Measuring Business Excellence

Performance measurement tools: the Balanced Scorecard and the EFQM Excellence Model

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Abstract *Performance improvement is high on the agenda of many companies around the world and with the growing number of improvement models now available care has to be taken to adopt an approach that will yield the most attractive return on investment. This paper compares and contrasts two widely known and well-publicized improvement models: Kaplan and Norton's Balanced Scorecard and the EFQM Excellence Model. Each consists of a non-prescriptive template offering managers a relatively small number of categories of key performance metrics to focus on. Here, they are examined from a critical perspective with regard to five central issues represented by five questions relating to objectives, strategies and plans, target setting, reward structures and information feedback loops. The analysis conducted reveals that despite having some significant differences both approaches seem to be developed from similar concepts. The paper concludes that it is difficult to find a perfect match between a company and a performance measurement framework and that further research should concentrate on how to implement strategic performance frameworks effectively in specific types of organization.*

Keywords *Balanced Scorecard, EFQM Excellence Model, Management, Performance measurement, Continuous improvement.*

Introduction

Over the past decade, a rapid increase in global competition brought about by technological change and product variety proliferation has accentuated the role of continuous performance improvement as a strategic and competitive requirement in many organizations world-wide. Nowadays, in order for organizations to maintain and improve their competitive advantages, performance measures are widely used to evaluate, control and improve business processes (Ghalayini and Noble, 1996). However, recent studies indicate that traditional performance measures, based on management accounting systems, are inappropriate. For instance, Ghalayini and Noble (1996) identified eight general limitations of traditional performance measures, which are: they are based on a traditional cost management system; use lagging metrics; are not incorporated into strategy; are difficult to implement in practice and tend to be inflexible and fragmented; contradict accepted continuous improvement thinking; and neglect customer requirements. They also identified some limitations related to traditional manufacturing management and its strong focus on increasing productivity, reducing cost and increasing profit, which may somehow detract attention from improving quality, reliability and delivery, and establishing short lead time, flexible capacity and efficient capital deployment.

As a result of the limitations of traditional performance measures, the characteristics of emerging (non-traditional) performance measures have been discussed in the literature (Dixon *et al*., 1990; Maskell, 1992). These characteristics are mainly related to company strategy and primarily based on non-financial measures. As a result, various integrated and multi-dimensional performance measurement systems have been developed and according to Ghalayini and Noble (1996) a revolution in performance measurement has been underway since the late 1980s. The new performance measurement systems can be grouped into distinct categories: those which emphasize self-assessment, e.g. the Deming Prize (Japan and Asia) (see http://www.deming.org/), the Baldridge Award (USA) (see http://www.quality.nist.gov/), the European Foundation for Quality Management Award using the EFQM Excellence Model (Europe) (see http://www.efqm.org/); and those designed to help managers measure and improve business processes, e.g., Capability Maturity Matrices (Crosby, 1980; Software Engineering Institute see http://www.sei.cmu.edu\cmm\), the Performance Pyramid (McNair *et al.*, 1990), the Effective Progress and Performance Measurement (EP^2M) (Adams and Roberts, 1993), and the Balanced Scorecard framework (Kaplan and Norton, 1992).

A common theme in the newer integrated performance models or frameworks has been a determined attempt to tie performance metrics more closely to a firm's strategy and long-term vision. Two of the more comprehensive frameworks, the Balanced Scorecard and the EFQM Excellence Model have received wide publicity and have recently been adopted by many organizations worldwide, particularly in Europe and the USA.

This article aims to examine the similarities and differences between the EFQM Excellence Model and the Balanced Scorecard. Both techniques are examined from a critical perspective that highlights five main sets of issues[1] which Otley (1999) states need to be addressed in developing a framework for managing organizational performance. The rest of this article is divided into three major sections. The first section provides a brief history and description of the concepts and design of each framework. The second section presents the comparison between them. The final section highlights the major benefits and drawbacks of both frameworks and provides some direction for future research.

