Construction business performance measurement: the SPM alternative

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Abstract Construction business performance measurement (BPM) is myopic, most often being project-specific, profit-orientated, and neglecting broader “stakeholder” issues. If construction organizations are to remain competitive in the longer term, they need to develop and better understand their relations with their customers, suppliers, employees, lenders and the wider community. Hence, performance measurement must embrace these broader business characteristics. The need for a shift in “orthodox” (BPM) beliefs from “basic” performance measurement, to an alternative “stakeholder perspective measurement” (SPM), is underlined. SPM will adequately consider relations with customers, suppliers, employees, financiers, and the wider community; all being critical for a business’s long-term viability. The paper goes on to advocate that construction organizations should reject this myopic strategic thinking, and better consider the interests of their stakeholders, both economically and morally. The latter calls for development of a serious stakeholder perspective to business performance measurement, so that construction organizations can be monitored and judged in a socially acceptable manner.

Introduction

To sustain competitiveness, indeed, in order to survive in national and international markets requires that construction businesses properly understand how they are currently performing, and how they need to perform in the future. In an increasingly competitive and shrinking global marketplace, never before have these demands been more important. To ignore this requirement results in short-termism and “blinkered” management strategies, with concomitant risks arising from those better organized and “slicker” businesses encroaching onto previously safe markets. To use a simile, it really has become “survival of the fittest”. Underlining this point is the fact that the past 20 years have witnessed many construction business takeovers and amalgamations, resulting in firms of conglomerates now dominating the UK construction sector (Mbugua et al., 1999).

This situation calls for effective business performance measurement (BPM), effective in the sense that it should enable a construction company to evaluate and establish its position with respect to its business environment. However, construction BPM tends to rely on “traditional” (bottom-line) performance measures, such as efficiency, return on capital employed, and profitability. These measures have been justifiably criticized by a number of commentators, mainly because they:
• over-rely on financial aspects (Clarke and Clegg, 1999);
• are retrospective (and hence always to some extent out-of-date); and
• do not accurately reflect the interests of stakeholders (Kaplan and Norton, 1996; Mbugua et al., 1999).

Furthermore, it is also widely acknowledged that inappropriate performance measures can:
• encourage short-termism (Hayes and Abernathy, 1980);
• lack strategic focus and fail to provide data on quality, responsiveness and flexibility (Skinner, 1974);
• fail to provide information on what customers really want (and what they are actually getting); and
• do not identify how competitors are performing (Camp, 1989; Kaplan and Norton, 1992).

Zairi (1996) and Olve et al. (1999) both asserted that BPM should look beyond traditional financial metrics and embrace essential business drivers (BD) that determine and influence a company’s future business (volume/direction, etc.). In response to calls for improved BPM, several new performance measurement frameworks incorporating financial measures and BD have emerged in the management literature. Some examples include: the performance measurement matrix (Keegan et al., 1989); the performance pyramid (Lynch and Cross, 1991); the balanced scorecard (Kaplan and Norton, 1996); and the “Baldrige” Award (Anon, 1999). Other commentators have focussed on measurement of specific business performance dimensions. For example, customer satisfaction (Berry et al., 1994), employee satisfaction (House and Price, 1991), and business success (Chakravarthy, 1988). Further, the issue of the critical role that employees play in fostering an effective construction business (appropriately referred to as the “people” factor) has not been overlooked (Nesan and Holt, 1999).

In view of this situation, the aim of this paper is to underline the need for a shift in orthodox beliefs with respect to BPM, from performance measurement to, alternatively, a stakeholder perspective. The latter will adequately consider relations with customers, suppliers, employees, financiers, and the wider community – all being critical for a business’s viability both in the short – and longer terms. Whilst the issue of expansive BPM (in the context of any type of business) is not new per se, the particular aspect of “stakeholder” interests in a construction company, and the incorporation of such interests into the development of strategic construction business planning, is a relatively new phenomenon.

The problems of construction BPM
Despite the importance of BPM in construction, it has received scant attention within mainstream construction management literature, particularly concerning its role in offering real-aid to improved construction business
performance. Presently, construction BPM is predominately project specific and profit orientated (considering “tangible” or “hard” factors); failing to take account of the broader “stakeholder” issues (predominantly “intangible” or “softer” issues), which encroach upon these phenomena (Love and Skitmore, 1996). According to Ward et al. (1991), in this context it is wholly inappropriate to evaluate projects, contractors, procurement methods and the like, solely on the extent to which they meet client objectives and goals without considering the nature of their business environment, the structure of the organization, the level of technology employed and so forth.

