
The role of the business excellence model in operational and strategic decision making

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Abstract

The aim of this paper is to determine current management thinking on how the business excellence model (BEM) is used within organisations. In many cases when organisational change models are applied in organisations the emphasis is on advocacy and implementation. There is a need to allow managers to play a role in critiquing these models which should lead to improved models and more informed application. This paper describes how a grounded theory research methodology is used to enable managers, who are applying the organisational change model known as the BEM, to develop their thinking in regard to the model. The main findings from the paper are, first, the clarification of the different aspects of the operational role of the BEM. Second, the managers found difficulty in attempting to use the model in a strategic manner despite the claims in the literature.

Introduction

There are benefits for organisations in using the European Foundation for Quality Management (EFQM) business excellence model (BEM) (EFQM, 2001) and the process itself, within specific contexts. The objective of this research is to further discuss and create constructive points for the development of management understanding and use of the BEM model so that potential organisational benefits can be fully realised.

The BEM and the other three major award models (the Baldrige, Deming and Australian) are each based on a perceived total quality management (TQM) model. This model does not exclusively focus on product or service perfection but consider a wide range of management activities developed by each of the relevant award organising bodies. The models are very similar in scoring procedures; the main differences are in the method of evaluation (Ghobadian and Woo, 1996, p. 11).

The principles behind these models have been used for a number of years, during which time a methodology has been built upon in terms of the weightings and the criteria. These models are used extensively throughout the world by leading companies and thus can be used for international benchmarking comparisons (Hendricks and Singhal, 1999). They have also helped TQM move beyond its stumbling block of some years ago of defining tangible and intangible benefits and conceptualising TQM in graphical manner (Tai and Przasnyski, 1999).

However, Garvin endows these models (The Baldrige Award or MBNQA) with a more elevated status. Garvin considered that the Baldrige Award was the "most important catalyst for transforming the American Business" and that it "more than any other initiative has reshaped management's thinking and behaviour" (Garvin, 1991, p. 80).

Juran, one of the Quality Gurus is also a supporter of the quality models and has discussed the rewards of the Baldrige Award (Juran, 1994, p. 48). More currently Kaye and Dyason (1999) and Savolainen (2000) support these views. However, opinion on the models amongst the gurus and current literature is divided. In Deming's final interview when discussing the MBNQA and companies striving for the award he was asked if the award process equated to a mission to improve quality. His response was:

no, nothing could be worse. The evil effect of the Baldrige guidelines on American business can never be measured (Stevens, 1994, p. 21).

Crosby stated that:

the Baldrige criteria have trivialised the quality crusade, perhaps beyond help. One day this do-it-yourself kit may be recognised as the cause of a permanent decline in product and service quality management (Simms *et al.*, 1991, p. 127).

Furthermore, McAdam and O'Neill (1999) question the dominance of the BEM and other quality models in TQM efforts. So with quality gurus and current literature divided on the issue of quality award models, what does the practitioner think of the models? Gallear *et al.* (2000) and Orr (1999) prompt a number of questions. Is the BEM used at corporate strategic level in the manner that the EFQM itself proposed it to be and assumes it to be? Why is the BEM used and what impact is it considered to have by practitioners when they take it on board? Managers of organisations need answers, or at least informed opinions on these issues, considering the vast sums of expenditure on business improvement initiatives. Anything that offers competitive advantage or improved use of vital resources must be scrutinised. Also, any clarification of these issues would add to improved understanding and clarification of research directions.

The aim of this paper is to determine current management thinking on how the BEM is used within organisations and to determine how organisations can increase



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the benefits of using the model. First, there is a brief critique of the model in regard to the management process. Second, the research methodology is described, followed by a discussion on the results in relation to operational and strategic management experience of the model.

Critique of the BEM and decision making

In regard to using quality models as the basis of a business or as a strategic model, Garvin (1991) points out (referring to the MBNQA) that it clearly omits marketing, organisational design and crucially strategic positioning. This view has also been expressed regarding the BEM. The:

EQA's [BEM] model has its shortcomings.

One may argue that key determinants of success (for example, innovation, strategic positioning, marketing penchant and R&D) are missing from the model. Despite possible flaws the model is useful. This is because it provides organisations with: an implementable total quality management model; a temporal or sectoral benchmarking tool; a self-assessment method; and a vehicle for sharing experience and good practices (Ghobadian and Woo, 1996, p. 16).

