



The current issue and full text archive of this journal is available at
<http://www.emerald-library.com>

Performance management model

Performance
management
model

A systems-based approach to public service quality

19

John Isaac Mwita

*International Development Department, University of Birmingham,
Birmingham, UK*

Keywords *Local government, Public sector, Performance management,
New public management, Management accounting*

Abstract *The delivery of public services in developing countries is over-centralised. One of the reasons for this is the presence of centralised decision-making apparatus, which distances power from communities. The centralised decision making reduces accountability among public sector employees and is a good recipe for undesirable decisions and mismanagement of performance and resources at the expense of public service quality. The quality of public sector management in developing countries lags behind those of the developed countries due to the ills caused by over-centralisation. Hence, the public services in developing countries are a drain on the wealth-producing part of their economy. Reviews the underlying literature and theoretical framework of performance management (PM) as a systems-based model for cultivating the "achievement culture" in public sector organisations (PSOs). It looks at how the various practical econometric and managerial techniques can integrate with the PM model in an attempt to excel the philosophy of new public management. The paper concludes by looking at the "new" role of management accounting systems in meeting "information needs" of modern public sector managers, as a potential area for further research. The paper proposes that the adoption of the PM model is a universal remedy for improving service quality in PSOs in developing countries.*

Introduction

Traditionally, public services are described as "non-productive" and a drain on the "wealth-producing" part of the economy in developing countries. New public management (NPM) has influenced a comprehensive process of change to public sector organisations (PSOs) across the board. The emphasis is on decentralisation, devolution and modernisation of public service delivery. The performance management (PM) model is a systems-based approach to cultivating the achievement culture in any economic entity by linking primary objectives to the secondary ones. The model pinpoints appropriate performance measures of output from the customer viewpoint. Across a range of OECD countries, reforms have marked a shift away from the traditional focus on input to output measures of performance (OECD, 1993).

Current strategic management literature suggests that the PM model is in place when there is a strong linkage between primary objectives and secondary objectives and between strategic plans and performance measures (Horton and Farnham, 1999; Flynn, 1997; Kloot and Martin, 1998). Techniques such as the ABC model of behaviour change (Ayers, 1995), systems analysis (Skidmore,

The International Journal of Public
Sector Management,
Vol. 13 No. 1, 2000, pp. 19-37.
© MCB University Press, 0951-3558

1994; Burch, 1992), budgetary control systems (Otley, 1999), the balanced scorecard approach (BSA) (Kaplan and Norton, 1992), results and determinants framework (RDF) by Fitzgerald *et al.* (1991), and the economic value added (EVATM)[1] can provide this linkage. This linkage is perfected by the information flows from and to management accounting systems – an aspect that is practically less addressed and taken for granted.

This paper attempts to discuss these issues in the context of the PM model and is divided into three main parts. The first part covers the conceptual framework of PM in public sector organisations generally as a package of NPM, which is introduced for effective public service delivery. The second part of this paper dwells on both the theoretical and practical implications of the application of the NPM and the PM model to public service delivery in the context of local government systems. The motivational models for stimulating change are introduced in order to trigger some behavioural change for quality PM. It provides a comprehensive summary of the systems-based approach to improving service quality of public sector institutions in both developed and developing countries. Essentially, there are copious lessons pertinent for developing countries following this transition process from Weberian “bureaucratic public administration” systems to NPM in OECD countries. Developing countries are urged to learn from these experiences in PM conducted by the developed countries such as the UK and the USA. The paper concludes by looking at the “new” role of management accounting systems in meeting the “information needs” of modern public sector managers, as a potential area for further research.

The conceptual framework

Service quality management

Service quality management may be described as the process of minimising the performance gap between actual delivery and customer expectation. In order to improve the service quality, managers have to adopt “customer-oriented” techniques because service providers directly address user needs. In this regard, the PM model appears to be the most ideal. In a pragmatic approach, some scholars attempt to define service quality by identifying gaps between provider and consumer in their respective perceptions of service quality (Ballantine and Modell, 1998) or the performance measures they use (Fitzgerald and Moon, 1996). In every economic entity, however, top management must be the frontiers of identifying these “performance gaps” and providing the avenue, framework and empowerment for their therapy. Performance and quality management is concerned with maximising the value added through the PM process such that the initial “costs” are exceeded by the subsequent “benefits” derived from deliverance (Horton and Farnham, 1999).

What is performance?

“If you can’t define performance, you can’t measure or manage it” (Armstrong and Baron, 1998). This is a challenge to PSO managers because the

overwhelming debate on performance today is whether it entails behaviour, results, or both. Performance is referred to as being about doing the work, as well as being about the results achieved (Otley, 1999). Performance is a multi-dimensional construct, the measurement of which varies, depending on a variety of factors that comprise it (Fitzgerald and Moon, 1996). Others argue that performance should be defined as the outcomes of work because they provide the strongest linkage to the strategic goals of the organisation, customer satisfaction, and economic contributions (Rogers, 1994). It is important to determine whether the measurement objective is to assess performance outcomes or behaviour. Therefore, an organisation should distinguish between outcomes (results/output), behaviour (the process) and appropriate performance measurement devices.

Campbell (1990) subscribes to the premiss that performance is behaviour and should be distinguished from the outcomes because they can be contaminated by system factors, which are outside the control of the performer. What is implied in Campbell's argument is that performance measurement can only focus on an individual/group's final output, if and only if, system factors are controllable. In contrast, Edis (1995) argues that performance is something that the person leaves behind and that exists apart from the purpose.

This paper adopts a comprehensive view that performance is achieved if it is defined as embracing three interrelated variables: behaviours (processes), outputs, and outcomes (value added or impact). Bromwich (1990) also supports this view by arguing that performance means both behaviours and results – behaviours emanate from the performer. Conceivably, behaviours, results and value-added are inseparable and interdependent variables. They are all important in performance management schemes. The next stage is to pinpoint the attributes of performance that PSO managers have to be aware of when managing and measuring performance

Factors affecting performance

Performance as defined above is affected by a number of factors, all of which should be taken into account when managing, measuring, modifying and rewarding performance (Armstrong and Baron, 1998). They comprise:

- *Personal factors* – the individual's skill, confidence, motivation and commitment.
- *Leadership factors* – the quality of encouragement, guidance and support provided by the managers and team leaders.
- *Team factors* – the quality of support provided by colleagues.
- *System factors* – the system of work and facilities (instruments of labour) provided by the organisation.
- *Contextual (situational) factors* – internal and external environmental pressures and changes.

