

Accepted for publication in *Evaluation*

**The Life Cycle Approach of Performance Management: Implications for  
Public Management and Evaluation**

G. Jan van Helden, Faculty of Economics and Business, University of Groningen, P.O. Box 800,  
9700 AV Groningen, The Netherlands

Tel: +31 (0) 50 363 3673. Fax: +31 (0) 50 363 8252. Email: g.j.van.helden@rug.nl

Åge Johnsen\*, Faculty of Social Sciences, Oslo University College, P.O. Box 4 St. Olavs plass,  
NO-0130 Oslo, Norway

Tel: +47 22 45 35 28. Fax: +47 22 45 36 00. Email: aage.johnsen@sam.hio.no

Jarmo Vakkuri, School of Management, FI-33014 University of Tampere, Finland

Tel: +358 3 3551 6356. Fax: +358 3 3551 7214. Email: jarmo.vakkuri@uta.fi

\*Corresponding author

Running title: Helden et al. The life cycle approach of performance management

6 June 2011; please do not quote without permission of the authors.

(Paper word count: 6,488 words/45,000 characters including spaces in main text (excluding abstracts, references, and figures) and 9,319 words all-inclusive.

## **Acknowledgements**

Earlier versions of this paper were presented at the Conference of the European Group of Public Administration (EGPA) ‘Comparing performance’ 19–22 September, 2007 Madrid, Study Group II Performance in the public sector and at the Conference ‘Evaluating the Complex’, 29–30 May 2008, Oslo. We are grateful to the attendants at these conferences, Wouter van Dooren, Christopher Pollitt, Isabella Proeller, Steven van de Walle and three anonymous referees for their comments.

## **Biographical Statements**

**G. Jan van Helden** is Emeritus Professor of Management Accounting at the Faculty of Economics and Business, University of Groningen. In recent years, his research has focused on management and accounting changes in public sector organisations, with a special attention to performance measurement, benchmarking and cost management.

**Åge Johnsen** is Professor of Public Policy at the Faculty of Social Sciences, Oslo University College. His research interests are public sector performance management, audit and accountability in political institutions, public sector strategic management and evaluation in government.

**Jarmo Vakkuri** is Professor of Local Government Accounting and Finance at the School of Management, University of Tampere. His research interests are performance measurement and management in public organisations, bounded rationality in social decision making, markets and

quasi-markets in political environment, audit and accountability in the public sector and institutional change of local government.

# **The Life Cycle Approach of Performance Management: Implications for Public Management and Evaluation**

## **Abstract**

This article discusses how performance management systems may be conceptualised as tools that undergo a life cycle with many stages. The article documents that research on public sector performance management often concerns how management can design systems or address dysfunctional effects when such systems are used. The research needs to cover the entire life cycle of performance management systems, should focus on both their benefits and costs, and needs a fuller recognition of the different actors involved in the life cycle than those normally associated with the hierarchical conception of principals and agents. The life cycle approach facilitates a comprehensive mapping of the various performance management stages and their contingencies from invention to assessment and re-design, including their interdependence. This enables policymakers, managers, evaluators, and researchers to better understand performance management systems as well as identify relevant research areas and communicate practical problems and solutions related to specific stages.

**Key words:** performance management, design, implementation, use, assessment

**L'approche cycle de vie pour le management de la performance: conséquence pour l'administration publique et l'évaluation** – G. Jan van Helden, Åge Johnsen et Jarmo Vakkuri

Cet article examine comment des systèmes de management de la performance peuvent être conceptualisé en tant qu'outils qui suivent un cycle de vie composé de plusieurs phases. L'auteur montre que la recherche sur le management de la performance dans le secteur public le plus souvent traite la façon dont le management peut designer des systèmes ou adresser des effets dysfonctionnels quand des tels systèmes sont utilisés. D'après l'auteur la recherche devrait explorer le cycle de vie entier des systèmes de management de la performance et focaliser aussi bien les avantages que les coûts. La recherche doit également prendre en compte qu'il y a plusieurs acteurs impliqués dans le cycle de vie, non seulement les acteurs qui sont normalement associé à la conception hiérarchique des principaux et agents. L'auteur conclut que l'approche du cycle de vie facilite une identification compréhensive des différentes phases du management de la performance et leur environnement, allant de l'invention à l'évaluation et le redésigne, y compris leurs interdépendances. Ainsi les politiciens, bureaucrates, leaders, évaluateurs et chercheurs peuvent mieux comprendre les systèmes de management de la performance, identifier les domaines de recherche intéressants et également communiquer des problèmes pratique ainsi que des solutions qui correspondent à des phases spécifiques.

*Mots-clés : management par les résultats, design, implémentation, usage, appréciation*

# **The Life Cycle Approach of Performance Management: Implications for Public Management and Evaluation**

## **Introduction**

The purpose of this article is to develop a new framework – the life cycle model – for a broad assessment of the evidence in performance management in the public sector. There is a debate going on in the evaluation society on the merits of performance management, how performance management differs from evaluation and how evaluation can strengthen performance management and vice versa (Blalock, 1999; Davies, 1999; Kusek and Rist, 2004; McDavid and Hawthorn, 2006; Nielsen and Ejler, 2008; Poister, 2003). Performance management in the public sector is now a widespread government tool in many countries, and there is a growing amount of research literature intended to map this practice (Bouckaert and Halligan, 2008; Boyne, Meier, O’Toole and Walker, 2006; van Dooren and van de Walle, 2008; Frederickson and Frederickson, 2006; Moynihan, 2008; Talbot, 2010). Research often concludes that public sector performance management is problematic, particularly when available performance information is either not or only limitedly used, or when it is only used for symbolic purposes (de Bruijn, 2002; Modell, 2004; Pollitt, 2006; Radin, 2006). Still, performance management is important and widely used in the public sector (Behn 2003; Curristine, 2005; de Lancer Julnes, 2006; Williams 2003), which creates a rich understanding desirable for policymakers, public managers, accountants and evaluators.

Performance management is spreading in the public sector at large and requires a comprehensive, interdisciplinary and inter-professional approach. Our assertion is that an analysis based on a life cycle approach can contribute to this understanding. The life cycle

framework enables scholars to identify possible gaps in the existing body of knowledge on performance management systems. Moreover, the framework is beneficial to practitioners in public policy, management and evaluation because it enables them to link their experiences with the relevant academic literature.

The life cycle model borrows from the product life cycle concept with the stages of market introduction, growth, maturation and decline, in addition to policymaking theory with the stages of agenda setting, policy formation, decision, implementation and evaluation. We have divided the performance management life cycle into design, implementation, use and assessment.