These and other issues such as organisational change, or the concepts of the learning organisation which are of such importance to the future of company development are not explicitly included in any of the four major quality awards. By considering the shortcomings of the models in this way, then the inherent flaw in labeling any model as a model of business or organisational excellence or as marketing it as guaranteeing success, is apparent.

Another way of illustrating the limitations of the award models is to consider the fact that the Baldrige model was considered to be the leading model until the EFQM adapted its key principles and incorporating field research produced the BEM. This model included the key element that the MBNQA did not have and which at the time caused the MBNQA such criticism, namely business results. The MBNQA then added this element. This avoided the problems of companies winning the award and then having financial difficulties such as in the infamous case of Florida Light and Power. More recently the issue of including innovation in such models has resulted in the MBNQA including it as an element. Now the Baldrige model is seen as the model to follow. The EFQM is expected to follow in this regard. Now the issue is where will innovation fit into the BEM. Is innovation really a "result" (where certain measures could be assigned) or is it actually a precept,

a prefix to the model itself, before leadership, policy and strategy, an enabler and creative driver of an organisation.

Thus, a company using the leading model, as the basis of its corporate strategic process would have had two groundbreaking readjustments to cope with in recent years. This point highlights the fact that neither the BEM nor any of the other quality award models are generic business models or corporate strategic blueprints for success. To put it simply they are in "no way a complete award for corporate excellence" (Garvin, 1991, p. 84); a sentiment echoed by Simms *et al.* (1992, p. 129).

Another undermining issue of the EFQM's role as a model for business or organisational excellence and a model for corporate strategy would be the fact that the BEM is updated every two years and so it is essentially one to two years out of date when used. The new BEM was launched in 2000. These changes come as the result of demand from its users (Quaglia, 1998). Although, not a part of a criterion, innovation (and learning) are included in the model structure to emphasise the link between organisational performance and leadership and its role throughout all criteria and the process of the models' application. However, many had expected this issue to be given more than a conceptual or philosophical role within the new BEM.

Naturally, it takes time for the information to be gathered in from the environment, analysis to take place, and decisions to be made as to how it is going to be used and impacted upon the model and eventually to be brought out via publications. However, if companies are using this as a leading edge model for strategic and dynamic purposes then they are actually somewhat dated.

Garvin described one of the models (the MBNQA) in the following manner: the best way to understand the Baldrige criteria is an audit framework, an encompassing set of categories that tells companies ... what they must demonstrate – but not how to proceed (Garvin, 1991, p. 82).

The model also provides an overview or: a big picture view from different angles ... a holistic approach (Quaglia, 1997).

Obviously such an approach can be used to advantage, as Shergold and Reed (1996) point out, in planning improvements. The EFQM itself considers that:

comparisons of business results ... should provoke analysis...and plans to achieve improvements (EFQM, 2001).

However, in the BEM the criteria concerned with policy and strategy do not focus on how effective is the corporate strategy or how dynamic is the strategy planning; rather it

considers how aspects of TQM have been incorporated in the strategic processes.

Within the context of planning it is evident that organisations are deliberating over the key processes and critical factors within their own organisations and then adapting the relevant aspects to the BEM. However, the BEM has provided for those that have not gone through such a process or consider the existing process or “plan headings” to be deficient with a structural model. Within this context it provides an organisational overview. However, it has also been shown that the BEM’s role is not primarily at a strategic level but rather at a tactical level, co-ordinating between the strategic goals and the activities, which will achieve them.

Research methodology

The key aim of the research is to determine current management thinking on how the business excellence model is used within organisations and to determine how organisations can increase the benefits of using the model. The following sections justify the choice of research methodology.

Deductive or inductive?

In some areas of the social sciences, existing deductive theory testing research methods do not completely capture the complexity of the context of organisational settings (Perry and Coote, 1994, p. 3). Wilkinson and Willmott (1996) state that there is a “paucity of systematic and rigorous evaluation” in many studies. Furthermore, they state the need for more theory grounded and contingency based research rather than solely deductive approaches.

