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# Development of the 3<sup>rd</sup> Generation Balanced Scorecard

## *Evolution of the Balanced Scorecard into an effective strategic performance management tool*

By

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# Introduction

This paper describes the changes to the definition of the Balanced Scorecard that have occurred since it became popular as a performance measurement framework during the early 1990s. The paper builds on earlier work by the authors<sup>1</sup> that characterised such definitions into three distinct generations of Balanced Scorecard<sup>2</sup>. The paper relates these developments to literature concerning strategic management within organisations, observing that the changes made have improved the utility of Balanced Scorecard as a strategic management tool. The paper concludes that in order to minimise risk of failure and avoid constraining and inflexible applications that merely serve as elaborate performance reporting systems as opposed to effective strategic management systems, Balanced Scorecard application need to reflect ideas of information asymmetry and the understanding of strategic control processes within organisations.

## The strategic information needs of managers

The limitations of financial data as the basis for decision making in organisations has been recognised for a long time<sup>3</sup>, as has the utility of non-financial data in providing for improved decisions as per Report of the Committee on Non-Financial Measures of Effectiveness (1971). The issue is how an appropriate sub-set of all possible non-financial measures can be identified. As the Committee's report notes "Conceivably, any information might be of use to someone at some future time" (ibid, p198). The Committee asserted that the selection needs to be informed by the trade-off between the practicality and cost of collection, and the expected utility of the data collected: an observation developed later notably by Williamson<sup>4</sup> and Stiglitz<sup>5</sup>.

During the 1980s, it began to be argued that an organisation's strategic policies could be used to inform and justify the choice of non-financial measures<sup>6</sup>. This observation was concurrent with an emerging awareness of the existence of formal control systems within organisations – particularly associated with the control of strategic activity<sup>7</sup>.

One response to these various factors was the Balanced Scorecard: a simple if initially rather vague concept<sup>8</sup> that has become both well known and (in various forms) widely adopted<sup>9</sup>. Kaplan and Norton presented Balanced Scorecard as an integrative device that would encourage and facilitate the use of non-financial information by senior managers of organisations, with the choice of non-financial measure being driven primarily by 'strategic' considerations. They argued that when equipped with this better information, managers would be able to deliver improved strategic performance<sup>10</sup>. The brevity and focus of the Balanced Scorecard was also presented as having value with respect to the need to efficiently and effectively communicate priorities within organisations<sup>11</sup>. This was expected to directly enable improved performance by 'workers' within the organisation. Both these observations have recently been tested and found to have some merit<sup>12</sup>.

## A definition for a Balanced Scorecard

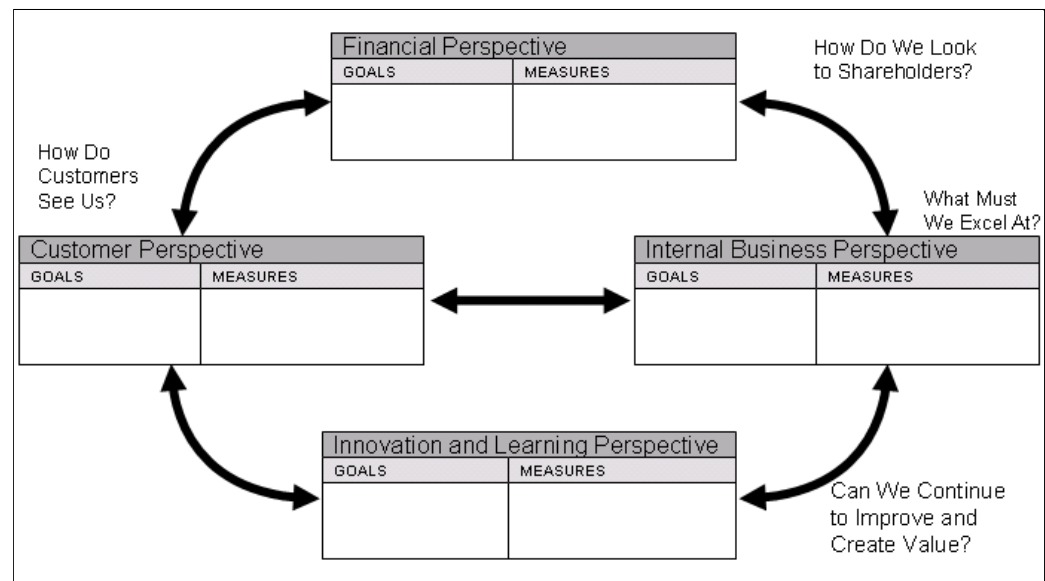
An unpublished analysis carried out by the authors' in 2001 of the types of questions asked about performance management in online discussion fora found "What is a Balanced Scorecard?" to be by far the most common. Intriguingly, in their writings Kaplan and Norton don't provide a clear definition of what a Balanced Scorecard is, focusing instead on how one might be used, or how it relates to other organisational attributes. However, across their several documents a number of attributes can be deduced. Drawing from Kaplan and Norton's publications prior to 1997<sup>13</sup>, Balanced Scorecard has at least the following attributes:

- A mixture of financial and non-financial measures (Kaplan and Norton 1992, 1993, 1996a, 1996b);
- A limited number of measures (Kaplan and Norton 1992), numbering between 15-20 (Kaplan and Norton 1993) and 20-25 (Kaplan and Norton 1996b)
- Measures clustered into four groups called perspectives (Kaplan and Norton, 1992, 1993,

1996a, 1996b), originally called “Financial”, “Customer”, “Internal Process” and “Innovation and Learning”, but the last two are renamed “Internal Business Process” and “Learning and Growth” in the 1996 documents.

- Measures chosen to relate to specific strategic goals – usually documented in tables with one or more measure associated with each goal (Kaplan and Norton, 1992, 1993, 1996a, 1996b).
- Measures should be chosen in a way that gains the active endorsement of the senior managers of the organisation, reflecting both their privileged access to strategic information, and the importance of their endorsement and support of the strategic communications that may flow from the Balanced Scorecard once designed (Kaplan and Norton, 1992, 1993, 1996a, 1996b).
- Some attempt to represent causality – though it is ambiguous in Kaplan and Norton’s work what they mean by this: as noted earlier the 1992 and 1993 papers illustrate links between the four perspectives but do not discuss these links in the text. The 1996a paper illustrates and discusses the need to show causal links between measures across the Balanced Scorecard perspectives in a fashion that anticipates 2nd Generation Balanced Scorecard features. But the 1996 book also suggests that causality should be between ‘performance driver [lead]’ measures and ‘outcome [lag]’ measures (Kaplan and Norton, 1996c).

In this paper we will subsequently refer to Balanced Scorecards that conform to this design as ‘1st Generation’ Balanced Scorecards. Figure 1 shows a diagrammatic representation of Kaplan and Norton’s original Balanced Scorecard design, based on that which appears in their 1992 article.



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

The lack of a clear definition from Kaplan and Norton has triggered several attempts by others to provide a definition<sup>14</sup>, which are consistent with the 1<sup>st</sup> Generation definition given above. Where alternative definitions appeared, these usually suggested changes to the number and / or naming of the perspectives<sup>15</sup>. In general, the literature endorses the utility of the approach<sup>16</sup>, but notes weaknesses in the initial design proposition, and recommends various improvements relating both to the design methods used and the underlying design concept<sup>17</sup>.

### The need for change

From the outset it was clear that the methods used to select measures to be included in the Balanced Scorecard would be critical to its subsequent success, 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). In their first paper, Kaplan and Norton had said little about how this measure selection activity could be done, beyond

