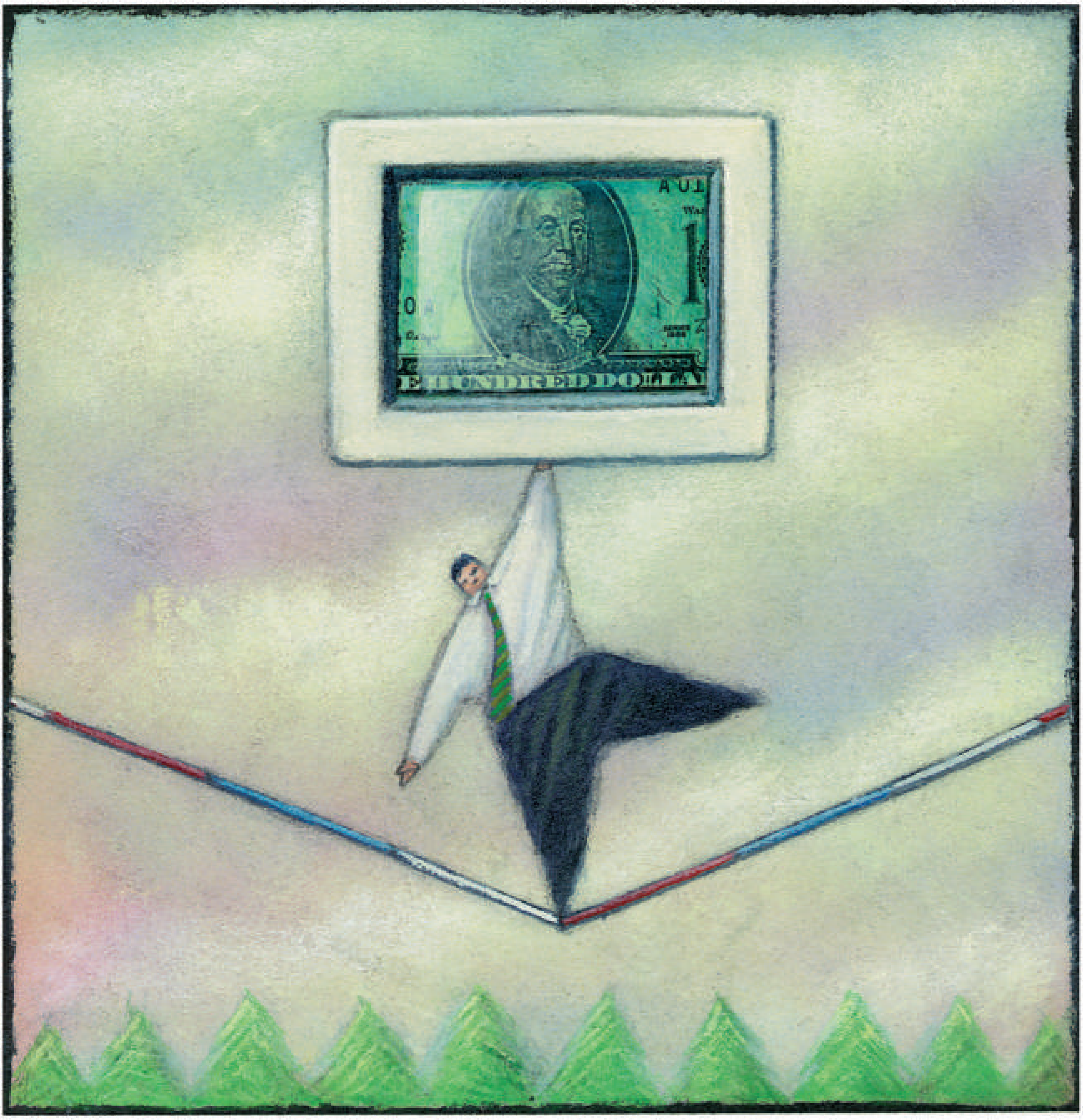
A Balanced Approach

By Ketan Varia



THE BALANCED SCORECARD, OFTEN CONSIDERED THE DOMAIN OF THE BOARD, IS A CRUCIAL METHODOLOGY FOR MANUFACTURING MANAGERS TO IDENTIFY BOTTLENECKS AND EXCEPTIONS, AND SOMETHING AGAINST WHICH IMPROVEMENT TOOLS CAN BE TARGETED

