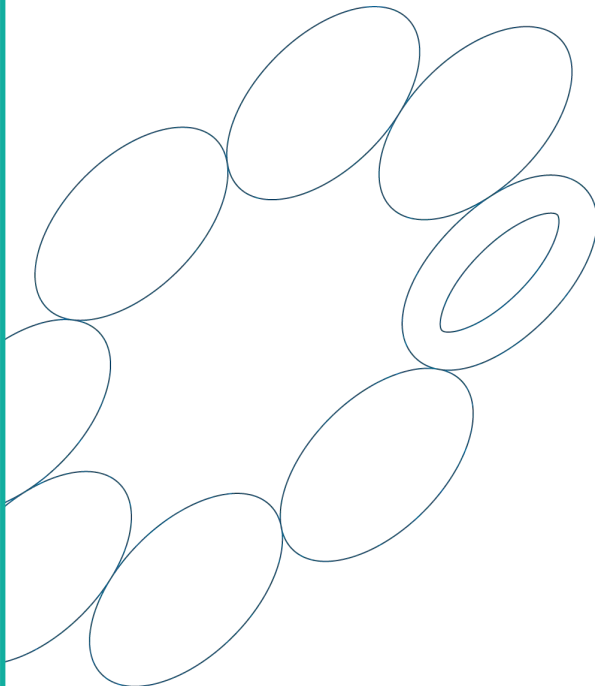


The Balanced Scorecard and the Business Excellence Model

2GC Working Paper

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Introduction

The Balanced Scorecard and the European Foundation for Quality Management (EFQM) Business Excellence Model are tools that use measures of an organisation's performance to drive organisational improvement – generally by highlighting current shortfalls in performance – in areas of particular concern / or interest – to management teams. Both have been widely adopted in recent years and benefit from the support of powerful advocates in the form of current users, consultants, and software suppliers. The purpose of this paper is to compare the two tools. We show that despite superficial similarities, the two approaches come from very different backgrounds and are designed and used using different processes. We also show how the different approaches have a fundamentally different epistemological basis and in turn, how this suggests a contingency, which should inform decisions about the choice of either approach.

Comparing the Balanced Scorecard and the Business Excellence Model

Prior to more critical discussion of the two approaches, it is necessary to introduce and compare the Balanced Scorecard and Business Excellence Model at a descriptive level. To achieve this the following table deconstructs both approaches. Table 1 highlights the differences and similarities between the two approaches across several categories.

Table 1: The Business Excellence Model and the balanced Scorecard - origins and characteristics

¹ This document is based upon a paper presented at the Trento CPSO conference, modified for web publication. Both documents are developments of an earlier 2GC working paper: "The Balanced Scorecard vs. the EFQM Business Excellence Model" (2000) – please contact 2GC if you would like a copy of this original working paper.

	The EFQM Business Excellence Model	The Balanced Scorecard
What is it?	A framework designed to assist organisations achieve business excellence through continuous improvement in the management and deployment of processes to engender wider use of best practice activities. It enables the calculation of scores against a number of criteria that can be used for either internal or external “benchmark” comparisons. It is hoped that the results of these relative comparisons will lead to increased focus on improving key process performance, and so generate “business excellence” (EFQM, 1999).	The Balanced Scorecard is a framework that expresses an organisation’s strategy as a set of measurable goals from the perspectives of owners/ investors, other external stakeholders, and the organisation itself. If these goals and associated measures, and targets are well chosen, the Balanced Scorecard will help managers focus on the actions required to achieve them, so helping the organisation achieve its overall strategic goals and realise its strategic visions (Kaplan and Norton, 1996).
Typical Applications	Driving continuous improvements in processes within an organisation. Providing information on external “benchmark” levels of performance of key processes. Provision of “best practice” checklists for use within Business Planning and Review activities (EFQM, 1999).	Focusing management agenda on achieving strategic goals. Supporting two way communication of strategic priorities and organisational performance. The prioritisation of investment and activity behind strategic goals. The alignment of goals and rewards behind common strategy across an organisation. Supporting continuous learning about strategic “cause and effect” relationships affecting an organisation (Lawrie and Cobbold, 2004; Andersen et al, 2004).
Typical Outputs (Documents)	Assessment of the quality of the organisations processes relative to prior years and to competitors / benchmark organisations. Identified areas of poor or low performance against prior years and competitors (EFQM, 1999).	A clearly articulated statement of vision and strategy. A set of measurable strategic objectives spread over four “perspectives”: each measure with agreed targets . A set of priority “initiatives” linked to the strategic objectives and measures.
Success Factors	Sponsorship and commitment of entire management team. Introduction of “embedded” management processes to use outputs to drive continuous improvement (EFQM, 1999).	Sponsorship and commitment of entire management team. Introduction of “embedded” management processes to use, refresh and renew the Balanced Scorecard over time.
Origins	The “Business Excellence Model” was originated by the European Foundation for Quality Management (EFQM) which aims to “assist management in adopting and applying the principles of Total Quality Management and to improve the Competitiveness of European industry”. The Foundation has also instigated the “European Quality Award”: the criteria developed to evaluate performance in the Excellence Model are similar to those used to evaluate contestants for the “Quality Award” (EFQM, 1999).	The Balanced Scorecard first appeared in the results of a multi-company research study called “Measuring Performance in the Organisation of the Future” in 1990. Sponsored by major US corporations, the study was initiated as a reaction to the growing dissatisfaction with traditional financial measures as the sole or main measure for corporate performance. The study identified the need for an improved management control system based on an understanding of actual performance against important strategic goals – which the authors called “The Balanced Scorecard” (Kaplan and Norton, 1992; Lawrie and Cobbold, 2004; Andersen et al, 2004).