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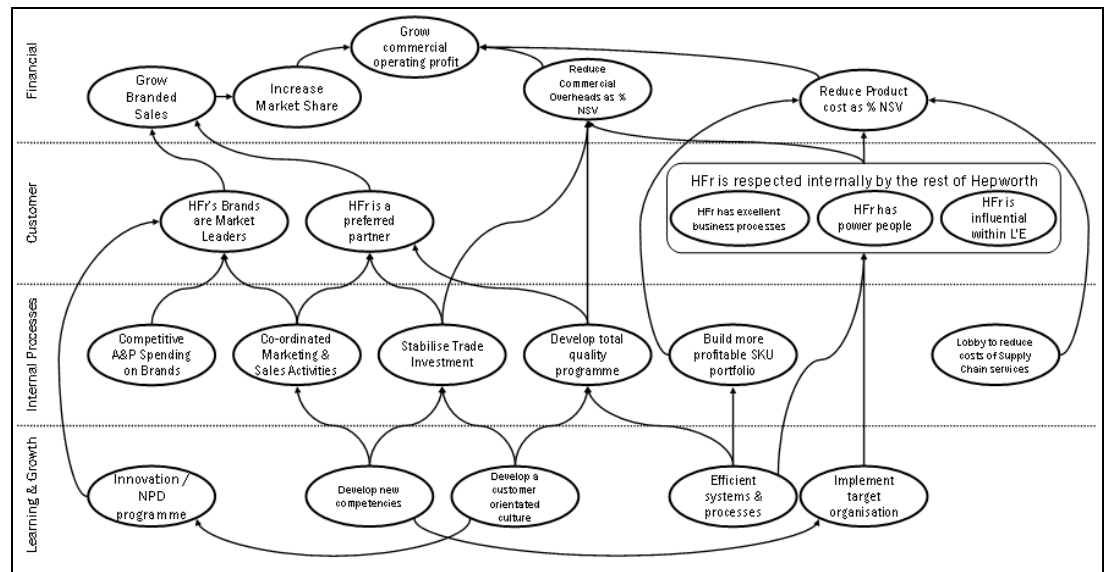
general assertions about the design philosophy: e.g. “putting vision and strategy at the centre of the measurement system”, “Companies should also attempt to identify and measure the company’s core competencies...”, “In addition to measures of time, quality and performance and service, companies must remain sensitive to the cost of their products.”<sup>18</sup> However, the design challenges presented by 1<sup>st</sup> Generation Balanced Scorecard design are severe – as evidenced by the Authors’ practical experience working in the field, and reported by practitioners in the literature<sup>19</sup>. Likewise, the adverse effects of poor measure selection on the usefulness and adoption rates of Balanced Scorecard have been noted by several authors<sup>20</sup>. Generalised approaches to 1<sup>st</sup> Generation Balanced Scorecard design were described in summary form in 1993 and in more detail in 1996 by Kaplan and Norton<sup>21</sup>. While these were helpful in setting out a wider project plan, they are light on the detail about how the design choices would actually be made. This in turn has triggered a number of ‘how to’ books and articles that attempt to fill the gap<sup>22</sup> – but the fact that such instructional texts are still being published hints at a failure to find a solution. This, in the authors’ view, is largely because definition of an effective design process was contingent upon changes being made to the design features of the Balanced Scorecard itself.

## 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 as discussed above. But the difficulties also stemmed from the issues presented by the design questions posed by 1<sup>st</sup> Generation Balanced Scorecard – in particular the need to filter, and cluster as mentioned earlier. The attitudinal approach to measure selection proposed initially by Kaplan and Norton (e.g. “To succeed financially, how should we appear to our shareholders?”) was quickly recognised by Kaplan and Norton as weak, and quickly replaced by the concept of ‘strategic objectives’ (Kaplan and Norton, 1993): short sentences which clarified the nature of the ‘Goals’ described in their 1992 paper. The innovation was to suggest that there should be a direct mapping between each of the several ‘strategic objectives’ attached to each perspective and one or more performance measures. Although subtle, this extra step in the measure selection process transforms the design process from that initially proposed, since it helped particularly with the filtering issue – the strategic objective itself gave a justification for the selection of one measure over another out of the many possible candidates for inclusion in each perspective.

The second key innovation concerned causality. As noted above, early attempts to define causality were weak, and in the period between 1992 and 1996, work focused on finding ways to show causality between measures<sup>23</sup>. Measure-based linkages provided a richer model of causality than before, but presented conceptual problems – for example, encouraging the use of various forms of analysis to validate measure selection based on numerical correlations between measures (indeed this is still the case<sup>24</sup>). Such methods may be efficient at selecting measures, but are difficult to integrate with the need for the Balanced Scorecard design to reflect the consensus views of the potential users of the device noted as a key characteristic above. Nonetheless, 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. This transition is neatly illustrated in two papers by Kaplan and Norton from 1996. One published at the start of the year illustrates and describes linkage as occurring between measures<sup>25</sup>, the second published in the Autumn illustrates and describes linkage as occurring between strategic objectives<sup>26</sup>. At the time, diagrams showing linkages between objectives were called ‘strategic linkage models’ – more recently they have been called ‘strategy maps’. An example is shown in Figure 2.

