

A Holistic Approach to Tax Administration Performance Management: Developing an Integrated and Open System Model

Dr. Muzainah Mansor

Senior Lecturer

School of Accountancy, College of Business

Universiti Utara Malaysia

06010 Sintok, Kedah, Malaysia.

Dr. Mahamad Tayib

Professor

OYA Graduate School of Business

Universiti Utara Malaysia

06010 Sintok, Kedah, Malaysia.

Abstract

A tax administration can be viewed as an open system that transforms inputs into outputs within the internal and external environment in which it operates. Open system theory is the basis of an input-process-output-outcome model of performance management. However, an open performance management system alone is impracticable without integrating the strategic, operational, and individual performance management levels. Strategic and operational levels should support each other and have impact on how people act at the individual level. This paper proposes a holistic performance management model which combines an open system model with an integrated model to develop a new holistic performance management model as a guide for a tax administration to evaluate, improve and manage its performance management system. The new model integrates performance management at the strategic, operational and individual levels in an open system view of a tax administration. The distinct feature of the model is that it highlights the critical process of transforming inputs into outputs/outcomes in a tax administration by diagnosing the interrelation of the components in a tax administration process, i.e. formal organisation, informal organisation, task and people. These components contain both institutional and behavioural factors that should be carefully managed to improve the overall performance of a tax administration.

Keywords: Performance management, tax administration, holistic approach model

1.0 Introduction

Performance management could support the achievement of an efficient and effective tax administration (Alley and Bentley, 2008). However, the discussion on performance management is limited in the tax administration literature. Instead, there have been extensive studies on tax administration performance measurement; for example, by Ishi (1993), Mustafa (1996), Tayib (1998), Gonzales and Miles (2000), Moesen and Persoon (2002), Taliencio (2004), Klun (2004), Barros (2005), von Soest (2006), and Tennant and Tennant (2007). The focus on performance measurement with the emphasis on collecting, measuring and reporting data produces little insights, learning or improvement for a tax administration (Marr, 2009).

To date, there are only three publications on tax administration performance management. These recent publications provided only a brief discussion on a very limited scope of performance management. Crandall (2010) discussed approaches to performance management; however, the discussion is more on how to measure performance in the performance management context. Hanninen (2011) briefly discussed performance management in Finnish tax administration.

This conceptual paper focuses on using performance benchmarking and process benchmarking in tax administration performance management. The OECD (2011), in its study on 49 OECD and selected non-OECD countries, reported that performance management systems are in place in all except four revenue bodies. It was also noted that many revenue bodies are in the process of developing new performance management systems and processes. However, none of these studies provide details on how to undertake performance management in tax administration.

Performance management emphasises the need to be forward looking and focused on how performance can be better in the future (Lebas and Euske (2007). Performance management systematically uses measurement and data analysis, as well as other tools, to facilitate learning and improvement and strengthen a focus on outcomes (United States National Performance Management Advisory Commission, 2009). It encompasses an array of practices designed to improve performance of an organisation.

Performance management is often equated to performance measurement. However, the two are not the same, as the measurement of performance is only one aspect of its management (Greener, 2009). Nathan (2009) also argued that performance measurement should not be confused with performance management, because measuring performance is a necessary but insufficient condition for performance management. Radnor and Barnes (2007, p. 393) differentiate them as:

Performance measurement is quantifying, either quantitatively or qualitatively, the input, output or level of activity of an event or process. Performance management is action, based on performance measures and reporting, which results in improvements in behaviour, motivation and processes and promotes innovation.

The definitions of performance management also revolve around individual performance, group performance, and organisational performance. This is because performance management in an organisation can be applied at these three levels. With respect to individual performance, the essence of performance management is the development of individuals with competence and commitment, working towards the achievement of shared meaningful objectives within an organisation that supports and encourages their achievement (Lockett, 1992). Individual performance management is about directing and supporting employees to work as efficiently and effectively as possible in line with the needs of the organisation, with a clear focus on how to improve employee performance so that they can contribute to the overall success of the organisation (Walters, 1995; IDS, 1997; DeNisi and Pritchard, 2006).

In terms of group performance, the aim is to improve strategic focus and organisational effectiveness through continuously securing improvements in the performance of teams. Group performance management is a range of practices an organisation engages in to improve the performance of a target group with the ultimate purpose of improving organisational performance to achieve organisational goals and objectives (Philpott and Sheppard, 1992; Hendry et al., 1997; DeNisi, 2000; Strebler et al., 2001).