Two arguments justify the development of a life cycle model for performance management in the public sector. First, much of the research on public sector performance management focuses on design and use, while the stages of implementation and the assessment of performance management – though not entirely neglected – have been less researched (van Helden, Johnsen and Vakkuri, 2008), with a notable exception in the evaluation literature. We therefore aim at presenting a more balanced review of the evidence from all the relevant stages in the life cycle.

Second, the discussion on performance management excessively follows the boundaries of academic and professional tribes. There is a need for more common frameworks for examining performance management systems among researchers, policymakers, public managers and evaluators. This paper develops one such analytical tool for understanding performance management. We contend that most disciplines and research approaches associated with performance management share the goal of moving from ‘studies to streams’

(Rist and Stame, 2006). More in-depth evaluative knowledge, results orientation and research-driven public management are all assumed to coalesce with more rational, intelligent decision making in the public sector (Perrin, 1998, 1999).

Our life cycle framework is based on a critical review of the relevant performance management literature. The literature on performance management is vast, so we therefore adopted the following selection criteria. First, the literature should acknowledge performance management research in various disciplinary traditions such as public administration, management accounting and evaluation. Second, the literature should be related to different stages of the performance management cycle in order to provide a balanced overview of the existing body of knowledge. Third, the literature should either be influential in terms of a fundamental understanding of specific stages of the performance management life cycle – there are both old and more recent ‘classics’ in public administration, management accounting and evaluation that current research can learn from – or it should be based on sound empirical evidence, though preferably, both criteria should be met. Finally, interesting evidence and lessons may also come from so-called ‘grey’ literature, thus we have also reviewed some research and consultancy reports.

The remainder of the article is outlined as follows. The second section presents the life cycle approach of performance management. This framework provides the structure for the subsequent discussion. The following subsections in the third section analyse selected literature regarding design, implementation, use and the assessment of performance management in the public sector. The fourth section provides a discussion, whereas the last section discusses implications of the life cycle approach for public management and evaluation.



## **The Life Cycle of Performance Management Systems**

In this paper performance management is understood as an instrument for improving efficiency, effectiveness and equity. Performance management is primarily used for increasing decision-making rationality in organisations, although ritualistic uses are not excluded (Nielsen and Ejler, 2008). Performance measurement encompasses construction and measurement of decision-relevant performance indicators as an important input to performance management, and often compares those measures with standards or norms (Blalock, 1999; Davies, 1999) that may be derived from external sources, as in benchmarking. Performance management not only implies measurement and monitoring, but also reporting the resulting information to relevant administrative and political bodies that can analyse and use this information (Poister, 2003). Performance management serves various functions, particularly accountability, organisational learning, policy (re) design and planning and control (Behn, 2003; Boyne and Gould-Williams, 2003; Hartley and Allison, 2002; Hood, 2007).

Performance information may be used in performance management as well as in evaluation. The main difference between performance management and evaluation is that performance management is a frequent, almost ongoing activity intended to 'ratchet up' (improve) performance, often of an activity, service or organisation, whereas evaluation is carried out on an ad hoc or regular basis, with the purpose of independently questioning the relevance and even appropriateness of a service, policy or programme (Perrin, 1998; Bastøe, 2006; Davies, 1999; Nielsen and Ejler, 2008).

Public sector organisations will often go through various stages when they adopt performance management systems. Together, these stages shape the so-called performance management life cycle, which consists of four stages, namely design, implementation, use and assessment. Carter (1991), Likierman (1993) and Johnsen (2005) have made similar distinctions, and in empirical studies of performance measurement some stages of this life cycle are recognisable (see for example Bouckaert and Halligan, 2008; Cavalluzzo and Ittner, 2004; van Dooren, 2005).

Figure 1 describes the life cycle model of performance management. *Design* refers to the initiation, content and construction of a performance management system, particularly regarding the types of performance indicators and the extent to which they are goal-oriented. *Implementation* is associated with the introduction of performance management systems in organisations, including pilot projects and testing. *Use* concerns a broad spectrum of aspects, such as purposes and styles of adoption. The uses of performance management systems are conceived to influence ‘something’ (individuals, services, organisations, programmes, society, etc.) in some specific technical, economic or cultural way. *Assessment* concerns a critical appraisal and eventual redesign of the performance management model. *Impacts* relate to the effects of performance management systems in terms of behavioural consequences and organisational effectiveness. Impacts of uses of performance management systems may be categorised as intended and unintended, as well as functional and dysfunctional. The organisational performance management is embedded in an *institutional environment*. These stages will also be influenced by factors other than by what is achieved during the preceding stages of the performance management life cycle, e.g. by the organisation’s strategy and influences from the stakeholders of the public service in question.

[Figure 1 here]

The framework in Figure 1 is obviously a simplification. The performance management life cycle is not necessarily a linear process through the various stages. Organisations may learn from their experiences during each of these stages, and employ the information to reconsider the content of these stages. Both feedback and feed-forward mechanisms shape the final assessment stage of the performance management life cycle, which could lead to a redesign of the performance management system or a change in its implementation or use. Moreover, public sector services are often co-produced by many organisations and tiers (local, regional, national) of government as well as by actors outside the public sector.

## **Analysis**

In the following sections, we review the current body of knowledge on public sector performance management in relation to the framework outlined in Figure 1. In addition to the four stages of the life cycle, impacts of performance measurement, which can regard all these stages, will be discussed. At the end of each subsection, we identify possible gaps in the body of literature.

## **Design**

The design stage often encompasses logical planning steps, including the definition of a vision or mission for the system, formulation of organisational goals and objectives in a consistent way, the development of related performance measures and standards, and the alignment of incentives and sanctions (Blalock, 1999).

Simon (1937) argued that the measurement of public sector performance is based on common wisdom applied to administrative issues. This knowledge could be pursued by asking questions on what the politicians wish to achieve, how the money is spent and how the services contribute to the achievement of goals. The implicit assumption is that developing systematic knowledge and using available data and methods from statistics, trend analysis, cost accounting and budgeting, in addition to the transparent reporting of the performance information to the public, would improve public policy and management.

Seemingly, much of the early public sector performance measurement research was primarily concerned with the design stage of the cycle. The more recent development of performance measurement systems includes attempts to combine the search for 'best practices' with non-parametric methods such as data envelopment analysis (Bretschneider, Marc-Aurele and Wu, 2005; Vakkuri, 2003). Additional methods such as the balanced scorecard can be regarded as innovations in designing multi-dimensional measurement models relative to traditional management-by-objectives models or common practice. Boyne et al. (2006), however, elaborate on far more sophisticated measurement models for public sector organisations than simple balanced scorecards.

