TRANSITION OF MEASURING FACILITIES MANAGEMENT PERFORMANCE FROM MICRO SCALE VIEW TO THE MORE COMPARATIVE VIEW

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ABSTRACT

Today's organisations constantly review the composition of their core businesses and the way they operate, therefore, clear attention must be paid both to the effective maintenance of support systems and the culture of the organisation. This paper argues that good performance is essential to facilities management (FM) in order to improve its supporting role to the core business of the organisation. A survey carried out of performance measurement techniques in FM revealed that there was apparent uncertainty as to which was the best approach to managing FM performance. It will further discuss there is also a need for a new approach to performance measurement systems in FM organisations by discussing problems with the existing approaches to performance measurement systems. The paper concludes with the concerns relating to the identification of the issues needing attention in addressing such problems within the FM field.

Key words

Facilities management, performance measurement

FACILITIES MANAGEMENT PERFORMANCE

Hronec (1993) defines performance measurement as: "a quantification of how well the activities within a process or the outputs of a process achieve a specified goal. Performance measures must be developed from the top down in an organisation and must link the organisation's strategies, resources, and processes".

Even in facilities management (FM) environments, where performance measurement has long been deemed inappropriate, the acceptance of performance measurement is growing. As Grimshaw and Keeffe (1992) stated: "A link exists between the physical environment and the operational efficiency of the organisation". The need for FM performance measurement systems is emphasised by Then (1996) by identifying FM as a business resource. Today's organisations constantly review the composition of their core business and the way it operates (Royal Institution of Chartered Surveyors, 1993). Therefore, clear attention must be paid both to the effective maintenance of support systems and the culture of the organisation. FM is an

important emerging business sector with an annual size well into tens of billions of pounds in the UK (Tranfield and Akhlaghi, 1995). Alexander (1993a) has further discussed the importance of the contribution of FM in today's' business environments. The FM budget of an organisation can often require thirty to forty per cent of the outlay, second only in cost to payroll (Williams, 1994). Therefore, good performance in FM is essential.

LITERATURE REVIEW CONCERNING THE MANAGEMENT OF FACILITIES MANAGEMENT PERFORMANCE

An initial survey (Amaratunga and Baldry, 2001; Amaratunga, 2001) carried out of performance measurement techniques in FM revealed that some were using the EFQM (European Foundation for Quality Management Excellence Model) model of Business Excellence (EFQM, 1999), in order to manage their performance. Others were using benchmarking, and still others were using no particular performance measurement culture or system. There was apparent uncertainty as to which was the best approach to managing FM performance. Would this uncertainty also be found in literature?

In many articles and textbooks, it is stated that FM performance measurement has long been, and often still is, an issue evaded by managers as they consider it to be too difficult or even counter productive (see for example Becker, 1990). The following list of techniques summarise some of the performance measurement processes identified through the survey:

- Benchmarking (Bendall, 1993);
- The "BIFM" measurement protocol (British Institute of Facilities Management, 1997);
- The concept of building performance and post-occupancy evaluation (Williams, 1994);
- Hierarchical system of performance indicators (Belcher, 1997);
- Measurement system based on the level of support (Bottom et al, 1996);
- Knowledge based FM (Carder, 1995);
- Building quality assessment (Clift, 1996);
- Performance "only" version of a framework (Davis et al, 1999);
- ORBIT –2 [(DEGW, 1986) (Cited in Becker, 1990)];
- Total performance of buildings. (Douglas, 1994);
- Questionnaire survey (Finlay and Tyler, 1991);
- Input versus output based performance measurement. (Heavisides & Price, 2001);
- Management-by-variance tool. (Hinks and McNay, 1999);
- Range of measurement methods. (Kincaid, 1994);
- Service performance measurement using simple techniques. (Murphy, 1999);
- EFQM Model (EFQM, 1999);
- SERVQUAL model. (Parasuraman et al, 1988);
- Total Quality Management Philosophy. (Pheng, 1996);
- A Scaling system. (Simpson, 1998);
- Competency measured performance outcomes. (Thompson, 1998);

- Performance measurement. (Varcoe, 1996);
- Customer satisfaction issues. (Walters, 1999); and
- “Frisque” Programme. (Williams, 1999).

