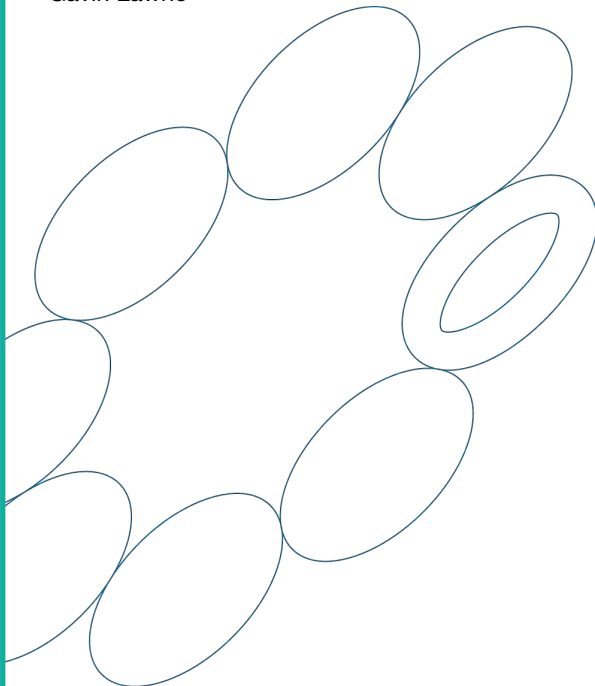


Combining EVA® with Balanced Scorecard to improve strategic focus and alignment

2GC Discussion Paper

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Introduction

This paper discusses the potential to combine use of the “Economic Value-Added” (EVA®) approach to the measurement of value generation by an organisation with the Balanced Scorecard approach to the management of strategic activity within an organisation. It briefly outlines how the two approaches are defined, considers their strengths and weaknesses, and then describes how the two tools might be used concurrently. The paper notes that EVA® has some advantages compared to other measures of financial performance but has limitations when used as a mechanism to promote strategic alignment. Concerning Balanced Scorecard, the paper describes the strength of the framework as a tool to support strategic or operational management activity, but highlights its dependence on effective measure selection. The paper finds EVA® and Balanced Scorecard to be highly compatible and that combining the two approaches is not difficult. The paper concludes that when EVA® is used in conjunction with the Balanced Scorecard approach, the resulting hybrid tool can be a powerful basis for encouraging organisational change and performance improvement.

The tools defined

EVA®

Economic Value-Added (EVA®) is a composite measure of financial performance that aims to measure the surplus value created by an investment strategy compared to some base value. Economists have discussed the underlying concept for over a century, with some suggesting Alfred Marshall’s theory of Economic Income an antecedent (Marshall, 1920). The concept owes its current popularity to the commercial activities of US based consultancy Stern Stewart (who have registered EVA® as a trade mark). It is only since the early 1990’s that the concept has become widely used within business.

EVA® measures the difference between the return on a capital investment and the cost of that capital. When calculated for a commercial enterprise as a whole, a positive EVA® indicates that the enterprise’s activities have generated surplus ‘shareholder value’ over the period of measurement (i.e. returns over and above those already factored into the firm’s cost of capital – a surplus that accrues to the shareholders). Perhaps more importantly, activities that generated negative EVA® values are considered to have lost shareholder value. This simple utility has made EVA® a popular indicator within the investment community.

In practice, however, the utility of EVA® as an accurate measure of shareholder value generation is open to question. EVA® results rely estimates of financial variables which are difficult to determine reliably in the ‘real world’: mostly these relate to the calculation of value – both that of the activity itself and of the base value that the investment return should be compared with. For example, it is open to debate whether ‘value added’ should include value arising from accounting accruals, or be limited to value ‘generated’ by organisational activity, and how ‘lost’ value should be accounted for (i.e. to account for situations where value added should more reasonably be compared to the returns obtained by others operating in the same market, rather than simply the firm’s cost of capital). To address these and other concerns, much work has been done by agencies that promote EVA® to introduce ‘adjustments’ into the EVA® calculation. One paper identifies over 150 such adjustments (Young, 1999). The number of such adjustments is itself indicative of the difficulty in obtaining ‘accurate’ EVA® calculations. Strong arguments have been advanced that as a tool to inform investor decisions,

EVA® is no more useful than standard accounting reports.