Performance measurement design problems cannot be solved without understanding the institutional context. Ouchi (1979) and Wilson (2000) were among the early authors who discussed mechanisms of organisational design and control in various contexts. In their view, the design of performance measurement systems is contingent upon the measurability of outputs and knowledge of the transformation process. Different control mechanisms – particularly market, hierarchy and clan – may be used for different purposes under different contingencies. In a somewhat different framework, Hofstede (1981) addressed how different

contingencies affect management control models (for a more recent contribution to this debate, see Noordegraaf and Abma, 2003).

Wang and Berman (2001) conducted a survey study on performance management design, which revealed that involvement in the sense of management commitment positively influences the design of output and outcome measures, whereas mission orientation only influences the design of outcome measures. These explanations corroborate our notion that the institutional context affects performance management systems, and not only the other way around.

Much of the knowledge on performance measurement has come from research following the public management reforms since the 1960s, for example in relation to programming, planning and budgeting systems. Some of this research has been directed towards decision-relevant performance measurement. The work of Mayston (1985, 1993) is an evident example of this. Mayston (1985) emphasised the importance of the decision relevance of performance measurement systems that face the risk of growing fast due to the fact that many stakeholders wish to measure various aspects. By emphasising decision relevance and information economics, the risk of information overload and system breakdown could be reduced.

The early phase of performance management development was often based on a narrow conception of the context of public sector services. Pollitt (1986) described how Thatcher's conservative, market liberal regime put a greater emphasis on performance management, but the performance measurements were unbalanced and excessively oriented towards management. Pollitt's main conclusion was that the concept of effectiveness must also address issues of equity and not only cost reductions and efficiency, and that the target groups

for the performance information must encompass stakeholders other than management only. More recently, Radin (2006) put forward a similar critique towards the US performance of measurement movement. Furthermore, the performance measurements could to a greater extent also use assessments from colleagues, rather than only from superiors, as argued by Pollitt (1988).

Carter (1991) discussed criteria for good performance indicators and argued that the indicators should be relevant for the organisational objectives, non-manipulative by the individuals and entities being measured, reliable and produced by accurate information systems and unambiguous and unchallengeable by employees. As practical organisational tools, the performance indicators were characterised according to three criteria: whether the coverage was narrow or extensive, useful in relation to being 'tailor made' or not and updated seldom or often. Carter put forward external political pressure on the governmental organisations and the degree of competition with private organisations as explanations for the observed patterns. Carter also argued that the development of performance measurement systems follows a life cycle and faces resistance.

Our review of the literature on the *design* of performance management systems gives rise to the following conclusions. First, there is an emphasis on efficiency and cost reduction, while aspects of effectiveness, equity and user satisfaction receive less attention. Second, there are theoretical and empirical pointers for contingencies of performance management design, although a systematic discussion of the impact of various types of contingencies such as technological factors, organisational factors and institutional factors is underdeveloped. Third, too little attention is given to methodological limitations of performance management systems. Studies in operations research can enrich the discussion about methodological

conditions and requirements for performance management systems to provide solid information. However, some general assumptions and limitations are addressed (Nørreklit, Nørreklit and Melander, 2006), and there also seems to be an increasing amount of interest in methodological issues (Bevan and Hood, 2006; Jacobs and Goddard, 2007; Meyer and Gupta, 1994). Finally, political rationales for designers could be studied more in-depth, i.e. situations in which designers wish to pursue aims other than improving decision making rationality.

### **Implementation**

Implementing performance information in management and budgeting is challenging because it affects the entire organisation (Mayne, 2007). The implementation of performance management systems is therefore important because it concerns many issues. For example, combining bottom-up and top-down processes (Long and Franklin, 2004) and piloting, training and management commitment (Melkers and Willoughby, 2005) are all factors that may contribute to the effective use and intended impacts.

In an early and much cited empirical paper within public management, Likierman (1993) developed 20 lessons from experience in order to enhance the use of performance indicators, including emphasising the need for conceptual validity applied to the political context, bottom-up participation, patience and pragmatic use of the performance indicators.

One could expect that a top-down control system would be resisted in a strong professional context with extensive clan control (Ouchi, 1979). Long and Franklin (2004) described the paradox of how the US Congress and President used the top-down mandate of the Government Performance and Results Act (GPRA) to implement internal bottom-up performance management processes in the federal agencies. However, this ‘one-size-fits-all’

approach was met with unique implementation processes within many of the agencies. A commonly reported outcome from implementation is resistance and tension, as documented by Jones (2002) with benchmarking in the UK National Health Service. Resistance is not necessarily the case, and may depend on many institutional factors such as national and organisational culture, as well as implementation processes. An illustration comes from Aidemark (2001) who examined the meaning of the balanced scorecard in health care management in a Swedish county and argued that the professionals regarded the balanced scorecard as a means of presenting a more compound picture of the health care activities than just financial statements.

The capacity for implementation is a critical resource for successful performance management. Berman and Wang (2000) studied the organisational and institutional capacities of US counties to implement performance measurement systems. Based on a comprehensive survey, they argued that specific organisational and learning capacities must be present if performance measurement systems are to be successfully implemented.

Some empirical research shows that there may often be ambiguous objectives and loose couplings between objectives and performance indicators in the implementation stage (Hyndman and Eden, 2000). Nevertheless, decoupling of performance indicators from organisational objectives may be a conducive implementation mode because this can prevent or bypass resistance so that the systems are able to 'make it' into a use stage (Jansen, 2008; Johnsen, 1999). Other research indicates that strategy linked to structure affects performance (Abernethy and Lillis, 2001), but this research has not studied the implementation stage's effect on the use of performance management models.



We conclude that the *implementation* of performance management systems benefits from considering a broad spectrum of performance domains, some extent of decoupling of performance indicators from organisational objectives and the availability of management capacities. Moreover, research regarding this stage is rather underdeveloped: understanding what is included in implementation and not in design or use is rather minimal (piloting, testing, creating support), or it overlaps those stages (availability of performance indicators, adoption of performance indicators). One unresolved issue is whether implementation is just an intermediary stage for 'use' or has a relevant substance of its own.

## **Use**

In studying why performance management systems are used and how they are used in the public sector, performance management research has particularly addressed purposes and styles of use. According to Behn (2003), the answer as to why government measures performance is contextual. Performance indicators are required for eight different purposes of use: evaluation, control, budgeting, motivation, promoting, celebrating, learning and improvement. Behn has challenged the widely held assumption that performance measurement systems can be universally designed to simultaneously address various managerial purposes. Moreover, research on the uses of public sector performance management lacks a detailed analysis of the 'user' (cf. Moynihan, 2008).

