

Balanced scorecard

The **balanced scorecard (BSC)** is a strategic performance management tool - a semi-standard structured report supported by proven design methods and automation tools that can be used by managers to keep track of the execution of activities by staff within their control and monitor the consequences arising from these actions. It is perhaps the best known of several such frameworks, and was widely adopted in English speaking western countries and Scandinavia in the early 1990s. Since 2000, use of Balanced Scorecard, its derivatives (e.g. [performance prism](#)), and other similar tools (e.g. [Results Based Management](#)) have become common in the Middle East, Asia and Spanish-speaking countries also.

Characteristics

The core characteristic of the Balanced Scorecard and its derivatives is the presentation of a mixture of financial and non-financial measures each compared to a 'target' value within a single concise report. The report is not meant to be a replacement for traditional financial or operational reports but a succinct summary that captures the information most relevant to those reading it. It is the methods by which this 'most relevant' information is determined (i.e. the design processes used to select the content) that most differentiates the various versions of the tool in circulation.

The first versions of Balanced Scorecard asserted that relevance should derive from the corporate strategy, and proposed design methods that focused on choosing measures and targets associated with the main activities required to implement the strategy. As the initial audience for this were the readers of the Harvard Business Review, the proposal was translated into a form that made sense to a typical reader of that journal - one relevant to a mid-sized US business. Accordingly, initial designs were encouraged to measure three categories of non-financial measure in addition to financial outputs - those of "Customer," "Internal Business Processes" and "Learning and Growth." Clearly these categories were not so relevant to non-profits or units within complex organisations (which might have high degrees of internal specialisation), and much of the early literature on Balanced Scorecard focused on suggestions of alternative 'perspectives' that might have more relevance to these groups.

Modern Balanced Scorecard thinking has evolved considerably since the initial ideas proposed in the late 1980s and early 1990s, and the modern performance management tools including Balanced Scorecard are significantly improved - being more flexible (to suit a wider range of organisational types) and more effective (as design methods have evolved to make them easier to design, and use).

The first balanced scorecard was created by Art Schneiderman (an independent consultant on the management of processes) in 1987 at Analog Devices, a mid-sized semi-conductor company^[1]. Art Schniederman participated in an unrelated research study in 1990 led by Dr. [Robert S. Kaplan](#) in conjunction with US management consultancy Nolan-Norton, and during this study described his work on Balanced Scorecard. Subsequently, Kaplan and [David P. Norton](#) included anonymous details of this use of balanced scorecard in their 1992 article on Balanced Scorecard^[2]. Kaplan & Norton's article wasn't the only paper on the topic published in early 1992^[3]. But the 1992 Kaplan & Norton paper was a popular success, and was quickly followed by a second in 1993^[4]. In 1996, they published the book *The Balanced Scorecard*.^[5] These articles and the first book spread knowledge of the concept of Balanced Scorecard widely, but perhaps wrongly have lead to Kaplan & Norton being seen as the creators of the Balanced Scorecard concept.

While the "balanced scorecard" concept and terminology was coined by Art Schneiderman, the roots of performance management as an activity run deep in management literature and practice. Management historians such as Alfred Chandler suggest the origins of performance management can be seen in the emergence of the complex organisation - most notably during the 19th Century in the USA^[6]. More recent influences may include the pioneering work of General Electric on performance measurement reporting in the 1950's and the work of French process engineers (who created the *tableau de bord* – literally, a "dashboard" of performance measures) in the early part of the 20th century. The tool also draws strongly on the ideas of the 'resource based view of the firm'^[7] proposed by [Edith Penrose](#). However it should be noted that none of these influences is explicitly linked to original descriptions of Balanced Scorecard by Schniederman, Maisel, or Kaplan & Norton.