Traditional approaches to performance appraisal associate variations in performance with personal factors, when, in fact, they could actually be caused in part or entirely by situational or systems factors (Atkinson and McCrindell, 1997). Essentially, the assessment of individual performance must necessarily consider not only what individuals have done (the results), but also the circumstances in which they have had to perform (Deming, 1986). This assessment process should extend to the performance of the manager as a leader, because what the performer does is mainly a reflection of the manager behaviour in terms of on-the-job training, coaching and guidance. Campbell (1990) argues that the functional relationship between performance and the attributes of performance can be explained in algebraic terms as f (knowledge, skill and motivation) factors. Whereas knowledge refers to facts and things (knowing *what* to do), skill refers to ability to perform, and motivation is a function of whatever independent variables are stipulated by a person's favourite incentive theory.

The role of motivation in the PM model is to modify the current behaviour of job-holders. An individual's behaviour can be systematically adapted to meet the desired standard by using the ABC model of behaviour change (Ayers, 1995; Daniels, 1989). This is the concern of the next part of this paper.

The ABC model of behaviour change

The ABC model of behaviour change is composed of three elements – Antecedents, Behaviour, and Consequences. The model advocates that, behaviour can be changed in two main ways – by what comes before it (*ex-ante*), and by what comes after it (*ex-post*) (Ayers, 1995). When you try to influence Behaviour *before* it occurs, you are using Antecedents. When you attempt to influence Behaviour by doing something *after* it occurs, you are using Consequences. The PM model is based on the systematic use of antecedents and consequences to improve the current behaviour – performance (Daniels, 1989). An *antecedent* prompts *behaviour*, which is followed by a *consequence*. An understanding of the way these elements interact allows managers to analyse performance problems, take corrective measures, and design work environments and management systems in which high performance will prevail and current behaviour be modified.

Antecedents

Daniels (1989) describes an antecedent to be a person, place, thing or event coming before behaviour, which encourages you to perform or behave the way you do. Antecedents only set a stage for behaviour or performance; they do not control it. The main characteristics of antecedents are that they:

- must always come before the behaviour;
- communicate information;
- work because they have been paired with consequences;

- consequences may also be antecedents; and
- antecedents without consequences have short-term effects.

Examples of antecedents include, *inter alia*, such things as goals, objectives, packaging, incentives, job descriptions, policies, procedures, standards, rules, regulations, meetings, tools, raw materials, conditions of the work, directions and instructions. Antecedents “set the landscape” for a work behaviour or performance to take place, but do *not guarantee* that the desired output will *actually* occur. Incentive schemes, coaching, training and development are probably the most common and effective antecedents used to change or improve performance.

The behaviour of other people is also an antecedent called modelling (Daniels, 1989). The actions of fellow employees and the boss influence the actions of other employees. If older employees complain, new employees may soon start complaining too. If the boss comes to work too early and leaves late, aspiring young managers tend to do the same. Behaviours, which others see positively reinforced are most likely to be modelled. The conditions under which people will or will not imitate what they see others do have been the subjects of considerable research (Bandura, 1969).

Selecting the right antecedent

Behaviours usually follow particular antecedents. However, even if an antecedent is specific and paired with a consequence, it may not be the best antecedent to produce the desired performance. For example, if procedure manuals are not kept current, performers may use outdated procedures. In order to help performance managers plan the right antecedent, Daniels recommends three most powerful classes of antecedent:

- (1) those that clearly describe expectations and desired performance (for example, primary objectives, job descriptions, accountabilities, standards and priorities);
- (2) those that have a history of being associated with a specific consequence (for example, warnings, traffic stoplights, or police cars); and
- (3) behaviours occurring just prior to the desired performance (for example, an elderly person in a residential home asking to be helped, a visitor asking for directions, or a counsellor entering into a conference room).

Behaviour

Behaviour is what you see if you observe someone working – a pinpoint (Ayers, 1995). A pinpoint is a specific description of performance that refers to any action (process) of a person or an outcome (result) the performer produces (Daniels, 1989). If an organisation has not pinpointed the desired behaviours from the beginning of the performance process, it will be impossible to objectively measure and determine whether the changes in the results are

performer-produced or system-produced. Another reason to pinpoint results is that without them an organisation may get wedged up in managing some undesirable behaviour unnecessarily.

Modifying employee behaviour

Motivational theories explain how individuals can be influenced to acclimatise new behaviours. *Need, goal setting, expected attractiveness of outcome and social comparison* are argued to be the main driving motivational forces that are premised by these theories (Dixon *et al.*, 1998). These are outlined as follows:

- for the “need” motivational force there is Maslow’s theory of hierarchy of needs (1970), motivation hygiene theory (Herzberg *et al.*, 1959, 1996), achievement-power-affiliation theory, as argued by McClelland (1961); and existence relatedness-growth theory (Alderfer, 1972);
- specificity of goals theory (Locke, 1968; Locke and Ladham, 1990) explain the “goal-setting” motivational force;
- the expectancy theory by Vroom (1964) explains “the expected attractiveness of outcome”; and
- finally, for the “social comparison” we have the equity theory by Adams (1965).

The practical impact of these theories on behaviour adaptation depends on things like attitudes, values, and personal qualities of individuals and organisations. Issues such as an individual’s capacity and willingness to amass the incentives they need to assume new behaviours; their capacity and willingness to be critically observant of their own behaviours and motivators, thereby developing the intuition and aptitude to manage their own behaviour change (Dixon, *et al.*, 1998).

A myriad organisational strategies are required to craft behavioural change in workplaces. In the course of acclimatising new behaviours, both individuals and organisations undergo a learning process. This may be a result of observations made of the new behaviour as practised by peers and its subsequent imitation by the learner (social learning theory (Bandura, 1986); or feedback received by the learner about the success or failure on the new behaviour(s) being practised (positive and negative reinforcement theory) (Daniels, 1989; Skinner, 1969)). The essence of the PM model is that it enables an economic entity to become a “learning organisation”.