EFQM Excellence Model

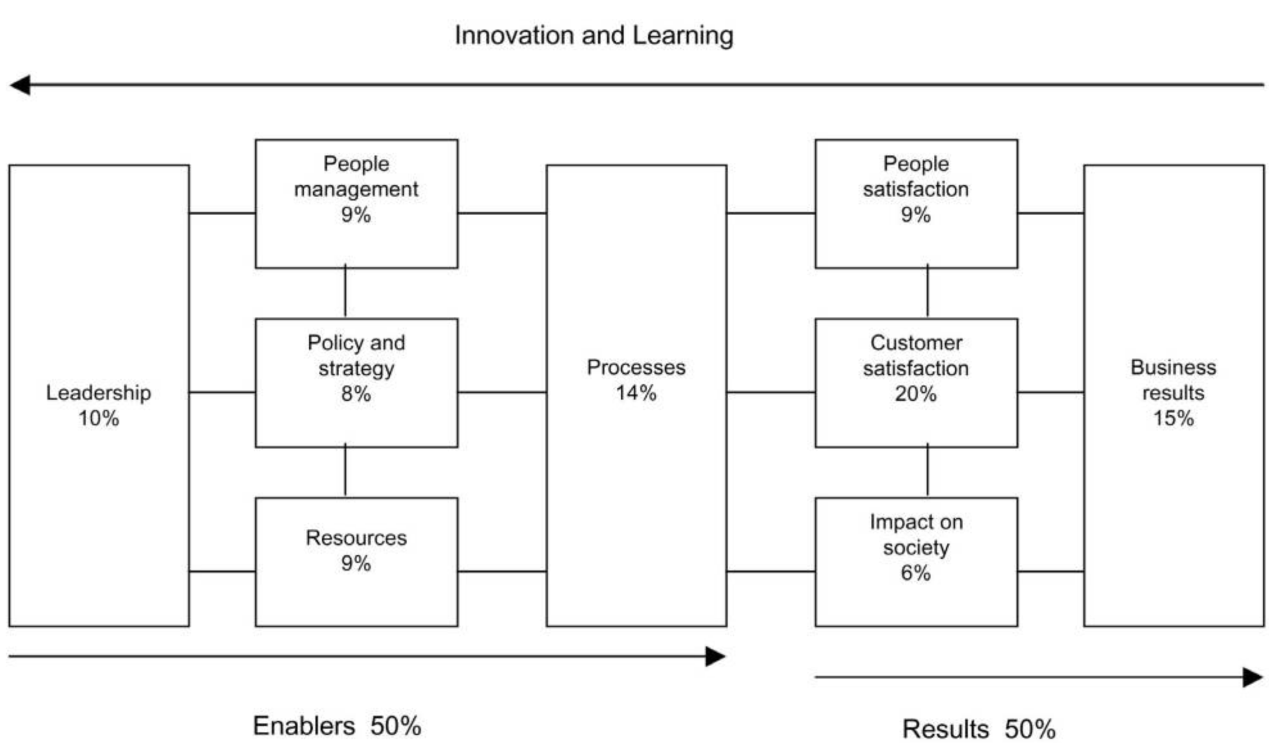
By the early 1980s, there had been an increasing concern about a lack of quality, productivity, and competitiveness in a dynamic world market leading to recognition of the need for a national award in the USA (Olve and Wetter, 1999). The Malcolm Baldridge National Quality Award (MBNQA) was established on 20 August 1987 in the USA with a basic structure of seven categories for self-assessment (Kaplan and Norton, 1992; Olve and Wetter, 1999). In 1988, the European Foundation for Quality Management (EFQM) was founded by 14 major European companies, with the endorsement of the European Commission. This was followed in 1992 by the first EFQM, European Quality Award (EQA). These awards are presented to companies that demonstrate excellence in the management of quality as their fundamental process for continuous improvement (Shergold and Reed, 1996). Furthermore, in early 1992, the United Kingdom Quality Award (UKQA) committee was established with similar aims emphasizing improvement of product quality and productivity through self-assessment. The UKQA have been granted on an annual basis since 1994 (Porter *et al.*, 1998; see also http://www.efqm.org).

Winners of the European quality awards and other national quality awards are regularly verified using reference criteria which allow the organizations to identify their strengths and improve their opportunities. The European Quality Award criteria are based on the EFQM Excellence Model that places emphasis on self-assessment and improvement planning. Figure 1 shows the scoring guideline for the EFQM Excellence Model assessment. The Excellence Model is now in widespread use in many organizations. Companies such as Rank Xerox, ICL, Rover, BT, The Post Office (Royal Mail), TNT Express and Glaxo have applied the model to help better understand their organizations and to identify what they need to focus on to achieve business excellence (Lascelles and Peacock, 1996). Moreover, many countries in Europe have now based their national quality awards on the excellence framework and criteria (Porter *et al.*, 1998).

Concepts of the EFQM Excellence Model

The specific purpose of the EFQM Excellence Model is to provide a systems perspective for understanding performance management. The Excellence Model is a non-prescriptive framework based on nine criteria reflecting validated, leading-edge management practices as shown in Figure 1 (Porter *et al.*, 1998). With their acceptance nationally and internationally as the model for performance excellence,

Figure 1 The EFQM Excellence Model



Source: EFQM. The EFQM Excellence Model is a registered trademark the criteria represent a common language for communicating and sharing best practices among organizations. Five of the criteria cover what an organization can manipulate, called ''Enablers''; while the other four represent what an organization will achieve, named ''Results''. Due to the non-prescriptive approach of the model, there are many ways of carrying out excellent quality management and self-assessment. The model itself contains no detailed instructions for its use, although all nine criteria must be considered in the award assessment process. These nine model criteria are listed and briefly described as follows:

''Enabler'' criteria

- *Leadership*: relates to the behavior of the executive team and all other managers in as much as how leaders develop and clarify a statement of vision that proposes total quality and continuous improvement in which the organization and its people can achieve.
- *People management*: regards how the organization handles its employees and how it develops the knowledge and full potential of its people to improve its business processes and/or services continuously.
- *Policy and strategy*: reviews the organization's mission, values, vision and strategic direction; how the organization implements its vision and mission via the concept of total quality and continuous improvement.
- *Resources*: refers to how the organization manages and utilizes its external partnerships and internal resources effectively in order to carry out effective business performance as stated in its mission and strategic planning.
- *Processes*: concerns how the organization designs, manages and improves its activities and processes in order to satisfy its customers and other stakeholders.

''Result'' criteria

- *People satisfaction*: investigates what the organization is achieving in relation to its employees.
- *Customer satisfaction*: measures what the organization is fulfilling in relation to its targeted customers.
- *Impact on society*: concerns what the organization is achieving in satisfying the needs and expectations of local, national and international society as appropriate.
- *Business results*: examines what the organization is achieving in relation to its planned business performance and in satisfying the needs of its shareholders.

The percentage given in each box in Figure 1 identifies the proportion of each criterion in the award assessment system of the EQA. In the scoring system of the award assessment, each of the *Enabler* criteria is scored on the basis of the combination of two factors: (1) the degree of excellence of the approach, and (2) the degree of deployment of the approach. Similarly, each of the *Result* criteria is examined and scored on the basis of the combination of two factors: (1) the degree of excellence of the results, and (2) the scope of the results (Lascelles and Peacock, 1996). The key document in the scoring process is the ''blue card'' – named by its color – which represents a set of guidelines to assist in assessing the capability of each candidate. Besides being the award assessment framework, the EFQM Excellence Model associated with its percentages has been used in a wide range of commercial organizations, especially in Europe, to carry out both self-assessment and continuous improvement. In the European/UK quality award process, there are seven sequential activities which form a flow chart of core assessment activities as shown in Figure 2.