The use of a broad range of approaches to the management of performance in FM was confirmed by the survey, as described in the above section. It was further confirmed that appraisal techniques for assessing performance should become an essential part of the FM process, particularly those that provide information that can be arrayed so as to ensure management can learn about the consequences of their actions.

The above list further highlights the diversity of techniques available in the literature and from these studies it could be concluded that the concept of performance measurement can indeed have various benefits in FM environments, even though the procedures may involve some subjectivity and uncertainty. However, it is acknowledged that designing an appropriate FM performance measurement system requires some considerable effort and time, not least because managers have to be convinced about the necessity and the benefits.

One of the major difficulties encountered by a facilities manager in the sphere of performance measurement is his/her understanding of this topic. There is a great deal of confusion about the reasons for performance indices and performance measurement services. It is frustrating that the FM market has been slow to take on board the concept of performance measurement. Simpson (1998) identified the following types of FM performance measurement systems, which might be used at different levels of the FM organisation: whole FM function, individual support service; and part of individual support services.

There is frequent comment that there are too many performance indices (especially in terms of cost) in the FM market. Therefore, a more positive and preferable stance in respect of performance measurement in FM is needed and the evaluation process should stand up to scrutiny and allow the measurement of FM performance of individual services as well as aggregating this information into indices and integrated performance measurement “universes”. This should allow assessment of FM performance covering various perspectives of FM together with FM’s relationship to the core organisation, although to date the key problems have been those of performance measurement techniques availability.

Interviewees were asked whether they would find assessments at any or all these three levels useful to them and all confirmed that they would be interested in obtaining assessments at all three levels. Such systems would clearly be popular within the FM community as a means of obtaining valid measurements of FM performance at different levels. Interviewees further wanted a way of measuring their customers’ perceptions of FM performance; they wanted to know what their customers’ thoughts are. However, the interviewees also acknowledged that they might have to balance the customers’ perception with what was affordable for the core business, when

considering resource allocation. The possibility of measuring innovation issues within FM was raised and the interviewees were attracted to this idea. They were clear that they needed to know how they perform in terms of implementation of their future plans. Some of the interviewees further confirmed, even though there are existing performance measurement instruments to assess the performance of the FM output in certain circumstances, there is room to develop measurement instruments to measure the output of the entire process, that is, input, process and output.

Although giving an insight into FM organisations' activities in performance measurement as detailed above, current literature does not appear to give a comprehensive overview of practice in this field. The literature review conducted points to at least the following requirements:

- The need for an integrative methodology for considering the facilities implications of business decisions; and
- The need for processes to monitor performance of existing facilities portfolio in a dynamic business environment.

Within FM literature, the use of integrated performance measurement systems incorporating financial and non-financial measures is very briefly glossed over, if mentioned at all. The view of Neely et al (1997) that "despite the academic interest, there appears to have been little research on what industry is actually doing with regard to its performance measurement systems" still holds true in the FM context. An assessment of the trend in the use of measures showed more recently that organisations have begun to touch upon non-financial or "soft" issues as well as traditional accounting variables, giving an indication that these measures now assume a place on organisational agendas. However, there is no indication of how this activity is permeating within FM organisations, and there still seems to be much truth in the statement that "it is not completely clear what should be measured" (Simpson, 1998). Why are such systems necessary to measure FM performance?

To understand the core business influence on facilities

Although some knowledge of performance measurement in FM has already been developed, it is still inadequate. Much work has been done to measure FM performance, as current available systems often ignore the influences of core business strategies towards FM. On the other hand all organisations, regardless of what they produce and regardless of size, are continuously faced with technological change. Often this technological change happens with great rapidity which demands an adequate response from a FM point of view. With the increasing need for FM to become more professional, strategic and commercially oriented, the issue of performance measurement in FM has been a major consideration in the facilities cycle.

Meeting current core business needs – assessment of the usefulness of facilities management

Even though FM exists to support the core business, it is often this relationship that runs into difficulties (Barrett, 1995). As it is a support service, many facilities managers have taken a reactive role, waiting for instructions before they perform any action. The result is that the facilities manager has to remedy the situation quickly, rather than assessing what would be the best long-term solution. One of the ways to improve facilities services therefore is to become more proactive, that is actively seek out problems and requirements before they become critical. Even though the meetings are a useful way of gauging satisfaction with facilities services, there is generally no time to discuss things in great detail and only certain people's views will be represented. Facilities managers should therefore consider developing an audit system that seeks to improve service through feedback (Barrett, 1995).