“There is little evidence to support the Stern Stewart claim that EVA® is superior to earnings in its association with stock returns or firm values. In no case does EVA® significantly outperform EBEI [Earnings before extraordinary items] in tests of relative information content. On the contrary, in most cases the evidence suggests that earnings outperform EVA®.”

Gary C. Biddle

But in addition to its role as a provider of information to external agencies, EVA® has been promoted as a valuable tool for directing the focus of managers within organisations towards the greatest value adding behaviours: if each manager can be assessed on the EVA® arising from their part of the organisation, and this is maximised, this in turn will be a route to maximising EVA® for the organisation as a whole. In addition to Stern Stewart, several consulting firms have built strategic management consultancy businesses around the application of this approach to strategy formation and the subsequent management of its delivery. As with other financial measures, it is conceptually straight forward to ‘decompose’ EVA® calculations into subsidiary components that collectively ‘add up’ to the figure for the organisation as a whole, which in turn allows for the localisation of value added to specific groups of employees, or to particular facilities or projects. Exponents argue that EVA® provides more useful information than other accounting measures of performance (such as accounting profit, or less complex return on capital measures), and when EVA® changes are linked to a reward mechanisms, acts to align employee interests with those of shareholders:

“EVA® is not a panacea and should never be viewed as an alternative to good management practice. What EVA® can do is help senior managers put the proper incentive and monitoring systems in place to increase the chances that all managers will run the firm in a manner consistent with the creation of shareholder value.”

David Young

Advocates argue that EVA® values are harder to ‘massage’ than traditional management accounting numbers, making ‘gaming’ harder. It is also argued that provided EVA® is calculated consistently (as might be possible to mandate within an organisation) errors introduced by the EVA® calculations themselves (e.g. through use of the ‘wrong’ figure for cost of capital) will tend to cancel each other out: allowing for the use of relatively simple definitions of EVA® to be used. The difficulty with this approach again is related to the ease with which EVA® values can be collected for components of an organisation: if it is hard to reliably determine value added for an organisation as a whole, within an organisation (where value added and asset values need to be attributed to discrete components of the organisation) the process becomes both political and opaque. In some ways the issue of attributing (for example) sales increases to either Sales, Marketing or Product Development is an issue independent of EVA® itself – but by relying upon such attributions to determine the required values, EVA® loses much of the neutrality that is a key part of its attractiveness.

In addition, where EVA® is used as the foundation of a strategy formation and implementation management system, a further technical issue is encountered. EVA® calculations can be decomposed to help managers understand better how they can influence the value in future – e.g. cost of capital is often out with the influence of managers within, whereas the amount of assets attached to a project or department are possibly directly controllable. However, this insight into what elements of the EVA® calculation are open to change does not enlighten managers about how such changes might be effected, nor does it provide any interim feedback on whether these actions (whatever they are) are being carried out effectively – it simply reports retrospectively on whether the actions had the desired effect. Thus, for EVA® to be an effective strategic management tool, other more conventional management methods need to

be attached to it – both in terms of guiding strategy formation and also in terms of providing feedback on strategy implementation activities. Since in most organisations these activities take place whether or not EVA® is calculated, and are not replaced by its use, in reality the impact of introducing EVA® to an organisation is probably less than its advocates would like to claim.

Balanced Scorecard

Balanced Scorecard emerged as a response to a trend to expand the range of data that organisations collected to inform managers about performance. Two factors influenced this. First, the rise of strategic management as a necessary management activity, and second, the development of computer based data reporting systems that made the collection and storage of large volumes of data less costly. Up to the 1960s, the dominant measure of performance in the private sector was simple financial performance. During the 1970s, the concept of strategic planning rose in importance – good strategies and plans were seen as the route to organisational success, and within this context a greater interest in non-financial measures emerged (to inform the strategy studies, if for no other reason). During the 1980s, the concept of ‘emergent strategy’ (being clear on long-term goals, but responsively adapting shorter terms activities and outputs to changing circumstances) increased the pressure on strategic managers to develop a deeper understand of what was ‘going on’ in the business (so as to better inform the required reactive decisions). In response to these pressures, organisations began to invest time and effort in the collection of greater volumes of non-financial measures of performance, and used this data to help provide better strategy formation and control of its delivery. But with this expansion in data volumes came a new problem – how to efficiently ‘make sense’ of what the information said.

