over time is displayed (in time series format) and that statistical process control is used to spot any significant trends or special causes affecting the results. This will form a powerful basis for improving the results, understanding whether changes made are having the desired effect and also knowing where to prioritise efforts.

- 3) Expand the system to understand (and address) underlying causes. A dashboard with time series data and limits will provide a manager with information to know where to focus investigations when a high level indicator is out of synch. Investigations may require some digging. We recommend supporting a high level performance dashboard with a cascade of key performance indicators (KPI tree) plus work to provide an understanding of the drivers of high level performance. This understanding is often intuitive, but process mapping and other tools (eg the 7 Management & Planning tools and 7 Quality Control tools¹) can help apply a systematic process for measuring, prioritising and systematically improving sub areas.

Using measurement to drive improvement.

The measurement system provides the focus for a system of continuous improvement. However, we also recommend using a process of continuous improvement to iteratively develop the performance measurement system. Start with what is available, identify the areas of operation most needing attention, then develop the next part of the measurement system to shed light on these priority areas. In this way, an immediate start can be made on driving business improvement, and the results of these improvements will also inform changes necessary to improve the measurement system itself.

Taking a whole systems approach.

Disparate information systems and improvement actions which do not effectively handle the interconnected nature of the activities of the organisation are a primary cause of many problems of sub-optimisation. This results in difficulties with prioritisation, continual fire-fighting and duplication of effort. However, creating a joined up system for high level performance measurement across the organisation and, where necessary, beyond the boundaries (eg considering the whole patient pathway) - fed by information that initially comes from disparate sources - is, in itself, a good way to enable a strategic overview to be taken and to drive to improvement.

The recommendations (above and below) for applying the 'balanced scorecard' concept aim to ensure a whole systems approach to measurement and improvement.

¹ Outlined in "The Memory Jogger II; A pocket guide of tools for continuous improvement and effective planning", Brassard & Ritter, 1994, (Goal/QPC, Methuen, MA). The 7 'Management & Planning tools' or 'New QC Tools' are: affinity, interrelationship, systematic, & matrix diagram, process decision programme chart, arrow diagram/ critical path analysis, matrix data analysis.

Original applications achieve focus on what is important to the organisation by only including strategic measures in the scorecard²; internal and external, eg penetrating new markets. In most NHS organisations, it doesn't make so much sense to separate strategic and operational measures as the strategy is not to penetrate new markets, but to improve quality, availability and cost of services (ie process improvement).

In addition there are a large number of mandatory measures to be managed. Fortunately, this problem can be surmounted by using SPC which provides the means to quickly identify areas for attention so making it possible to make sense of large-volumes of data, and still focus on what is important... aircraft illustration

Summary of features of recommended approach

The features of the approach can be summarised as follows: A dashboard; well-laid out; clarity over different groups and what are critical indicators of overall importance; systems for warning limits and the same principles cascaded to sub-systems. This can be compared to the performance measurement system in an aircraft.

In an aircraft, the dashboard helps the pilot identify what most needs attention through a range of methods (all of which have an application to an organisation); clear unobstructed dials, carefully laid out in appropriate groups; limits of normal operation for each measure calculated & marked on the dial; warning systems to alert the pilot (or manager) when performance in any area exceeds the limits. In an organisational setting, statistical process control (SPC) provides a robust means to determine the current operating limits of each indicator and identify when action is necessary. This enables the pilot/manager to make sense of large volumes of data and spot 'signals' from 'noise'.

Even with a very sophisticated system for managing performance, an aircraft still has the critical measures for assessing overall stability of flight clearly at the centre. Establishing & managing the different dimensions effecting 'stability' and 'overall health' is equally important in an organisation. More (or less) measures may be appropriate at the highest level. However, it should be linked to many more measures throughout the organisation by means of a 'cascaded' scorecard system.

In summary, the approach outlined above advocates a way of applying the principles of the balanced scorecard, in a manner which is consistent with Dr W Edwards Demings emphasis on understanding the organisation as a system. This is an improvement on the exact practice of original text-book applications and done well, this approach will provide benefits that include:

- The ability to spot 'signals' from 'noise' and so make sense of large volumes of data; (and avoid drowning in data)
- The ability to use the information to actively facilitate improvement
- The means to drive up data quality.

² Some balanced scorecard applications only cover around 20 strategic measures. Hoshin Kanri, the Japanese-origin approach to policy deployment separates the measures and processes for daily management from those for strategic ('breakthrough') improvement.

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