Simpson (1996) views FM performance as a whole entity, as a collection of component parts, and as a function which can be perceived differently by different groups of people. In reality FM can contribute to, or detract from, business performance at a number of levels (Nutt, 1999). Therefore, FM performance needs to be assessed in relation to (Nutt, 1999): its contribution, or not, to the core business of an organisation, its support, or not, to business operations and productivity, the effectiveness, or not, of its own facilities management arrangements, the delivery and quality of out-sourced, part-sourced and in-sourced services, the support it provides to the end user, and the service received by the customer.

To ensure facilities perform to the expectations of the users

The task of ensuring that the facilities provision performs to the expectations of the users/occupiers is a complex facilities-related service delivery process that involves a number of stakeholders comprising both internal and external customers. The focus of management attention here should be a constant balancing of priorities: between cost of provision and occupiers' demand, between strategic and operational demands, and between maintaining control and exploiting sourcing opportunities (Then, 1996).

Securing the future

Alexander (1994) identified performance measurement as one of the three essential issues for the effective implementation of a facilities strategy within organisations, "better tools are needed for assessing an organisation's rate and level of improvement – to ensure that gains have in fact been made". Therefore, adaptation to change will continue to be a key business criterion in the coming decade and will continue to provide the greatest challenge for FM. Predicting the future and managing uncertainty is in the nature of FM. Identifying the influences for change in the business environment and developing facilities to accommodate it are central to the function.

NEED FOR AN INTEGRATED PERFORMANCE MEASUREMENT SYSTEM REPRESENTING MORE MARCO LEVEL ISSUES FOR FACILITIES MANAGEMENT

It is worth re-emphasising the importance of having a clear understanding of the underlying issues and organisational demands relating to performance measurement in FM (Varcoe, 1996). There must be clarity in linking operations to strategic goals, with a focus on business operations in the context of customers and their requirements. It is only from this firm basis of a clear understanding of the overall organisational performance equation that business decisions and value-based recommendations for improvements, supported by performance measurement, can be made in the proper context of true organisational need. Thus, performance measurement is becoming increasingly important and supports management and practice within the FM department. However, a large majority of academics and practitioners in the field reported that currently, within their FM group, knowledge of FM performance measurement is limited (Hinks, 1999; Alexander, 1993b; Amaratunga, 2001).

Therefore, the aim of this section is to emphasise these issues of inadequately addressed performance measurement systems in FM, leading to the identification of new systems addressing performance measurement issues in a more comparative view.

FACILITIES MANAGEMENT PERFORMANCE MEASUREMENT PROBLEM

As mentioned in a previous section, appropriate measurement procedures can provide major benefits. When applying current measurement principles to more macro perceptive based FM organisations, several problems have to be faced:

- It is difficult to isolate FM's contribution to organisational performance from the other business activities because it is always the intertwined efforts that eventually result in outcomes in the market place;
- The problem of matching specific FM inputs and intermediate outputs with final outputs;
- A third major measurement problem is the time lag between FM efforts and their payoffs within an organisational setting;
- Besides problems with the selection of performance metrics, there is also the problem of determining the right norms to compare with; and
- Another issue, already mentioned in the previous section, is the acceptance of performance measurement in FM.

Therefore, it is argued in this paper that performance measurement techniques available in general management literature haven't been fully transformed into FM literature. The research carried out by McFadzean (1995) proposed that a clear methodology for linking FM to the core business is required to resolve the above current problems experienced by many of today's FM organisations in measuring facilities performance and to develop

knowledge about the links between FM and the business in research terms. The process should include links to the core business at a corporate level.