Consequences

Consequences are events that follow behaviours and change the probability that the behaviours will reoccur in the future. Consequences affect behaviour in one of two ways. They either increase it or decrease it. There are four behavioural consequences: two increase behaviour and two decrease it (Daniels, 1989):

- (1) Consequences that increase behaviour are:
 - positive reinforcement (denoted R+), i.e. getting something you want; and
 - negative reinforcement (R-), i.e. escaping or avoiding something you do not want.
- (2) Consequences that decrease behaviour are:
 - getting something you do not want (P+), called punishment; and
 - failure to get something you want (P-), called extinction.

R+ is technically defined as any consequence that increases the probability that behaviour that preceded it will occur more often in the future. R- is a consequence that strengthens any behaviour that reduces or terminates the consequence. In other words, a negative reinforcer is a sanction that job-holders will work harder (increase and surpass their performance) to escape or avoid (Daniels, 1989).

In contrast, P+ is a consequence that decreases the frequency of the behaviour it follows. A punishment is therefore a procedure presented following some behaviour or performance with a view to preventing such behaviour from happening again. Extinction (P-) means withholding, or non-delivery, of positive reinforcement for previously reinforced behaviour. P- decreases performance. An extinction burst is a sudden, often dramatic increase in behaviour that usually occurs soon after extinction begins (Daniels, 1989).

The PM model is systematic in approach and managers can adopt the principles of systems analysis theory (SAT) to link primary and secondary objectives of an organisation (Burch, 1992). Systems analysis (SA) is described as the organised step-by-step study of detailed procedures for the collection, manipulation and evaluation of data about an organisation for the purpose not only of determining what must be done, but also of ascertaining the best way to improve the functioning of the system (Skidmore, 1994; Checkland, 1981; Checkland and Holwell, 1998).

SAT attempts to be comprehensive by taking into account many of the variables that affect the day-to-day functioning of an entity. In contrast to the reductionist approach to problem solving, SAT is holistic in nature and PSOs can safely adopt its philosophy. For example, if we let our system be a local authority, the standing committees and departments will form the sub-systems. Then, we may analyse them in terms of the dominant antecedents, behaviour and consequences within the context of *inputs*, *process* and *outputs*, respectively. The antecedents and consequences, which influence the daily behaviour of local authority subsystems, must be determined in the first place for the PM model to be effective. For example, pinpointing what the priorities of both environmental and process stakeholders are, determining specific secondary objectives that are necessary to achieve these primary objectives, and finally how this achievement will be assessed.

Literature review on PM model

PM model is a novel concept in developing countries relative to developed economies. The PM model is defined within the context of private sector organisations as a systematic, data-oriented approach to managing people at work that relies on positive reinforcement as the major way of optimising performance (Daniels, 1989). It is a “value-adding” process of organisational performance (Slater *et al.*, 1998). Furthermore, you must develop a way to measure these behaviours and their results, and determine the methods for changing or modifying the current behaviour if necessary. The final steps are to use those methods, evaluate the results and give feedback to performers. Data-oriented means that an organisation must use performance data to evaluate the effectiveness of the strategies employed (secondary objectives) to achieve the primary objectives (Fitzgerald *et al.*, 1991). The techniques and practices of PM are derived from the field study of *applied behaviour analysis* – the term used to describe the scientific study of behaviour (Baer *et al.*, 1968). In order to understand behaviour, applied behaviour analysts use the same scientific methods that the physical sciences employ, i.e. precise definition of the behaviour under study, experimentation, and consistent replication of the experimental findings.

PM is an integrated set of planning and review procedures, which cascades down through the organisation to provide a link between each individual and the overall strategy of the organisation (Rogers, 1994). Similarly, the NAHT (1991) describes PM as “a process that links people and jobs to the strategy and objectives of the organisation”. The emphasis put across by the NAHT is that through PM individual jobholders:

- have greater clarity about what their organisation is trying to achieve;
- understand what is expected of them in their job;
- are entitled to regular feedback on how well they are doing;
- have continuous support from their managers; and
- have an opportunity to assess their overall performance achievements over a given period.

LGMB (1993) and the Audit Commission (1995) in the UK have adopted a broad definition of the PM model that encompasses the functions and processes that may be used to manage both organisational and individual performance. This kind of vision of the PM model creates a more integrated approach to the management of performance and enhancing accountability in local authorities in general. The two institutions suggest that, in order to improve both organisational and individual performance, the following management functions are important:

- defining and setting organisational and individual aims and objectives;
- corporate planning;
- linking organisational strategy and service objectives to jobs and clients;

- identifying staff training and development needs;
- assessing the results through personal appraisal using relevant performance indicators;
- performance agreements or contracts;
- using the knowledge gained through training to modify performance attitudes;
- external and internal communication systems; and
- organisation development (OD) and performance review.

The term PM refers to any integrated, systematic approach to improving organisational performance to achieve corporate strategic aims and promote its mission and values (Edis, 1995). This implies that a PM system aims at improving the results of people's efforts by linking these to the organisation's corporate objectives. That is, PM is the means through which employees' performance can be improved by ensuring appropriate recognition and reward for their efforts, and by improving communication, learning and working arrangements as stipulated in the balanced scorecard model.

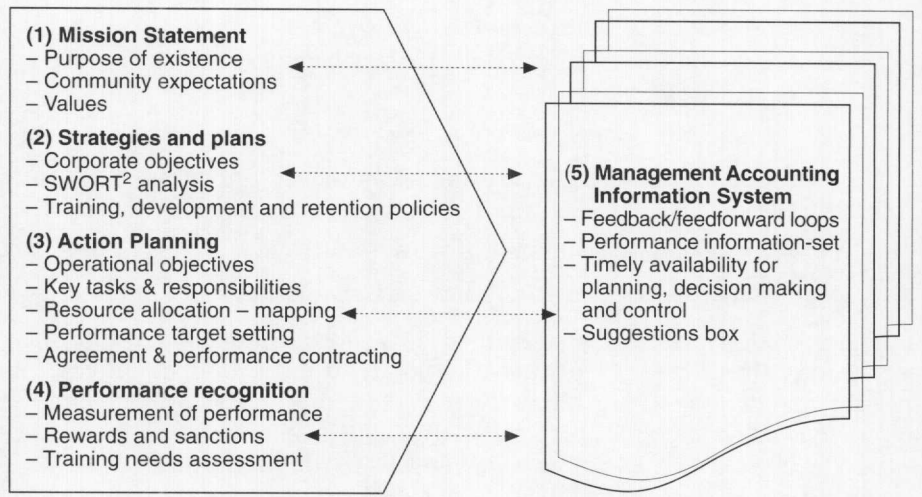
Installing PM in an organisation entails creating and supporting the "achievement culture" and thus ensures that effort is generated that results in performance which in turn results in real achievements. By "achievement culture", it means a combination of performance orientation and professional excellence (Edis, 1995).