Yet, performance measurement research in construction has previously adopted a narrow focus, typically failing to respect the profoundly complex and interdependent nature of what is essentially a dynamic social system capable of infinite variation (Love and Skitmore, 1996; Nesan and Holt, 1999).

Understanding why some organizations are more successful than others requires broad knowledge of their contextual, technical, structural, and human factors. These factors are not mutually exclusive; many overlap and constantly interact with each other, thereby initiating important social processes. In attempting to understand fully the business organization, social processes are often overlooked (Love and Skitmore, 1996; Nesan and Holt, 1999). Hence, to acquire an holistic perspective of business performance calls for examination beyond the (traditional) narrow and reactive measures, requiring focus on the broad and longer term considerations of the organization’s corporate strategy, business processes, and customers’ needs.

To summarize the “problems” with present BPM practices, they are typically: narrow, retrospective, long-term cyclical, and bottom-line driven. What is called for is an alternative that is broad, progressive, dynamic, and all-embracing (Table I). Stakeholder perspective measurement can offer these attributes.

The stakeholder perspective and SPM paradigm
Measurement in itself does not cause improvement – it is merely the starting point for establishing new knowledge. The early management theorist Fredrick Taylor concluded in 1915 that the success of management is based upon an ability to become scientific, where knowledge is characteristically acquired through systematic observation, experiment and deductive reasoning (Love et al., 1999). With this in mind, there is a need for all contractors to develop and implement a performance management system, because those who do not cannot seriously claim to know where their business is, or, more importantly, where it is heading.

A major criticism of traditional BPM systems is that they are fragmented, lack focus and cohesiveness, and are typically driven by a set of inappropriate objectives (Coates, 1997). According to Zairi (1996) there are a several reasons why performance measurement systems fail. These include:

- failure to define performance operationally;
The SPM alternative

<table>
<thead>
<tr>
<th>BPM problems</th>
<th>SPM solutions</th>
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<tr>
<td>Narrow focus</td>
<td>Concentration upon hard issues. Use of quantifiable measures (e.g. accounting figures) for convenience</td>
</tr>
<tr>
<td>Retrospective</td>
<td>Tends to look back at previous performance (e.g. use of last year’s accounts)</td>
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<tr>
<td>Long term cyclical</td>
<td>Only tends to take place intermittently and typically annually (e.g. annual accounting ratios)</td>
</tr>
<tr>
<td>Bottom line driven</td>
<td>Tends to focus on monetary aspects (e.g. productivity, output, efficiency, profit, liquidity, asset structure)</td>
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**Table I. BPM and SPM: critical comparison**

- failure to relate performance to process;
- fear of distorting performance priorities;
- fear of exposing poor performance;
- misunderstanding and misusing measures; and
- measuring the wrong things.

Clearly, the development of an effective *modus operandi* should therefore incorporate six common characteristics, being essential prerequisites to achieving best practice:

1. clearly understand what the business is trying to achieve – this being made explicit and being driven by corporate strategy;
2. apply a cocktail of financial and non-financial business measures;
3. extract comparative measures through benchmarking;
4. properly understand the company’s position both by reference to sector and broader industrial “norms” (analogous to inter-company comparison of financial ratio outputs);
5. report results regularly, promoting dissemination of pertinent knowledge and encouraging appropriate action; and

*Note:* *Ashton (1997) observed positive correlation between stakeholder performance and bottom line business results*
The authors prefer to describe this alternative as stakeholder perspective measurement (SPM), utilizing multi-dimensional performance measures because in reality companies have to satisfy a number of performance criteria (Love and Skitmore, 1996). SPM should consider the three common perspectives of the firm:

1. as a stakeholder entity reflecting the interests of customers and shareholders (reflected in measures of product/service performance);
2. as a goal-orientated, profit center (reflected by measures of financial performance); and
3. as a system that engages in resource garnering, conversion and exchange with the environment (reflected in measures of competitive ability, productivity and quality).

Performance should achieve organisational goals and objectives in a resourceful and consistent manner, though this underlying purpose is frequently overlooked. This is because BPM often overlooks the three important questions of when, where, and how:

1. **When?** If measurement is performed too often it over-consumes resources and becomes counterproductive, hence, timing is of prime consideration. Conversely, under-measurement can lead to vital indicators being missed at an appropriate time and the optimal solutions for addressing such failing to be implemented.

2. **Where?** This must embrace the social and stakeholder aspects elucidated above calling for a variety of measurement methods to be implemented, not necessarily simultaneously.

