

# The development of the Balanced Scorecard as a strategic management tool

## 2GC Conference Paper

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## Abstract

The Balanced Scorecard is a widely adopted performance management framework first described in the early 1990s. More recently it has been proposed as the basis for a 'strategic management system'. This paper describes its evolution, recognising three distinct generations of Balanced Scorecard design. The paper relates the empirically driven developments in Balanced Scorecard thinking with literature concerning strategic management within organisations. It concludes that developments to date have been worthwhile, highlights potential areas for further refinement, and sets out some possible topics for future research into the field.

## The Balanced Scorecard and its development

The Balanced Scorecard was first introduced in the early 1990s through the work of Robert Kaplan and David Norton of the Harvard Business School. Since then, the concept has become well known and its various forms widely adopted across the world (Rigby, 2001).

By combining financial measures and non-financial measures in a single report, the Balanced Scorecard aims to provide managers with richer and more relevant information about activities they are managing than is provided by financial measures alone. To aid clarity and utility, Kaplan and Norton proposed that the number of measures on a Balanced Scorecard should also be constrained in number, and clustered into four groups (Kaplan and Norton, 1992, 1993). Beyond this, the original definition of Balanced Scorecard was sparse. But from the outset it was clear that the selection of measures, both in terms of filtering (organisations typically had access to many more measures than were needed to populate the Balanced Scorecard) and clustering (deciding which measures should appear in which perspectives) would be a key activity. Kaplan and Norton proposed that measure selection should focus on information relevant to the implementation of strategic plans, and that simple attitudinal questions be used to help determine the appropriate allocation of measures to perspectives (Kaplan and Norton, 1992).

In essence the Balanced Scorecard has remained unchanged since these early papers, having at its core a limited number of measures clustered into groups, and an underlying strategic focus. But modern Balanced Scorecard designs also have a number of features that clearly differentiate them from earlier examples. This paper describes these changes as an evolution through three distinct 'generations' of Balanced Scorecard design.

## 1<sup>st</sup> Generation Balanced Scorecard

Balanced Scorecard was initially described as a simple, "4 box" approach to performance measurement (Kaplan and Norton, 1992). In addition to financial measures, managers were encouraged to look at measures drawn from three other "perspectives" of the business: Learning and Growth; Internal Business Process; and Customer, chosen to represent the major stakeholders in a business (Mooraj et al, 1999).

Definition of what comprised a Balanced Scorecard was sparse and focused on the high level structure of the device. Simple 'causality' between the four perspectives was illustrated but not used for specific purpose. Kaplan and Norton's original paper's focus was on the selection and reporting of a limited number of measures in each of the four perspectives (Kaplan and Norton, 1992). The paper suggested use of attitudinal questions relating to the vision and goals of the organisation to help in the selection of measures to be used, and also encouraged the consideration of 'typical' areas of interest in this process.

Kaplan and Norton's original work makes no specific observations concerning how the Balanced Scorecard might improve the performance of organisations; the implication is that the provision of

accessible relevant measurement data itself will trigger improved organisational performance. However, they do imply that the source of these improvements is changes in behaviour: “It establishes goals but assumes that people will adopt whatever behaviours and take whatever actions are necessary to arrive at those goals”. In the light of this, the basis for selecting the goals represented by the Balanced Scorecard is of some importance. But in their first paper Kaplan and Norton say little about how a Balanced Scorecard could be developed in practice beyond a general assertion that design involved “putting vision and strategy at the centre of the measurement system” (1992). Later writing includes increasing amounts of proscription about development methods, concluding with a lengthy description of one such process in their first book on the subject published in 1996.

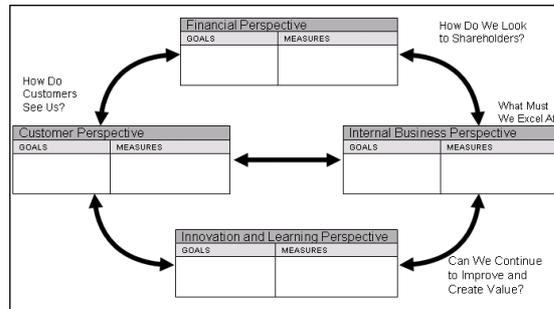


Figure 1 shows a diagrammatic representation of Kaplan and Norton’s original Balanced Scorecard design. We will subsequently refer to this type of Balanced Scorecard design as a ‘1<sup>st</sup> Generation’ Balanced Scorecard.