During the late 1980s, Analog Devices, a US electronics firm, developed a simple but effective management reporting system that included both financial and non-financial measures called ‘The Balanced Scorecard’ (Stata 1989). The framework organised a small selection of the firm’s measures into four ‘perspectives’: ‘Financial’, ‘Customer’, ‘Internal Process’ and ‘Learning & Growth’. Kaplan and Norton took this idea and popularised it in their highly influential 1992 paper in the Harvard Business Review “The Balanced Scorecard - Measures Th at Drive Performance”. The editors of the Harvard Business Review reflected the article’s popularity and influence when they, in its 75th Anniversary issue, cited the Balanced Scorecard as being one of 15 most important management concepts to have been introduced via articles in the magazine. The original article by Robert Kaplan and David Norton in 1992 outlined a simple, “4 box” approach to performance measurement that were broadly similar to that of the Analog Devices design, but they were perhaps more explicit about the need to link the measures to strategic goals.

Many early adopters of Balanced Scorecard found it difficult to design. Managers found it hard both to agree on the appropriate set of measures, and subsequently to set targets for these. A common response to this difficulty was to agree to delegate the selection process: either to outside agents (e.g. consultants) or to a specialist team within the organisation. While this at least relocated the selection problem out of the management team itself, it was soon found that Balanced Scorecards developed in this manner were perceived to be unhelpful by the managers charged with using them, contributing to a high rate of abandonment for these ‘first generation’ Balanced Scorecards (Lingle & Schieman 1996, Schneiderman 1999, Malina & Selto 2001).

So although popular, early Balanced Scorecards were poorly received and not widely used by the managers they were intended to help. In response to this, researchers and practitioners set out on a long journey to better understand and so address these design problems. In 1993, Kaplan and Norton wrote a follow-up paper introducing the concept of ‘strategic objectives’ –

short sentences describing the 'goals' introduced in the 1992 paper. In the mid 1990s Balanced Scorecard documentation began to record hypothetical relationships between objectives - leading to the emergence of so called 'Strategy Maps' or 'Strategic Linkage Models' (SLM). These new Balanced Scorecard designs, consisting of a (typically four-perspective) SLM plus a set of measures, had been hinted at in papers emerging from 1995 onwards, but the first unambiguous description of this type of Balanced Scorecard appeared in a Swedish publication in 1997 (Olve & Wetter, 1999). Many observers consider this 'second generation' Balanced Scorecard to be current standard practice.

But while the use of strategy mapping and linkage models during the second half of the 1990s is seen to have made easier the task of measure selection, management teams still found it difficult to set appropriate targets for such critical objectives once they had been identified (Lawrie & Cobbold, 2004).

Practitioners sought solutions to this new problem of selecting meaningful strategic objectives for the organisation. Between 1996 and 1998, a multinational food-manufacturing firm working with the author developed a third element of the Balanced Scorecard design - a document known initially as a 'Vision Statement', and later renamed as a 'Destination Statement'. A Destination Statement describes what managers think (or hope) the organisation would 'look like' at some later date en-route to achieving their chosen strategic objectives. The idea of creating a clear statement describing what an organisation's management hoped to achieve was not a new idea: the innovation was to use this statement to support Balanced Scorecard objective selection and target setting. Since this early work, this "3rd generation" of Balanced Scorecard design has demonstrated substantial advantages over earlier methods in terms of process time required to develop, and ease of cascading - these features are discussed in more detail elsewhere (e.g. Lawrie & Cobbold 2004).

The processes that are required for effective Balanced Scorecard design are complex - despite the simplicity of the initial concept. But even once developed, a Balanced Scorecard is only useful if it triggers changes in decision-making behaviour (how else will it influence performance...?). Accordingly, much of the implementation work associated with introducing a Balanced Scorecard is wrapped up in the development of behaviour patterns that encourage the use of the selected data - one element of which is sometimes the linking of incentives to the achievement of set targets: in this we see perhaps the most robust common point of contact between Balanced Scorecard and EVA®.

In general Balanced Scorecard is viewed by academics as a favourable development, but as with EVA® nor is it seen as a panacea:

"Like all management tools, however, the Balanced Scorecard is not a sufficient condition for success; it cannot do everything! For example, it should not be a tool supporting attempts at management-by-exception and management-from-a-distance. Neither is it a substitute for sound strategy, clear focus and strong alignment of energies within the firm. On the other hand, developing and using a Balanced Scorecard-type of system can help develop these conditions by forcing top management to articulate a strategy and Key Success Factors, and focusing managers' attention on the firm's progress on these elements."