The Balanced Scorecard

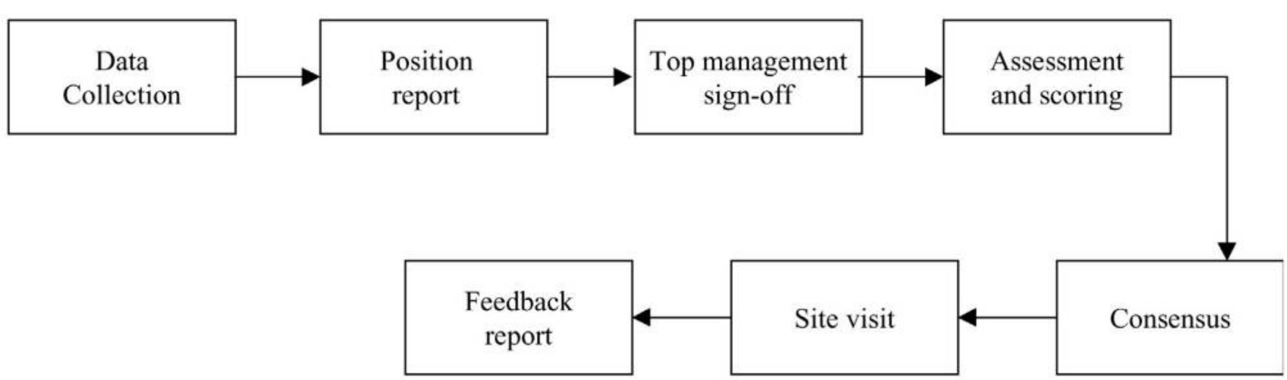
In early 1990, the Nolan Norton Institute, the research arm of KPMG, sponsored a study in ''Measuring performance in the organisation of the future''. David Norton, CEO of Nolan Norton, served as the study leader and Robert Kaplan as an academic consultant. After a year long research program with 12 companies, the study group came out with a comprehensive framework, named the ''Balanced Scorecard'', in which an organization's mission and strategic objectives can be translated into a set of performance measures (Kaplan and Norton, 1996a).

The aim of the Balanced Scorecard framework is to give managers a comprehensive view of the business and allow them to focus on the critical areas, driving the organization's strategy forward. The Balanced Scorecard retains a highlight on financial objectives as a gauge for identifying how the system is performing (Kaplan and Norton, 1992; Kaplan and Norton, 1996a). For a number of years there have been numerous large organizations that have used the Balanced Scorecard or other models resembling scorecards as a method of performance measurement and as a performance driver, for example, ABB, Halifax, Skandia, Electrolux, British Airways and Coca-Cola Beverage Sweden (Olve and Wetter, 1999).

The concepts of the Balanced Scorecard

The purpose of the Balanced Scorecard is to help communicate and implement an organization's strategy. Hence, the Balanced Scorecard is a framework containing a set of financial and non-financial measures chosen to aid a company in implementing its key success factors, which are defined in the company's strategic vision. To counter the traditional emphasis on the implicit short-termism of profit, a financial aspect, Kaplan and Norton (1992) introduced three additional measurement categories that highlight non-financial aspects. These are customer satisfaction, internal business process, and learning and growth. Kaplan and Norton think of these three additional categories as sets of measures of the firm's drivers of future performance, whereas the financial perspective represents the past performance. The Balanced Scorecard framework includes four major perspectives: (1) financial, (2) customer, (3) internal

Figure 2 Generic core assessment activities



Source: Lascelles, D. and Peacock, R. *Quality in Action: Self-Assessment for Business Excellence*, page 32, 1996. Reproduced with permission business process, and (4) learning and growth. However, Kaplan and Norton (1993) reported in a *Harvard Business Review* article that each company requires developing its own performance scorecard (containing a set of measures) suited to improving its business performance as judged by its own stakeholders:

> The Balanced Scorecard is not a template that can be applied to businesses in general or even industry-wide. Different market situations, product strategies and competitive environments require different scorecards. Business units devise customized scorecards to fit their mission, strategy, technology and culture. In fact, a critical test of a scorecard's success is its transparency: from 15 to 20 scorecard measures, an observer should be able to see through to the business unit's competitive strategy. *Kaplan and Norton (1993)*

This means that an organization can have more or less than three additional categories since each of the additional categories is derived from the firm's key performance drivers.

The Balanced Scorecard emphasizes that financial and non-financial measures must be a part of the information system for employees at all levels of the organization. The scorecard should translate the business unit's mission and strategy into tangible objectives and measures. Moreover, these measures are balanced not only between external measures (shareholders and customers) and internal measures (critical business process, innovation, and learning and growth) but also between the result measures (outcomes) and driver measures (measures for future improvement). The scorecard uses measures to communicate and to inform employees about the drivers of current and future success (Kaplan and Norton, 1996a).

A major strength of the Balanced Scorecard is the emphasis that it places on linking performance measures with business unit strategy. Kaplan and Norton (1996b) also introduced a framework to link the scorecard with the management of strategy, the so-called ''strategic framework for action''. It consists of four specific processes as follows.

1. Clarify and translate vision and strategy.
2. Communicate and link strategic objectives and measures.
3. Plan, set targets, and align strategic initiatives.
4. Enhance strategic feedback and learning.