Berman and Wang's (2000) survey study on use showed that technical capacities in particular, as well as support from stakeholders, are associated with an increased use of performance measures. Whereas earlier studies (Poister and Streib, 1999; de Lancer Julnes and Holzer, 2001) found little use for performance indicators, Melkers and Willoughby (2005) found that the use of performance indicators was widespread. Melkers and Willoughby (2005) also

focused on specific aspects of the use of performance measurements such as for budgeting or communication. This study found that a lack of leadership support negatively influences use, which is also dependent upon characteristics of the performance measurement system itself in terms of transparency and density (e.g. use in various stages of the budget cycle). Moynihan (2005) argued that the adoption of organisational learning forums and developing organisational culture would enhance the use of the information and provide learning.

Llewellyn and Northcott (2005) demonstrated how the notion of an average is being introduced through national cost comparisons of UK hospitals. Being average gives UK hospitals a 'sense of comfort' and a perception of 'not standing out too much', whereas being too cheap (or too expensive) may include a possibility that such a hospital is going to be set up as a 'target'. In a similar fashion, benchmarking might be used defensively in order to avoid further rearrangements (cf. Bowerman, Ball and Francis, 2001; van Helden and Tillema, 2005).

The role of performance measurement in political management is most likely still underdeveloped with regard to being decision relevant for various stakeholders and as an instrument in democratic governance (ter Bogt, 2004; Pollitt, 2006). However, studies from the Netherlands (Jansen, 2008), Norway (Askim, 2007; Askim, Johnsen and Christophersen, 2008) and the US (de Lancer Julnes, 2006) indicate that managers and politicians use performance information in policymaking.

The uses of performance measurement have various consequences, which include the effect on institutional environment. By using performance measurements, decision makers maintain the status quo by reinforcing institutional properties or disturb it by transforming institutional

properties. While users may use performance management systems as they were designed, users may also circumvent accepted ways of use by ignoring certain properties, working around them and inventing completely new ones (Vakkuri and Meklin, 2006). Or as argued by Moynihan (2008), users employ the ambiguity in performance measurements according to their institutional interests. Hence, an interactive dialogue model to understand the role of performance information in public administration can then be helpful.

Pollitt (1988) discussed the applicability of user orientation of performance management in public management. There is a need to consider the conception of the user and his relationship to the service, for example, whether the users are current users, those on waiting lists, those considered to have a need for but do not use the service, or all potential users. Moreover, the incorporation of subjective user assessments must be balanced against more objective data, according to Pollitt.

Perrin (1998) examined important fallacies of performance measurement systems. He argued that evaluators needed to understand some fundamental principles of performance measurement (see also Perrin, 1999). The most important flaws include ambiguity in conceptual frameworks, goal displacement (i.e. the 'right' goals are replaced by measurement-related goals), the use of meaningless and irrelevant measures, an emphasis on cost shifting instead of cost savings, confusing subgroup differences with overall success indicators, incentives for mediocre and unambitious behaviour (cf. Llewellyn and Northcott 2005), dysfunctional uses for resource allocation and a limited focus on outcomes. Perrin argued for effective strategies to mitigate these problems.

Bevan and Hood (2006) examined performance management systems in UK health care systems and identified four types of users' responses in gaming behaviour. 'Saints' are players who may disagree with the rule system of performance measurement, but they have a high public service ethos and are willing to report about their (also dysfunctional) behaviour. 'Honest triers' broadly share the rules of the measurement game and do not voluntarily report their misbehaviour, but do not attempt to provide misleading information. 'Reactive gamers' broadly agree with the rule system, but if possible, attempt to game the target system. Finally, 'rational maniacs' do not agree with the rules, and aim to hide dysfunctional behaviour by manipulating information (see also Banker, 1980; Charnes, Clarke and Cooper, 1989).

Our conclusions are that performance management *use* is contingent upon various factors such as the goals of these systems as well as managerial and institutional factors. Moreover, use can be modelled through various reaction patterns, such as either supporting or opposing behaviour, or considering a move to the average level within a certain branch. The relationship between uses of performance management systems and theories on behavioural decision making is underdeveloped, and the understanding of the 'user' is limited. Additional research is needed on how the use (and users) shapes or reshapes the systems in the context of political decision making. More understanding is needed on the relationship between politicians and bureaucrats as users of performance information.

### **Assessment**

Performance management models can be systematically assessed, and some models may be redesigned and re-implemented. There is seemingly not much literature on this stage of the performance management life cycle. However, there are more examples. Rodgers and Hunter (1992) used meta-analysis and concluded that management by objectives had positive impacts

on private as well as public sector organisations. Meyer and Gupta's (1994) seminal contribution on the running down of performance measures provides a description of how individual performance indicators within performance measurement systems in use are evaluated, discarded or redesigned. Performance indicators have impacts on behaviour, thus over time performance indicators no longer discriminate between behaviour or performance, and therefore new performance indicators have to be designed and implemented. Kaplan (1998) identified limitations in management practices and redesigned the management by objectives model into the now popular balanced scorecard (Kaplan and Norton, 1996), while other models might be aborted during the implementation stage or be abandoned after a short time use (Carson et al., 2000).

The new institutional theory on management fads and fashion (Abrahamson, 1996) and some critical theory (Nørreklit, 2003) provide potential explanations on how discarded models may be redesigned to fit contemporary issues or culture. Old models and parts of old models are re-labelled and repackaged, and then re-launched for the management problems of today. For example, the balanced scorecard has been widely adopted as an innovation, but in reality it is a variant of management by objectives (Johnsen, 2001), which is from the 1950s (Drucker, 1954), and which many have regarded as being out of fashion or out-dated (Poister and Streib, 1995).

In Figure 1, assessment is a final stage. However, as we have stated earlier, the life cycle model may or may not be a linear process starting with design and ending with assessment, before resuming with redesign. In practice, given an organisation's or performance measurement system's history, the process can start at any point. Assessment can also kick in at any point.

We conclude that the *assessment* may consist of adjustments made by the management of an existing system in use or by actors in the performance management industry – often academics or consultants – as part of the management innovation processes, or by external auditors. Hence, some management models may have an after-life or many life cycles, and systematic research on the *assessment* stage is undeveloped. For instance, feedback mechanisms from use and *assessment* to design are almost uncovered, in addition to the understanding of how dysfunctional effects of performance measurements affect the design and implementation of performance management systems.

## **Impacts**

There is an extensive literature on organisational effectiveness in sociology and organisation theory (Donaldson 2001; Meyer and Gupta, 1994, Steers, 1975), although performance management is basically a matter of creating impacts through improvements (Boyne et al., 2006). The problem of deciding what satisfactory improvements are can be aggravated by the fact that such assessments may depend on issues such as organisational size and age, and whether the organisations have previously been regarded as efficient or not. Opinions on given criteria on the relationships between the realised and intended impacts of public service processes and outputs can assess improvements, but these criteria and the weights that should be assigned to them may vary between stakeholders and over time. In this way, improvements and impacts in our vocabulary will always be a political issue (Boyne et al., 2006).