In the last decade, there has been a growing criticism of traditional performance measures as too narrowly focused on financial measures (Olve et al, 1999). The reason is that conditions today are no longer the same as when traditional management control emerged. An attempt has been made below to summarise some of the views advanced in this debate in the following sections:

Criticism of traditional management control

Various authors have pointed out the need in many decision-making contexts to integrate financial and non-financial measures of performance and qualitative information (Letza, 1996; Rangone, 1997; Neely, 1998). Non-financial issues, "those areas of the discipline which are generally difficult to measure and assess", are becoming more widely recognised as having an impact on business performance (Stone, 1996). In many of today's competitive environments, each presenting a series of intangible critical success factors, the assessment of organisational effectiveness cannot be narrowed to quantitative measures, but must also explicitly include intangible factors.

Traditional financial accounting measures offer a narrow and incomplete picture of business performance, and a reliance on such data hinders the creation of future business value. As a result financial results should be supplemented with additional measures that reflect customer satisfaction, internal business processes, and the ability to learn and grow. Is there scope to assess FM performance using an alternative approach, covering both financial and non-financial issues, whilst still preserving the insights into the integrative value of FM? These are some of the issues that need to be addressed.

Need to represent non-financial measures

Much of the criticism of traditional performance measurement systems stems from their failure to measure and monitor multiple dimensions of performance by concentrating almost exclusively on financial measures (Brignall and Ballantine, 1996). Organisations are searching for ways to incorporate intangibles – such as quality management, customer retention, internal organisational processes, research and development and innovation – into their regular performance evaluation.

Not all non-financial criteria are created equal, according to the study carried out by Ernst and Young (1998). Developing a comprehensive performance measurement system incorporating non-financial measures has frustrated many managers. Drucker (1993) puts the ever-increasing measurement dilemma; "…a traditional measure is not adequate for business evaluation. A primary reason why traditional measures fail to meet new business needs is that most measures are lagging indicators. The emphasis of accounting

measures has been on historical statements of financial performance. They are the result of management performance, not the cause of it".

In response to the dissatisfaction with traditional performance measurement systems, a number of performance measurements models have been developed in the recent past (Cross and Lynch, 1998; Hronec, 1993; 1991; Kaplan & Norton, 1996). Although several approaches to designing and implementing a system to provide non-financial control have been proposed in the literature, the problem of integrating non-financial measures with financial measures effectively still remains an open question.

Lack of prescription on how to implement them

A number of frameworks have been adopted by FM organisations of major companies in recent years as described above, and have concentrated on different aspects of the organisation including quality management, service management, process management and resource management. Many of the different approaches have been compared in literature (Doyle, 1992; Geaunuracos and Meiklejohn, 1993). Some models have been criticised because of their lack of non-financial indicators and the inappropriateness of their financial measures (Olve et al, 1999). The other models, although more flexible to accommodate different approaches to performance measurement, have been criticised for their lack of prescription on how to implement them (McFadzean, 1995).

Lack of strategic focus

For the most of the twentieth century, traditional management control systems have existed in an environment of mature products and stable technologies (Hally, 1994). The role of the management control system was to see that an organisation remained efficient; as a result, management concentrated on costs while paying less attention to revenues (Olve et al, 1999). Since 1940s, industries have undergone vast technological changes, and most organisations have become larger. Production processes have led to new demands on organisational systems of management control. Financial measures showed the effects of decisions already taken but failed to provide adequate guidance for long-term strategic development.

Other issues

In practice, while managers are bombarded with literature about "successful" applications of performance measurement, gaining the promised benefits is not guaranteed simply by following their promoters' prescriptions (Holloway, 2000). Holloway et al (1999) highlight some key problem themes:

- The priority areas of strategic importance to the organisation to target for performance measurement systems may be strongly contested;
- Selecting relevant and valid approaches which are so culturally and politically acceptable to the organisation can be highly problematic;
- The provision of resources for systematic implementation can be resisted from above and below;

- What works well in some organisations may fail to deliver in apparently similar ones; and
- Evaluation of performance measurement activities is often constrained by a lack of understanding of causal links between performance measurement and performance improvement.

These issues are rarely acknowledged in literature (Holloway, 2000). Choosing appropriate approaches to performance measurement for the needs of the organisation, implementing them systematically, and evaluating their impacts are some of the processes which managers have to grapple with while being under increasing pressure to deliver optimum performance. Some other associated problems are: impact of performance measurement on actual performance, causal relationships are often unknown, many approaches to performance measurement lack a theoretical basis, and provision of resources is limited.