Government driven 'top down' targets, continue to attract criticism from people at the coalface, particularly in the education and health fields. The announcement of overstated results recently in the private sector – such as oil reserves – shows us that target setting is rife, with spectacular consequences following when reality hits. Is there an alternative to business performance improvement from the head office target driven approach to a process that actually drives improvement?

During the early part of the 20th century, performance focus was primarily result driven and this did not matter as huge growth and demand dictated financial results, not the effectiveness of underlying process. However, with the maturity of manufacturing and commodity markets, internal processes and organisation culture became a significant lever to financial outcomes. The concept of the Balanced scorecard was first introduced by Robert Kaplan in 1992 in the *Harvard Business Review*, in which the premise was that a business should not only measure its financial output but also other areas of performance (process, customer and people). Furthermore it should give these areas the same focus as financial performance. Kaplan showed that these measures are interdependent and, without a balance on all areas, world-class sustainable performance cannot be created. Thus, the balanced scorecard concept is a unique way of measuring performance – a visual, sustainable and accountable process, managed locally – yet with a direct impact on the bottom line. This approach is different from traditional target setting that often focuses on pure output rather than on improving and sustaining the underlying process.

In a process/output diagram for a discrete manufacturing company, measurement and improvement of velocity (ratio of value add time to lead time), results in increased cash and reduced costs as subsequent output results (fig 2). A process/output diagram of this nature helps business units understand the underlying drivers to performance improvement and will form the basis of creating scorecards.

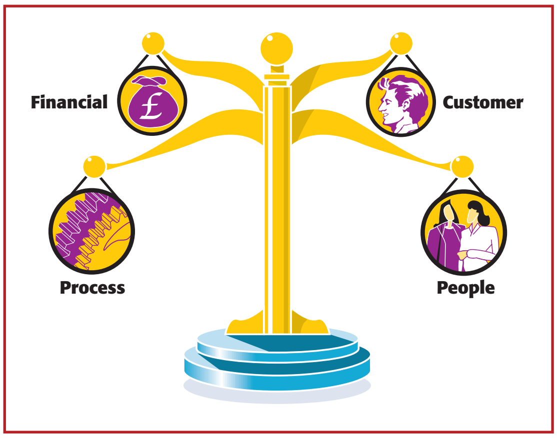


Fig 1: The concept of balance

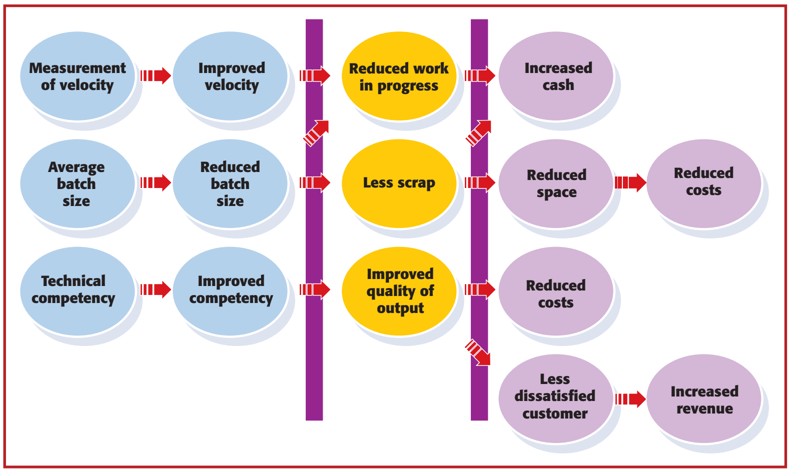


Fig 2: Process/Output diagram

> **"The premise was that a business should not only measure its financial output but other areas of performance"**