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”. Maintaining the focus that Balanced Scorecard was intended to support the management of strategy implementation, Kaplan and Norton further described the use of this development of the Balanced Scorecard as the central element of “a strategic management system”.



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

Collectively the changes in design described here represent a materially different definition of what comprises a Balanced Scorecard compared to that described above as a 1<sup>st</sup> Generation Balanced Scorecard. In particular, we note two key enhancements to the definition given earlier:

- Measures are chosen to relate to specific strategic objectives, the design aim being to identify about 20-25 strategic objectives each associated with one or more measures and assigned to one of four perspectives<sup>27</sup>.
- An attempt is made to visually document the major causal relationships between strategic objectives, laying out the results in a 'strategic linkage model' or 'strategy map' diagram<sup>28</sup>.

We will refer to Balanced Scorecards that incorporate these developments as '2nd Generation Balanced Scorecards'.

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<sup>29</sup>.

As objectives began to appear in graphical representations of linkages, so they began to require short titles (to fit onto the 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<sup>30</sup>.

### Opportunities for further improvement

2<sup>nd</sup> Generation Balanced Scorecards represent a substantial improvement compared to 1<sup>st</sup> Generation designs – mainly because the design addresses weaknesses in the 1<sup>st</sup> Generation definition, and allows for the use of less challenging design processes. Yet concerns persist about definitional weaknesses: whereas the focus of concern with the 1<sup>st</sup> Generation design related primarily to measure selection ('filtering'), with 2<sup>nd</sup> Generation designs the focus of concern relates more to how measures are grouped ('clustering'). The standard layout for a strategic linkage model sets causality flowing across the four perspectives (i.e. the four standard 'clusters' of measures proposed by Kaplan and Norton in 1992) from 'Learning and Growth' through 'Internal Business Processes' and 'Customer' and ending up at 'Financial'. Complex arguments have been advanced suggesting that for many organisations this

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causal flow is inappropriate – either because it leaves out one or more important clusters<sup>31</sup> or because the causality links cannot be justified<sup>32</sup>. The common thread among these concerns is the desire to increase confidence that the Balanced Scorecard accurately reflects the strategic objectives of the organisation, and that the linkages shown are meaningful.

On a more practical level, organisations developing 2<sup>nd</sup> Generation Balanced Scorecards found significant practical problems both with measure selection and target setting<sup>33</sup>, and with attempts to rationally ‘cascade’ high level Balanced Scorecards to lower levels of the organisation<sup>34</sup>. These problems can be associated with weaknesses in the design approach associated with specific design activities. 2<sup>nd</sup> Generation Balanced Scorecard design processes assume that interpretation and individual understanding of the Vision/Mission statement or strategic plan on which the Balanced Scorecard is based, is shared among the management team in question, but it does not include any specific activities or design components to ensure that such is the case<sup>35</sup>. The approach therefore disregards the need to ensure first that the understanding of a vision is in fact shared within a management team before asking the team to identify and agree the actions and intermediate results leading to its achievement. 2<sup>nd</sup> Generation Balanced Scorecard also carries a potential weakness in who makes the selection of strategic objectives<sup>36</sup>. Kaplan & Norton’s original design approach (1996) suggested that the organisation’s strategy be first analysed by a small group comprising key personnel supported by consultants. This analysis could then be used to drive the selection of priorities or strategic objectives on behalf of the organisation’s management team. Failure to use a collective approach may, however, weaken the value of the strategy itself<sup>37</sup> as well as the efficacy of its implementation due to lack of support from those accountable for executing it<sup>38</sup>. Finally, the recommended 2<sup>nd</sup> Generation Balanced Scorecard approach to selecting strategic objectives is decoupled from any consideration of the causality between them. Cause and effect links are only considered “post-hoc”. But, as Epstein & Manzoni (1997) argue, the key to linking strategy with performance measures is found in the development of assumptions relating to the prior understanding of cause-and-effect relationships. This view is also supported in the cause-and-effect theories as described by Hedberg (1981) and later elaborated on by, for example, Burke & Litwin (1992)