Key attributes of the design and suggested development process for this type of Balanced Scorecard are summarised in the table below.

**Figure 1 – 1<sup>st</sup> Generation Balanced Scorecard**

### Practical Experiences with 1<sup>st</sup> Generation Balanced Scorecards

The authors’ professional experience suggests that 1<sup>st</sup> Generation Balanced Scorecards are still being developed, and that they probably still form the large majority of Balanced Scorecard designs introduced into organisations. This is reflected in the literature, where books and articles that use more advanced representations of Balanced Scorecard are only recently appearing (Olve et al, 1999, Kaplan and Norton, 2000, Niven, 2002). But despite its huge popularity as a concept, and apparently widespread adoption, relatively few detailed case studies concerning Balanced Scorecard implementation experiences appear to exist in the academic literature. Those few that do focus primarily on the architecture of the Balanced Scorecard design (e.g. Butler et al, 1997), and associated organisational experiences (e.g. Ahn, 2001). Commercial / practitioner writing on Balanced Scorecard is more extensive (e.g. Schneiderman, 1999), but often more partisan (e.g. Lingle et al 1996). But in general the literature endorses the utility of the approach (Epstein et al, 1997) but notes weaknesses in the initial design proposition, and recommends improvements (e.g. Eagleson et al, 2000, Kennerley et al, 2000).

### 2<sup>nd</sup> Generation Balanced Scorecard

The practical difficulties associated with the design of 1<sup>st</sup> Generation Balanced Scorecards are significant, in part because the definition of a Balanced Scorecard was initially vague, allowing for considerable interpretation. Two significant areas of concern were filtering (the process of choosing specific measures to report), and clustering (deciding how to group measures into ‘perspectives’). Discussions relating to clustering continue to be rehearsed in the literature (e.g. Butler et al, 1997, Kennerley et al, 2000), but discussions relating to filtering are less common, and usually appear as part of descriptions of methods of Balanced Scorecard design (e.g. Kaplan and Norton, 1996, Olve et al, 1999).

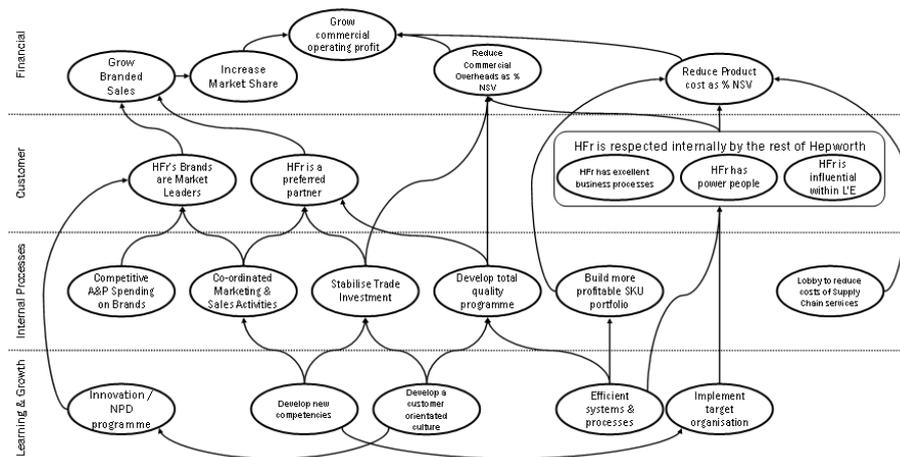
Perhaps the most significant early change translated the attitudinal approach to measure selection proposed initially by Kaplan and Norton (e.g. “To succeed financially, how should we appear to our shareholders?”) into a process that yielded a few appropriate key measures of performance in each perspective. A solution was the introduction of the concept of ‘strategic objectives’ (Kaplan and Norton, 1993). Initially these were represented as short sentences attached to the four perspectives, and were used to capture the essence of the organisation’s strategy material to each of the areas: measures were then selected that reflected achievement of these strategic objectives. Although subtle, this approach to measure selection quite different from that initially proposed, since strategic

objectives were developed directly from strategy statements based on a corporate vision or a strategic plan.

Another key development concerned causality. Causality between the perspectives had been introduced in early '1st Generation' Balanced Scorecard thinking (see Figure 1). '2nd Generation' Balanced Scorecard saw the idea of causality developed further. Instead of simply highlighting causal links between perspectives, internal documents from one consulting firm's work in 1993 shows an early attempt to indicate linkages between the measures themselves<sup>1</sup>. This improvement was also proposed later by others (Newing, 1995). Measure based linkages provided a richer model of causality than before, but presented conceptual problems – for example, the use of measures encouraged attempts to 'prove' the causality between measures using various forms of analysis (indeed this is still the case – e.g. Brewer, 2002).