The PM model (see Figure 1) stems from a clear understanding by every member of the organisation's mission and values, and what it wants to achieve. Its success depends on managers developing a style that promotes achievement with the right motivation "or positive reinforcement" and performance-based information-set from the management accounting system (MAS) as shown in Figure 1.

Literature indicates that the traditional role of MAS in PSOs is that of financial planning and control (Drury, 1996). While budgetary control remains an important measure to contain over-expenditure in PSOs, NPM reform process is more concerned with output measures that focus more on quality delivery of goods and services. The market is more closely focusing on outcome measures that assess contributions to achievement of governments' primary objectives.

Clearly, this propensity has posed a great challenge to management accountants in PSOs given that modern public sector managers now need a new package of "information-set" that is commensurate with the market-based planning, decision-making and control processes (Muid, 1997). Unfortunately, literature is still scanty out there, which addresses issues governing the role of management accounting in the new era of public management. That is how management accountants have responded to new information needs of public sector managers following the adoption of the NPM principles. There is little discussion around the nature of performance information and current models of management accounting literature. For example, how the frontiers of

Figure 1.
The five-factor PM
model



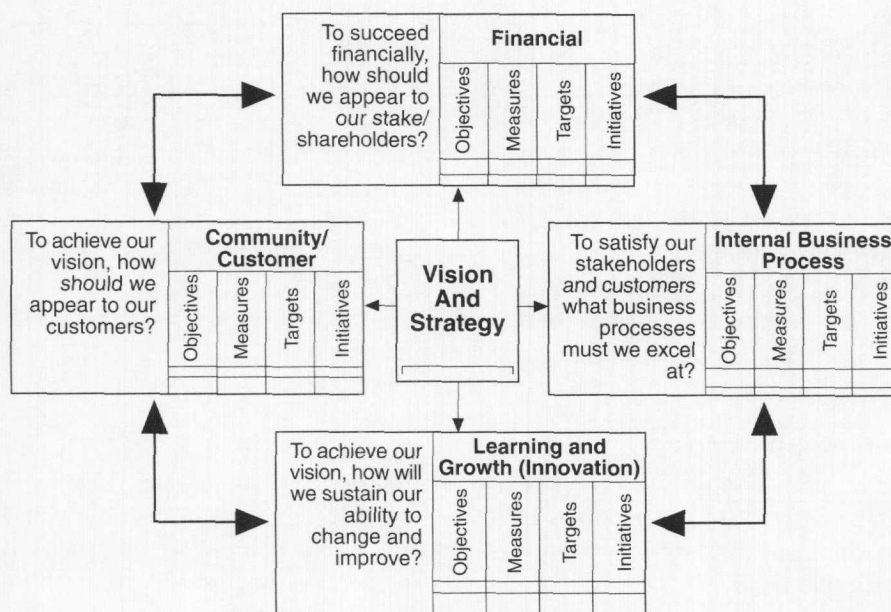
management accounting, such as activity-based costing (ABC), activity management (AM), activity-based management (ABM), local information systems (LS), balanced scorecard (BS), life-cycle costing (LCC), target costing (TC), strategic management accounting (SMA), cost of quality (CQ), EVATM, etc., are applicable in a public sector environment. This is a potential area for further research.

Implications of the PM model in local governments

Performance management model is the process by which the organisation integrates its performance with its corporate strategies and objectives (Bititci *et al.*, 1997). Literature on PM is now starting to address issues of strategic linkages with operational performance in the local government system (Atkinson *et al.*, 1997). This is consistent with the literature on performance management in general (Kaplan and Norton, 1996; Fitzgerald *et al.*, 1991; Ballantine and Modell, 1998). However, literature is still largely grounded in operational concepts of the PM model. Research provides evidence that organisations concentrate on measuring what is easily measurable and in local government this approach results in a prejudice against measuring performance in terms of economy and efficiency, and to a lesser extent on effectiveness (Palmer, 1993).

In reviewing the development and use of performance measurement in UK local government, Ghobadian and Ashworth (1994) suggest characteristics of performance measurement systems that are consistent with the principles underlying the balanced scorecard approach (BSA) to performance management as set out in Figure 2. They believe that an integrated, holistic performance measurement system that did all of these things would, in fact, be a performance management system.

Further research claims that prior to the 1990s public sector reforms performance measurement, let alone performance management, was not a high



Source: Kaplan and Norton (1996)

Figure 2. The balanced scorecard: framework to translate a strategy into operational terms

priority in Victorian local government in Australia (Kloot *et al.*, 1997). Managerialist changes instituted by the state government, consistent with managerialist changes in other Australian government sectors, New Zealand, the UK, Canada and the USA, now demand a focus on performance measurement (Dixon *et al.*, 1998). The most obvious managerialist change is the introduction of compulsory competitive tendering (CCT), which requires performance information for the purposes of contract specification and management (Palmer, 1993). It is through MAS that quantitative “performance-based” information can be internally disseminated for the PM model to earn positive implications in the local governments.

The BS is potentially a powerful tool by which senior managers can be encouraged to address the fundamental issue of effectively deploying an organisation’s strategic intent (Kaplan and Norton, 1992, 1996). The BS literature also indicates that it is as much the process of establishing a scorecard that yields benefit as the resultant measurement schema. Kloot and Martin (1998) argue that, in practice, PM systems require the four dimensions of the BS, i.e. financial, community/customer, internal business processes, and growth/innovation and learning. While all the four dimensions of the BSA model are important, the focus in the local government system has been on the results of council work financial performance and to a lesser extent on how the community views performance.