Marc J. Epstein

Combining EVA® and the Balanced Scorecard

Clearly the most pragmatic way to combine both tools is to use the EVA® calculation to drive the definition of financial objectives (and so measures) selected for use in a Balanced Scorecard. Balanced Scorecard is not prescriptive about how individual objectives and / or measures should be identified, and so the use of EVA® in this way does not itself cause any difficulties. However, the use of the EVA® approach potentially has implications for the design process used to create a Balanced Scorecard.

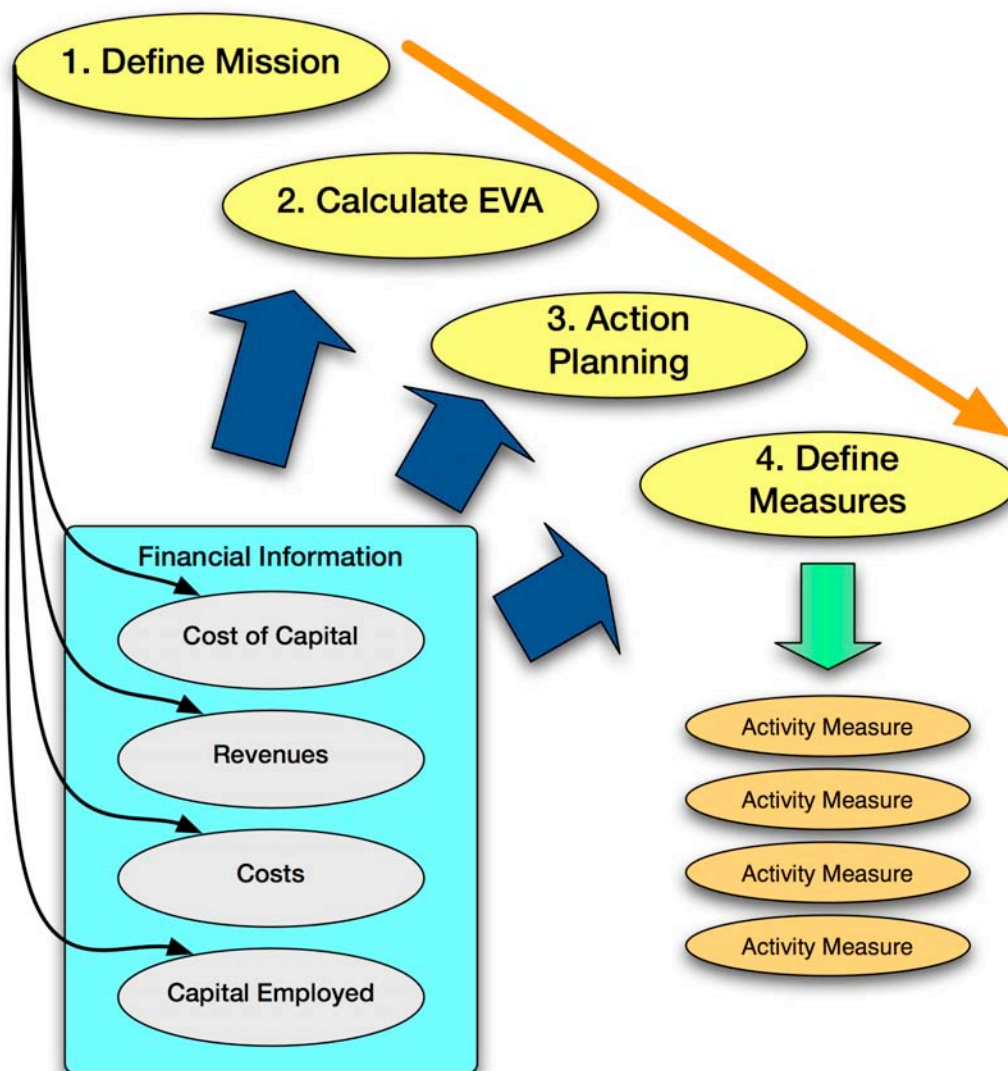


Figure 1 – Typical EVA® approach

A typical application of the EVA® approach is illustrated in Figure 1 below. In step 1 contextual information about the goals of the organisation are set out (at the very minimum, expectations for EVA® generation are communicated, but typically this is also accompanied by choices of a high level strategic nature (e.g. concerning new investment asset allocation). In

step 2, critical information about the financial performance of the enterprise are used to develop EVA® values for components of the organisation, and these used to challenge managers to develop action plans to improve performance in the coming period. In the light of these action plans, additional progress measures are defined. At the end of the period a revised calculation of EVA® is made, and the manager's performance is assessed.