### 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, with new features intended to give better functionality and more strategic relevance while addressing the above practical issues associate with a 2<sup>nd</sup> Generation design approach. The origin of the developments stem from the issues relating to the validation of strategic objective selection and target setting. These triggered the development in the late 1990’s of a further design element – the ‘Destination Statement’. Destination Statements were initially created towards the end of the design process by challenging the managers involved to imagine the impact on the organisation of the achievement of the strategic objectives chosen earlier in the design process. This integrative process helped identify inconsistencies in the profile of objectives chosen caused by the potential limitations inherent in the use of only four perspectives, as mentioned earlier, and the final document was found to be useful in validating the targets chosen for some measures. The idea that it would be useful for an organisation to have access to a clear statement concerning what the organisation is trying to achieve was not new<sup>39</sup>: the innovation here was simply to realise that such a statement could act as a useful reference point for the target setting process.

It was quickly found that this ‘rolling forward’ of the strategy was easier to conceptualise when associated with a particular future date (e.g. ‘in three years time’) – as typically not all the strategic objectives chosen operated over the same time-period. Because of its intended role as a target setting device, effort was made to ensure that the statement quantified ‘how much’ of key things would have been achieved by this time (e.g. headcount, revenues, customer satisfaction, quality levels etc.). To help focus discussion about the consequences of the strategy, the statement was broken in to several ‘categories’. Figure 3 shows an example extract from a ‘Destination Statement’ in a public sector organisation.

<p><b>Stakeholder Expectations and Financial Resources</b></p> <ul style="list-style-type: none"> <li>• <b>S&amp;F1</b> - SPG has grown its total income (external and internal) to £300M *(NIL NIL)</li> <li>• <b>S&amp;F2</b> - 70% of SPG income comes from direct and indirect Government funding (£210M - £235M now) *(NIL NIL)</li> <li>• <b>S&amp;F3</b> - 30% of SPG income is derived from commercial revenue of which £30M is non-explosive related and £60M is explosive related (£90M-£16M now) *(FIVE SEVEN)</li> <li>• <b>S&amp;F4</b> - SPG has achieved a level of profit on total revenue that is at least x%* (TWO NIL)</li> <li>• <b>S&amp;F5</b> - SPG has created a capital investment plan to ensure it can achieve its growth &amp; profit targets (NIL NIL)</li> <li>• <b>S&amp;F6</b> - SPG has met its return on capital employed (ROCE) targets of x%*(ONE NIL)</li> </ul>	<p><b>External Relationships</b></p> <ul style="list-style-type: none"> <li>• <b>ER1</b> - SPG has benefited from its benchmarking relationships with the DDC, Trading Funds, government agencies and other organisations in that business improvement can be linked directly to these alliances/ liaisons (NIL NIL)</li> <li>• <b>ER2</b> - SPG has identified its key markets and is the first choice provider within them (NIL NIL)</li> <li>• <b>ER3</b> - Customers / consumers use SPG because they perceive we meet their needs (ONE NIL)</li> <li>• <b>ER4</b> - SPG meets customer / consumer needs as promised (NIL NIL)</li> <li>• <b>ER5</b> - SPG has win / win flexible relationships with key suppliers (FOUR SEVEN)</li> </ul>
<p><b>Organisation and Culture</b></p> <ul style="list-style-type: none"> <li>• <b>O&amp;C1</b> - We have outsourced non-core activities appropriately (FOUR THREE)</li> <li>• <b>O&amp;C2</b> - SPG has aligned and delegated authority and responsibility across the organisation to the lowest appropriate level (ONE NIL)</li> <li>• <b>O&amp;C3</b> - SPG has developed a training philosophy that is embraced by staff and generates both functional and professional qualifications in support of business (NIL NIL)</li> <li>• <b>O&amp;C4</b> - SPG has an employment policy and package that attracts and retains the right quality staff (NIL NIL)</li> <li>• <b>O&amp;C5</b> - SPG has a flat management structure with no more than 4 layers (team, function/shed, site/function, HO/function) and no more than 5 basic grades (worker, team leader, Junior, middle, and senior manager) (NINE SIX)</li> <li>• <b>O&amp;C6</b> - SPG has achieved a balanced &amp; structured workforce with a ratio of direct to indirect manpower that compares favourably with national commercial standards (ONE TWO)</li> </ul>	<p><b>Processes and Capabilities</b></p> <ul style="list-style-type: none"> <li>• <b>P&amp;C1</b> - SPG has a single integrated management and planning system that meets all of the needs of the business and exploits the latest technology (THREE FOUR)</li> <li>• <b>P&amp;C2</b> - SPG has access to coherent business information across the organisation that can be measured and used to cost accurately existing activity and new work. This allows the business to charge appropriate rates according to the level of activity (FOUR THREE)</li> <li>• <b>P&amp;C3</b> - SPG has a benchmarking strategy to conduct continuous internal and external benchmarking of peers and the monitoring of competitors in order to deliver continuous improvement and the achievement of its objectives (NIL NIL)</li> <li>• <b>P&amp;C7</b> - SPG has a tracking capability that identifies stock condition and location continuously from receipt through to the consumer as part of an integrated supply chain (EIGHT EIGHT)</li> <li>• <b>P&amp;C8</b> - SPG is responsible for all defence distribution across the entire supply chain from industry to the operational consumers (THREE SIX)</li> <li>• <b>P&amp;C9</b> - All commodities are stored and secured in the most appropriate storage environment including CHE (NIL NIL)</li> </ul>