Although Kaplan & Norton's first book, *The Balanced Scorecard*, remains the most popular. The book reflects the earliest incarnations of Balanced Scorecard - effectively restating the concept as described in the 2nd Harvard Business Review article. Their second book, *The Strategy Focused Organization*, echoed work by others (particularly in Scandinavia^[8]) on the value of visually documenting the links between measures by proposing the "Strategic Linkage Model" or [strategy map](#). Since then Balanced Scorecard books have become more common - in early 2010 Amazon was listing several hundred titles in English which had Balanced Scorecard in the title.

Design

Design of a Balanced Scorecard ultimately is about the identification of a small number of financial and non-financial measures and attaching targets to them, so that when they are reviewed it is possible to determine whether current performance 'meets expectations'. The idea

behind this is that by alerting managers to areas where performance deviates from expectations, they can be encouraged to focus their attention on these areas, and hopefully as a result trigger improved performance within the part of the organization they lead.

The original thinking behind Balanced Scorecard was for it to be focused on information relating to the implementation of a strategy, and perhaps unsurprisingly over time there has been a blurring of the boundaries between conventional strategic planning and control activities and those required to design a Balanced Scorecard. This is illustrated well by the four steps required to design a Balanced Scorecard included in Kaplan & Norton's writing on the subject in the late 1990s, where they assert four steps as being part of the Balanced Scorecard design process:

1. Translating the vision into operational goals;
2. Communicating the vision and link it to individual performance;
3. Business planning; index setting
4. Feedback and learning, and adjusting the strategy accordingly.

These steps go way beyond the simple task of identifying a small number of financial and non-financial measures, but illustrate the requirement for whatever design process is used to fit within broader thinking about how the resulting Balanced Scorecard will integrate with the wider business management process. This is also illustrated by books and articles referring to balanced scorecards confusing the design process elements and the balanced scorecard itself. In particular, it is common for people to refer to a "strategic linkage model" or "strategy map" as being a balanced scorecard.

Although it helps focus managers' attention on strategic issues and the management of the implementation of strategy, it is important to remember that the balanced scorecard itself has no role in the formation of strategy. In fact, balanced scorecards can comfortably co-exist with strategic planning systems and other tools.

Original design method

The earliest Balanced Scorecards comprised simple tables broken into four sections - typically these "perspectives" were labeled "Financial", "Customer", "Internal Business Processes", and "Learning & Growth". Designing the Balanced Scorecard required selecting five or six good measures for each perspective.

Many authors have since suggested alternative headings for these perspectives, and also suggested using either additional or fewer perspectives. These suggestions were notably triggered by a recognition that different but equivalent headings would yield alternative sets of measures. The major design challenge faced with this type of Balanced Scorecard is justifying

the choice of measures made. "Of all the measures you could have chosen, why did you choose these?" This common question is hard to answer using this type of design process. If users are not confident that the measures within the Balanced Scorecard are well chosen, they will have less confidence in the information it provides. Although less common, these early-style Balanced Scorecards are still designed and used today.

In short, early-style Balanced Scorecards are hard to design in a way that builds confidence that they are well designed. Because of this, many are abandoned soon after completion.

Improved design methods

In the mid 1990s, an improved design method emerged. In the new method, measures are selected based on a set of "strategic objectives" plotted on a "strategic linkage model" or "strategy map". With this modified approach, the strategic objectives are distributed across the four measurement perspectives, so as to "connect the dots" to form a visual presentation of strategy and measures.

To develop a strategy map, managers select a few strategic objectives within each of the perspectives, and then define the cause-effect chain among these objectives by drawing links between them. A balanced scorecard of strategic performance measures is then derived directly from the strategic objectives. This type of approach provides greater contextual justification for the measures chosen, and is generally easier for managers to work through. This style of Balanced Scorecard has been commonly used since 1996 or so: it is significantly different in approach to the methods originally proposed, and so can be thought of as representing the "2nd Generation" of design approach adopted for Balanced Scorecard since its introduction.

Several design issues still remain with this enhanced approach to Balanced Scorecard design, but it has been much more successful than the design approach it superseded.