A methodology which inquires more deeply into operational and strategy related events within the organisation is needed to enable a coherent and firmly founded set of total quality management and strategy theories to be elucidated. In this situation a phenomenological perspective is considered to be more appropriate: “appreciate the different constructions and meanings that people place upon their experience ... explain why people have different experiences, rather than search for external causes (Easterby-Smith *et al.*, 1993). This inductive approach is more consistent with the current exploratory study (Yin, 1994). With the inductive approach, the use of the interpretist approach in place of the deductive option is much more appropriate for the rich complex research issue of establishing theory from TQM and strategy based organisational practice. In this approach it is important to listen to practitioners (Terziowski *et al.*, 1996; Lewin

and Stephens, 1993). Also, to focus on meaning and reflection of the complex issues observed: “interpretist researchers see language as the means of communication in which there may be differences and nuances of meaning” (Allan, 1998, p. 91).

Grounded theory

One of the most useful and developed inductive research methods is that of grounded theory (Glaser and Strauss, 1967). In this methodology (Figure 1) the researcher starts with minimalist a priori constructs (i.e. the preceding brief discussion on TQM and strategy), inquires deeply into organisational behaviour and events and gradually tests and forms theoretical constructs (Leonard and McAdam, 2001). There is no prior need for hypothesis or research questions; these emerge throughout the research (Strauss and Corbin, 1990).

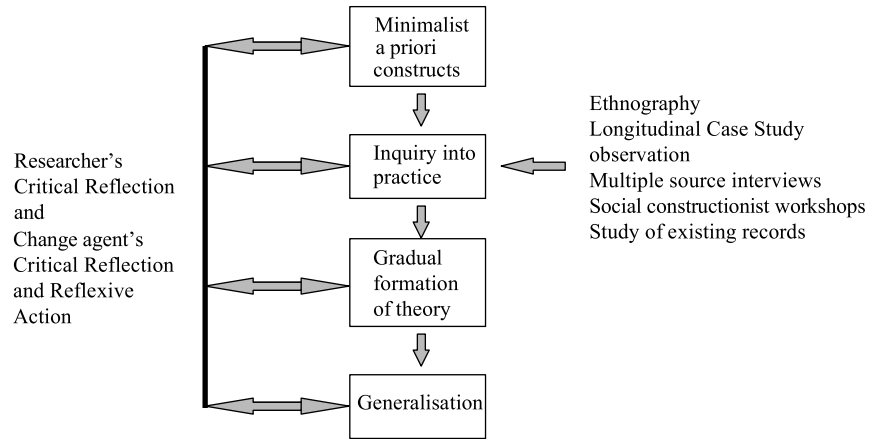
The “researcher being able to develop theory through comparative method ... looking at the same event or process in different settings or situations” (Easterby-Smith *et al.*, 1993, p. 35). Sitter *et al.* (1997) state that grounded theory uses abstract concepts to describe and analyse a series of general phenomena, but based on practical experience. It is this intrinsic link to practical experience that makes the method attractive to theory forming within the TQM and strategy discourse. Ropo and Hunt (1995) emphasise the recursive processual nature of grounded theory (see loops in Figure 1) which leads to interplay of organisational and individual characteristics across time and which is grounded in data.

Theory building by grounded theory capitalises on the rich practitioner based knowledge base of TQM and strategy. Sources of data can include TQM team meetings, interviews with TQM managers, TQM case studies, etc. (Perry and Coote, 1994). Strauss and Corbin (1990) show how such data can be gathered from “streams of research”. Grounded theory is a longitudinal research methodology, unlike many deductive approaches, which intrinsically rely on questionnaire data taken at a given point in time. Wolfgramm *et al.* (1998) describe grounded theory as inquiring into the “processual pattern of change at institutional, organisational and strategic level”.

Current study

For the current study, 19 organisations were selected for in-depth study using grounded theory methodology. These organisations were selected based on their involvement in TQM and strategy as evidenced by their use of the BEM (EFQM, 2001), participation in national quality awards. These organisations

Figure 1
 Generic grounded theory research methodology



Source: Strauss and Corbin (1990) and Leonard and McAdam (2001)

all had 500+ employees and had well-developed operational and strategic plans. The research was gathered using semi-structured interviews, ethnography (over a two-year period) and organisation information and archives. All the interviews were taped, transcribed and coded using grounded theory principles (Strauss and Corbin, 1990). The key categories within the data emerged when “saturation” was reached on key headings (Strauss and Corbin, 1990) through multiple replication across the cases. The key findings are summarised under the following main headings arising from the research.