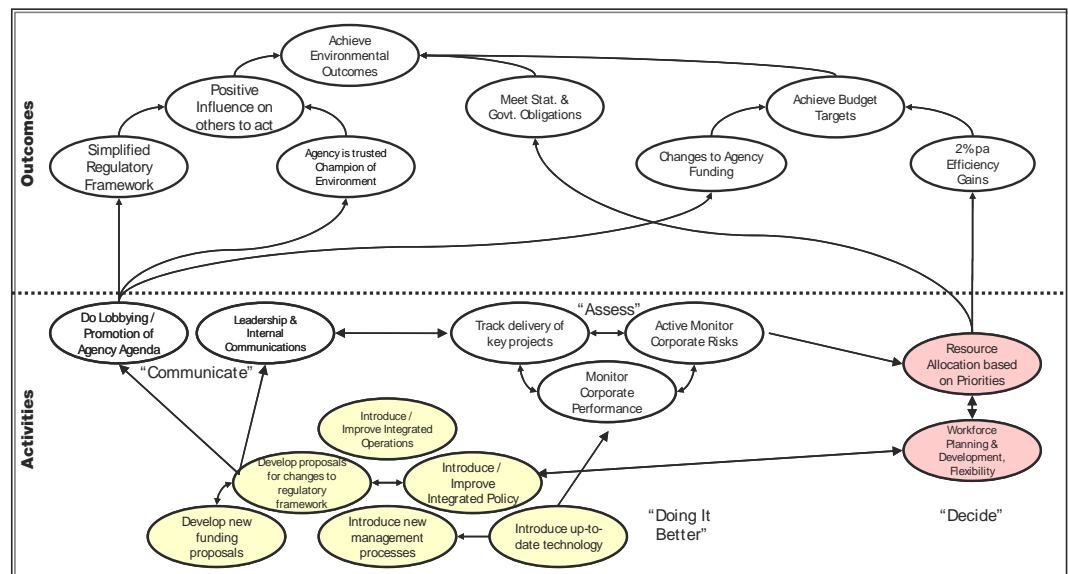
**Figure 3 – Destination Statement (Partial example taken from 2GC Internal Documents)**

At a practical level it was quickly found that management teams were able to discuss, create, and relate to the 'Destination Statement' 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<sup>40</sup>.