Local authorities need a better means of determining performance in relation to objectives (Atkinson and McCrindell, 1997). When linking performance measurement and organisational accountability, several writers have made an

important distinction between primary and secondary objectives (Atkinson and McCrindell, 1997) or results and the determinants of those results (Fitzgerald *et al.*, 1991). The strategic planning process begins by determining the organisation's primary objectives. There is an obvious and complementary relationship between results (primary objectives) and determinants (secondary objectives). A focus on stakeholders is evident in recent performance models. Atkinson *et al.* (1997) refer to *environmental* stakeholders; customers, owners and the community, and *process* stakeholders; employees and suppliers. Whereas environmental stakeholders are concerned more about achievement of primary objectives, process stakeholders are concerned with the planning, design, implementation and operation of the organisation to meet the primary objectives. The way in which this works in organisations is what Atkinson *et al.* (1997) call strategic performance measurement system.

Empirical studies show that, in practice, much of the dissatisfaction with performance appraisal comes from the ineffectiveness of the system in achieving some of the purposes for which the schemes are established. Studies also indicate that some of the problems with performance measurement are attributable to the flaws in the design, implementation or operation of the performance appraisal schemes in organisations. Evidence from surveys consistently show that managers spend little time on the measurement process of individual performance. Given the scantiness of studies addressing these claims, the author is currently undertaking an academic research, which attempts to address these issues more closely. Most importantly, the focus of this study is on the role of MAS in response to the revised information needs of public sector managers in the UK local government system. Already there are indications from the pilot study across UK local government chief executives that, although there are consensus and perception that PM model is a powerful tool for improving organisational and individual performance, less effort is exerted in making the most out of the model. The findings from this study will hopefully be invaluable contributions towards this literature and important lessons for practitioners and academicians in developing countries.

The concluding remarks

This paper has attempted to highlight some of the concepts and literature of the PM framework. The paper has argued that the philosophy of NPM is a contemporary customer-focused approach, which aims at improving the delivery of public service quality. Conceivably, this theoretical framework emphasises the use of PM as a systems-based model for cultivating "the achievement culture" within PSOs. The PM model is a value-adding process which links people and jobs to the strategy and objectives of the organisation and a number of managerial planning, measurement and control techniques have been devised to facilitate this linkage. It is recommended that for the PM model to function effectively, performance of employees must be linked to corporate objectives, measured, and recognised. The planning, decision-

making and control processes must be based on performance information from the MAS.

The PM model provides an important integrating framework, both academically and practically, to focus on optimisation of customer service level. Second, there is a need to link PM systems design with issues of policy, strategy, operations, assessments and information systems. Third, the PM model reflects and correlates the aims of an organisation and the plans that have been developed to achieve those aims. The PM model goes even beyond the traditional boundaries of pure management and integrates with management accounting in various dimensions. For example, the PM model requires that management accountants need to understand all operational activities of the organisation so that constant and noise-free performance-based information can flow across all levels within the organisation.

This makes it clear that management accounting and other performance measurement practices need to be evaluated not just from an economic perspective, but also from a social, behavioural and managerial perspective, within an overall organisational context. Local government performance measurement pays much less attention to the determinants, or means of achieving long-term, sustained organisational improvement-internal business processes, and innovation and learning. Strategic PM demands an approach that recognises the importance of a focus on both results (primary objectives) and the means to achieve these results (secondary objectives). The role of management accounting in the provision of quantified performance data for planning, decision making and control is taken for granted in this respect. These social, technical, cross-national cultural aspects of public management reforms make the study of PM systems such a fascinating topic for academic research and such a challenge to the practitioner. Developing countries are urged to adopt the "PM model" with vigilance, because by far and large its effectiveness depends, among other things, on the extent to which market conditions triumph in the respective country. Most importantly, there is a real need for these countries to learn from veteran countries like the UK.

Notes

1. EVATM is a market-based control technique that has been developed by the Stern Stewart Corporation as an overall measure of financial performance that is intended to focus managers' minds on the delivery of shareholder value.
2. SWORT denotes organisational strategic analysis in terms of Strengths, Weaknesses, Opportunities, market Risks and Threats due to competition and so on.

References

- Adams, J.S. (1965), "Inequality in social exchange", in Dixon, J. *et al.* (1998), "Managerialism – something old, something borrowed, little new: economic prescription versus organisational change in public agencies", *International Journal of Public Sector Management*, Vol. 11 No. 2/3, pp. 164-87.
- Alderfer, C.P. (1972), *Existence, Relatedness, and Growth*, Free Press, New York, NY.
- Armstrong, M. and Baron, A. (1998), *Performance Management Handbook*, IPM, London.

- Atkinson A.A. and McCrindell J.Q. (1997), "Strategic performance measurement in government", *CMA Magazine*, April, pp. 20-23.
- Atkinson A.A. *et al.* (1997), "A stakeholder approach to strategic performance measurement sloan", *Management Review*, Spring, pp. 25-37.
- Audit Commission (1995), *Management Handbook: Paying the Piper... Calling the Tune*, HMSO, London.
- Ayers, H. (1995), *Perspectives on Behaviour: A Practical Guide to Effective Interventions*, David Fulton, London.
- Baer, D. *et al.* (1968), "Some current dimensions of applied behaviour analysis", *Journal of Applied Behaviour Analysis*, Vol. 20 No. 4, pp. 103-05.
- Ballantine, J.B.S. and Modell, S. (1998), "Performance measurement and management in public health services: a comparison of UK and Swedish practice", *Management Accounting Research*, Vol. 9, pp. 71-94.
- Bandura, A. (1969), *Principles of Behavior Modification*, Holt, Rinehart & Winston, New York, NY.
- Bandura, A. (1986), *Social Foundations of Thought and Action: A Social Cognitive Theory*, Prentice-Hall, Englewood Cliffs, NJ.
- Bititci, U. *et al.* (1997), "Integrated performance measurement systems: an audit and development guide", *The TQM Magazine*, Vol. 9 No. 1.
- Bromwich, M. (1990), "The case for strategic management accounting: the role of accounting information for strategy in competitive markets", *Accounting, Organizations and Society*, No. 15.
- Burch, J.G. (1992), *Systems Analysis, Design, and Implementation*, Boyd & Fraser, Boston, MA.
- Campbell, D. (1990), "The forces of prejudice", *The Guardian*, 31 October.
- Checkland, P. (1981), *Systems Thinking, Systems Practice*, J. Wiley, Chichester.
- Checkland, P. and Holwell, S. (1998), *Information, Systems, and Information Systems*, J. Wiley, Chichester.
- Daniels, A.C. (1989), *Performance Management: Improving Quality Productivity through Positive Reinforcements*, PM Publications, Turker, GA.
- Deming, W.E. (1986), *Out of Crisis: Quality, Productivity and Competition Position*, Cambridge University Press, Cambridge.
- Dixon, J. *et al.* (1998), "Managerialism – something old, something borrowed, little new: economic prescription versus organisational change in public agencies", *International Journal of Public Sector Management*, Vol. 11 No. 2/3, pp. 164-87.
- Drury, C. (1996), *Management and Cost Accounting*, 4th ed., Chapman & Hall, London.
- Edis, M. (1995), *Performance Management and Appraisal in Health Services*, Kogan Page, London.
- Fitzgerald, L. and Moon, P. (1996), *Performance Measurement in Service Industries: Making it Work*, CIMA, London.
- Fitzgerald, L. *et al.* (1991), *Performance Measurement in Service Businesses*.
- Flynn, N. (1997), *Public Sector Management*, 3rd ed., Prentice-Hall, Harvester Wheatsheaf, London.
- Ghobadian, A. and Ashworth, J. (1994), "Performance measurement in local government – concepts and practice", *International Journal of Operations & Production Management*, Vol. 14 No. 5, pp. 35-51.
- Herzberg, F. (1996), *Work and the Nature of Man*, World Publishing Company, New York, NY.
- Herzberg, F. *et al.* (1959), *The Motivation to Work*, John Wiley, New York, NY.
- Horton, S. and Farnham, D. (1999), *Public Management in Britain*, Macmillan Press Ltd, London.