Examples of empirical research which address some of the above scepticism felt by such managers may nonetheless also promote performance improvement fashions uncritically (Oakland, 1999; Ghobadian et al, 1998). While other authors take a more overtly critical and/or theory testing stance (Dinesh and Palmer, 1998; Minchington and Francis, 2000; Wilkinson and Willmott, 1995) most writing on this subject – and by implication, most research – pays little attention to the problematic side of performance measurement.

ISSUES NEEDING ATTENTION AS MACRO LEVEL REQUIREMENTS

Above evidence suggests that performance measurement concept is firmly on the FM agenda. Hinks (1999) has speculated on the future of performance measurement in FM in the context of the future business needs. It has been observed that the focus of contemporary FM performance assessment has limited the consideration of the wider, perhaps less tangible or differentiable, value of FM. The emphasis on measuring FM performance has separated it from the business and has neglected its inter-active value. Therefore, condensing FM from the business view, there is a need for the development of models and theories which would be suitable for assessing the business utility value of FM. In terms of issues that need researching, the literature review detailed in the above sections has identified the following as key:

Issues associated with individual performance measurement

- Is performance measurement a luxury for FM? Which performance measures are of greatest value to FM organisations?
- Should measures focus on input processes, the output of processes, or both?
- Is time the fundamental measure of FM performance?
- How can flexibility, which is often simply a property of the “system”, be measured?
- How can FM performance measures be designed so that they encourage inter-functional co-operation?

- How can FM related measures which do not encourage short-termism be designed?
- How can FM performance measures be designed so that they encourage appropriate behaviour?
- Can “flexible” FM measures which take account of the changing business environment be defined?
- How should the data generated as a result of a particular FM measure be displayed?
- How can one ensure that the management loop is closed – that corrective action follows measurement?

Issues associated with the performance measurement system as an entity

- What are the “definitive” principles of performance measurement system design in FM?
- How can the measures be integrated both across the FM organisation’s functions and through its hierarchy?
- How can conflicts between FM performance measures be eliminated?
- What techniques can facilities managers use to reduce their list of “possible” measures to a meaningful set?
- Would a “generic” FM performance measurement system facilitate this process or is a process-based approach required and what are the relative advantages and disadvantages of the above?
- Do “generic” performance measurement systems actually exist?
- Can a practicable FM performance measurement system design process be specified?
- Can a “flexible” FM performance measurement system which takes account of the changing business environment be defined?
- How can the cost-benefit of a FM performance measurement system be analysed?

Issues associated with the system and its environment:

- Why do organisations fail to integrate their FM performance measurement into their strategic control systems?
- How can we ensure that the FM performance measurement system matches the organisation’s strategy and culture?
- To which dimensions of the internal and external environment does the FM performance measurement system have to be matched?

The previous section has shown the problems associated with current performance measurement systems and emphasises the requirement for an integrated performance measurement system for FM. This section further confirms this need for a new approach to such systems by identifying the current problems in evaluating performance in FM. It is identified through the extensive literature review that the following explorations are required in FM performance measurement setting:

- The service received by the different segments of customers;

- Its contribution to the core business of an organisation, that is, its support to business operations and productivity; and
- The effectiveness of its own FM arrangements.

In the previous sections, it is shown that there is an increased interest in FM performance measurement systems in practice. In theory, various FM performance measurement concepts are available, but choosing among these concepts and tailoring a chosen concept to fit a specific measurement need and context is not an easy task. However, contingency theorists have made convincing arguments that such a fit with the purpose and context of measurement is necessary to make the measurement procedure effective (Macintosh, 1994; Neely et al, 1997; Brown and Gobeli, 1992; Hauser and Zettelmeyer, 1997). This argument is accepted by the writer and further assumed that effective measurement procedures will contribute to FM effectiveness.

CONCLUSION

Though the concept of FM effectiveness has not been explicitly operationalised, some examples of the benefits claimed by practitioners and academics are discussed in this paper. There is a concern as to "how could FM measurement system be aligned with the purpose of measurement and with the relevant contingencies in an FM context?" As discussed above, current performance measurement system approaches do not give any advice. They support the "embodiment and detailed design phases of a measurement system design process, but factors identified in this paper, are often ignored. Therefore, there is a need for research aimed at contributing to closing this gap.

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