Collectively the changes in design described here represent a materially different definition of what comprises a Balanced Scorecard compared to Kaplan and Norton's original work - we will refer to Balanced Scorecards that incorporate these developments as '2<sup>nd</sup> Generation Balanced Scorecards'. The impact of these changes were characterised by Kaplan and Norton in 1996 as enabling the Balanced Scorecard to evolve from "an improved measurement system to a core management system" (Kaplan and Norton 1996). Maintaining the focus that Balanced Scorecard was intended to support the management of strategic implementation, Kaplan and Norton further described the use of this development of the Balanced Scorecard as the central element of "a strategic management system".

One consequence of this change in emphasis was to increase the pressure on the design process to accurately reflect the organisation's strategic goals. Over time the idea of strategic linkage became an increasingly important element of Balanced Scorecard design methodology, and in the mid 1990's Balanced Scorecard documentation began to show graphically linkages between the strategic objectives themselves (rather than the measures) with causality linking across the perspectives toward key objectives relating to financial performance. An example is shown in Figure 2.



**Figure 2 – Strategic Linkage Model (Taken from 2GC Internal Documents)**

As objectives began to appear in graphical representations of linkages, so they began to require short titles (to fit onto diagrams). To compensate the idea of 'objective descriptions' associated with strategic objectives emerged. These descriptions, which were simply longer paragraphs describing in more detail the 'meaning' of the objective, are symptomatic of a significant increase in the volume of purely design related documentation associated with the design of Balanced Scorecards – objectives began to be assigned to owners, measures to objectives. Early software reporting systems began to enhance these elements of design information by linking it with measurement data, and using email and diary systems to enable speedy diagnosis and interventions in response to data observed: the ability to store and work with these characteristics are now central to leading 'Balanced Scorecard' software systems (e.g. Marr and Neely, 2001).

<sup>1</sup> Unpublished documents

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Another consequence was the increased awareness of the need to reflect differences in management agenda within differing parts of organisational structures, and so increasing attention was given to developing 'strategic alignment' between management units by developing Balanced Scorecards as part of a 'cascade' at the Business Unit level (Kaplan and Norton, 1996, Olve et al, 1999).

The representation of causality between strategic objectives – known initially as the 'Strategic Linkage Model' – is now considered to be an important part of any Balanced Scorecard design (Kaplan and Norton, 2000). The design elements that make up the 2<sup>nd</sup> Generation Balanced Scorecard now represent 'mainstream' thinking on Balanced Scorecard design – as evidenced by considerable consistency of definition across a range of practitioner and academic texts (Olve et al, 1999; Niven, 2002).

Increasing adoption of the 'explicit' causality present in the strategic linkage model has diminished the value of 'lead' and 'lag' measures – as the predictive nature of 'lead' measures is now more clearly (and less ambiguously) documented in the design of the Balanced Scorecard.

### **Practical Experiences with 2nd Generation Balanced Scorecards**

There are still areas that prove difficult to deal with during the development process for both management teams and consultants charged with developing 2<sup>nd</sup> Generation Balanced Scorecard. The first of these areas concerns the development of the Strategic Linkage Model. Management teams find the necessary selection of priority elements within their collective vision and strategic goals difficult. While there is usually some type of common reference point in the form of visions or plans, often this is either poorly defined, lacking continuity or something that the management team didn't fully agree on. Working to choose objectives simply flushed these issues to the forefront of management attention, and triggered useful debate, but the activity of actually selecting priority objectives itself is not one that has been found to support open discussion about the collective alignment of strategic goals. Another difficult area is target setting. While measure selection is easier, thanks to Strategic Objectives and the Strategic Linkage Model, for similar reasons to those noted above, organisations often lack a common reference point relating from which targets can be extrapolated. Finally, the Strategic Linkage Model documentation, although clear to those familiar with construct, has proven less helpful when used for broadcast communication of strategy – it lacks sufficient supportive information to be usefully stand alone as a communication concerning an organisation's strategic plans.