	The EFQM Business Excellence Model	The Balanced Scorecard
How does it work?	<p>The Model assumes that excellence requires of an organisation:</p> <ul style="list-style-type: none"> Results Orientation; Customer Focus; Leadership and Constancy of Purpose; Management by Processes and Facts; People Development and Involvement; Partnership Development; Public Responsibility <p>The model considers relative performance by an organisation in the areas of enabling activities and observed results. It does this using five “enabling” criteria (Leadership; People; Policy & Strategy; Partnerships & Resources; Processes) and four “results” criteria (Performance; Customers; People; Society). Current performance is evaluated as a score across the nine criteria by checking the organisation’s alignment against a total of 32 standard statements (e.g.: “Processes are systematically designed and managed”). Scores are attached to the answers to these questions either on the basis of internal “Self Assessment” or with the assistance of outside assessors. Scoring uses a universal scoring and weighting system that treats all types of organisations alike (no adjustments are made for size or industry). The scoring system has been designed to allow an organisation to benchmark its score against those of other firms, or against scores from prior assessments. Also a weighted “total” of these scores is usually calculated. Wider introduction of quality management systems by an organisation tends to improve scores – but in general the Excellence Model does not itself provide information on how low scores can be improved.</p> <p>Results are generally produced in “report” format and circulated, usually on an annual basis (EFQM, 1999).</p>	<p>The Balanced Scorecard builds on basic concepts of management activity concerning:</p> <ul style="list-style-type: none"> Causality – the belief that managers can identify things to do that will lead to important outcomes being achieved. Learning – the belief that given appropriate feedback, managers will identify ways to improve performance. Team Working – the belief that most organisations rely on management activity performed by teams as well as individuals (e.g. “The Board”). Communication – the belief that clear communication of goals, priorities and expectations are necessary to achieve high levels of performance within an organisation. <p>Although many variations exist, most Balanced Scorecards are built on a core idea that manager’s need information on a reduced set of measures selected across four distinct “perspectives” of performance.</p> <p>Measurement information is usually collected at least quarterly, circulated in the form of paper or electronic reports, and these reports are used to inform regular meetings of the management team.</p> <p>Generally Balanced Scorecard information is not directly useful for cross industry comparisons or other Benchmarking activities (Kaplan and Norton, 1992; Lawrie and Cobbold, 2004; Andersen et al, 2004).</p>
Best practice design methods	<p>Data driven Self-Assessment against standard criteria, looking at current and recent performance. Assessment Process typically not operated by whole management team</p> <p>Opportunities for improvement are identified against poor performance relative to standard criteria (EFQM, 1999).</p>	<p>Forward looking workshop based design process involving management team, building on existing management plans, but looking for a “step change” in performance</p> <p>Creation of a set of strategic objectives that are “unique” to the organisation (Kaplan and Norton, 1992; Cobbold et al, 2004; Andersen et al, 2004; Olve et al, 1999).</p>