As mentioned before, the Balanced Scorecard has been adopted by many companies worldwide; therefore there are numerous normative and empirical studies of its implementation in the literature. Examples of some interesting studies include: Butler, *et al.* (1997) bring out a successful case of an adaptation of the Balanced Scorecard in Rexam Custom Europe (RCE), part of Rexam plc, USA; case studies of Mobil (NAM&R), Cigna property and assurances and Skandia insurance are developed by Kaplan and Norton (2000); Hasan and Tibbits (2000) report about an adaptation of the Balanced Scorecard in electronic commerce (e-commerce); and case study of series of errors in implementation of Evergreen Software developed by Chandrasekhar *et al.* (1999).

Similarities and differences between the EFQM Excellence Model and the Balanced Scorecard

As stated previously, the intention of this article is to critique the EFQM Excellence Model and the Balanced Scorecard on the basis of the key sets of issues expressed by Otley (1999). These issues are represented by the following five questions:

1. What are the key objectives that are central to the organization's overall future success, and how does it go about evaluating its achievement for each of these objectives?
2. What strategies and plans has the organization adopted and what are the processes and activities that it has decided will be required for it to successfully implement these? How does it assess and measure the performance of these activities?
3. What level of performance does the organization need to achieve in each of the areas defined in the above two questions, and how does it go about setting appropriate performance targets for them?
4. What rewards will managers (and other employees) gain by achieving these performance targets (or, conversely, what penalties will they suffer by failing to achieve them)?
5. What are the information flows (feedback and feed-forward loops) that are necessary to enable the organization to learn from its experience, and to adapt its current behavior in the light of that experience? *Otley (1999)*

The first question is about the definition of goals and the measurement of goal congruence in terms of the financial aspect and also in terms of satisfying all the stakeholders. The second is related to the formulation and implementation of plans. After the visionary goals are stated in the first step, executives, managers and administrators should illustrate the plan of how to attain the corporate goals as well as how to deploy the strategy throughout the organization. The third question relates to target setting and has the aim of increasing goal attainment and reducing resource consumption. Setting a level of target performance is usually associated with benchmarking and provides an opportunity to compare company performance levels with others engaged in similar operations. Motivation and incentives are the main concern of the fourth question. Although prizes and rewards are often associated with short-termism, financial incentive schemes, i.e. committing an explicit financial reward (either in salary increases or one-off bonus payments) is considered the best motivational instrument for improving the performance of human resources. The last question concerns using information, i.e. feedback and feed-forward, to support and coordinate the process of making decisions and taking action throughout the organization. Feedback, information on actual operations, is used to evaluate that current operations either meet the pre-set targets or is used to signal a need for corrective action (Harrison and Shirom, 1998). On the other hand, feed-forward information is used to diagnose and predict a corrective action before adverse processes happen.

The remainder of the paper uses Otley's five questions to analyze and compare the EFQM Excellence Model and the Balanced Scorecard, drawing attention to the similarities and differences between these popular performance measurement techniques.

EFQM Excellence Model

The EFQM Excellence Model has been created with the aim of being the reference model supporting the European Quality Award. The basis of the Excellence Model is the principle of total quality management (TQM). However, although some organizations do not intend to win the award, top management and managers have applied the nine criteria of the Excellence Model to carry out self-assessment, which enables them fully to understand their organizational position and then use this benchmark data to pursue continuous improvement. There are several approaches to self-assessment, many of which are described in the EFQM self-assessment guide (The European Foundation for Quality Management, 1996).

To answer the first question, as mentioned before, the Excellence Model was originally created to provide assistance to management on how to change their organizations using total quality concepts which not only help managers increase the effectiveness of their decision-making and leadership capabilities but also enables managers to know where to focus their change initiatives for maximum impact on stakeholder satisfaction (Lascelles and Peacock, 1996). In other words, the Excellence Model can facilitate organizations to assess themselves against the nine criteria of the model, first to understand their current position and then to use this benchmark to pursue continuous improvement. In addition, the four *Result* criteria – people satisfaction, customer satisfaction, impact to society, and business results – appear to represent four performance objectives that the organization needs to achieve for future success.

The Excellence Model does not give any suggestion on what strategies or plans should be adopted in order to achieve continuous improvement, thus question two is not directly addressed. The EFQM Excellence Model simply provides guidance about what areas will be examined under the European Quality Award scoring system. The 2001 European Quality Award official brochure (The European Foundation for Quality Management, 2000) not only provides nine weighted criteria, but also gives more details of weighted sub-criteria for each criterion. There is no plan or strategy given to enable managers to manage and control their organization successfully. However, numerous articles in the quality management literature support the view that the EFQM Excellence template can provide a vehicle for achieving continuous improvement.

EFQM Excellence Model

Regarding target setting in question three, the excellence model does not directly mention target performance. However, according to the assessment, the four *Result* criteria will provide the scores of how well the *Enabler* criteria perform. Even though the excellence model approach pays particular attention to participants (Camison, 1996), it can also be used as a generic performance measurement framework using a self-assessment approach, e.g., an award simulation of which the target score can be set for each criterion and sub-criterion. In particular ''assessment and scoring'' activities of the seven sequential core assessment activities (Figure 2) confirm that the organization's position has been evaluated by a team of assessors. Managers realize their own score from the feedback report and a desired score can be established and addressed for the next assessment.