- Kaplan, R.S. and Norton, D.P. (1992), "The balanced scorecard: measures that drive performance". *Harvard Business Review*, January-February, pp. 71-9.
- Kaplan, R.S. and Norton, D.P. (1996), "Using the balanced scorecard as a strategic management system". *Harvard Business Review*, January-February, pp. 75-85.
- Kloot, L. and Martin, J. (1998), *Strategic Performance Management: A Balanced Approach to Performance Management Issues in Local Government*, Victoria University of Technology, Melbourne.
- Kloot, L. et al. (1997), *Management Accounting Systems and Organisational Learning in Victorian Local Government*, Australian Centre for Management Accounting Development, Melbourne.
- LGMB (1993), "People and performance: the LGMB guide to performance management", Local Government Management Board, London.
- Locke, E.A. (1968), "Towards a theory of task motivation and incentives", *Organisational Behaviour and Human Performance*, Vol. 14 No. 2, pp. 157-89.
- Locke, E.A. and Latham, G.P. (1990), *A Theory of Goal Setting and Task Performance*, Prentice-Hall, New York, NY.
- McClelland, D.C. (1961), *The Achieving Society*, Van Nostrand Reinhold, New York, NY.
- Maslow, A.H. (1970), *Motivation and Personality*, Harper & Row, New York, NY.
- Muid, C. (1997), "Information systems and the new public management – a view from the centre", *Public Administration*, No. 72.
- NAHT (1991), *Performance Management Guide*, National Association of Head Teachers, West Sussex.
- OECD (1993), *Regulatory Management and Reform: Current Concerns in OECD Countries*, Public Management Occasional Papers, Regulatory Management and Reform Series No. 1. OECD, Paris.
- Otley, D. (1999), "Performance management: a framework for management control systems research", *Management Accounting Research*, Vol. 10, pp. 363-82.
- Palmer, A. (1993), "Performance measurement in local government", *Public Money and Management*, October-December, pp. 31-6.
- Rogers, S. (1994), *Performance Management in Local Government*, Longmans, Essex.
- Skidmore, S. (1994), *Introducing Systems Analysis*, NCC-Blackwell, Manchester.
- Skinner, B.F. (1969), *Contingencies for Reinforcement*, Appleton-Century-Crofts, New York, NY.
- Slater et al. (1998), "Concepts of private sector management for public administrators", Report to ADB, University of Birmingham.
- Vroom, V.H. (1964), *Work and Motivation*, John Wiley, New York, NY.

Further reading

- Arwidi, O. and Samuelson, L.A. (1993), "The development of budgetary control in Sweden – research note". *Management Accounting Research*, Vol. 4, pp. 93-107.
- Atkinson, R.C. (1988), *Steven's Handbook of Experimental Psychology: Volume 2*, John Wiley, New York, NY.
- Aucoin, P. (1990), "Administrative reform in public management: paradigms, principles, paradoxes and pendulums in governance", *International Journal of Policy and Administration*, Vol. 3, pp. 115-37.
- Aucoin, P. (1995), *The New Public Management – Canada in Comparative Perspective*, Institute for Research and Public Policy (IRPP), Montreal.