### **3<sup>rd</sup> Generation Balanced Scorecard**

The 3<sup>rd</sup> Generation Balanced Scorecard model is based on a refinement of 2<sup>nd</sup> Generation design characteristics and mechanisms to give better functionality and more strategic relevance. The origin of the developments stem from the issues relating to target setting and the validation of strategic objective selection outlined above. These triggered the development in the late 1990's of a further design element – the 'Destination Statement' – initially at the end of the design process to 'check' the objectives, measures and targets chosen. The first Destination Statements were created as a final consensus estimate of the consequences at a particular future date (e.g. 'in three years time') of implementing the strategic objectives previously selected for the strategic linkage model. By agreeing in this statement 'how much' of key things would have been achieved by this time (e.g. headcount, revenues, customer satisfaction, quality levels etc.) the hope was it would subsequently be easier (for example) to check for (or set) a consistent set of annual targets. Figure 3 shows an example extract from an early 'Destination Statement'.

<p>▪Financial &amp; Market Characteristics</p> <ul style="list-style-type: none"> <li>- Hepworth retail sales have achieved a total UAE markets share of 46% and 7% markets share in N.E.</li> <li>- Since 1999 Retail sales revenues have grown 23% to AED 1.4bn in total, equal to 7% annual compound growth</li> <li>- The Abu Dhabi Area has protected its position against "intruders" from potential competitors by increasing the number of stations within its area</li> <li>- An increase in sales promotions and marketing spend (total of AED 5 m in 2003 from AED 1.2m in 1999) have also been an important driver of revenue growth</li> <li>- Smartcard sales have increased from 2% to 25% of total retail sales since 1999 and replaced coupons</li> </ul> <p>▪Activities &amp; Processes</p> <ul style="list-style-type: none"> <li>- A formal site evaluation and acquisition process successfully introduced in 2000/2001 has allowed Hepworth to complete the addition of 44 and re-imaging of 30 sites effectively</li> <li>- An efficient and timely process for the completion of new and re-imaged sites is delivering the projects on time - project delivery is based on SLA between Retail Sales and project management department</li> <li>- Ongoing evaluation of the contribution/discontribution of existing gas stations</li> <li>- Efficient Smart Card system is in place</li> <li>- Up-to-date market analysis is used to update current services and develop new services in line with changes in the marketplace and consumer habits sourced internally/externally</li> </ul>	<p>▪External Relationships</p> <ul style="list-style-type: none"> <li>- Transaction times at the filling stations are competitive and customers are satisfied with the service they receive</li> <li>- Customers respond well to Hepworth's promotions</li> <li>- Hepworth is perceived to value customer complaints and suggestions</li> <li>- Landowners prefer Hepworth to be a business partner (e.g. in Northern Emirates owners prefer to enter into management contracts with Hepworth)</li> <li>- Local authorities are positive to Hepworth's site requirements</li> <li>- Customers prefer Hepworth's re-imaged stations to old ones and to those of competitors. Issues about Self Service stations have been resolved</li> </ul> <p>▪Organisation &amp; Culture</p> <ul style="list-style-type: none"> <li>- A dedicated sales and marketing team responsible for selling Hepworth Smart cards is in place</li> <li>- A separate management team are responsible for the continued development of C-stores</li> <li>- Retail Sales is a separate business unit with Hepworth Distribution and manpower is re-allocated accordingly</li> <li>- Basic internal training capabilities have been achieved through train the trainer initiatives and training in tasks</li> <li>- Retail sales department is responsible for their own filling stations staff training</li> </ul>
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Figure 3 – Destination Statement (Partial example taken from 2GC Internal Documents)

It was quickly found that management teams were able to discuss, create, and relate to the 'Destination Statement' much easily and without reference to the selected objectives. Consequently the design process was 'reversed', with the creation of the 'Destination Statement' being the first design activity, rather than a final one. Further it was found that by working from Destination Statements, the selection of strategic objectives, and articulation of hypotheses of causality was also much easier, and consensus could be achieved within a management team more quickly. We will refer to Balanced Scorecards that incorporate Destination Statements as '3<sup>rd</sup> Generation Balanced Scorecards'.