The rationalistic tradition of public sector performance management research distinguishes between functional and dysfunctional use. In his classical paper, Ridgway (1956) referred to the tension between intentions of improving organisational performance and the different uses

of performance indexes, though the ultimate outcome may be less favourable to performance improvement than is usually assumed. In performance measurement, the cure may sometimes become worse than the disease.

The research has provided several lists of possible dysfunctional effects of uses of performance measurements, which includes the following seven aspects (Smith, 1995; Vakkuri and Meklin 2006): tunnel vision, sub-optimisation, myopia, convergence, ossification, gaming, and misrepresentation. This last category is sometimes called ‘creative accounting’ or perverting behaviour (de Bruijn, 2002).

There are only a few extensive studies of the impact of performance management models on organisational performance. In one such study, Melkers and Willoughby (2005) examined the effects of performance measurement information on budgeting in local US governments. They found that there was pervasive use, and that ‘the implementation of performance measurement supports improved communication within and across branches of government, advances learned discussion about the results of government activities and services, and adds value to budgeting decisions by providing relevant information about results, as well as costs and activities’ (p. 188). Nevertheless, the information had little effect on budgeting processes and outcomes. Moynihan and Pandey (2005) studied how many doctrines congruent with assumed good performance management practice affected managers’ perceptions of organisational performance, and found that the clarity of goals and decentralised decision making positively affected performance. Boyne and Chen (2007) found that the use of targets – a contested issue in public management – improved performance in schooling. There have also been studies, or at least discussions, of the impacts of performance information on democracy and accountability. Pollitt (2006) argued that based on the available literature,

performance information does not seem to be valued much by important decision makers in the public sector in terms of the impact on democracy. De Lancer Julnes (2006) argued that performance information is important because it can influence decisions and therefore contributes to governmental accountability. Some new empirical research seems to indicate that performance management does have impacts for democracy and accountability (Boyne et al., 2006).

Not surprisingly, we have to conclude that *impacts* of performance measurement are difficult to quantify and assess, and two possible gaps may be explored. The first gap concerns the preoccupation with perverse behaviour and *dysfunctional* effects. The problem of measuring long-term impacts may be one explanation as to why the research has mainly concentrated on dysfunctional behavioural aspects of performance management systems. Research could benefit from a more systematic approach in which both the possible benefits and costs were addressed, which would again result in a more balanced approach of the public sector performance management research such as in Abernethy and Lillis (2001), Boyne et al. (2006) and van Dooren and van de Walle (2008). Furthermore, dysfunctional effects should be studied more contextually in various public sector organisational environments. Albeit difficult to assess, both the functional and dysfunctional effects of performance management should be applied to citizens and other relevant stakeholders of public services and not only to management (Bouckaert and Halligan, 2008). The impacts of performance management are long-term effects. Understanding impacts is therefore a difficult inter-temporal analysis in which links between causes (performance management systems use) and effects (performance improvement in the public sector) are complicated to demonstrate. The relationships also vary according to the criteria assigned to the political decisions by stakeholders over time. To include measures for the usage of performance management models such as independent



variables in for instance productivity analyses (e.g. data envelopment analysis) could be a viable way forward in the study of impacts.

The second gap relates to a lack of theoretical focus in studying the dysfunctional effects of performance management. The behaviour in public organisations may influence performance measurement, and performance measurement may influence organisational behaviour. It may be the case that users deliberately employ performance measurement systems for their unique individual, organisational and political purposes or that the performance measurement systems set the conditions for organisational actors to adapt to. The directions of influence should be better explained in the research.

## **Discussion**

The life cycle model of performance management may be applied positively or normatively. It could possibly map research, development and evaluation when applied positively, as we have done. Applied normatively, the model can be used to anticipate stages that managers should be engaging with.

We argue that the life cycle framework could contribute to making different actors (researchers, practitioners, evaluators) and disciplines more aware of the ways in which specific problems within specific stages in the area of public sector performance management research are addressed, analysed and solved. The life cycle model provides a systematic framework for that purpose. Proper communication is not self-evident between disciplines and professions, let alone academic journals. Moreover, researchers, practitioners, evaluators and the consultancy industry emphasise various stages as well as different performance management problems, and may also prefer different meeting points and communication

channels. For instance, much behavioural accounting research (Llewellyn and Northcott, 2005; Modell 2004) focuses more on dysfunctional effects than the intended and realised benefits of performance management. Practitioners of management and evaluation tend to have their interest in the design and implementation for putting models into practice (Likierman, 1993; Kaplan and Norton, 1996), whereas researchers are often interested in the design and use of the models (Cavalluzzo and Ittner, 2004; van Dooren, 2005). In other words, it could be argued that in addition to the lack of mutual communication between different disciplinary areas (van Helden, Johnsen and Vakkuri, 2008) there may be room for facilitating communication between academics and practitioners through the life cycle framework.

On a broader level, there may be a development over time in public sector performance management research that mirrors the theoretical development in administrative theory regarding rationality (Simon, 1947/1997), i.e. economic, administrative and political man. The different notions of rationality may explain the dominant mode of thinking for many of the actors in the different stages of the life cycle: economic rationality in the design stage, bounded rationality in the implementation stage and political rationality in the use and evaluation stage. Boyne et al. (2006) regard the performance of public organisations as contested and multidimensional, and all measures of performance – whether quantitative or qualitative – as ‘subjective’. Accordingly, our proposal is to seek a more balanced approach in analysing the various stages of the life cycle, and perhaps to see different forms of rationalities for different stakeholders at different stages of the life cycle. In that respect, evaluation may learn from accounting and public management, which seldom regards numbers as ‘objective’ representations of reality. Conversely, performance information is subject to interests and contingent on assumptions and choice.

Our analysis indicates major theoretical gaps in the prevailing body of knowledge on public sector performance management. First, the design of performance management systems continues to be biased towards measuring costs and efficiency at the expense of issues of equity and user satisfaction, although this does not apply to using an evaluation perspective. Second, despite some studies on implementation, this stage seems to be under-researched. Third, a common understanding of the use and users of performance information seems to be embedded in the notion of hierarchical management control. There is a need for a broader conception of the use and users of performance information than has been common thus far. In particular, public sector managers can learn from what is available in the evaluation literature, e.g. that performance information may not be decisive but influential in political decision making. Fourth, conceptions of empirical research on the assessment of performance management systems and its interaction with the other stages are underdeveloped. Fifth, the studies of performance management system impacts have primarily addressed dysfunctional impacts. Performance management research should seek a more balanced and theoretically solid approach between the costs and benefits of uses of performance management systems. Sixth, a more in-depth analysis of institutional and organisational contingencies of performance management design, implementation, use and evaluation may come up with inconsistencies. For example, what works (or not) in one setting in an Anglo-American public management culture may or may not work in another setting. Seventh, there is a lack of research on interdependencies between various performance management stages. Researchers as well as practitioners may be unaware of the links of their research and practices on public sector performance management to other stages of the performance management life cycle. The evaluation discipline should recognise these gaps in the literature in their evaluations of performance management systems.