This structured consideration of the drivers of shareholder value is not unlike the 'financial objectives' of a typical (non-EVA® based) Balanced Scorecard (see Figure 2). In fact it is quite possible that this type of EVA® break down could be used as a defined basis for the selection of Financial Objectives and Measures in a Balanced Scorecard. The increased 'authenticity' of the structure of the EVA® calculation would add credibility to any discussion concerning the basis for financial measure selection.

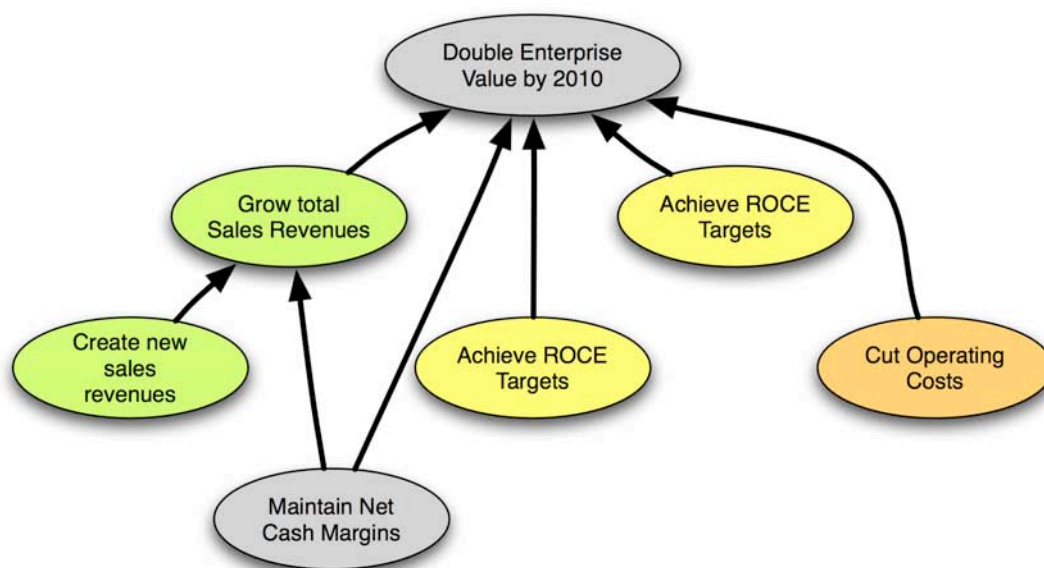


Figure 2 – Example Balanced Scorecard Financial Objectives

But financial objectives typically form only one-fourth part of a Balanced Scorecard. By combining EVA® with Balanced Scorecard in this way, it is important to consider what the implications are for the remaining objectives: does the use of EVA® in this way help or hinder their selection?

Design process implications

It was noted earlier that the representation of hypothetical causal links between objectives emerged in the mid 1990's as an aid to the design process, and that this evolved subsequently into the SLM device that now forms a standard part of the documentation associated with a Balanced Scorecard. Financial objectives usually appear at or near the 'top' of such a diagram – in part because most organisations are accountable for either the delivery of investment returns, or the delivery of 'value for money'. Other objectives on the SLM describe both what the management team aim to do to affect these financial outcomes, and identify other non-financial outcomes that need to be achieved (e.g. maintaining satisfaction levels, improving process quality, development of new products and services). Reflecting this, modern 3rd Generation Balanced Scorecards often only have two 'perspectives' – one containing 'activity' objectives, and the other containing 'outcome' objectives.