The EFQM Excellence Model has both people management and people satisfaction *Enabler* and *Result* criteria respectively. The fourth question (regarding reward structure) was not addressed in the model before 1999. However, the most recent, 1999 version of the EFQM Excellence Model, used to judge The European Quality Award 2001 (The European Foundation for Quality Management, 2000) lists *''people are rewarded, recognized and cared for''* as a part of the award assessment. This means that this specific area, reward structure, has now been recognized. It should be pointed out that the original TQM principles of Deming (1986) are strongly negative towards pay incentives. They also disagree with performance appraisal and management-by-objectives (MBO) (Wilkinson *et al.*, 1998). In particular, Deming's hypothesis does not focus on the management of individual performance; his hypothesis only focuses on improving system performance. However, in the 1990s, HRM researchers and practitioners have tended to concentrate on the individual rather than on systemic determinants of performance; they also suggest that individual commitment is necessary for continuous improvement (Wilkinson *et al.*, 1998).

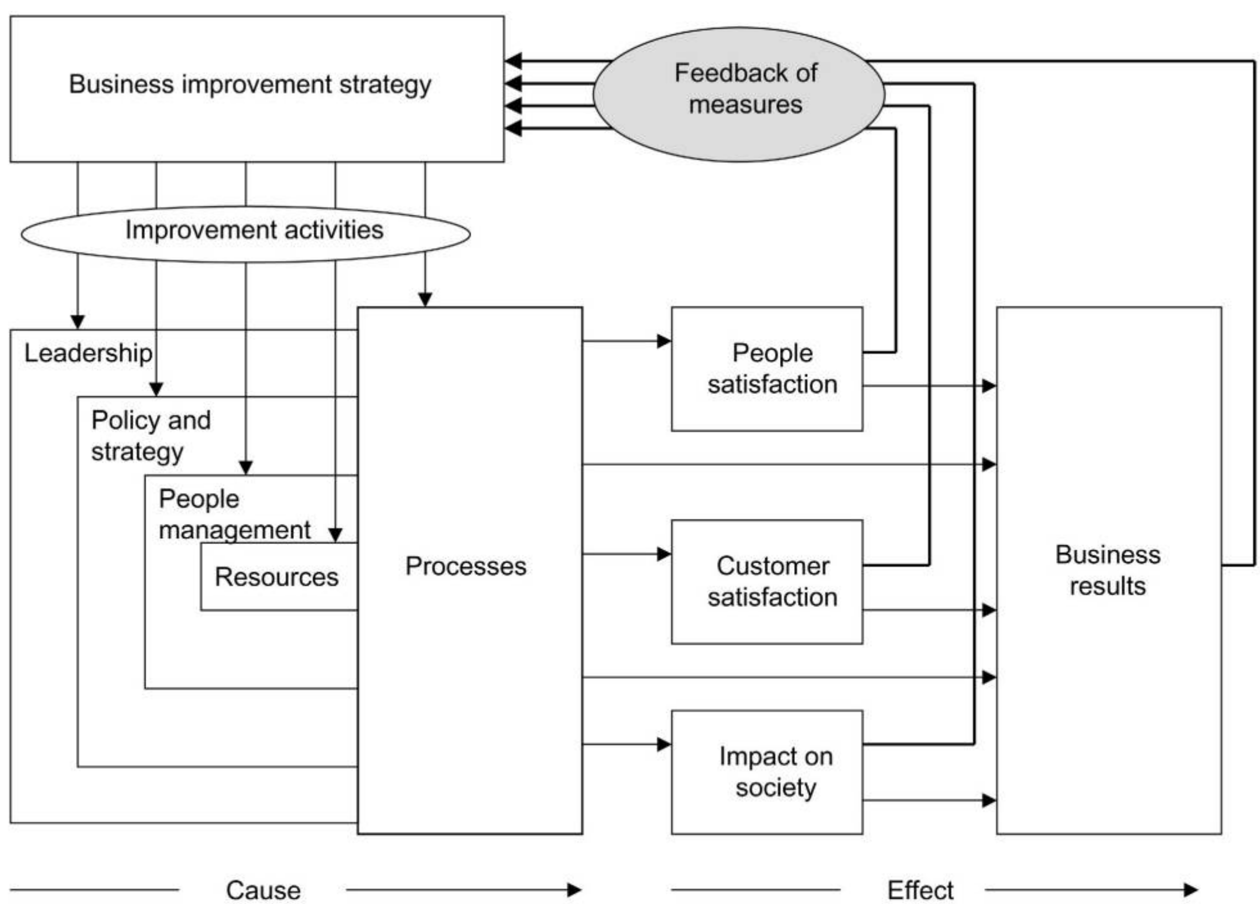
Finally, information flow is a part of the EFQM Excellence Model. The four *Result* criteria (see Figure 1) are considered as major feedback information flows. More precisely, Lascelles and Peacock (1996) provide a diagram showing feedback information flows from the *Result* criteria to the *Enabler* criteria in the Excellence Model. This diagram is illustrated in Figure 3 below. In other words, the causes of the four *Result* criteria need to be identified, quantified, and prioritized in order to enable managers to perform appropriate actions.

The Balanced Scorecard

The Balanced Scorecard approach has been developed with the goal of linking the business unit strategy to the performance measures selected. This seems to be considered as a major part of developing a consistent performance measurement system. Dixon, *et al.* (1990) address the relationships between strategy, actions, and measures in effective organizations, which tend to have complete conformance in each of these three areas.

In terms of the first of Otley's five main issues described earlier, the question of key performance objectives is difficult to pin down precisely because the BSC framework

Figure 3 Business improvement performance feedback



Source: Adapted from Lascelles, D. and Peacock, R. *Quality in Action: Self-Assessment for Business Excellence*, page 110, 1996. Reproduced with permission mentions only four generic performance areas and each company is required to develop its own performance scorecard (containing a set of measures) suited to improving its business performance as judged by its stakeholders (Kaplan and Norton, 1993). The implication seems to be that for the first of Otley's questions, the Balanced Scorecard approach has multiple key performance objectives depending on the organization's strategy.