Two further benefits arising from use of the Destination Statement as a component of a the Balanced Scorecard design are also recognised:

- In projects aimed at developing multiple Balanced Scorecards, the value of the Destination Statement to enable achievement of strategic alignment, without the enforcement of 'common objectives' increased the ownership and utility of Balanced Scorecards within organisations<sup>41</sup>. In addition to providing operational utility during the design of multiple Balanced Scorecards, this feature addresses a specific concern characterised by Banker et al whereby the presence of 'common objectives' can substantially reduce the utility of cascaded Balanced Scorecards<sup>42</sup>.
- In public sector organisations in particular, the rigid definition of the four perspective labels that typifies Balanced Scorecard definitions can cause problems: the suggesting of alternative labels for application in the public sector is common<sup>43</sup>. The original motivation for the four perspectives was to encourage consideration of non-financial aspects of performance during the selection of measures for the Balanced Scorecard. We have found that this can be done equally well by careful choice of 'category' heading for use during the design of the Destination Statement: reducing the need for the standard four perspectives in the strategic linkage model. With the Destination Statement driving the selection of strategic objectives across the four (or more) categories we have seen public sector managers happy to simply choose 'activity' and 'outcome' objectives, linked with simple causality. With just two perspectives, debate about 'missing' perspectives is eliminated – the issue is simply whether the right priority activities are represented, and whether the correct consequent results from these activities also are shown. Such 'two-perspective' strategic linkage models

(see Figure 4 below) featured strongly in a recently documented project for a major UK Government Agency – which also included the creation of a complex cascade of strategically aligned Balanced Scorecards, achieved efficiently using 3rd Generation Balanced Scorecard methods<sup>44</sup>.



**Figure 4 –Two-perspective Strategic Linkage Model (example taken from 2GC Internal Documents)**

We will refer to Balanced Scorecards that incorporate Destination Statements and optionally two perspective strategic linkage models as ‘3<sup>rd</sup> Generation Balanced Scorecards’. The primary enhancements over a 2<sup>nd</sup> Generation Balanced Scorecard are:

- **Destination statement:** A description, ideally including quantitative detail, of what the organisation (or part of organisation managed by the Balanced Scorecard users) is likely to look like at an agreed future date<sup>45</sup>. Typically the destination statement is sub-divided into descriptive categories that serve a similar purpose (but may have different labels) to the ‘perspectives’ in 1st and 2nd Generation Balanced Scorecards.
- **Strategic Linkage Model with ‘Activity’ and ‘Outcome’ Perspectives:** A simplification of a 2nd Generation Balanced Scorecard strategic linkage model – with a single ‘outcome’ perspective replacing the Financial and Customer perspectives, and a single ‘activity’ perspective replacing the Learning and Growth and Internal Business Process perspectives<sup>46</sup>.

The creation of a Destination Statement describing what the organisation is likely to look like at an agreed future date ensures that a shared view of the strategic plan and its intended consequences is agreed prior to making decisions about organisational activity and setting targets for those activities. It addresses the 2nd Generation issue described above.

Although the two-perspective strategic linkage model is a notable departure from Kaplan & Norton’s four perspective model, the main difference between 2nd and 3rd Generation is found in how the strategic linkage model is designed, not the way it looks. The strategic objectives, define the most important activities and their associated results for the management team to focus on in the near-term in order to make sure the organisation achieves the medium- to long-term goals described in the Destination Statement. Identifying strategic objectives with the participation of the full management team and taking a starting point directly in the Destination Statement, by first asking the question, “so what do we do in order to reach our destination” deals with another critical aspect of the weaknesses in the 2nd Generation design approach described earlier.

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## Academic Thinking Supporting the Evolution of Balanced Scorecard

From the outset, Kaplan and Norton made it clear that the primary focus of Balanced Scorecard is to be a control tool for managers. But there are different types of control exercised by managers: Kaplan and Norton associate the Balanced Scorecard with what Muralidharan<sup>47</sup> calls 'strategic control' rather than 'management control'<sup>48</sup>. In practice, considerable academic and practical attention has focused on the application of Balanced Scorecard for management control purposes<sup>49</sup>. 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<sup>50</sup>.

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<sup>51</sup>. 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<sup>52</sup>.