## **Implications of the life cycle approach for evaluation research and practice**

In the life cycle approach, performance measurement is primarily regarded as a managerial problem. Although this perspective is not fundamentally distinct from an evaluation perspective – both assume that performance can be improved through high-quality knowledge of the entities considered be they organisations or programmes – there are also differences. Next, we discuss the differences between the evaluation and managerial perspective on performance measurement, demonstrating how the life cycle approach of performance measurement can also be beneficial to evaluation.

In evaluation an answer has to be given to the question as to whether a certain programme is effective, i.e. accomplishes relevant goals. Three key issues stand out in choosing an evaluation focus in comparison with a managerial focus. First, the domain is a *public sector programme*, rather than a public sector organisation or organisational unit. Second, the core is *to find and assess causal links between programme components and programme goals*, which may conflict with managerial interests in the usefulness of performance management systems for decision making. As we already have indicated, a management focus often underplays aspects of effectiveness and customer satisfaction, and overemphasises aspects of efficiency and cost saving. Third, performance management systems are important to evaluation, but *evaluation requires much more*, e.g. how public sector organisations develop goals and how the organisations conducting a programme can enrich their learning capacity (Bledsoe and Graham, 2005).

In the design stage of the life cycle approach, an evaluation perspective requires a substantial discussion about the identification of goals and how these goals can be translated into suitable

performance indicators. Although performance management also acknowledges the importance of conflicting goals (Hofstede, 1981), an evaluation stance requires that a broad variety of stakeholders has to be involved in the design of a performance management system to safeguard that all relevant goals are addressed (Perrin, 1998, 2006). Several guidelines about reporting performance information from GASB (2003) adhere to the importance of the design of a performance management system, particularly by clarifying the scope of a programme, identifying its goals and stakeholders and trying to find a balance between being concise and comprehensive in selecting performance indicators.

A further implication of the life cycle approach to evaluation is concerned with the notion in evaluation that performance management systems have to be evidence based. This means that a search for causal links between components of the programme and relevant outcome indicators is crucial. The main question to be answered is 'does the programme work as it should be', which is more ambitious than requiring that performance information is useful for controlling the organisation. Indicators can relate to activities, outputs and short-term outcomes, and they have to be measured and compared with targets. The life cycle approach may help evaluators to check in the implementation stage as to whether sufficient proof can be found for causal links between programme components and relevant outcome indicators, for example, by pilot testing (Perrin, 2006). It may also stimulate evaluators to reconsider these causal links in the assessment stage of the life cycle when experiences with the application of the performance management systems for evaluation purposes are available.

The life cycle approach can also help evaluators to recognize either positive or negative unintended side effects of programmes. Although a programme is developed for accomplishing certain goals, and finding goal-related performance indicators for assessing the

effectiveness of the programme is crucial, evaluators need to be receptive for discussions with stakeholders about unforeseen side effects of such a programme (Perrin, 2006; Leeuw, 1996). The assessment stage of the life cycle approach focuses on the question of whether performance indicators need to be reconsidered given the evidence about the execution of the programme. This reconsideration needs to avoid overly simple feedback mechanisms in which responsible persons listen to what evaluators have to say in order to avoid making mistakes in the future. In contrast, organisational learning requires that assumptions underlying programmes are questioned, giving rise to reflections about innovative adaptations of programmes (Leeuw, 1996). This aspect is often neglected in the management accounting and public management literatures, but is something that an evaluation perspective may add to common understanding.

## References

- Abernethy, M. A. and A. M. Lillis (2001) 'Interdependencies in Organization Design: A Test in Hospitals', *Journal of Management Accounting Research* 13: 107–129.
- Abma, T. A. and M. Noordegraaf (2003) 'Public Managers amidst Ambiguity: Towards a Typology of Evaluative Practices in Public Management', *Evaluation* 9(3): 285–306.
- Abrahamson, E. (1996) 'Management fashion', *Academy of Management Review* 21(1): 254–285.
- Aidemark, L. G. (2001) 'The Meaning of Balanced Scorecards in the Health Care Organisation', *Financial Accountability and Management* 17(1): 23–40.
- Askim, J. (2007) 'How Do Politicians Use Performance Information? An Analysis of the Norwegian Local Government Experience', *International Review of Administrative Sciences* 73(3): 453–472.
- Askim, J., Å. Johnsen and K. A. Christophersen (2008) 'Factors behind Organizational Learning from Benchmarking: Experiences from Norwegian Municipal Benchmarking Networks', *Journal of Public Administration Research and Theory* 18(2): 297–320.
- Banker, R.D. (1980) 'A Game Theoretic Approach to Measuring Efficiency', *European Journal of Operations Research* 5(4): 262–266.
- Bastøe, P. Ø. (2006) 'Implementing Results-Based Management', in R. C. Rist and N. Stame (ed.) *From Studies to Streams: Managing Evaluative Systems*, pp. 97–110. London: Transaction Publishers.
- Behn, R. D. (2003) 'Why Measure Performance? Different Purposes Require Different Measures', *Public Administration Review* 63(5): 588–606.
- Berman, E., and X. Wang (2000) 'Performance Measurement in U.S. Counties: Capacity for Reform', *Public Administration Review* 60(5): 409–420.