Key components of a 3<sup>rd</sup> Generation Balanced Scorecard are:

- **Destination statement:** In order to make rational decisions about organisational activity and not least set targets for those activities, an enterprise should develop a clear idea about what the organisation is trying to achieve (Senge 1990, Kotter 1995). A destination statement describes, ideally in some detail, what the organisation is likely to look like at an agreed future date (Olve et al, 1999; Shulver et al, 2000). In many cases this exercise builds on existing plans and documents – but it is rare in practice to find a pre-existing document that offers the necessary clarity and certainty to fully serve this purpose within an enterprise.
- **Strategic Objectives:** The destination statement offers a clear and shared picture of an organisation at some point in the future, but it does not provide a suitable focus for management attention between now and then. What needs to be done and achieved in the medium term for the organisation to “reach” its destination on time is agreed upon in the form of objectives or priorities. By representing the selected objectives on a “strategic linkage model”, the design team is encouraged to apply “systems thinking” (Senge 1990; Senge et al. 1999) to identify cause-and-effect relationships between the selected objectives i.e. what do we need to do to achieve the results we expect. This approach also helps ensure the objectives chosen are mutually supportive and represent the combined thinking of the team's high-level perception of the business model.
- **Strategic Linkage Model and Perspectives:** The chosen strategic objectives are spread across four zones or 'perspectives'. The lower two perspectives contain objectives relating to the most important activities in terms of business processes, cycle time, productivity etc. (Internal Processes) and what needs to happen for these processes to be sustained and further developed in terms of people, product and process development (Learning & Growth). The two top perspectives house objectives relating to the desired results of the activities undertaken i.e. how we wish external stakeholders (e.g. the general public, partner agencies and organisations to perceive us (External Relations) and how this will ultimately

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translate into financial results and economic value (Financial).

- **Measures and Initiatives:** Once objectives have been agreed measures can be identified and constructed with the intention to support management's ability to monitor the organisation's progress towards achievement of its goals (Olve et al, 1999). Initiatives are special projects with a finite start and end date and are mapped to strategic objectives to give an indication of the projects or actions needed in order to realise the objectives (Niven, 2002).

### **Practical Experiences with 3rd Generation Balanced Scorecards**

The first Balanced Scorecards to have included Destination Statements were designed during 1998/9. Examples of applications of this new approach are emerging, (Guidoum 2000, Shulver et al 2000, Lawrie et al, 2001, Andersen et al, 2002). These experiences show that the 3<sup>rd</sup> Generation approach to Balanced Scorecard design and development does appear to have material benefits to organisations resulting from improved functionality as a strategic management tool, and as a result of its ability to support a more flexible and engaging approach to design and development within complex organisations.

### **Academic Thinking Supporting the Development of Balanced Scorecard**

From the outset, it has been clear that the primary focus of Balanced Scorecard is to be a control tool for managers (Kaplan and Norton, 1992). But there are different types of control exercised by managers: Kaplan and Norton appear from the outset to associate the Balanced Scorecard with what Muralidharan (1997) calls 'strategic control' rather than 'management control' (see also Bungay and Goold, 1991). But in practice, considerable academic and practical attention has focused on the application of Balanced Scorecard for management control purposes (Neely *et al*, 1994, Lingle and Schiemann, 1996, Frigo, 2000). This in part may be linked to the prevalence of simple 1<sup>st</sup> Generation Balanced Scorecard models being used as the basis for academic contributions (e.g. Kennerley et al, 2000).

The transition from 1<sup>st</sup> Generation to 2<sup>nd</sup> Generation Balanced Scorecard designs coincided with a reinforcement of the positioning of Balanced Scorecard as a tool to support strategic control. The concurrent development of practical approaches to Balanced Scorecard design focused on forming a consensus within a management team is clearly consistent with thinking on leadership articulated over many years (e.g. Thomson, 1967, Kotter 1995, Katzenbach, 1997). As noted previously the use of simple causal models to support the articulation of strategic priority objectives was consistent with work on organisational change and learning being promoted by Burke and others (Burke *et al*, 1992, Kotter 1995, Senge et al. 1999, and Argyris, 1977).

The transition from 2<sup>nd</sup> Generation to 3<sup>rd</sup> Generation Balanced Scorecard designs, although in design terms less significant than the earlier transition, represents a significant change in the approach to Balanced Scorecard design activity. The adoption of 3<sup>rd</sup> Generation Balanced Scorecard designs has been particularly helpful in supporting the development of multiple Balanced Scorecards within complex organisations (Shulver et al, 2000), and it is our view that this is largely because of its ability to address issues of information asymmetry. Oliver Williamson writing on Transaction Cost Economics in the 1970s (Williamson 1975) articulates clearly the issue of communication bandwidth limiting the ability of one party to 'know' what another party knows. Williamson focused on what he called 'information impactedness' as it applied to contractual forms used in the Insurance industry, but others have made similar observations about information asymmetries elsewhere (e.g. Rothschild and Stiglitz 1976, Mintzberg 1990). These observations suggest that the projection of a centrally developed strategy into components of an organisation can become problematic. Corporate Performance Management software systems have been presented by some as a solution to part of this problem by making it economic for large volumes of detailed information about activities and performance of the organisation to be collated and assessed centrally: a key feature of such offerings is the ability to 'drill down' into information recursively to get to the root cause of performance anomalies (Marr and Neely, 2001). However the information asymmetry viewpoint challenges the utility of such activity, as the software provides at best only a partial solution to the asymmetry problem. Similarly 'more complex' alternatives to Balanced Scorecard (e.g. Kennerley *et al*, 2000) do