The transition from 2<sup>nd</sup> Generation to 3<sup>rd</sup> Generation Balanced Scorecard designs, although in terms of design elements 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<sup>53</sup>. In addition to the reasons cited above, it is our view that this utility stems from its ability to accommodate effectively the issue of information asymmetry. Oliver Williamson writing on Transaction Cost Economics in the 1970s 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<sup>54</sup>. These observations suggest that the projection of a centrally developed strategy into components of an organisation can become problematic. We can see the obverse of this issue in the problems raised concerning the negative effect of 'common objectives' in systems of multiple Balanced Scorecards<sup>55</sup>. It is argued that the common objectives distract the attention of those evaluating Balanced Scorecard data from remaining objectives – in part because the evaluator 'knows more' about the common objectives. In addressing this issue, it is not sufficient to eliminate 'common' objectives – as this simply runs the risk of none of the objectives being evaluated effectively, rather than just a few. What is required is a mechanism to efficiently communicate more of the local context and issues that caused the strategic objectives to be selected: we have found that the Destination Statement facilitates this communication<sup>56</sup>.

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<sup>57</sup>. 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: you may have more data, but not necessarily any more information about the local context that is necessary to make this data useful. Indeed recent research suggests that Balanced Scorecard data in many software applications are neither balanced nor perceived as useful. Measures are still too many, largely financially focused and the Balanced Scorecard investments considered "an expensive, bloated, and useless substitute for the traditional paper reports"<sup>58</sup>

Similarly 'more complex' alternatives to Balanced Scorecard<sup>59</sup> do not openly address the informational issues presented by this increase in complexity. Shulver et al (2000) 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.

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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 dozen years since the advent of Balanced Scorecard, changes have been made to the definition of what constitutes a Balanced Scorecard. These changes have enabled related changes to be made to the design processes used to create the device within organisations thus addressing the above issues associated with a 2<sup>nd</sup> Generation design approach. This evolution of Balanced Scorecard can be largely attributed to innovation driven by empirical evidence of weaknesses in the devices created, rather than in the original idea. Early Balanced Scorecards failed because they were very difficult to design well, in part because the characteristics of an effective Balanced Scorecard were not well characterised. 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 from the original concept that can be seen in two subsequent generations of Balanced Scorecard. 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 device described by Kaplan and Norton. Modern Balanced Scorecard designs 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 future research into the field are as follows:

- More refinement is needed in matching understanding of how management behaviour can be influenced by performance measurement data to better facilitate management interventions. Theories of strategic control methods and practice currently are developed separately from theories relating to performance management: there would be value in looking at how insights from these two schools of thought could be brought together.
- 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.<sup>60</sup>. 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 deepening of the understanding about the factors that inhibit the adoption of advanced Performance Management systems in large / complex organisations (i.e. the ones who potentially could get most benefit): currently, the characteristics of organisations that successfully implement Performance Management are not well known.

## To Obtain More Information

The [Resources](#) section of the 2GC web site contains other 2GC resources relating to performance management and 3rd Generation Balanced Scorecards. The resources include a wide range of 2GC authored papers, case-studies, FAQs and presentations, plus an active discussion forum, a large database of Internet links to useful web sites, and the Internet's largest / most complete catalogue of Performance Management Software Vendors.

For information on 2GC's services including our consultancy and training programmes, visit the [Services](#) section of the web site or email [Services@2gc.co.uk](mailto:Services@2gc.co.uk)

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## About 2GC

2GC is a research led consultancy expert in addressing the strategic and performance management issues faced by organisations in today's era of rapid change and intense competition. Founded in 1999, and based in the UK, 2GC has quickly established itself as global leader in the field of strategic performance management system design and implementation. 2GC has worked for public and private sector clients across 21 countries and 4 continents.

Central to much of 2GC's work is the application of 3rd Generation Balanced Scorecard, an approach to strategic implementation, strategy management and performance measurement.

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# Endnotes

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- <sup>1</sup> Gavin Lawrie is the founder and Managing Director of 2GC Active Management, a specialist performance management consultancy based in Maidenhead, Berkshire in the UK. His primary research interest is strategic performance management, in particular its application in large / complex organisations. Ian Cobbold is a consultant with the same firm. His primary research interest is strategic performance management.
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