Although the Balanced Scorecard approach mainly emphasizes how to link a firm's strategy with its performance measures, there are only vague details given concerning how to select the performance metrics to be placed in the scorecard boxes. However, Kaplan and Norton (2000) have developed a strategy map, which is a generic architecture for describing a strategy to the scorecard measures in each perspective. To implement a ''strategy map'', the desired outcomes from the corporate vision and strategy are embedded in a chain of cause-and-effect logic intended to lead to the identification of all the scorecard measures.

Goal setting is not addressed in the Balanced Scorecard approach; the scorecard is a non-prescriptive template. This means that the users can develop a template to suit their own situations; different functional areas require different measures and also a different level of performance targets. It seems that managers need to set their own suite of goals or targets for all the performance measures addressed in each individual scorecard box. However, cause-and-effect logic in the strategy map (Kaplan and Norton, 2000) should be a useful guideline for managers to identify what performance level to aim for to deliver the strategic outcomes required.

Reward structures have been little mentioned in the Balanced Scorecard literature so far, although aligning individual goals with the corporate strategy is considered as an important step of how to implement the Balanced Scorecard. Kaplan and Norton (1996a) have only mentioned that there should be a link between the Balanced Scorecard measures and incentive compensation. They do not agree with the traditional compensation formula which assigns weights to each objective and calculates incentive compensation by the extent to which each weighted objective was achieved. They also say:

> A better approach would be to establish minimum threshold levels for a critical subset of the strategic measures. Individuals would earn no incentive compensation if performance in a given period fell short of any threshold. This requirement should motivate people to achieve. *Kaplan and Norton (1996a)*

Kaplan and Norton (1996b) also suggest that providing incentive compensation to teams or individuals may cause the implementation of long-term strategy to fail because teams and individuals within departments may turn their goals to concentrate on how to achieve short-term and tactical goals instead.

Another important feature of the Balanced Scorecard is the explicit need for ''double-loop'' learning in the strategic process. ''Single-loop'' or ordinary feedback information has been considered as insufficient and an inadequate information flow for handling the strategic feedback information under today's competitive environment. Kaplan and Norton (1996b) suggest:

> Organizations need the capacity for double-loop learning, the learning that occurs when managers question their assumptions and reflect on whether the theory under which they were operating is still consistent with current evidence, observations, and experience. *Kaplan and Norton (1996b)*

This confirms that the Balanced Scorecard is a dynamic tool, the contents of which will change over time as strategies develop and key performance drivers change. However, there is still little guidance on how to manage the double-loop learning process in the scorecard literature.

Discussion

The above analysis attempts to compare similarities and differences between two popular performance measurement models – the Balanced Scorecard and the EFQM Excellence Model – by considering five central areas of management control systems. An overall summary is given in Table I. The analysis has shown that neither approach gives a clear answer for each of Otley's questions. This does not mean that both models are insufficient or inconsistent to enable organizations to adopt a process of continuous improvement. It is important to notice that both models provide broad and non-prescriptive templates, which mean management can assign their own measures to suit their corporate situations and environment. This means both approaches are flexible. As Kaplan and Norton (1993) mention, no prescriptive template can be applied to businesses in general or even industry-wide; each business unit must devise customized measures to fit their mission, strategy, technology and culture.

Both models contain several key objectives focused on specific areas, i.e. the nine criteria of the Excellence Model and the four generic perspectives of the Balanced Scorecard. The EFQM Excellence Model does not address plans or strategies for organizations wishing to implement the model for a successful award assessment or to achieve continuous improvement through the self-assessment. On the other hand, the Balanced Scorecard approach provides a ''strategy map'', which has been created to help managers establish a cause-and-effect logic mapping between the measures and strategy outcomes. Neither approach requires managers or users to set target performance levels; perhaps these models can serve as non-prescriptive

Table I Comparison between the Balanced Scorecard and the EFQM Excellence Model using Otley's five questions of management control systems (Otley, 1999)

Question	*Excellence Model*	*Balanced Scorecard*
1. Objectives	Multiple objectives based on TQM principles, and emphasises nine areas: – leadership; – people management; – policy and strategy implementation; – resource management; – process management; – people satisfaction; – customer satisfaction; – impact on society; and – business results.	Multiple objectives based on strategy, and emphasise four generic areas: – financial; – customer; – internal business processes; and – innovation and learning.
2. Strategies and plans	Not particularly addressed, but all weighted criteria and weighted sub-criteria can be used as guidance.	Assign strategic measures. Uses ''strategy map'' to connect each measure to strategy.
3. Targets	None specific. Management can set their expected performance levels.	Not addressed. Due to non-prescriptive template, managers are required to assign target performance levels.
4. Rewards	Requires an appropriate reward and recognition system, but no explicit guidance given.	Suggests that individual compensation system should be linked to strategic measures.
5. Feedback	Not mentioned. However, the model itself provides feedback information as a default of the assessment method.	Requires double-loop learning which is more complicated than single-loop feedback.

frameworks giving users a convenient tool to help set their own target performance levels. However, both approaches do require organizations to give an incentive compensation, although they seem to provide scant detail for the successful linking of the reward system to the performance measurement system. Only the scorecard approach suggests that the incentive compensation should be linked to the strategic measures. Concerning feedback, both approaches regard feeding back information after an assessment as important, however, the Balanced Scorecard approach requires ''double-loop'' learning to be applied for handling the strategic feedback information.