In the late 1990s, the design approach had evolved yet again. One problem with the "2nd generation" design approach described above was that the plotting of causal links amongst twenty or so medium-term strategic goals was still a relatively abstract activity. In practice it ignored the fact that opportunities to intervene, to influence strategic goals are, and need to be anchored in the "now;" in current and real management activity. Secondly, the need to "roll forward" and test the impact of these goals necessitated the creation of an additional design instrument; the Vision or Destination Statement. This device was a statement of what "strategic success," or the "strategic end-state" looked like. It was quickly realized, that if a Destination Statement was created at the beginning of the design process then it was much easier to select strategic Activity and Outcome objectives to respond to it. Measures and targets could then be selected to track the achievement of these objectives. Design methods that incorporate a

"Destination Statement" or equivalent (e.g. the [Results Based Management](#) method proposed by the UN in 2002) represent a tangibly different design approach to those that went before, and have been proposed as representing a "3rd Generation" design method for Balanced Scorecard.

Design methods for Balanced Scorecard continue to evolve and adapt to reflect the deficiencies in the currently used methods, and the particular needs of communities of interest (e.g. NGO's and Government Departments have found the 3rd Generation methods embedded in [Results Based Management](#) more useful than 1st or 2nd Generation design methods).

Popularity

In 1997, Kurtzman found that 64 percent of the companies questioned were measuring performance from a number of perspectives in a similar way to the Balanced Scorecard.

Balanced Scorecards have been implemented by government agencies, military units, business units and corporations as a whole, non-profit organizations, and schools.

Many examples of Balanced Scorecards can be found via Web searches. However, adapting one organization's Balanced Scorecard to another is generally not advised by theorists, who believe that much of the benefit of the Balanced Scorecard comes from the design process itself. Indeed, it could be argued that many failures in the early days of Balanced Scorecard could be attributed to this problem, in that early Balanced Scorecards were often designed remotely by consultants. Managers did not trust, and so failed to engage with and use these measure suites created by people lacking knowledge of the organization and management responsibility.

Variants, alternatives and criticisms

Since the Balanced Scorecard was popularized in the early 1990s, a large number of alternatives to the original 'four box' Balanced Scorecard promoted by Kaplan & Norton in their various articles and books have emerged. Most have very limited application, and are typically proposed either by academics as vehicles for promoting other agendas (such as green issues),^[9] or consultants as an attempt at differentiation to promote sales of books and / or consultancy.^[10]

Many of the variations proposed are broadly similar, and a research paper published in 2002^[11] attempted to identify a pattern in these variations - noting three distinct types of variation. The variations appeared to be part of an evolution of the Balanced Scorecard concept, and so the paper refers to these distinct types as "Generations". Broadly, the original 'measures in boxes' type design (as proposed by Kaplan & Norton) constitutes the 1st Generation Balanced Scorecard design; Balanced Scorecard designs that include a 'strategy map' or 'strategic linkage model' (e.g. the Performance Prism, later Kaplan & Norton designs,^[12] the Performance Driver model of Olve & Wetter^[13]) constitute the 2nd Generation of Balanced Scorecard design; and

designs that augment the strategy map / strategic linkage model with a separate document describing the long-term outcomes sought from the strategy (the "Destination Statement" idea) comprise the 3rd Generation Balanced Scorecard design. Examples of the 3rd Generation Balanced Scorecard design include the [Third Generation Balanced Scorecard](#) itself, and the performance management elements of the UN's [Results Based Management](#) model.

The Balanced Scorecard has always attracted criticism from a variety of sources. Most has come from the academic community, who dislike the empirical nature of the framework: Kaplan & Norton notoriously failed to include any citation of prior art in their initial papers on the topic. Some of this criticism focuses on technical flaws in the methods and design of the original Balanced Scorecard proposed by Kaplan & Norton,^[14] and has over time driven the evolution of the device through its various Generations. Other academics have simply focused on the lack of citation support.^[15] But a general weakness of this type of criticism is that it typically uses the 1st Generation Balanced Scorecard as its object: many of the flaws identified are addressed in other works published since the original Kaplan & Norton works in the early 1990s.