Results and discussion

The BEM – a structured approach to business improvement

The most consistent message from the managers regarding the BEM was that it provides a framework and a co-ordinating basis from which an organisation can actually plug in various tools, techniques, improvement projects that are planned or underway in an organisation. These views are supported in the literature and indeed this is one of the less controversial issues regarding the models. It is therefore agreed that models such as the:

EQA [BEM] model, provide a pragmatic framework for dealing with the complexity and for probing the relationship between cause and effect (enablers and result), using self-assessment (Finn and Porter, 1994, p. 61).

However, the critical issues that led Crosby and Deming to dislike the models will become apparent and be discussed in more detail later. Initially the manager’s view of

the model’s “structured approach” to business improvement can be examined.

In describing the impact of the BEM one manager stated:

well, it gave us the starting block, it gave us a methodology to start and address some issues. Rather than just an idea rattling round the mind of the MD, this is the model, companies are using this, and we’re looking at this in the long term; we need to be looking at this model.

Another manager echoes this view, however, in place of “address some issues” expresses it as “a way of reviewing the business, it’s a way of hanging lots of concepts around, some people see how they link in together”.

The managers further stated that the model in this manner encourages:

structure and goal setting and structured achievement. Before it was saying which way is the wind blowing. Certainly those are some of the advantages we thought came with using the Baldrige and also from the actual EQM we see advantages there.

The BEM was used to introduce and develop quality.

We weren’t going the way we wanted, quality circles, no one really knew what they were doing ... The BEM was shown to what was then the Steering Committee to explain to people that ... this could improve all aspects of the job.

The managers have described the BEM as a framework that assists in providing a conceptual framework to overview the organisation and the “issues” through which business improvement can be structured. Also the managers have spoken about goal setting, issues and steps to quality and concepts. None has referred to markets, driving the company forward in strategic terms; the tone is very much of a non-strategic level. This last quote refers to

aspects of the job at a very operational perspective. Indeed three managers referred to the BEM as a framework where initiatives or activities certainly of a non-strategic nature and of a more tactical or operational nature were discussed.

This is underlined by the following manager:

It is something that has been taken on board as a structured approach to improvement and ... the, the buy-in, if you like, from director level is such that all directors are now trained BER [business excellence review] assessors.

So even though the BEM has been given support at board level it is from improvement purposes at operational rather than strategic level or rather with a strategic impact. This was clearly seen when one manager stated that:

it's fine, it's good, it's okay – it's good framework, it's just not what we are using as our driver for the business, so we were really just taking what we're doing and putting it into those contexts ... but I think it's a good model. I mean it's far more encompassing.

The BEM is used as a conceptual framework at senior management (strategic) level through which improvement initiatives can be co-ordinated and implemented in a structured manner. This has provided managers with a much needed framework to conceptually place the wide range of improvement tools, techniques and certified systems from ISO9000 to Investors in People to environmental standards. The BEM is also being used primarily for operational rather than for strategic purposes. This can be more clearly discussed later after the benefit of analysing the assessment and planning functions of the BEM.

A method of assessment and measurement

One of the BEM's roles is that of assessing and measuring the implementation and progress of improvement initiatives. This is closely linked with the "conceptual structure" when it is considered that it enforces upon the organisation the need to identify key factors by which the initiatives can be monitored and measured and this in itself requires a re-evaluation of the organisation and its processes. Once again the assessment and measurement referred to here is of initiatives and so is inherently of an operational nature:

strategies which probably sound good at high level if you're sitting in strategic headquarters but to the guy who's deploying them at area, or indeed unit level there's no clear direction, or linkage or ... rationale behind the whole thing ... if you're looking at a strategic direction I think we're just trying to define it a bit.

Thus the manager speaks of the potential difficulties of strategies being formed at strategic level in terms of goal setting which is difficult or impractical at operational level. What, in the case of this company, is emerging is a guideline from strategic level but also flexibility from operational level as to what exactly needs to be focused upon. This view highlights the fact that it is the operational level that is the real driver of the model in practice. This is illustrated once again in terms of measurement and assessment when the manager states that:

We now have a product which enables a unit of any size in our business to assess itself against the BEM. So you know, deploying it and making it real for people who will deliver improvement is key and we have an ongoing plan to deliver that to all units.