After considering five areas of management control systems, it is evident that both approaches – the Balanced Scorecard and the EFQM Excellence Model – are quite similar. The only major difference is that key objectives in the Excellence Model are assigned based on the TQM principles whereas in the scorecard approach, the key objectives are based on the desired corporate strategy. At this point, the Balanced Scorecard is considered more flexible than the excellence model. For example, management can use the Balanced Scorecard approach to measure a business unit by setting TQM principles as a business unit strategy. Lascelles and Peacock (1996) have studied the Balanced Scorecard approach from TQM principles. They suggest using the scorecard to facilitate progress in the *Result* criteria of the Excellence Model, i.e. people satisfaction, customer satisfaction, impact on society, and business results. An example of a Balanced Scorecard based on the *Result* criteria of the EFQM Excellence Model is shown in Figure 4.

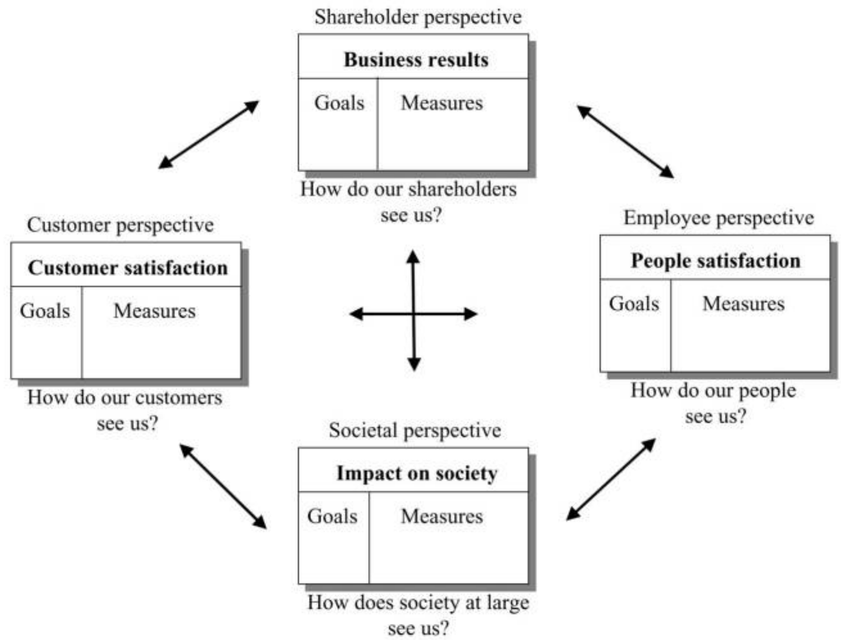
In practice, few attempts have been made to apply the Balanced Scorecard to the EFQM Excellence Model. Examples include British Telecom (BT), NatWest Life (National Westminster Life Assurance, NWL), and European Communications (Olve and Wetter, 1999; The European Foundation for Quality Management, 1999). NWL has been using the Balanced Scorecard since 1992, and later on, the executive team were attracted to the EFQM Excellence Model which enables the company to benchmark its performance against the best practices of other companies throughout the UK and Europe. The linkages between the vision, the scorecard and the excellence model have been developed as shown in Table II. NWL also combines these linkages to its vision as shown in Figure 5.

British Telecom (BT) has applied the Balanced Scorecard to the EFQM Excellence Model in the same way; the company uses the scorecard to their strategic business planning processes whereas the excellence model is regarded as a tool for assessing its entire business (see Figure 6). In addition, the scorecard approach is deployed at corporate, divisional, and business unit levels for both firms (Olve and Wetter, 1999; The European Foundation for Quality Management, 1999).

Table II EFQM's criteria in the Balanced Scorecard's perspectives (Olve and Wetter, 1999)

Financial perspective	*Customer perspective*
■ Business results	■ Customer satisfaction ■ Impact on society
Internal quality	*Organisational development*
■ Resources ■ Processes ■ Non-financial business results	■ Leadership ■ Policy and strategy ■ People management ■ People satisfaction

Figure 4 A Balanced Scorecard of Excellence Model

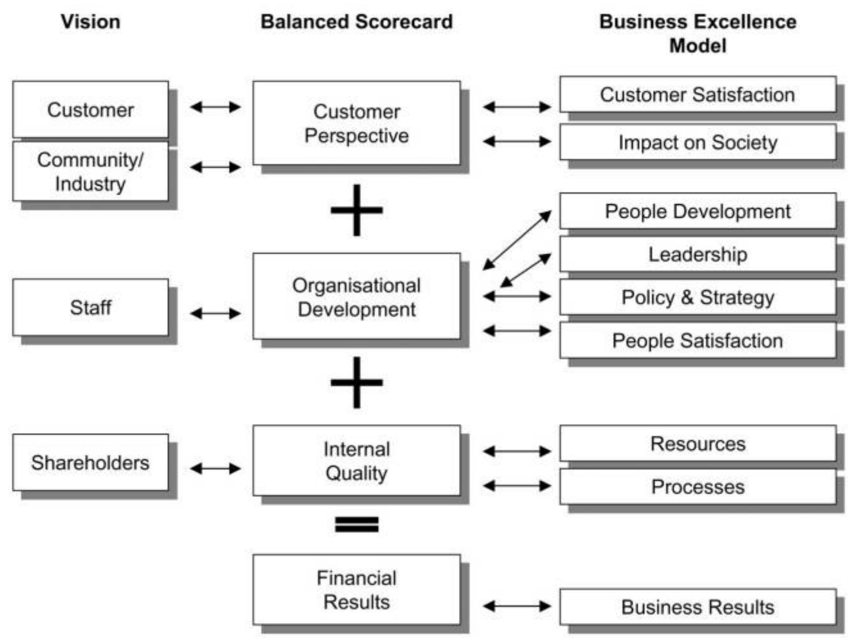


Source: Lascelles, D. and Peacock, R. *Quality in Action: Self-Assessment for Business Excellence*, page 111, 1996. Reproduced with permission

This review has shown that the Balanced Scorecard and the Excellence Model seem to be developed from similar concepts. In addition, since the Excellence Model is designed for use as an award assessment framework, it is rather broader (usually applied to an organization as one large framework) but more prescriptive (based on all key objectives and TQM principles). The Balanced Scorecard, on the other hand, is more flexible for application into a specific area or function of an organization. Both frameworks require the users to select the set of appropriate metrics to implement them. Both the Excellence Model and the Balanced Scorecard provide specific frameworks in which a company can establish a clear vision of its management processes and focus on improving its long-term performance.