- Austin, R.D. and Gittel, J.H. (1999), *Anomalies of High Performance: Refraining Economic and Organizational Theories of Performance Measurement*, Working Paper, Harvard Business School.
- Batley, R. (1996), "Public-private relationships and performance in service provision", *Urban Studies*, Vol. 33 Nos. 4/5, pp. 723-51.
- Bellamy, C. and Taylor, J. (1994), "Towards the information polity? Public administration in the information age", *Public Administration Journal*, Vol. 72 No. 1.
- Borins, S. (1994), "Government in transition: a new paradigm in public administration", A Report on the Inaugural Conference of CAPAM, the Commonwealth Association for Public Administration and Management, CAPAM, Toronto.
- Borins, S. (1995), "The new public management is here to stay", *Canadian Public Administration*, Vol. 38, pp. 122-32.
- Boston, J. et al. (1996), *Public Management. The New Zealand Model*, Oxford University Press, Auckland.
- Briers, M. and Hirst, M. (1990), "The role of budgetary information in performance evaluation", *Accounting Organizations and Society*, pp. 373-98.
- Bryson et al. (1993), "Decentralisation of collective bargaining: local authority opt outs", *Local Government Studies*, Vol. 19 No. 4, Winter.
- Bunce, P. et al. (1995), "Advanced budgeting: a journey to advanced management systems", *Management Accounting Research*, pp. 253-65.
- Corrigan, P. and Joyce, P. (1997), "Reconstructing public management: a new responsibility for the public and a case study of local government", *International Journal of Public Sector Management*, Vol. 10 No. 6.
- Day, P. and Klein, R. (1987), *Accountabilities: Five Public Services*, Tavistock, London and New York, NY.
- Downs, E. (1992), *Structured Systems Analysis and Design Method: Application and Context*, Prentice-Hall International, New York, NY.
- Dryden, S. (1968), *Local Government in the Third World: Experience of Tropical Africa*, John Wiley, London.
- Dunsire, A. (1995), "Administrative theory in the 1980s: a viewpoint", *Public Administration*, Vol. 73, pp. 17-40.
- Dyer, L. and Reeves, T. (1995), "Human resource strategies and firm performance: what do we know and where do we need to go?", *International Journal of Human Resources Management*, Vol. 6, pp. 656-70.
- Eadie, D.C. (1983) "Putting a powerful tool to practical use: the application of strategic planning in the public sector", *Public Administration Review*, Vol. 43, pp. 447-52.
- Elcock, H. (1996), "Strategic management", in Farnham, D. and Horton, S. (Eds), *Managing the New Public Services*, 2nd ed., Macmillan, London.
- Emmanuel, C. et al. (1990), *Accounting for Management Control*, Chapman & Hall, London.
- Farnham, D. and Horton, S. (Eds) (1996), *Managing the New Public Services*, 2nd ed., Macmillan, London.
- Fletcher, C. and Williams, R. (1992) "The route to performance management", *Journal of Personnel Management*, Vol. 24 No. 10, pp. 42-7.
- Flynn, N. (1990), *Public Sector Management*, Harvester Wheatsheaf, London.
- Flynn, N. and Talbot, C. (1996), "Strategy and strategists in UK local government", *Journal of Management Development*, Vol. 15 No. 2.
- Golembiewski, R.T. (1990), "Public sector organisation behaviour and theory: perspectives on nagging problems and on real progress", in Lynn, N.B. et al. (Eds), *Public Administration: The State of the Discipline*, Chatham House Publishers, Chatham, NJ.

- Goodsell, C. (1990). "Emerging issues in public administration", in Lynn, N.B. *et al.* (Eds), *Public Administration: The State of the Discipline*, Chatham House Publishers, Chatham, NJ.
- Gore, A. (1993), "The Gore report on reinventing government. Creating a government that works better and costs less", *Report of the National Performance Review*, Times Books, New York, NY.
- Gray, A. and Jenkins, B. (1995), "From public administration to public management: reassessing a revolution", *Public Administration*, Vol. 73 No. 1, pp. 77-99.
- Gulick, L. and Urwick, L. (Eds) (1937), *Papers on the Science of Administration*, Institute of Public Administration, New York, NY.
- Guthrie, J. and English, L. (1997), "Performance information and programme evaluation in the Australian public sector", *International Journal of Public Sector Management*, Vol. 10 No. 3.
- Haynes, J. (1996), *Third World Politics*, Blackwell, Oxford.
- Hax, A.C. and Majluf, N.S. (1984), *Strategic Management: An Integrative Perspective*, Prentice-Hall, Englewood Cliffs, NJ.
- Hood, C. (1991), "A public management for all seasons?", *Public Administration*, Vol. 69, pp. 3-19.
- Hood, C. (1995), "The new public management in the 1980s: variations on a theme", *Accounting, Organisations and Society*, Vol. 20, Nos. 2/3, pp. 93-110.
- Horgren, C.T. *et al.* (1997), *Cost Accounting – A Managerial Emphasis*, 9th ed., Prentice-Hall, Englewood Cliffs, NJ.
- Hughes, O.E. (1998a), *Australian Politics*, 3rd ed., Macmillan, Melbourne.
- Hughes, O.E. (1998b), *Public Management & Administration: An Introduction*, Macmillan Press, London.
- Institute of Personnel Management (1992), *Performance Management in the UK: An Analysis of Issues*, IPM, London.
- Isaac-Henry, K. *et al.* (1997), *Management in the Public Sector, Challenge and Change*, 2nd ed., International Thomson, London.
- Kickert, W.J.M. (1997), *Public Management Reform in Western Europe*, Edward Elgar, Cheltenham.
- Klay, W.E. (1989), "The future of strategic management", in Rabin, J. *et al.* (Eds), *Handbook of Strategic Management*, Marcel Dekker, New York and Basel.
- Kloot, L. (1995), "Management control systems and organisational learning in a changing environment". Unpublished PhD Thesis, University of Technology, Swinburne.
- Kramer, F.A. (1987), *Changing Public Bureaucracy: Values and Organization – Management Theories*, The Free Press, London.
- Lane, J. (1995), *The Public Sector: Concepts, Models and Approaches*, 2nd ed., Sage, London.
- Langfield, S.K. (1997), "Management control systems and strategy: a critical review", *Accounting Organisations and Society*, pp. 207-32.
- Lee, R.D. and Johnson, R.W. (1989), *Public Budgeting Systems*, 4th ed., Aspen Publications, Rockville.
- Lerner, A. and Wanat, J. (1992), *Public Administration – A Realistic Reinterpretation of Contemporary Public Management*, Prentice-Hall, Englewood Cliffs, NJ.
- Martin, J. (1999), "Leadership in local government reform: strategic direction versus administrative compliance", *Australian Journal of Public Administration*.
- Massey, A. (1993) *Managing the Public Sector*, Edward Elgar, Aldershot.
- Merchant, K.A. (1989), *Rewarding Results: Motivating Profit Center Managers*, Harvard Business School Press, Boston, MA.