	The EFQM Business Excellence Model	The Balanced Scorecard
Implementation Issues	<p>The Self-Assessment process needs to be applied rigorously in order to be effective. EFQM recommends a graduated approach starting with the use of simple questionnaires and progressing through detailed questionnaires to workshops as the organisation becomes more familiar with the approach. The use of external assessors is often in connection with an actual or simulated European Quality Award application process.</p> <p>The relative complexity of the criteria statement scoring system, and the need for comparability between implementations (to allow benchmarking) requires the process to be conducted by suitably trained and experienced personnel (“assessors”). This encourages the use of a Self-Assessment process run by “project teams” rather than managers themselves, and legitimises the use of external consultants (with access to benchmarking data, for example). This leads to a relatively “low impact” assessment process, but one that is often done external to the management team (EFQM, 1999).</p>	<p>The major challenges in Balanced Scorecard design are the selection of measures – an activity that is often undertaken using specialist external support – and the introduction of new ways of working that actually make use of the information generated by the Balanced Scorecard – usually attempted as an “in-house” exercise.</p> <p>Advanced users extend the Balanced Scorecard within an organisation through “cascading” – the creation of a pyramid of linked smaller Balanced Scorecards that “feed into” the Balanced Scorecard for the whole organisation – and the modification of related business processes (e.g. budgeting and planning) to include reference to the organisation’s Balanced Scorecard.</p> <p>As an organisation’s strategic goals change so also should its Balanced Scorecard – typically Balanced Scorecard designs are reviewed every two years. (Cobbold et al, 2004; Andersen et al, 2004; Olve et al, 1999).</p>

The Design Process

Both tools can be characterised by their design processes. Simply put, both processes are designed to allow a management team to identify a limited number of performance measurements that together inform the team about the performance of the organisation for which they are responsible. But significant differences in the ideas about organisational performance that underpin the two approaches have led to significantly different design processes.

The Balanced Scorecard

State of the art or 3rd Generation (Lawrie and Cobbold, 2004) Balanced Scorecard development processes are abstractive; they create Scorecards that represent clearly and concisely the specific strategic goals selected by an organisation, and document explicitly what activity, in the management team’s view, is required of the organisation for the goals to be achieved. The abstraction is the management team’s assumptions concerning “causality” – how and why a set of enabling activities will drive the achievement of strategic results ... a “theory” of the organisation, of the business. This type of design process is required because the Balanced Scorecard itself is not prescriptive about what areas of strategic performance need to be monitored by a management team: the first widely read paper on the Scorecard (Kaplan and Norton, 1992) simply suggested that, whatever the strategic goals adopted by an organisation, significant benefits arise if progress towards them is monitored across several measurement dimensions (rather than just through financial measures).

The start of a Balanced Scorecard design process begins therefore, with the identification of priority areas of performance required to deliver the unique strategic goals selected by the whole management team. (The process differs from that proposed by Kaplan and Norton who argued that the initial activity to identify strategic objectives should be based on the input of only a small part of the management team (Kaplan & Norton, 1996). This identification of priority areas of strategic performance is usually based around activity to develop initially a strategic “vision” for the organisation, followed by activities to identify the important actions required of the organisation to achieve the vision. When accomplished with the participation of the

full management team, such work is more effective because articulation and identification of goals and actions are based on the combined experience and knowledge of the whole team and their collective view on causality. In other words, on their consensual theory about how and why a set of enabling activities will drive the achievement of strategic results. Besides consensus, involving the whole management team in the design process also ensures ownership and a common understanding of the goals.

It is becoming increasingly common also for the design process to validate the selection of strategic objectives by “mapping” them to the four performance perspectives suggested by Kaplan and Norton in their 1992 work, and linking where appropriate objectives that are “causally linked” (Epstein and Manzoni, 1997, Lawrie and Cobbold, 2004). The structure of the Balanced Scorecard designs arising from the application of this process is shown in Figure 1.