The use of the BEM as a method of "measurement and assessment" is one of the most important issues to the companies adopting the BEM and many have integrated this with existing recognition and quality management systems such as ISO9000 and its auditing. Regarding the BEM one manager stated:

Business review now looks like a European quality model [BEM] section 1-9 where we not only discuss key results. However, we actually discuss at our business review the enablers, what's going on there, so that when we hit the end of a year and we try and look at the numbers again we don't reflect on what we might have done.

Another key point here is the fact that the assessment helps to focus, on a monthly basis, (in this case) on performance and so highlight changes and acts as a monitor of the organisation. Again this would have links with planning and flexible management enabling rapid change in the changing environment. However, to what extent is this used strategically rather than simply from an operational or unit perspective?

The manager also makes a point about the dangers of measurement and in particular the scoring system of the BEM:

When you start assessment, self-assessment in departments, you'll be looking at scores because there's danger if you do that, managers are going to start creating scores here. I'm better than you. And I've a feeling at the moment that the right way to approach it is not to have a score.

The emphasis on the scores is evident in the following company:

We basically worked very closely with the BEM ... we would then be assessed on these attributes and would get a rating from 1-5; obviously we want a 7 but 5 is the highest that any CBU has in the UK at the minute.

With this company the scores seem to have gained precedent, of course there will be

inherent benefits if the scores are improving but it is interesting to see a scoring mentality forming.

Ultimately most companies see the model as an opportunity to assess itself and benchmark itself:

In terms of benchmarking the EFQM gives us a feel for what we are like compared to other companies ... It gave us some sort of marker as to where we were at ... However, it was giving us feedback to tell us how we could be better. This feedback was very important for us.

The last two managers have made a crucial point. Neither sees the BEM as anything other than a method for assessment and benchmarking.

In regard to the BEM's use in assessment and measurement, there is a divide. This divide is between those who see the BEM as nothing more than a tool by which the organisation can be measured on a regular basis and entry in an awards scheme and those who use the measurement ability to integrate existing systems of auditing and monitoring. Once again the operational rather than strategic emphasis is apparent. Measurement has been held at a departmental level as well as assessing the performance of individual initiatives. They held at a departmental level as well as assessing the performance of individual initiatives. The true extent of the BEM's influence at strategic level will become clear when the planning application of the model is evaluated.

A mechanism to structure and deliver planning: translating strategy at tactical level

The application of the BEM as a means to structure and plan improvement activities emerged from the data:

We have identified 12 key business processes, how those processes plug in to the BEM, where the main areas of correspondence are, so you know what levers you've got to pull to unlock improvements on the various criteria.

It is interesting to note here the way in which the 12 key business processes were identified independently and then merged into the BEM. Consistently the view is of the model as a mechanism by which structure or headings can be assigned to existing processes or plans. Again it is interesting to note that the BEM did not influence the structure of these, rather the structure was created initially by each organisation and merged with the BEM criteria. This is illustrated by the following quote:

I think what it does is ... it gives you some fairly concrete headings to think under ... I still haven't got around to putting the vision document under those headings. I'd like to

and when I do the HR plan for IIP that a lot of that will fit into place ... we've got the people but and quality but I would like us eventually to have the whole business plan under those headings.

This structure is linked with goal setting and achieving deliverables:

Certainly those are some of the advantages we thought came with using the Baldrige and also from the actual EFQM we see advantages there. It is a structured system that is based around investment plans and using the best formats.

The manager considers the BEM as:
a framework, its mechanism for doing strategic planning.

This speaks very much of a framework which provides an organisational overview to aid strategic planning which of course has strong links with the structuring of initiatives and assessment and measurement of the impact of those organisational activities. This is highlighted when one manager pointed out that:

the structure that very simple model lays out in terms of business results, allows the very top level to see where the impact on different sectors...That is the sort of ... strategic level. There is a very clear linkage between business results, where are we going, what are we delivering ... shareholders ... markets. Now that I believe is an indelible link to total quality as you then translate it into various sectors ... total quality.

This was echoed by another manager:

It is the means of translating the strategy into achievable activities.