3. **How?** Using a series of tailor-made measures for each organization, focusing on the critical and constraint areas of its processes.

Performance measurement (and its management) must be fully attuned not only to economic but also to ethical objectives. In this regard, Fitzgerald *et al.* (1991) identified two categories for analysis. First, there are the resultants (i.e. effectiveness) of a chosen strategy such as extent of targeted market capture, financial performance, and real unit cost. Second, there are the determinants of competitive success, embracing quality, flexibility, productivity, innovation, and social contribution. A comparison of BPM, and the SPM concept, is given graphically in Figure 1.

**Measuring SPM**
It has been said that one can not manage what can not be measured. Whether this is strictly true or otherwise is not resolved here, but there are clear
arguments for measuring in this specific context. In a quality driven construction organization, the following are principal reasons why measurement is needed and why it plays a key role in quality and productivity improvement. Measurement helps:

- ensure that customer requirements have been met (and if not, why not);
- enable establishment of achievable business objectives and monitors compliance thereto;
- provide standards for business comparisons;
- provide transparency and a scoreboard for individuals to monitor their own performance;
- identify quality problems and those requiring priority attention;
Construction organizations use a variety of methods to measure their performance. For example, progress monitoring is commonplace. At a strategic level construction organizations may refer to league tables (e.g. published in building magazines) to contrast such characteristics as turnover, number of employees, pre-and-post tax profits, and overall ranking in the industry (e.g. Building magazine’s top 100 contractors). Such league tables can raise awareness of performance and competitiveness in the industry; encouraging lower-ranking businesses to “look-inward” and strive to increase their future ranking.

The science of measurement must be understood: it is the first stage of a continuous performance improvement cycle. Measurement must be proceeded by evaluation of results, comparison, planning for improvement, and then implementation of strategy. Yet, these follow-on aspects are often ignored by construction organizations. This is one reason why measurement per se is often viewed cynically – it is the results of such an exercise that must be acted upon to complete the entire process effectively. Furthermore, such a performance cycle may be conceived and developed as a business dialogue, which not only evolves into a focal strategic point but also crosses any organizational divides that may exist. That is, SPM must embrace the specialists within the organization who are responsible for measurement and analysis and, assess the managers who are accountable for employee commitment and actions.

Measurement is the foundation of good management practice (Love et al., 1999). It should, however, be perceived only as a thermometer, not a panacea to all business ailments. Thus, a business’s underlying raison d’être of inclusiveness and competitiveness must be the generators of good performance. Finally, it is underlined that it is the results of measurement that must be appropriately acted upon, if the measurement activity is to contribute anything to the business in real terms.

The information age continues to expand at a pace far beyond the expectations of most. The equally growing emphasis on the need for a sustainable environment is also ever present. Resultantly, there is growing pressure on managers to take into account the desires and values of their organization’s stakeholders (essentially, these values are the desires, beliefs, moral principles and practices of an individual or active group within the organization or community). The manager must achieve this without precluding the interests of shareholders (which understandably are principally financial). To develop an effective long-term business strategy it is necessary to align a construction organization’s overall aspirations, analytical techniques and management processes with those business drivers that create value.

By definition all stakeholders have a vested interest in the fortunes of their business. Consequently, it is important to understand how human, organisational
and customer intellectual assets can be balanced so that they can be combined to create value (Love et al., 2000). It is acknowledged that it is not an easy task, although it is something which construction organisations must seek to address, if they are to remain competitive into the new millennium. Indeed, measures that construction organisations may be tempted to adopt (to cut costs and maximise profits) will invariably affect other organisations that are involved in procuring construction facilities. This in itself can lead to dissatisfaction and perhaps unsuccessful projects.

Conclusion
For too long, construction organizations have focused on short-termism. That is, the “bottom line”. This paper has suggested that successful business strategies require the adoption of a stakeholder perspective to business measurement, as it can be used to deliver optimal business performance. It is expected that, in the future, the development of loyal, inclusive stakeholder relationships will become one of the most important determinants of commercial viability and business success. Thus, construction organisations should not be myopic in their strategic thinking and should respect the desires of their stakeholders, economically and morally. This approach should be addressed by developing a comprehensive stakeholder perspective approach to business performance so that the organisation can be monitored and judged in a socially accepted manner, thus providing the foundation for maximising stakeholder value.

References
Camp, R.C. (1989), Benchmarking – The Search for Industry Best Practice that Lead to Superior Performance, ASQS Quality Press, Milwaukee, WI.