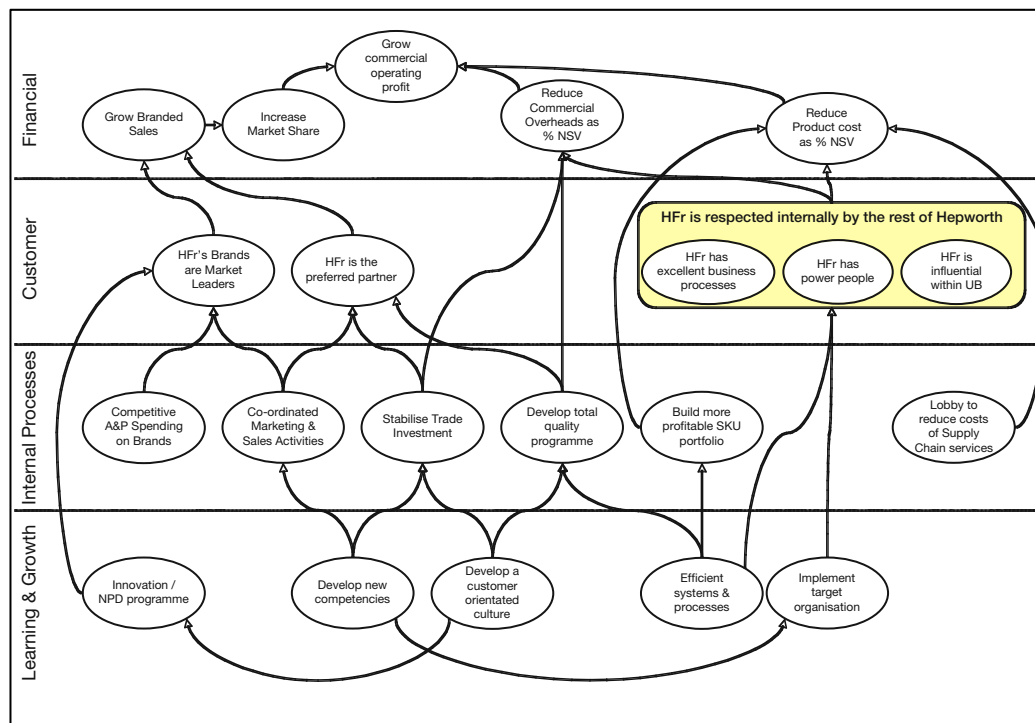


Figure 1 – The four perspectives of the Balanced Scorecard linked to a strategic vision

The Business Excellence Model

The roots of the Business Excellence Model lie in the Quality Management field, where standardisation and documentation are of characteristic importance. The design of the Business Excellence Model is closely defined, and relatively static– based on generic strategic priorities arrived at using what has been called “plausible logic” (Seddon, 1998).

Although the EFQM states that the Business Excellence Model is of equal utility across a wide range of industries (from service sector organisations through to public sector bodies) research evidence suggests that it has been most widely adopted within manufacturing industries (e.g. Ölve, Roy & Wetter, 1999). Regardless of where it is applied, it is stipulated by the EFQM and others that the areas of strategic performance that should be monitored by management teams are the same. The relative importance attributed to each of these areas varies according to standard “weights” that are periodically updated by EFQM. The nine strategic areas, and the generic causal links between them are shown graphically in Figure 2.

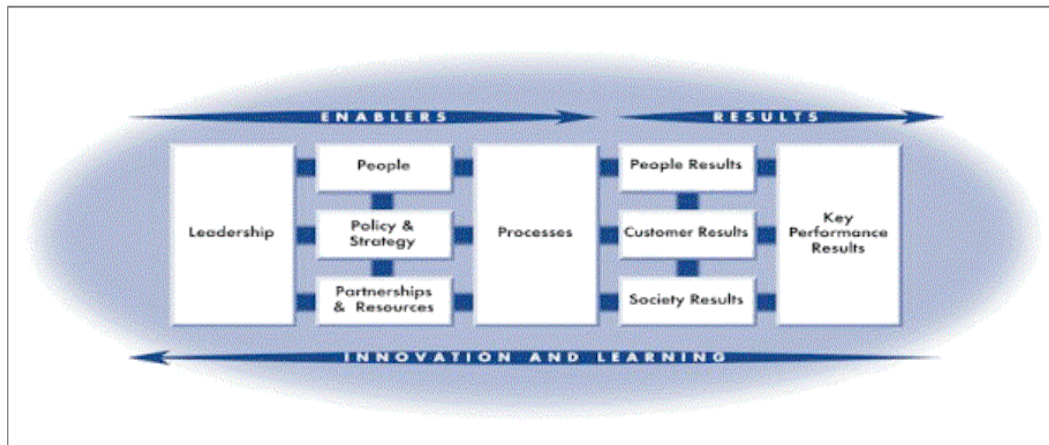


Figure 2 - "The EFQM Excellence Model" – EFQM website: <http://www.efqm.org/welco.htm>

Evaluating the organisation's processes and performance against a uniform and predetermined set of strategic priorities not only makes the design process easier, but more importantly for the Business Excellence Model enables the standardised "benchmarking" of results between different organisations, even if they are active in different markets or industries. Even though the Business Excellence Model design requires compliance with standard design rules, the EFQM makes it clear, that a number of alternative design approaches exist depending on an organisation's prior knowledge of the methodology as well as its commitment to the process and level of resource allocation (EFQM, 1999). The EFQM describes five generic design approaches – listed here from the "simplest" (i.e. lowest required resource commitment) to the most complex:

- **The questionnaire approach** – Self-Assessment using standard questions designed to get the organisation started thinking in terms of process improvement. Questionnaires can also be used to facilitate group discussions about improvement opportunities and to inform management workshops.
- **The matrix chart approach** – Self-Assessment using a matrix chart containing a series of statements of achievement representing each of the nine strategically important areas of the model and each assigned a number of points. An organisation's management team normally designs the matrix based on a group discussion forcing that management team to "articulate their collective vision, and the steps to achieving it in all nine Criteria areas [of the Business Excellence Model]".
- **The workshop approach** – Self-Assessment resulting from a "scoring workshop". After a (self-study) training sequence, and collection of relevant data, the Management group score an organisation's performance against the 32 sub-criteria, agree initiatives to undertake that will improve the scores in the following year, and agree some kind of ongoing review process to track the execution of the initiatives. The EFQM recommends that two fully trained assessors – one internal and one external assessor - facilitate workshops.
- **The pro-forma approach** – External Assessment supported by consultants: key individuals or groups of people fill in a pre-printed page for each of the 32 sub-criteria. Trained assessors or colleagues from different departments could review the results produce lists of strengths and weaknesses that feed into the development of the Business Excellence Model "scores" for the organisation.
- **The quality award simulation approach** – External Assessment driven by a simulation of an application for the EFQM European Quality Award. A specially trained internal

report writing team drives the process, with the report being assessed and scored either by external assessors. This approach involves a great deal of delegation: EFQM itself thinks the main risks associated with this approach being: less involvement of the management team and the “potential for creative writing, covering up real issues”. (EFQM, 1999)

The EFQM recommends the first two design approaches to beginners as a point of entry in learning about the model and about the potential for change by gradually using the model “in a more rigorous manner”. In some documentation associated with the model, strict adherence to the design principals of the model appear to be more important than adjusting the model to fully reflect the unique strategic priorities of the organisation using it. e.g.:

“It may be necessary to simplify some of the language used in the EFQM Model or to perhaps include organisation specific examples in the areas to address. This can be done while still retaining the integrity of the EFQM Model and the concepts that underpins it.”

EFQM, “Assessing for Excellence: A practical guide” (1999).

In the context of this paper, it may be useful to make two observations about the list:

- Firstly, underpinning all five design approaches is the principle of comparison with, and aspiration to an ideal of practice, with an underlying assumption that conformance to said practice ideal leads to improved performance.
- Secondly, all five approaches implicitly advocate the adoption of generic strategic priorities built around process improvement. When coupled with benchmark comparisons these can possibly be beneficial for organisations at an operational level. But this focus on standardised “best practice” is generally considered to be an unreliable route to strategic success (Porter, 1999; Seddon, 1998; Russell, 1999). Merely being explicit in the language used highlights the problem: call a generic strategy “someone else’s strategy,” or a “borrowed strategy,” and it is immediately less appealing.

Design Process: Discussion

One criterion for differentiation between the two processes concerns the extent to which – in the final system design – they attempt to reflect the specific strategic goals of the organisation for which they are being developed. The Balanced Scorecard assesses performance of selected activities believed to be critical contributions to the achievement of specific strategic goals of an organisation. As a result the design processes starts with the articulation of a shared strategic vision specific to the organisation, and works backwards to define the priority strategic activities and outcomes that must occur to achieve success. By contrast, the Business Excellence Model assesses performance of activities within a standard set of categories against generic “best practice” standards, or against the past performance of these activities in the same organisation. EFQM’s description of Business Excellence Model supports the logic and importance of associating the findings produced with an organisation’s strategy to produce prioritised areas for improvement. The Business Excellence Model encourages organisations starting the process of selecting strategic priorities to be monitored by evaluating the performance of current processes against previous results (Russell, 1999), and to identify priorities for actions to improve performance based on changes to these current processes. But, importantly, even the EFQM recognises that activity outside the scope of the Business Excellence Model design process will be required to effectively identify the right set of strategic priorities for an organisation to track over time:

“... the process of Self-Assessment does not, of itself, improve the organisation... a key step in the process is to identify the “vital few” [areas of improvement relating to the organisation’s strategy]...”

EFQM, “Assessing for Excellence: A practical guide” (1999)

In conclusion, the Balanced Scorecard design process is necessarily more complex than that required for the Business Excellence Model (as it has additionally to describe and reflect the organisation’s own strategic goals). Further, since the strategic priorities of organisations vary even within industries, the resulting Balanced Scorecard measures selected by the design process can only weakly support “benchmark” comparisons: but they are for the same reason much more likely (compared to the Business Excellence Model) to provide directly relevant information on an organisation’s strategic performance.