Even though the literature, both academic and practitioner oriented, has suggested that the two approaches are very useful tools for improving the business performance and pursuing continuous improvement, this paper raises some questions for academic research. For instance, how do organizations actually apply these approaches in practice; how are they integrated into existing performance measurement systems; how can managers identify those key performance drivers from their corporate strategy; and, most importantly how do managers assign appropriate metrics to measure the drivers to be addressed? Both these performance measurement frameworks, the Balanced Scorecard framework and the EFQM Excellence Model, provide a checklist to help ensure that a more complete picture of the control systems in operation is observed. Nevertheless, the skills of management will be required to integrate these frameworks into the organization successfully. Due to the fundamental similarities of both frameworks, the authors suggest that the key success factor in applying them to an organization is linked to the question of how to select adequate measures, i.e. measures which incorporate business strategy and also motivate all employees to achieve strategic outcomes.

Figure 5 NWL's view of the linkages between vision, the Balanced Scorecard and the EFQM Excellence Model



Source: Olve, N. and Wetter, M. *Performance Drivers: A Practical Guide to Using the Balanced Scorecard*, page 161, 1999. John Wiley and Sons Limited. Reproduced with permission.

Conclusions

Five questions of management control systems relating to key objectives, strategies and plans, target setting, reward structures and information feedback loops, have been used to compare the EFQM Excellence Model with the Balanced Scorecard framework. The key comparisons between these two frameworks are summarized in Table I. This shows that both models have been formed from similar structures, although the EFQM Excellence Model supports TQM principles whereas the Balanced Scorecard emphasizes strategy alignment. A summary of the comparison is given below.

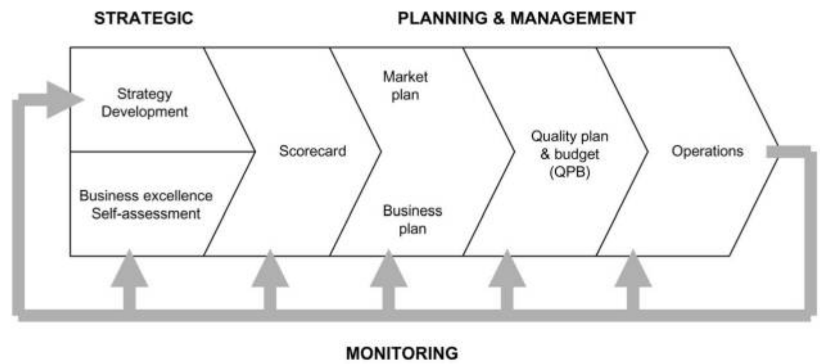
Similarities

- Both models are non-prescriptive templates.
- Specific improvement areas require managers to assign their own measures.
- No explicit methods for successful implementation.
- No specific targets for performance levels.
- Linked with reward and incentive systems.

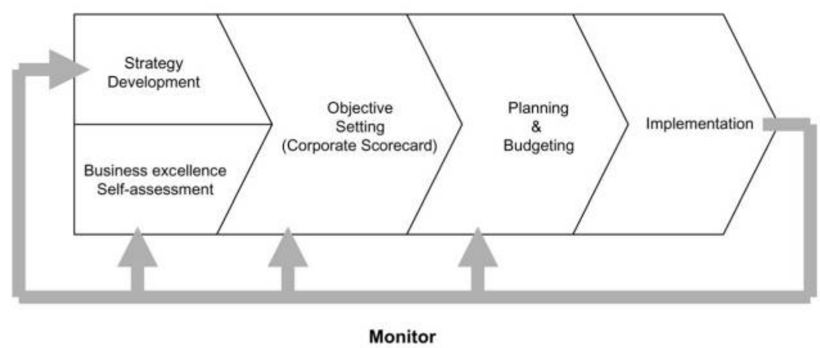
Differences:

- The Excellence Model supports TQM concepts; the Balanced Scorecard attempts to align corporate strategy with performance measures.
- Both models use different methods for information feedback.
- The Balanced Scorecard is more flexible than the Excellence Model.

Figure 6 Using the Balanced Scorecard approach in Strategic planning at BT and European Communications



Elements of the Strategic Planning and Management used at BT



The Strategic Business Planning used at European Communications

Source: Source: Adapted from Olve, N. and Wetter, M. *Performance Drivers: A Practical Guide to Using the Balanced Scorecard*, page 161, 1999. John Wiley and Sons Limited. Reproduced with permission, and The case study: European Communications S.A., page 17, EFQM. Reproduced with permission

Notwithstanding the similarities and differences between the EFQM Excellence Model and the Balanced Scorecard, a problem common to both frameworks is being able to integrate them into a business unit or a whole company. As a matter of fact, these strategic performance frameworks have been developed to give an overall view of companies' performance and to overcome limitations of traditional performance measurement systems. Practically, it is difficult to find a perfect match between a company and a performance measurement framework. Therefore it is recommended that research should concentrate on how to implement strategic performance frameworks effectively in specific types of organization.

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