Another criticism, usually from pundits and consultants, is that the balanced scorecard does not provide a bottom line score or a unified view with clear recommendations: it is simply a list of metrics.^[16] These critics usually include in their criticism suggestions about how the 'unanswered' question postulated could be answered. Typically however, the unanswered question relates to things outside the scope of Balanced Scorecard itself (such as developing strategies).^[17]

There are few empirical studies linking the use of Balanced Scorecards to better decision making or improved financial performance of companies, but some work has been done in these areas. However broadcast surveys of usage have difficulties in this respect, due to the wide variations in definition of 'what a Balanced Scorecard is' noted above (making it hard to work out in a survey if you are comparing like with like). Single organization case studies suffer from the 'lack of a control' issue common to any study of organizational change - you don't know what the organization would have achieved if the change had not been made, so it is difficult to attribute changes observed over time to a single intervention (such as introducing a Balanced Scorecard). However, such studies as have been done have typically found Balanced Scorecard to be useful^[18]

The four perspectives

The 1st Generation design method proposed by Kaplan & Norton was based on the use of three non-financial topic areas as prompts to aid the identification of non-financial measures in addition to one looking at Financial. The four "perspectives" proposed were^[19]:

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

The "financial perspective" encourages the identification of a few relevant high-level financial measures. In particular, designers were encouraged to choose measures that helped inform the answer to the question "How do we look to shareholders?"

The "customer perspective" encourages the identification of measures that answer the question "How do customers see us?"

The "internal business perspective" encourages the identification of measures that answer the question "What must we excel at?"

The "innovation and learning perspective" encourages the identification of measures that answer the question "Can we continue to improve and create value?".

As noted above, these 'prompt questions' highlight, Kaplan & Norton were thinking about a medium sized commercial organisation in the USA when choosing these topic areas. They are not very helpful to other kinds of organisations, and much of the literature on Balanced Scorecard since has focused on alternative headings and questions to link to them.

Measures

The Balanced Scorecard is ultimately about choosing measures and targets. The various design methods proposed are intended to help in the identification of these measures and targets, usually by a process of abstraction that narrows the search space for a measure (e.g. find a measure to inform about a particular 'objective' within the Customer perspective, rather than simply finding a measure for 'Customer'). Although lists of general and industry-specific measure definitions can be found in the case studies and methodological articles and books presented in the references section. In general measure catalogues and suggestions from books are only helpful 'after the event' - in the same way that a Dictionary can help you confirm the spelling (and usage) of a word, but only once you have decided to use it.

Software tools

It is important to recognise that the balanced scorecard by definition not a complex thing - typically no more than about 20 measures spread across a mix of financial and non-financial topics, and easily reported manually (on paper, or using simple Office software).

The processes of collecting, reporting, and distributing Balanced Scorecard information can be labour intensive and prone to procedural problems (for example, getting all relevant people to return the information required by the required date). The simplest mechanism to use is to delegate these activities to an individual, and many Balanced Scorecards are reported via ad-hoc methods based around email, phone calls and office software.

In more complex organisations, where there are multiple Balanced Scorecards to report and/or a need for co-ordination of results between Balanced Scorecards (for example, if one level of Balanced Scorecard reports relies on information collected and reported at a lower level) the use of individual Balanced Scorecard reporters is problematic. Where these conditions apply, organisations use Balanced Scorecard reporting software to automate the production and distribution of these reports.

A recent survey^[20], found that roughly 1/3 of organisations use office software to report their Balanced Scorecard, 1/3 use bespoke software developed specifically for their own use, and 1/3 use one of the many commercial packages available.

There are currently over 100 vendors of software suitable for Balanced Scorecard reporting (i.e. supporting data collection, reporting and analysis)