Figure 3 (overleaf) illustrates the major steps involved in the design of a 3rd Generation Balanced Scorecard. Initially managers draw together formal and tacit information to create a 'Destination Statement' that summarises their belief about the state of their organisation at some nominated date in the future. This view of the future is compared to their knowledge of the present, and the differences between these two states helps them identify the highest priority actions needed in the short to medium term to ensure the organisation tracks towards its goals. These priority actions become the 'activity perspective' of the Balanced Scorecard, and typically are measured using activity measures (i.e. measuring whether the required tasks are done, not their impact). Only subsequently do managers select a matching set of 'outcome objectives' that will inform them over a similar timescale whether their chosen activities are having the desired effect.

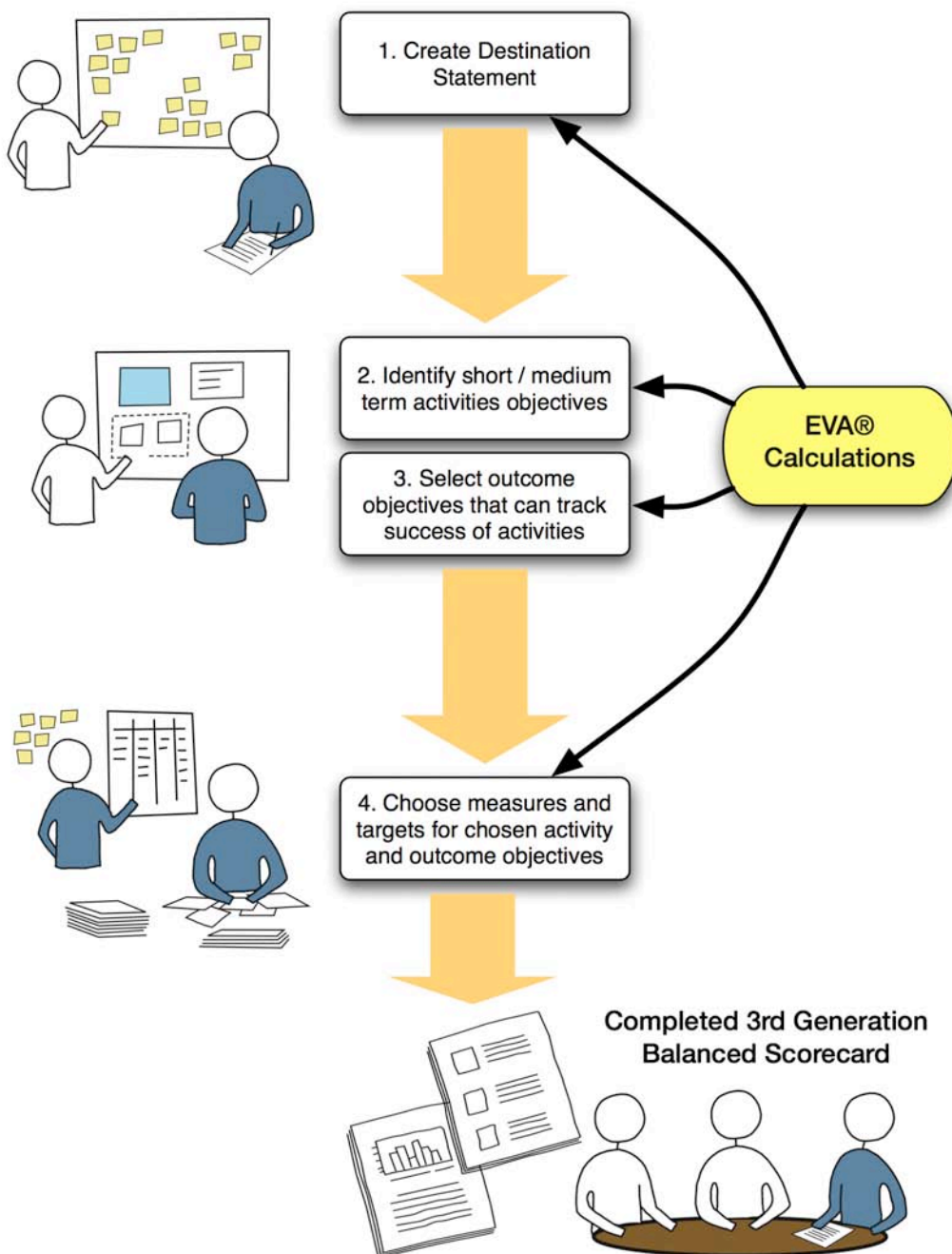


Figure 3 – Including EVA® in the Balanced Scorecard design process

Including EVA® type methods will affect the Balanced Scorecard design process in ways:

1. It is likely that EVA® measures and targets will feature both in the Destination Statement and as an 'outcome' objective within the Balanced Scorecard.
2. Knowledge of the component elements of the EVA® calculation, and the scope a management team has to influence them, are likely to influence a team's thinking about the state of the firm at some future date – for example by requiring them to acknowledge what changes to the organisation are most appropriate to improve the EVA® generated.
3. The need to maintain EVA® performance in the short term will act to constrain the scope of managers to engage in 'strategic' actions that in the short term harm EVA®. This is likely to encourage the adoption of relatively more 'conservative' programmes of change. Consideration of whether this is a good thing takes us back to the concerns cited for EVA® as an investment appraisal tool – it generates numbers, but it is hard to know for sure what value to compare it too. Pursuit of conservative strategies (i.e. ones that meet or exceed short term EVA® targets) might prevent the realisation of much greater EVA® generating opportunities. This is not so much a weakness of EVA® itself as a measure, but rather the unqualified use of a single measure to drive strategic thinking (similar issues would be raised by the blind use of payback, IRR or ROCE targets, for example). But the idea that such financial goals can be used in this way is a characteristic of EVA® thinking – and potentially a topic of concern.

We can see therefore that EVA® and Balanced Scorecard thinking can quite easily co-exist within the same management context: some changes are required in the Balanced Scorecard design process to accommodate the extra information that EVA® provides, and EVA® can figure as a measure within a Balanced Scorecard design without problem. Further, the Balanced Scorecard design process can help managers working with EVA® to develop a consensus about the actions they need to focus on to achieve the required levels of performance and provide them with an effective way of managing their execution.

By ensuring the definition of measure and targets for key elements of strategic plans, the Balanced Scorecard offer to managers (and their supervisors) mechanisms to evaluate the effectiveness of strategic plans as they are being carried out – rather than waiting for the retrospective results of an EVA® calculation at the end of a period.

Combinations of EVA® type calculations and Balanced Scorecard are not new – 2GC is aware that combinations of this type have been developed by AT&T (using EVA®) in the USA and by Boots plc in the UK (using other Shareholder Value measures).

Conclusion

EVA® and Balanced Scorecard are both tools that have become popular during the 1990's, both aiming to help managers to focus more effectively on the creation of shareholder value. However while EVA® is efficient at tracking the relative value generating performance of an organisation and its components, Balanced Scorecard is a powerful complementary tool useful to guide the management of strategic and operational plans intended to trigger the sought value generating improvements.

This discussion paper has shown that working to combine the two approaches can work well, providing useful enhancements to both. EVA® can provide focus and rigour to the development of financial goals for an organisation, and the decomposition of these calculations can provide additional insight to managers about what levers are available to

them to improve EVA® in future. Balanced Scorecard provides the framework for translating strategic requirements into relevant activity plans that can then be monitored – it gives managers using EVA® methods a more reliable way to identify appropriate actions, and also a mechanism for subsequently managing their implementation.

Whether an organisation that does not have EVA® in place should introduce it as part of a Balanced Scorecard development programme is much less clear, however. While EVA® is arguably 'a better number' for financial reporting, the practical challenges and costs associated with calculating it reliably and accurately within an organisation compromise its utility.

So we conclude that:

- For organisations that have EVA® in place, implementation of a modern Balanced Scorecard should improve the utility of the EVA® system;
- For organisations that have a modern Balanced Scorecard in place, the benefits that might arise from the introduction of EVA® are less clear. Such an introduction will do 'no harm', and may actually improve the quality of the organisation's Balanced Scorecards. But the incremental improvement arising may not justify the cost of the introduction.

About 2GC

2GC is a research led consultancy expert in addressing the strategic control and performance management issues faced by organisations in today's era of rapid change and intense competition. Central to much of 2GC's work is the application of the widely acknowledged 3rd Generation Balanced Scorecard approach to strategic implementation, strategy management and performance measurement.

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Useful Web Resources

Answers to Frequently Asked Questions about Balanced Scorecard and Performance Management <http://www.2gc.co.uk/resources-faqs.asp>

Related presentation pack on linking Balanced Scorecard and EVA®

<http://www.2gc.co.uk/resources-presentations.asp>