Scorecards themselves can be created for a look and feel that suits the business. The most important things are that they should be visual and straightforward to understand. I like to think that the scorecard should pass the 'two minute test' – a casual observer should be able to pick up the key message from the scorecard in this time. A typical scorecard is illustrated in fig 3 and, as can be seen, complaints in 'customers' and absenteeism in 'people' vividly stand out, with the process area all on 'green'. Attached to the scorecard would be actions from meetings and detailed history of measures giving further information as required. The period that a scorecard is refreshed is very dependent on the business unit processes, in my experience a monthly update is one that works well in almost all →

“...Most pernicious of all, targets are based on the illusion that the centre can drive change... The opposite is true. Improvements in...services will generally come from individuals and teams finding better ways to work”

The Economist (editorial) April 2001

organisations, although a greater frequency could be applicable to intensive service industries. The scorecard should be located strategically for each business unit (the foyer for example) and I have seen the potential opportunities this generates for interesting discussion during customer, supplier and head office visits.

COMPARING CARDS

One interesting aspect of local scorecards is that these, created in different divisions of a business, can be linked to a head office scorecard. A scorecard for the head office will of course look much different than one that exists at the coalface – however the head office scorecard should have a direct process/output link to local scorecards. This integrated approach can help head office review the effect of improvement on business outcomes and strategies. A huge benefit of this approach is that irrelevant measures are eliminated, freeing management across all units and head office to focus on what really matters to the business.

So far, I have explained the concept of the scorecard, which, on the face of it, seems relatively straightforward to execute. However, the implementation of the scorecard (fig 4) can often be more challenging than execution of the scorecard itself. It is important that the implementation approach should be focused around a team of people who are involved in the day to day processes and measures, that need control and improvement. It is this cross-functional team that brainstorms and debates the balanced measures, takes ownership and agrees its own considered targets. Targets should be based on the ‘capability of the process’ and also ‘the voice of the customer’ – and, more importantly, measurement of these values trigger process improvement, and not blame. This is clear distinction from arbitrary calculated targets, which occur frequently in all sectors of industry, to one that relates to the local execution and is defined by the local customer. Hence this way of target setting reduces the risk of sub optimisation, where focus on meeting an arbitrary set target to the detriment of another measure resulted in sub optimisation of the whole process. At the outset business managers must buy in to the concept of the scorecard as, without this, sustainability is not possible. One useful way of doing this is to give the unit manger the overall accountability for implementation, together with the support framework to make it happen. Indeed, thorough consideration needs to be made to what Key Performance Measures already exist, whether they are relevant, who collects data and the use of measures. Some output driven measures may actually need to continue to exist, due to legal or regulatory requirements. On a recent visit to a client I discovered that defects were measured against the overall percentage of scrap, and was set by corporate standards. No consideration was given to what the customer’s view was of the process, what was acceptable yield to the customer for each stock keeping unit and the actual capability of the existing process or machinery. The consequence was that local management played a numbers game, hiding the true scrap and underlying problems via extra inspection, and clever