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not openly address the informational issues presented by this increase in complexity. Shulver *et al* have shown that one development of 3<sup>rd</sup> Generation Balanced Scorecards has been to support alternative management models that tolerate or accommodate the information asymmetry issue through facilitation of the concise articulation and communications of key data, and through facilitating the identification communication criticalities in an organisation's hierarchy (Shulver *et al*, 2000). Across its three generations, the Balanced Scorecard has evolved to be a strategic management tool that involves a wide range of managers in the strategic management process, provides boundaries of control but is not prescriptive or stifling and most importantly removes the separation between formulation and implementation of strategy.

## Conclusions

During the 10 years since the advent of Balanced Scorecard many changes have been made to the physical design, utility and the design processes used to create the tool within organisations. This evolution of Balanced Scorecard, at least in terms of these three parameters, can be largely attributed to empirical evidence driven primarily by observed weaknesses in the design process rather than in the architecture of the original idea. The need to have a design process that made measure selection more relevant and part of the collective view of the management team drove the major changes that can be seen in two subsequent generations of Balanced Scorecard from the original concept. However, while empirical developments were the mainstay of the evolution of Balanced Scorecard, certain aspects of the evolution rationale can be paralleled to pre-existing academic philosophies relating to organisational management and strategic thinking.

The alignment between developments in Balanced Scorecard principles and the theoretical aspects of control and management process are a positive indication that the more modern ideas about Balanced Scorecard design processes and structure are indeed 'better' than the original concept described by Kaplan and Norton, in so far as they are more likely to have a beneficial consequence for the organisation adopting the tool. However while more recent Balanced Scorecard designs are substantial improvements on original ideas, there is still room for improvement. Potential areas for further refinement and possible topics for future research into the field are as follows:

- A refinement in the understanding of the links between types of management behaviour and the information needed to facilitate better management interventions. The separation of management and strategic control is central to this development and is an area that is well documented; however, there is a need to expand the literature relating to appropriate mechanisms to influence management behaviours more effectively.
- An examination into the ways of reconciling performance reporting with performance management. It is often the case that an organisation's performance management system's data need to have complete 'coverage' of the business, for example metrics on health and safety, operations, finance, human resources, markets etc. (Eagleson *et al*, 2000. Kennerley *et al*, 2000). However, in the practical environment this can reduce the relevance to the local unit developing the metrics and diminish ownership of the management system.
- A consideration of the relationship between Balanced Scorecard application in large organisations and issues relating to intra-unit communications. Balanced Scorecard when cascaded through an organisation can be used as a successful strategic contracting, and strategy communication tool (Shulver *et al*, 2000) however, its precise utility needs further exploration.
- An examination of the most appropriate ways to translate advances in measurement concepts (e.g. Intellectual Capital, EVA etc.) efficiently into the design processes adopted for BSC, without diminishing 'ownership' of the design work done by managers unfamiliar with the new concepts. EVA and Intellectual Capital are both appear to offer ways to 'improve' measurement information. However, if the management team themselves are not comfortable working with them, they won't design them into their Balanced Scorecard. But if a consultant 'designs it in', although potentially beneficial, if the management team does not understand them it will probably not own or act upon them. In this scenario the

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interaction of the Balanced Scorecard with other management concepts and its possible improvement is dependant on the skills and education of the management team.

- Developing an understanding of the benefits of Balanced Scorecard and if possible attaching capital values to pre and post case scenarios. A key criterion for the adoption of the Balanced Scorecard within organisations is the ability to demonstrate value in its adoption. While many loose attempts to define benefits exist there is a scarcity of concrete examples of benefit to public and private organisation.

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## 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 3<sup>rd</sup> Generation Balanced Scorecard approach to strategic implementation, strategy management and performance measurement.

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