- Bevan, G. and C. Hood (2006) 'What's Measured is What Matters: Targets and Gaming in the English Public Health Care System', *Public Administration* 84(3): 517–538.
- Blalock, A. B. (1999) 'Evaluation Research and the Performance Management Movement: Estrangement to Useful Integration?', *Evaluation* 5(2): 117–149.
- Bledsoe, K. L. and J. A. Graham (2005) 'The Use of Multiple Evaluation Approaches in Program Evaluation', *American Journal of Evaluation* 26 (3): 302-319.
- Bogt, H. J. ter (2004) 'Politicians in Search of Performance Information? Survey Research on Dutch Aldermen's Use of Performance Information', *Financial Accountability and Management* 20(3): 221–252.
- Bouckaert, G. and J. Halligan (2008) *Managing Performance: International Comparisons*. London: Routledge.
- Bowerman, M., A. Ball, and G. Francis (2001) 'Benchmarking as a Tool for the Modernisation of Local Government', *Financial Accountability and Management* 17(4): 321–329.
- Boyne G. A., K. J. Meier, L. J. O'Toole and R. M. Walker (ed.) (2006) *Public Service Performance: Perspectives on Measurement and Management*. Cambridge: Cambridge University Press.
- Boyne, G. A. and A. A. Chen (2007) 'Performance Targets and Public Service Improvement', *Journal of Public Administration Research and Theory* 17(3): 455–477.
- Boyne, G. and J. S. Gould-Williams (2003) 'Planning and Performance in Public Organizations: An Empirical Analysis', *Public Management Review* 5(1): 115–132.
- Bretschneider, S., F. J. Marc-Aurele Jr, and J. Wu (2005) "'Best Practices" Research: A Methodological Guide for the Perplexed', *Journal of Public Administration Research and Theory* 15(2): 307–323.
- Bruijn, H. de (2002) *Managing Performance in the Public Sector*. London: Routledge.



- Carson, P. P., P. A. Lanier, K. D. Carson and B. N. Guidry (2000) 'Clearing a Path through the Management Fashion Jungle: Some Preliminary Trailblazing', *Academy of Management Journal* 43(6): 1143–1158.
- Carter, N. (1991) 'Learning to Measure Performance: The Use of Indicators in Organizations', *Public Administration* 69(1): 85–101.
- Cavalluzzo, K. S. and C. D. Ittner (2004) 'Implementing Performance Measurement Innovations: Evidence from Government', *Accounting, Organizations and Society* 29(3/4): 243–267.
- Charnes, A., R. L. Clarke and W. W. Cooper (1989) 'An Approach to Testing for Organizational Slack via Banker's Game Theoretic DEA Formulations', *Research in Governmental and Nonprofit Accounting* 5: 211–229.
- Currstine, T. (2005) 'Government Performance: Lessons and Challenges', *OECD Journal on Budgeting* 5(1): 127–151.
- Davies, I. C. (1999) 'Evaluation and Performance Management in Government', *Evaluation* 5(2): 150–159.
- de Lancer Julnes, P. (2006) 'Performance measurement: An effective tool for government accountability? The debate goes on', *Evaluation* 12(2): 219–235.
- de Lancer Julnes, P. and M. Holzer (2001) 'Promoting the Utilization of Performance Measures in Public Organizations: An Empirical Study of Factors Affecting Adoption and Implementation', *Public Administration Review* 61(6): 693–708.
- Donaldson, L. (2001) *The Contingency Theory of Organizations*. Thousand Oaks, CA: Sage.
- Dooren, W. van (2005) 'What Makes Organisations Measure? Hypotheses on the Causes and Conditions for Performance Measurement', *Financial Accountability and Management* 21(3): 363–383.

- Dooren, W. van and S. van de Walle (ed.) (2008) *Performance Information in the Public Sector: How it is Used*. Palgrave Macmillan.
- Drucker, P. F. (1954) *The Practice of Management*. New York: Harper Business.
- Frederickson, D. G. and H. G. Frederickson (2006) *Measuring the Performance of the Hollow State*. Washington, D.C.: Georgetown University Press.
- GASB (2003) *Reporting Performance Information: Suggested Criteria for Effective Communication*. Connecticut: Governmental Accounting Standards Board.
- Hartley, J. and M. Allison (2002) 'Good, Better, Best? Inter-Organizational Learning in a Network of Local Authorities', *Public Management Review* 4(1): 101–118.
- Helden, G. J. van and S. Tillema (2005) 'In Search of a Benchmarking Theory for the Public Sector', *Financial Accountability and Management* 21(3): 337–361.
- Helden, G. J. van, Å. Johnsen and J. Vakkuri (2008) 'Distinctive Research Patterns on Public Sector Performance Measurement of Public Administration and Accounting Disciplines', *Public Management Review* 10(5): 641–651.
- Hofstede, G. (1981) 'Management Control of Public and Not-for-profit Activities', *Accounting, Organizations and Society* 6(3): 193–211.
- Hood, C. (2006) 'Gaming in Targetworld: The Targets Approach to Managing British Public Services', *Public Administration Review* 66(4): 515–521.
- Hood, C. (2007) 'Public Service Management by Numbers: Why Does It Vary? Where Has It Come From? What Are the Gaps and the Puzzles?', *Public Money and Management* 27(2): 95–102.
- Hood, C., O. James, G. Jones, C. Scott and T. Travers (1998) 'Regulation Inside Government: Where New Public Management Meets the Audit Explosion', *Public Money and Management* 18(2): 61–68.

- Hyndman, N. and R. Eden (2000) 'A Study of the Coordination of Mission, Objectives and Targets in U.K. Executive Agencies', *Management Accounting Research* 11(2): 175–191.
- Jacobs, R. and M. Goddard (2007) 'How Do Performance Indicators Add Up? An Examination of Composite Indicators in Public Services', *Public Money and Management* 27(2): 119–110.
- Jansen, P. (2008) 'New Public Management: Perspectives on Performance and the Information Use', *Financial Accountability and Management* 24(2): 169–191.
- Johnsen, Å. (1999) 'Implementation Mode and Local Government Performance Measurement: A Norwegian Experience', *Financial Accountability and Management* 15(1): 41–66.
- Johnsen, Å. (2001) 'Balanced Scorecard: Theoretical Perspectives and Public Management Implications', *Managerial Auditing Journal* 16(6): 319–330.
- Johnsen, Å. (2005) 'What Does 25 Years of Experience Tell Us About the State of Performance Measurement in Public Management and Policy?', *Public Money and Management* 25(1): 9–17.
- Jones, C. S. (2002) 'The Attitudes of British National Health Service Managers and Clinicians towards the Introduction of Benchmarking', *Financial Accountability and Management* 18(2): 163–188.
- Kaplan, R. S. (1998) 'Innovation Action Research: Creating New Management Theory and Practice', *Journal of Management Accounting Research* 10: 89–118.
- Kaplan, R. S. and D. P. Norton (1996) *The Balanced Scorecard: Translating Strategy into Action*. Boston, Massachusetts: Harvard Business School Press.
- Kusek, J. Z. and R. Rist (2004) *Ten Steps to a Results-Based Monitoring and Evaluation System*. Washington: World Bank.