These management experiences set the use of the BEM within this organisation at a tactical level, a position at which it co-ordinates and guides the initiatives and activities to fulfil the corporate strategy. Not all of the managers had a clear understanding of how the BEM was utilised at a strategic level, even when they were involved in the planning process. This can only speak of the lack of influence of the model:

I haven't actually been involved in the strategy but I do believe that they now use the European quality model [BEM] to help develop the strategy. There is total quality in there as well.

This is despite the fact that this manager was part of the management team that along with the managing director created the strategy:

On an annual basis the management team will go away for a weekend and develop a five-year plan. Basically the team looks at the strategic objectives as decreed by the board and establishes how we can achieve these objectives i.e. a strategic plan of how to implement the objectives set by the board.

This is as much a structured approach and measurement as it is strategic planning usage and it is interesting to see the term “structured thinking” emerging once again: Our strategic thinking ... if you look at the nine elements of the BEM and, you know, each of these, under your leadership, strategic thinking, if you were, if you were looking at where the industry, or where our business was going to be ... you know, you’re looking at a five year plan, possibly a ten year plan ... if we were strategically developing our business.

This was the only organisation that used the BEM not only to provide the overview of the organisation for its plans but also to be the only method of assigning key processes or issues within its organisational context for strategic purposes. This highlights very clearly the issues brought forward regarding the usage of the models in the literature and it also stands out from the practice of the other companies in this research.

A grounded model for BEM operational/strategic decision making

Three key layers emerged from the grounded research as shown by the grounded model in Figure 2. The layers are the organisational levels in which they are used, that is the strategic, tactical and operational applications. The tactical level is the fulcrum of the usage of the model in practice. This level represents the “strategic-operational divide” that is such an inherent part of the use of the model in practice. The grounded research shows how the BEM is used at each of these organisational levels – strategic, tactical and operational as summarised in the following paragraphs.

Strategic level

At the strategic level of an organisation the BEM was found to be used only to a limited extent. That extent is as a “conceptual framework for over-viewing the organisation” and so as a “tool for senior management” to perceive effectiveness of TQM related initiatives in the organisation. At strategic level the decisions are made as to what initiatives will be incorporated within the BEM allowing a visualisation of their positioning and impact within the organisation. However, the detail of such planning is not carried out at this level, rather it is delegated to the tactical level. The BEM was found to have no discernable impact on the formulation of the strategic plan or the corporate strategy. It is not viewed as a “strategic driver”.

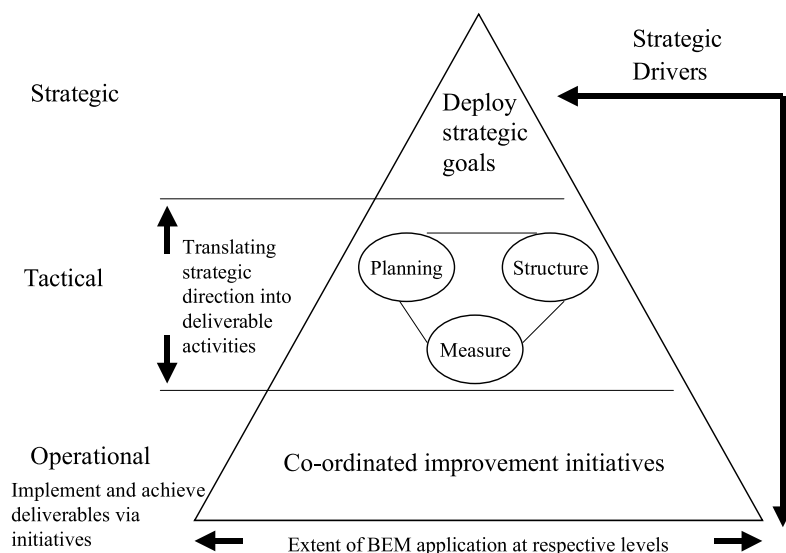
When the corporate strategy is confirmed and the strategic goals determined, these are deployed to the tactical level where the allocation and determination of how they can be achieved are planned.

Tactical level

It is at this level (Figure 2) that the co-ordinating and structured benefits of the BEM are applied and become apparent. The initiatives and activities that are available, or that are to be introduced, are aligned with the aid of the BEM model to “deliver the strategic goals”. This involves setting targets, creating teams, planning the logistics and initiating such programmes. Therefore, the BEM at this “tactical” level provides a “mechanism” for “translating strategy into deliverable or achievable activities and targets”.