Epistemology

It is possible to further contrast the Business Excellence Model and the Balanced Scorecard if one shifts the point of comparison the underlying epistemologies of the two approaches. Broadly, there are four main epistemological systems: religion; mysticism; empiricism and science. The logical forms of empiricism and science are represented diagrammatically below:

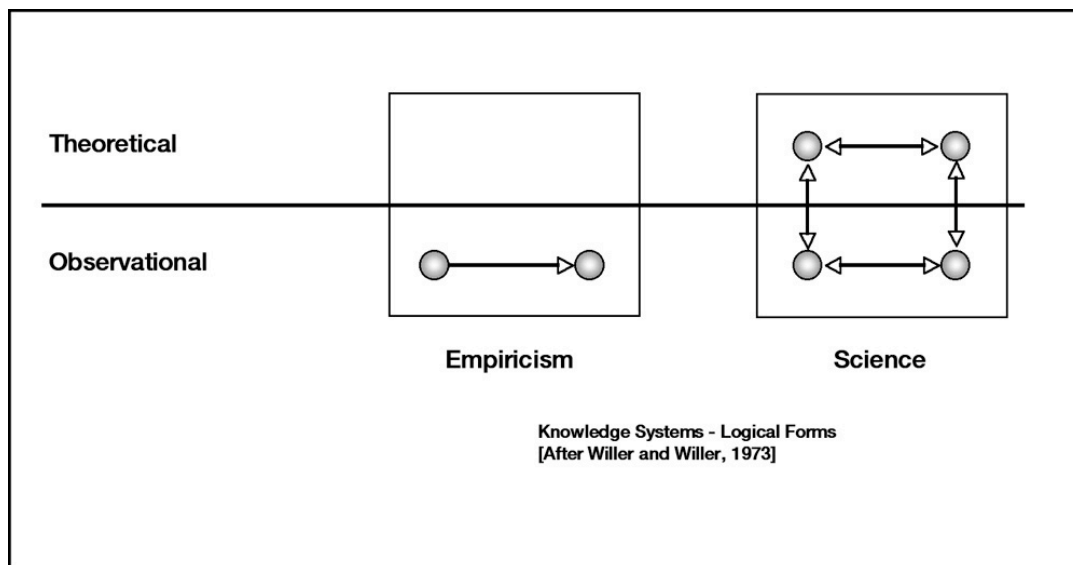


Figure 3: Logical forms of empiricism and science

In the figure 3, thought connection is made at two levels, the observational and theoretical. The terms represented by the dots at the observational level are referred to as observational terms or empirical categories, and the dots at the theoretical level represent ideas or concepts. Thought connections made at the observational level are empirical, connections made only at the theoretical level are rational, and connections across the two levels are abstractive (Willer and Willer 1973).

Empiricism

Empiricism consists of empirical thought alone. In empiricism, things happen [observable conditions exist] because of an assumed relation between empirical objects or categories. Actions at the theoretical level are not considered. The system is not therefore subject to theoretical refutation. The content of empiricism is concerned with the connection of categories of observables only. Empiricism is the most widely used knowledge system, but used alone, is not science. Modern techniques of observation,

measurement and manipulation, and in particular the employment of statistical tools can often mean that modern empiricism is very effective, and very persuasive.

Science

In science, things happen [observable conditions exist] not only because of an assumed connection between empirical objects or categories, and not only because of connections at the theoretical level. Instead, science makes rational connections that correspond to observational connections. That is, theories are constructed that have, within their relevant scope, a structural similarity to connected observational categories. Therefore the scientific knowledge system works at and between both the theoretical and empirical levels. The system is subject to both theoretical and empirical refutation. (Richards 1983) The content of scientific thought is empirical, theoretical and, most importantly, abstractive. (Magee 1997; Richards 1983; Willer and Willer 1973)

Confusion between science and empiricism

Science and empiricism may be confused because they both offer explanations of empirical events that use observation in contrast with other types of knowledge systems. Although both science and empiricism are concerned with empirical connection, their similarity ends at that point. The logical form of science is much more complex than empiricism as is illustrated in the figure above. "Empiricism transcends particular contexts by generalisation, science transcends particulars by abstraction" (Willer and Willer, 1973).

Despite widespread use of generalisations to explain, generalisation has no real explanatory power in particular cases. Further, generalisation also involves the unanswerable problem that there are potentially infinite numbers of points of comparison between any two empirical events. The final, and fatal flaw in inductive logic is that it makes invalid predictions about an infinite number of possible future situations on the basis of a finite number of observation statements. No rules exist which tell us when we have collected enough observations to justify generalisation. Even statistical significance rules are arbitrary.

Science and empiricism are useful in managing everyday life. Science is powerful because it explains before it manages, it sets up mental constructions in terms we can hopefully understand and apply in multiple contexts. Empiricism, however, explains only if it manages (Willer and Willer 1973).