- Milakovich, M.E. (1991), "Total quality management in the public sector", *National Productivity Review*, Vol. 10, pp. 195-213.
- Mitchell, F. (1994), "A commentary on the applications of activity-based management", *Management Accounting Research*, Vol. 5, pp. 261-71.
- Moore, M.H. (1995), *Creating Public Value – Strategic Management in Government*, Harvard University Press, London.
- Mulhins, L. (1996), *Management and Organisational Behaviour*, 4th ed., Pitman, London.
- Noreen, E. (1991), "Conditions under which activity-based cost systems provide relevant costs", *Journal of Management Accounting Research*, Vol. 3, pp. 159-68.
- Nun, P.C. and Backoff, R.W. (1992), "Strategic management of public and third sector organisations", *A Handbook for Leaders*, Jossey-Bass, San Francisco, CA.
- Nunberg, B. (1995), "Managing the Civil Service, reform lessons from advanced industrialised countries". World Bank Discussion Paper, The World Bank, Washington, DC.
- OECD (1987), *Administration as Service, the Public as Client*, OECD, Paris.
- OECD (1990), *Survey of Public Management Developments*, Public Management Committee (PUMA), OECD, Paris.
- OECD (1991), "Serving the economy better", *Occasional Papers on Public Management*, OECD, Paris.
- OECD (1992), *Public Management Development Survey 1990*, OECD, Paris.
- OECD (1995), "Governance in transition", *Public Management Reforms*, OECD, Paris.
- OECD (1997), "In search of results", *Performance Management Practices No. 67*, OECD, Paris.
- OECD (1998), *Public Management Reform and Economic Development*, OECD, Paris.
- Osborne, D. and Gaebler, T. (1992), *Reinventing Government, How the Entrepreneurial Spirit Is Transforming the Public Sector*, Addison-Wesley, Reading, MA/Wokingham.
- Osborne, D. and Gaebler, T. (1993), *Reinventing Government – How the Entrepreneurial Spirit Is Transforming the Public Sector*, Penguin, New York, NY.
- Otley, D.T. (1994), "Management control in contemporary organizations: towards a wider perspective", *Management Accounting Research*, Vol. 5, pp. 289-99.
- Otley, D.T. and Berry, A.J. (1980), "Control, organisation and accounting," *Accounting Organizations and Society*, pp. 231-44.
- Otley, D.T. and Berry, A.J. (1994), "Case study research in management accounting and control", *Management Accounting Research*, Vol. 5, pp. 45-65.
- Pollitt, C. (1990), *Managerialism and the Public Services: The Anglo-American Experience*, Basil Blackwell, Oxford.
- Pollitt, C. (1993), *Managerialism and the Public Services: Cuts or Cultural Change in the 1990s*, 2nd ed., Basil Blackwell, Oxford.
- Pollitt, C. (1996), "Antistatist reforms and new administrative directions: public administration in the United Kingdom", *Public Administration Review*, Vol. 56 No. 2, pp. 81-7.
- Price, C. (1994), "Privatisation in less developed countries", in Jackson, P.M. and Price, C. (Eds), *Privatisation and Regulation. A Review of the Issues*, Longman, London and New York, NY.
- Public Management Service (1997), *Organisation of PUMA's Work on Performance Management*, PUMA, Paris.
- Quade, E.S. (1982), *Analysis for Public Decisions*, 2nd ed., Elsevier, New York, NY.
- Rabin, J. and Bowman, J.S. (Eds) (1984), *Politics and Administration. Woodrow Wilson and American Public Administration*, Marcel Dekker, New York, NY.
- Rainey, H.G. (1990), *Public Management: Recent Developments and Current Prospects*, Chatham House Publishers, Chatham, NJ.

- Ranson, S. and Stewart, J. (1994), *Management for the Public Domain*, Macmillan, London.
- Riggs, F. (1991), "Public administration: a comparativist framework", *Public Administration Review*, Vol. 51 No. 6, pp. 473-7.
- Riley, E. (1992), *Motivating and Rewarding Employees: Some Aspects of Theory and Practice*, ACAS, London.
- Rogers, C. (1936), *A Social Psychology of Schooling: The Expectancy Process*, Routledge & Kegan Paul, London.
- Root, H.L. (1996), *Small Countries, Big Lessons: Governance and the Rise of East Asia*, Oxford University Press, Hong Kong.
- Saunders, P. and Klau, F. (1985), "The role of the public sector", *OECD Economic Studies*, No. 4, OECD, Paris.
- Scapens, R. and Roberts, J. (1993), "Accounting and control: a case study of resistance to accounting change", *Management Accounting Research*, Vol. 4, pp. 1-32.
- Shillinglaw, G. (1989), "Managerial cost accounting: present and future", *Journal of Management Accounting Research*, Vol. 1, pp. 33-46.
- Simon, H.A. (1976), *Administrative Behavior – A Study of Decision Making in Administrative Organization*, The Free Press, New York, NY.
- Simpson, E.F. (1994), *The Developing World*, 2nd ed., Longmans, London.
- Spann, R.N. (1981), "Fashions and fantasies in public administration", *Australian Journal of Public Administration*, Vol. 40, pp. 12-25.
- Stewart, J. and Walsh, K. (1992), "Change in the management of public services", *Public Administration*, Vol. 70, pp. 499-518.
- Swiss, J.E. (1992), "Adapting total quality management (TQM) to government", *PAR*, Vol. 52, pp. 356-62.
- Thompson, A.A. and Strickland, A.J. (1990), *Strategic Management: Concepts and Cases*, BPI Irwin, Homewood, IL.
- Toft, G. (1989), "Synoptic (one best way) approaches of strategic management", in Rabin, J. et al. (Eds), *Handbook of Strategic Management*, Marcel Dekker, New York and Basel.
- Vernon, R. (1984), "Linking managers with ministers: dilemmas of the state-owned enterprise", *Journal of Policy Analysis and Management*, Vol. 4.
- Ward, K. (1992), *Strategic Management Accounting*, Butterworth-Heinemann, Oxford.
- World Bank (1995a), *Bureaucrats in Business: The Economics and Politics of Government Ownership*, Oxford University Press, New York, NY.
- World Bank (1995b), "Local government capacity in Columbia: beyond technical assistance", *World Bank Report*, Washington, DC.
- World Bank (1996), "Findings: Africa region", *Issue Number 56*, February.
- World Bank (1997), *World Development Report 1997: Economic Indicators*, The World Bank, Washington DC.
- Wright, V. (1994), "Reshaping the state: implications for public administration", *Western European Politics*, Vol. 17, pp. 102-34.
- Zeckhauser, R.J. and Horn, M. (1989), "The control and performance of state-owned enterprises", in MacAvoy, P. et al. (Eds), *Privatization and State Owned Enterprise. Lessons from the United States, Great Britain and Canada*, Kluwer, Boston, MA.
- Zifcak, S. (1994), *New Managerialism: Administrative Reform in Whitehall and Canberra*, Open University Press, Buckingham.