The other crucial role that the BEM plays at this level is to assess and measure

Figure 2
The strategic application of the BEM



organisational performance, to determine the extent to which the strategic goals are being met at departmental or unit level.

Throughout, this translating tactical level of the organisation at which the BEM is most effectively used, there are three key tangible impacts of the BEM by which it actually translates strategic direction into deliverable activities. They are:

- 1 planning;
- 2 structure; and
- 3 measurement.

The planning and structural attributes are inherently linked, the model provides a conceptual framework by which as at the strategic level the organisation and its processes can be visualised. It is then within this framework that the initiatives can be placed and aligned which facilitates the planning process. The final attribute which ensures that the initiatives are achievable and measurable is the measurement capability of the model.

Operational level

At the operational level (Figure 2) the initiatives are actually implemented and the deliverables sought to be achieved. This level represents the main part of BEM application in terms of the planning being put into practice and where the results are made or lost.

Conclusions

Using the grounded theory research methodology a number of conclusions can be drawn in relation to existing management experience of using the BEM. First, there was evidence that management used the BEM as the standard framework. This framework was used primarily in an operational role. For example, existing organisational change activity such as ISO9000 and Investors in People could be mapped onto the framework and given relative scores and priorities. Such combinations were used by the managers mainly at an operational level in terms of achieving business improvements. These improvements were largely seen as being within the existing business context, as distinct from forward-looking conceptions of strategy.

Second, the BEM was considered to be useful in the assessment and measurement of change management activity in an organisation. However, some managers used the BEM exclusively as a measurement tool and a benchmark through the award process. Others take a more in-depth view, considering the BEM as a means for measuring integrating and improving the organisation's systems. In all cases

measurement was at departmental level and below. In these circumstances the BEM's operational audit role is emphasised. The managers applying the model were prompted to ask the "how" questions rather than the "why" questions. The managers considered strategic alignment of change management activities to be beyond the remit of the model.

Third, managers found the BEM was useful for enabling existing planning processes to be reinforced within their organisations. Thus, the BEM was found to provide an organisational overview which existing planning and activity was mapped onto, and measured, by the BEM model. The focus on business processes enabled the managers to investigate and subsequently improve both organisational processes and those processes involving people outside the organisation, for example, suppliers, alliance partners and customers.

Finally, there is a need for research in this area beyond that of exploratory grounded theory research. First, it is recommended that the grounded model could be used in a theory-testing mode to determine its generalisation and application across sectors. Secondly, "best practice" case studies could be researched to show how organisations have successfully used TQM and the BEM (or other quality models) at all levels of management decision making, namely strategic, tactical and operational. Many more studies relating to managerial information and understanding are required to enable more directed efforts in these areas.

References

- Allan, J. (1998), "Perspectives on research in quality management", *Total Quality Management*, Vol. 9 Nos 4 and 5, pp. 51-5.
- Easterby-Smith, M., Thorpe, R. and Lowe, A. (1993), *Management Research: An Introduction*, Sage Publications, Beverly Hills, CA.
- European Foundation for Quality Management (EFQM) (2001), *The Business Excellence Model*, EFQM, Brussels.
- Finn, M. and Porter, L.J. (1994), "TQM self-assessment in the UK", *The TQM Magazine*, Vol. 6 No. 4, pp. 56-61.
- Gallea, D., Ghobadian, A., Liu, J. and Woo, H. (2000), "Quality and business process synergy: key strategies promoting longevity", *International Journal of Manufacturing Technology and Management*, Vol. 2 No. 7, pp. 983-93.
- Garvin, D.A. (1991), "How the Baldrige Award really works", *Harvard Business Review*, November-December, pp. 80-93.
- Ghobadian, A. and Woo, H.S. (1996), "Characteristics, benefits and shortcomings of four major quality awards", *International*