What has all this to do with the Balanced Scorecard and the Business Excellence Model? The answer is that the Business Excellence Model is empiricist. It relies on an inductive logic. The assumed general relation amongst categories of "driver" and categories of "result" derives from multiple correlations carried out over time (Bates et al, 2003). Whilst providing intuitively convincing support or backing for said relationships, these correlation exercises fall down because of the problem of induction. No number of empirical observations can verify a proposition. Logical flaws aside, in practice this means that when the assumed causality / theory is applied in new contexts it does not necessarily have any predictive power. Any organisation following the dictates of the Business Excellence Model is by definition, operating "out of context" because it is not the same organisation as the generic "ideal" organisation. The context specificity of particular behaviours and their linked results means that effort expended on generic "drivers" or even whole categories of driver will not always lead to the "results" suggested by the model.

By contrast the Balanced Scorecard design process invites managers to hypothesise about causality ... to develop theory. Clearly such theory is bounded by the limitations of their particular context, but that is of no concern to the firm. Managers have created theory, and critically, this theory can be subject to refutation if (again, within their boundary conditions) observables contradict the theory. If such refutation occurs then the management team will

have learned, and can propose new theory, new causal connections in turn leading to revised and improved behaviours. When adherents of the Business Excellence Model encounter empirical refutation, they have no opportunity to revise the model (especially if engaged in the EFQM Quality Award Scheme). At the very least, they live with low “scores” from assessors. At worst, they are forced to “work the model,” to further invest in improvement activity of no use except to demonstrate adoption of “best practice.”

Conclusions

In spite of sharing a number of apparent similarities, the Balanced Scorecard and the EFQM Business Excellence Model are based on fundamentally different concepts about how best to improve the performance of an organisation. The Balanced Scorecard favours a clear focus on the actual strategies and associated implementation activities adopted by an organisation, providing a robust tool onto which other management processes can be built – at the expense of a more complex design processes: the Balanced Scorecard is based on a dynamic and individual abstraction rooted in explicit cause and effect relationships.

The Business Excellence Model is based on a static design derived using “plausible logic” and contains a standard set of strategic objectives used by all organisations using Business Excellence Model. It has only implicit representations of the “generic” cause and effect relationships that link the strategic objectives together; though in practice these are assumed to be real ... to represent objective reality (Bates et al, 2003). The use of this standard model facilitates the use of a much simpler design process, and enables the “benchmark” comparison of Business Excellence Model outputs in the entire universe of organisations using the tool.

Both models seem to have strengths and weaknesses depending on the purpose for which they are being used. This paper has considered specifically their utility in connection with strategic performance management, and has observed fundamental differences that create a considerable disparity between the models. While the design of the Balanced Scorecard supports its usage as a strategic management tool, the Business Excellence Model’s original design as a diagnostic tool raises serious doubts about its effectiveness as a strategic management tool. Some proposals have been made concerning ways to adapt Business Excellence Model to be more useful in this respect (e.g. Russell, 1999): but even these cannot get around the fundamental shortfall of the Business Excellence Model – its lack of explicit strategic relevance to the organisation using it.

References

- Andersen, H.; Lawrie, G.; Savic, N.; (2004) “Effective quality management through third-generation balanced scorecard;” *International Journal of Productivity & Performance Management*, Vol. 53 Issue 7, p634-645
- Argyris, C. (1991). “Teaching Smart People How to Learn”, *Harvard Business Review*, May – June, pp 99 – 109
- Barsky, N.P and Bremser W.G. (1999) “Performance Measurement, Budgeting and Strategic Implementation in the Multinational Enterprise”, *Managerial Finance*, Vol. 25, No. 2, pp. 3 – 16
- Bates, K., Bates, H., and Johnston, R.; (2003) “Linking service to profit: the business case for service excellence”; *International Journal of Service Industry Management*; Vol. 14, No. 2, pp 173-183
- Burke, W.W. and Litwin, G. A. (1992). “A Causal Model of Organisational Performance and Change”, *Journal of Management*, 18 #

Campbell, A.; Alexander, M. (1997) "What's wrong with strategy?", *Harvard Business Review*, Volume 75, Issue 6, Nov/Dec, pp. 42-50

Cobbold, I.; Lawrie, G. (2004) *Third-generation balanced scorecard: evolution of an effective strategic control tool* *International Journal of Productivity & Performance Management*, Vol. 53 Issue 7, p611-623

Cobbold, I.; Lawrie, G.; Issa, K. (2004) "Designing a strategic management system using the third-generation balanced scorecard: A case study," *International Journal of Productivity & Performance Management*, Vol. 53 Issue 7, p624-633

EFQM website: <http://www.efqm.org/welco.htm>

EFQM, (1999). "Assessing for Excellence: A Practical Guide for Self-Assessment", EFQM Brussels Representative Office, Brussels

Epstein, M. J. and Manzoni, J. F. (1997). "The Balanced Scorecard & Tableau de Bord: A Global Perspective on Translating Strategy into Action", INSEAD Working Paper 97/63/AC/SM

Hodgetts, R.M., "A conversation with Michael E. Porter: A significant extension toward operational improvement and positioning", *Organizational Dynamics*; Volume 28, Issue 1; Summer 1999; pp. 24-33

Huckestein, D. and Duboff, R. "Hilton Hotels", *Cornell Hotel and Restaurant Administration Quarterly*, August 99, Vol. 40, Issue 4, 1999, pp. 28 – 383

Kaplan, R. and Norton, D. (1992). "Putting the Balanced Scorecard to Work", *Harvard Business Review*, Sept. – Oct.