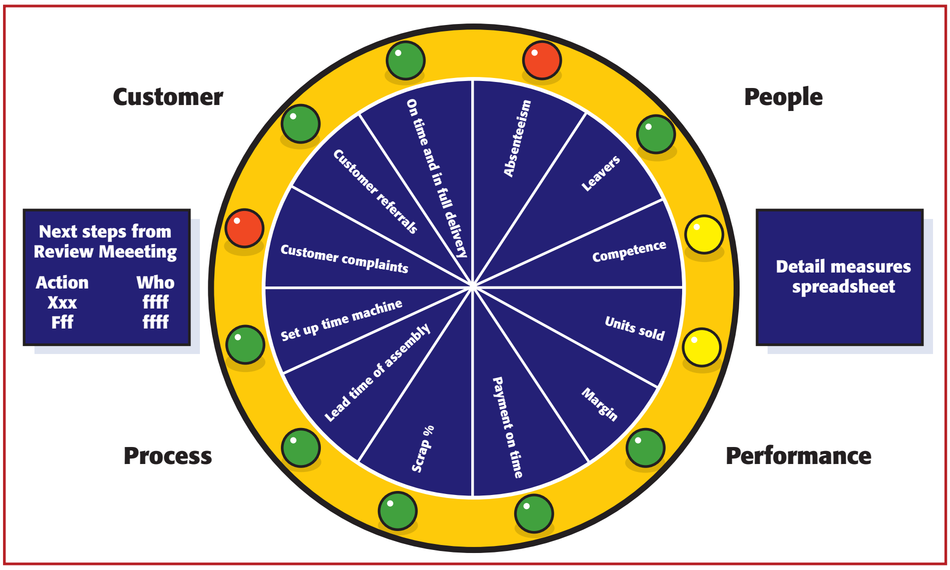


Fig 3: An example of a scorecard that could be used by a discrete manufacturing process

massaging of numbers. The amount of overall waste these games generate is still frighteningly visible in many companies.

Enhancing the scorecard occurs during a meeting with key stakeholders, consider inviting customer and suppliers of the processes, where the work done to date is presented. The stakeholders present will be asked to take full accountability of agreeing measures, targets, accountability and improvement. The measures agreed so far go through validation and debate – this is critical, as people who are close to the process (not a performance manager) will execute the measurement. The three measures of process capability, customer target and customer tolerances are the key indicators to assess the state of a balance scorecard segment. Based on the results, the scorecard is lit red, green or amber. A red status is for when customer tolerances are breached. An amber status should be applied when the measurement meets customer requirements but is statistically out of control, thus the chances of future defects is high. Examples of amber status issues include recent rail crashes, where the underlying processes were on amber and shown to be out of control...waiting for failure to occur. A green status is when the process is in statistical control and within customer tolerances.

Fig 4: Steps to implementing a scorecard

DIGESTING AND IMPROVING

Reviewing and sustaining of the scorecard should take place in regular management team reviews, involving the relevant people. The focus of attention should be on red and amber measures only. Improvement action teams should be set up to look at underlying causes of the issue using problem solving tools such as process mapping and root cause analysis. In a facilitated framework these can often yield surprisingly good results. Some of the issues may just be down to the way measurements are being carried out, or a small difference in process methods between workers that creates widely different results. It is important that senior management shows support for, and has patience with, this activity, as quick fixes never prove sustainable. If there is a lack of history in a particular measure, it can take time to monitor the trends and create targets. It is not important to have all the measurement segments in place before launching the scorecard – in fact, if 50% of measures are available, the scorecard should be launched, with the outstanding measures following in due course.

A client of mine recently spent a full day reviewing performance, and managed to cover less then 20% of agenda; classic paralysis by analysis and a resulting blame culture. Following the implementation of the scorecard the meeting was remodelled as a two-hour monthly meeting focusing only on red and amber status measures with an emphasis on improvement teams to tackle underlying problems and report back on results. This freed up a huge amount of management time, empowered people and gave confidence to senior managers that a process existed for improvement.

WHAT IF IT ALL GOES RIGHT?

I am often asked by clients what would happen once their teams have resolved all their issues and all scorecard segments are green. If all improvements come into fruition and all measurements are lit at green, then there are several options. Perhaps stabilised measures and sustainable processes can be replaced with others. It is possible to reduce variability for specific activities to further reduce costs from the business. However, it is more likely that customer requirements will become more exacting or evolution of needs will throw up further challenges in improvement for the long term of the balanced scorecard.

The balanced scorecard approach is a relevant and practical way of measuring and sustaining business performance. However, it needs management involvement, patience and facilitation to succeed. Companies as diverse as food retailers (Tesco) to engineering and maintenance (Network Rail) have successfully implemented their own versions of such scorecards. If implemented correctly scorecards free up management time, stop 'paralysis by analysis' and empower people who have the ability to make improvements. Overall this approach, like the approaches of lean, agility, ERP, kaizen, Six Sigma and so forth, should be used with discrimination, it is certainly not the answer to all challenges faced in the business world. ■

Ketan Varia is an independent consultant specialising in process improvement and & previously worked for Ernst & Young Management Consulting. He runs a one day tailored workshop on the balanced scorecard.