- Journal of Quality and Reliability Management*, Vol. 13 No. 2, pp. 10-14.
- Glaser, D.G. and Strauss, A.L. (1967), *The Discovery of Grounded Theory: Strategies for Qualitative Research*, Alding, New York, NY.
- Hendricks, K.B. and Singhal, V.R. (1999), "Don't count TQM out: evidence shows implementation pays off in a big way", *Quality Progress*, April, pp. 35-42.
- Juran, J. (1994), "Juran on the reward of awards", *European Quality: EQA Edition*, p. 48.
- Kaye, M. and Dyason, D. (1999), "Achieving a competitive focus through self-assessment", *Journal of Total Quality Management*, Vol. 10 No. 3, pp. 373-90.
- Leonard, D. and McAdam, R. (2001), "Grounded theory methodology and practitioner reflexivity in TQM research", *International Journal of Quality and Reliability*, Vol. 18 No. 2, pp. 180-94.
- Lewin, A. and Stephens, C. (1993), "Designing postindustrial organisations: combing theory & practice", in Huber, G. and Glick, W. (Eds), *Organisational Change and Redesign: Ideas for Improving Performance*, Oxford University Press, Oxford.
- McAdam, R. and O'Neill, E. (1999), "Taking a critical perspective to the European Business Excellence Model using a balanced scorecard approach: a case study in the service sector", *Journal of Managing Service Quality*, Vol. 9 No. 3, pp. 191-8.
- Orr, S. (1999), "The role of quality management in manufacturing strategy: experiences from the Australian wine industry", *Journal of Total Quality Management*, Vol. 10 No. 2, pp. 271-9.
- Perry, C. and Coote, L. (1994), "Processes of a case study research methodology: tool for management development?", Australian and New Zealand Association for Management (ANZAM) 1994 Conference, December, Victoria University of Wellington, New Zealand.
- Quaglia, G. (1997), "Model development, quality link: European foundation for quality management", *Newsletter*, Vol. 9 No. 49, September.
- Quaglia, G. (1998), "It's bigger and better", *Quality World*, October, pp. 20-2.
- Ropo, A. and Hunt, J. (1995), "Entrepreneurial processes as virtuous and vicious spirals in a changing opportunity structure: a paradoxical perspective", *Entrepreneurship: Theory and Practice*, Spring, Vol. 19 No. 3, pp. 91-112.
- Savolainen, T. (2000), "Leadership strategies for gaining business excellence through total quality management: a Finnish case study", Vol. 11 No. 2, pp. 211-26.
- Shergold, K. and Reed, D.M. (1996), "Striving for excellence: how self-assessment using the business excellence model can result in step improvements in all areas of business activities", *The TQM Magazine*, Vol. 8 No. 6, pp. 48-52.
- Simms, A.C., Bowles, J., Crosby, P.B., Gale, B.T., Garvin, D. *et al.* (1991), "Does the Baldrige Award really work?", *Harvard Business Review*, January-February, pp. 126-47.
- Sitter, L., Hertog, J. and Dankbaar, B. (1997), "From complex organisations with simple jobs to simple organisations with complex jobs", *Human Relations*, May, Vol. 50 No. 5, pp. 497-535.
- Stevens, T. (1994), "Dr Deming: management today: does not know what its job is", *Industry Week*, January, pp. 21-8.
- Strauss, A. and Corbin, J. (1990), *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*, Sage, Newbury Park, CA.
- Tai, L.S. and Przasnyski, Z.H. (1999), "Baldrige award winners beat the S&P 5000", *Quality Progress*, April, pp. 45-51.
- Terziovski, M., Sohal, A. and Samson, D. (1996), "Best practice implementation of total quality management: multiple cross case analysis of manufacturing and service organisations", *Total Quality Management*, Vol. 7 No. 5, pp. 459-81.
- Wilkinson, A. and Willmott, H. (1996), "Quality management, problems and pitfalls: a critical perspective", *International Journal of Quality & Reliability Management*, Vol. 13 No. 2, pp. 55-65.
- Wolffgramm, S., Boal, K. and Hunt, J. (1998), "Organisational adaption to institutional change: a comparative study of first-order change in prospector and defender banks", *Administrative Science Quarterly*, March, Vol. 43 No. 1, pp. 87-127.
- Yin, R. (1994), *Case Study Research*, Sage, London.

Application questions

- 1 There is a challenge to managers at all levels in their organisations to develop total quality management at strategy development, tactical and operations levels. How can this be achieved?
- 2 With reference to the first question, what plans must be put in place and what measures and models can be used?