Kaplan, R. and Norton, D. (1996). "The Balanced Scorecard: Translating strategy into action", Harvard Business School Press, Boston

Lamotte, G. and Carter, G. (1999). "Are the Renaissance Balanced Scorecard and the EFQM Excellence Model mutually exclusive or do they work together to bring added value to a company?", Final Draft, Pre publication version, Released exclusively for the EFQM Common Interest Day; December 9

Lingle, J.H; Schiemann, W.A. (1996) "From balanced scorecard to strategic gauges: Is measurement worth it?", *Management Review*, Volume 85, Issue 3; Mar, p. 56

Magee, B. Popper. London; 1980.

McAdam, R. and O'Neil E. (1999). "Taking a critical perspective to the European Business Excellence Model using a balanced scorecard approach: a case study in the service sector", *Managing Service Quality*, Vol. 9, No. 3, pp. 191 – 197

Mintzberg, H. (1990). "The Design School: Reconsidering the Basic Premises of Strategic Management", *Strategic Management Journal*, Vol. 11, pp. 171 – 195

Mintzberg, H. (1994). "The rise and fall of strategic planning", Prentice Hall, Hemel Hempstead

Picken, J. C. and Dess, G. G. (1997). "Out of (Strategic) Control", *American Management Association, Organizational Dynamics*, Volume 26, number 1, pp 35 – 48

Porter, L; Oakland, J. and Gadd, K. (1998). "Unlocking business performance with self assessment", *Management Accounting*, Volume 76, Issue 8, pp. 35 – 37

Richards, S. *Philosophy and sociology of science: an introduction*. Oxford: Basil Blackwell Publisher Limited; 1983.

Russell, S. (1999). "Business Excellence: From outside in or inside out?", *Total Quality Management*, Volume 10, Issue 4/5, pp. 697 – 703

Seddon, J. (1999). "The business excellence model: Will it deliver?", *Management Services*, Volume 43, Issue 10, start page 8

Senge, P. (1990). "The Fifth Discipline", Doubleday Currency, New York,

Simons, R. (1995). "Levers of Control: How Managers Use Innovative Control Systems", Harvard Business School Press, Boston

Simons, R. L., (1992). "The Strategy of Control", *CA Magazine*; Volume 125, Issue 3; Mar; p. 44

Tushman, M.L. and P. Anderson (1986). "Technological Discontinuities and Organizational Environments", *Administrative Science Quarterly*, Vol. 31, pp. 439-465

Willer, D. and Willer, F. *Systematic empiricism: critique of a pseudoscience*. New Jersey: Prentice Hall Inc.; 1973.

Sources of additional information:

About the Balanced Scorecard

There is relatively little useful information on Balanced Scorecard on the world-wide-web. The original article, "Putting the Balanced Scorecard to Work" by Kaplan & Norton (Harvard Business Review, Sept. – Oct. 1992) is now showing its age but is still worth reading. Two better, and more recent publications that summarise how thinking on the idea has developed, and give practical insights gained from recent case studies are: "The balanced scorecard: Not just another fad" by Hanson, J and Towle, G., *Credit Union Executive Journal*, Jan/Feb 2000, Issue 1, pp. 12 – 16, and "Performance Drivers – A practical guide to using the Balanced Scorecard" by Ölve, N., Roy, J. and Wetter, M. John Wiley and Sons, 1999.

About the Business Excellence Model

The EFQM web site: <http://www.efqm.org> contains a wealth of documentation about the Business Excellence Model, including lists of training and consulting organisations that specialise in supporting its development. Two recent articles are also worth reading: "Are the Balanced Scorecard and the EFQM Excellence Model mutually exclusive or do they work together to bring added value to a company?" by Lamotte, G. and Carter, G. EFQM, 1999, and "Taking a critical perspective to the European Business Excellence Model using a balanced scorecard approach: a case study in the service sector" by McAdam, R. and O'Neil E. in *Managing Service Quality*, Vol. 9, No. 3, pp. 191 – 197 (1999).

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.