- Leeuw, F. L. (1996) 'Performance Auditing, New Public Management and Performance Improvement: Questions and Answers', *Accounting, Auditing and Accountability Journal* 9(2): 92–102.
- Likierman, A. (1993) 'Performance Indicators: 20 Early Lessons from Managerial Use', *Public Money and Management* 13(4): 15–22.
- Llewellyn, S. and D. Northcott (2005) 'The Average Hospital', *Accounting, Organizations and Society* 30(6): 555–583.
- Long, E. and A. L. Franklin (2004) 'The Paradox of Implementing the Government Performance and Results Act: Top-Down Direction for bottom-up Implementation', *Public Administration Review* 64(3): 309–319.
- Mayne, J. (2007) 'Challenges and Lessons in Implementing Results-Based Management', *Evaluation* 13(1): 87–109.
- Mayston, D. (1993) 'Principals, Agents and the Economics of Accountability in the New Public Management', *Accounting, Auditing and Accountability Journal* 6(3): 68–96.
- Mayston, D. J. (1985) 'Non-Profit Performance Indicators in the Public Sector', *Financial Accountability and Management* 1(1): 51–74.
- McDavid, J. and L. R. L. Hawthorn (2006) *Program Evaluation and Performance Measurement: An Introduction to Practice*. Thousand Oaks: Sage.
- Melkers, J. and K. Willoughby (2005) 'Models of Performance-Measurement Use in Local Governments: Understanding Budgeting Communication and Lasting Effects', *Public Administration Review* 65(2): 180–190.
- Meyer, M. W. and V. Gupta (1994) 'The Performance Paradox', *Research in Organizational Behavior* 16: 309–369.
- Mintzberg, H. (1994) *The Rise and Fall of Strategic Planning*. New York: Prentice Hall.

- Modell, S. (2004) 'Performance Measurement Myths in the Public Sector: A Research Note', *Financial Accountability and Management* 20(1): 39–55.
- Moynihan, D. P. (2005) 'Goal-Based Learning and the Future of Performance Management', *Public Administration Review* 65(2): 203–216.
- Moynihan, D. P. (2008) *The Dynamics of Performance Management: Constructing Information and Reform*. Washington, D.C: Georgetown University Press.
- Moynihan, D. P. and S. K. Pandey (2005) 'Testing How Management Matters in an Era of Government by Performance Management', *Journal of Public Administration Research and Theory* 15: 421–439.
- Nielsen, S. B. and N. Ejler (2008) 'Improving Performance? Exploring the Complementarities between Evaluation and Performance Management', *Evaluation* 14(2): 171–192.
- Noordegraaf, M. and T. Abma (2003) 'Management by Measurement? Public Management Practices amidst Ambiguity', *Public Administration* 81(4): 853–871.
- Nørreklit, H. (2003) 'The Balanced Scorecard: What is the Score? A Rhetorical Analysis of the Balanced Scorecard', *Accounting, Organizations and Society* 28(6): 592–619.
- Nørreklit, H., L. Nørreklit and P. Melander (2006) 'US 'Fair Contract' Based Performance Management Models in a Danish Environment', *Financial Accountability and Management* 22(3): 213–234.
- Ouchi, W. (1979) 'A Conceptual Framework for the Design of Organizational Control Mechanisms', *Management Science* 25(9): 833–848.
- Perrin, B. (1998) 'Effective Use and Misuse of Performance Measurement', *American Journal of Evaluation* 19(3): 367–379.
- Perrin, B. (1999) 'Performance Measurement: Does the Reality Match the Rhetoric? A rejoinder to Bernstein and Winston', *American Journal of Evaluation* 20(1): 101–111.

- Perrin, B. (2006) *Moving from Outputs to Outcomes: Practical Advice from Governments around the World*. IBM Centre for the Business of Government.
- Poister, T. H. (2003) *Measuring Performance in Public and Nonprofit Organizations*. San Francisco: Jossey-Bass.
- Poister, T. H. and G. Streib (1995) 'MBO in Municipal Government: Variations on a Traditional Management Tool', *Public Administration Review* 55(1): 48–56.
- Poister, T. H. and G. Streib (1999) 'Performance Measurement in Municipal Government: Assessing the State of Practice', *Public Administration Review* 59(4): 325–335.
- Pollitt, C. (1986) 'Beyond the Managerial Model: The Case for Broadening Performance Assessment in Government and the Public Services', *Financial Accountability and Management* 2(3): 155–170.
- Pollitt, C. (1988) 'Bringing Consumers into Performance Measurement: Concepts, Consequences and Constraints', *Policy and Politics* 16(2): 77–87.
- Pollitt, C. (2006) 'Performance Information for Democracy: The Missing Link?', *Evaluation* 12(1): 38–55.
- Radin, B. A. (2006) *Challenging the Performance Movement: Accountability, Complexity, and Democratic Values*. Washington, D.C.: Georgetown University Press.
- Ridgway V. F. (1956) 'Dysfunctional Consequences of Performance Measurements', *Administrative Science Quarterly* 1(2): 240–247.
- Rist, R. C. and N. Stame (2006) *From Studies to Streams: Managing Evaluative Systems*. London: Transaction Publishers.
- Rodgers, R. and J. E. Hunter (1992) 'A Foundation of Good Management Practice in Government: Management by Objectives', *Public Administration Review* 52(1): 27–39.
- Simon, H. A. (1937) 'Comparative Statistics and the Measurement of Efficiency', *National Municipal Review* 26: 524–527.

- Simon, H. A. (1947/1997) *Administrative Behavior: Study of Decision-Making Processes in Administrative Organizations*. Fourth edition. New York: The Free Press.
- Smith, P. (1995) 'Outcome-related Performance Indicators and Organisational Control in the Public Sector', in J. Holloway, J. Lewis and G. Mallory (ed.) *Performance Measurement and Evaluation*. London: Sage.
- Steers, R. M. (1975) 'Problems in the Measurement of Organizational Effectiveness', *Administrative Science Quarterly* 20(4): 546–558.
- Talbot, C. (2010) *Theories of Performance: Organizational and Service Improvement in the Public Domain*. Oxford: Oxford University Press.
- Vakkuri, J. (2003) 'Research Techniques and Their Use in Managing Non Profit Organizations: An Illustration of DEA Analysis in NPO Environments', *Financial Accountability and Management* 19(3): 243–264.
- Vakkuri, J. and P. Meklin (2006) 'Ambiguity in Performance Measurement – A Theoretical Approach to Organisational Uses of Performance Measurement', *Financial Accountability and Management* 22(3): 235–250.
- Wang, X. and E. Berman (2001) 'Hypotheses about Performance Measurement in Counties: Findings from a Survey', *Journal of Public Administration Research and Theory* 11(3): 403–428.
- Williams, D. W. (2003) 'Measuring Government in the Early Twentieth Century', *Public Administration Review* 63(6): 643–659.
- Wilson, J. Q. (2000) *Bureaucracy: What Government Agencies Do and Why They Do It*. Second edition. Basic Books.

**Figure 1 - The Performance Management Life Cycle**