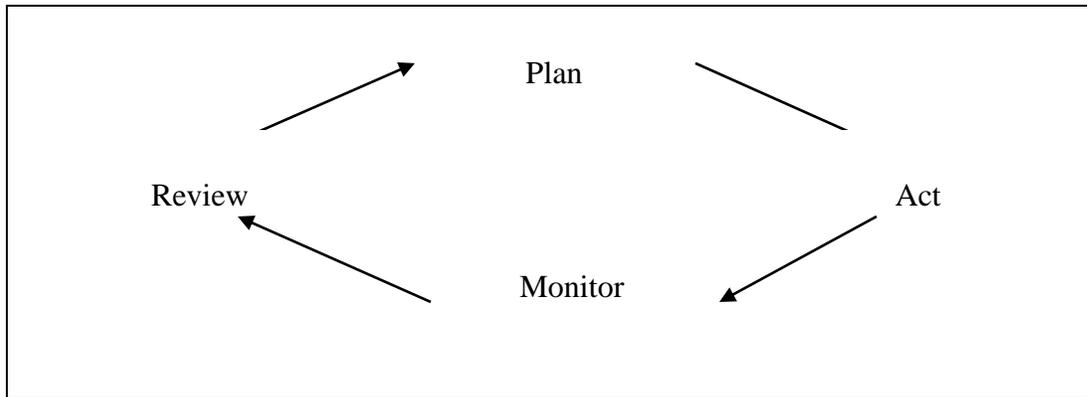
In terms of organisational performance, broadly, any integrated and systematic approach to achieve an organisation's strategic aims and promote its missions and values is considered to be organisational performance management (Edis, 1995). This might include, for example, an agreed framework of planned goals, objectives and standards for getting better results (Armstrong and Murlis, 1994). The purpose of organisational performance management is to provide a pro-active system; where the corporate and functional strategies are deployed to all business processes, activities, tasks and personnel; and feedback is obtained through the performance measurement system to enable appropriate management decisions (Bititci et al., 1997).

Buchner (2007) identified two main theories underpinning performance management. The first one is the goal theory, which underpins the emphasis in performance management on setting and agreeing objectives against which performance can be measured and managed. It supports the agreement of objectives, feedback and review aspects of performance management. The second theory is the control theory which focuses attention on feedback as a means of shaping behaviour. As people receive feedback on their behavior, they appreciate the discrepancy between what they are doing and what they are expected to do and take corrective action to overcome it. Together, the goal and control theories form the basic performance management cycle.

Armstrong (2009) stated that a basic performance management system operates as a continuous and self-renewing cycle as shown in Figure 1.

The cycle contains activities of developing organisational goals through an established plan, implementing the plan, controlling/monitoring/measuring whether performance is in congruence with the plan, and reviewing the achievement of the plan. He stated that the performance management cycle closely resembles the cycle for continuous improvement defined by Deming (1986). This is not a coincidence as performance management is all about continuous improvement.

Figure 1: Performance Management Cycle



2.0 Levels of Performance Management

Traditionally, performance management in an organisational context has been divided into three levels: individual, operational and strategic level. Improving organisational performance involves the process of managing individual, operational, and strategic performance.

2.1 Individual Level

Originally, organisations' performance management focus was based on individuals performing tasks as part of a group. In the 1970s in the United States and the 1980s to 1990s in Britain, it was government legislation concerning such things as equal opportunity and civil rights which compelled organisations to adopt some sort of system for evaluating their employees. Performance management systems were used in the 1980s and 1990s as powerful tools for change in public sector culture and ethos (Furnham, 2004). In the 1990s, individual performance management was reshaped by two key trends (Brudan, 2010). The first was the increase in popularity of self-assessment of performance, followed by feedback sessions with line managers. In this case, most organisations rely upon some form of performance appraisal system to provide employees with feedback about their performance and to help the organisation make decisions about such things as pay increases and promotions (Cleveland et al., 1989; Landy and Farr, 1980). Research on performance appraisal dates back at least as far as the early 1920s, and has continued to the present day (DeNisi and Pritchard, 2006). The second key trend was the integration between individual performance management and strategic performance management. Organisational goals became reflected in individual goals and individual measures became aligned with organisational performance measures, in an effort to increase the accountability of all employees to the execution of the organisational strategy.

2.2 Operational Level

Performance management at operational level is linked to operational management, as its focus is the achievement of departmental, project or group objectives. Although it is aligned with corporate strategy, its focus is more functional. The evolution of operational performance management is linked to the evolution of accounting and management. This is due to the fact that operational performance is traditionally evaluated in terms of efficiency and effectiveness, and the easiest way to do this is by using financial indicators, provided by the accounting function in organisations (Brudan, 2010). Over time, as internal and external operating environments became more complex, organisations started to look at non-financial indicators of performance. This made the connection with operations management and other aspects of the general management discipline.

Operational performance looks at the processes of how inputs such as people, materials and machines are transformed into outputs such as finished goods and satisfied customers (Gemmel, 2004).

The operations function is not an isolated part of an organisation; as with many other functions, it must be linked to business strategy. The operations function contributes and supports an organisation's business strategy through five performance objectives as suggested by Slack et al. (1995, p. 53): 1) the quality objective – doing the things right; 2) the dependability objective – doing things on time; 3) the speed objective – doing things fast; 4) the flexibility objective – changing what you do; and 5) the cost objective – doing things cheap. These performance objectives can be regrouped into three categories: the quality objective, the time-based objective, and cost objective. It is therefore important for an organisation to develop its operational performance management, as an organisation is only as good as its processes at the operational level (Rummler and Brache, 1990). To manage performance at the operational level, one must ensure that processes are installed to meet customer needs, and that those processes work efficiently and effectively, and that the process goals and measures are driven by the customers' and organisation's requirements.

2.3 Strategic Level

At the strategic level, performance management deals with the achievement of organisational objectives. Practitioners refer to it as corporate, business or enterprise performance management. The strategic level is the highest and most complete usage of performance management principles in organisations. Organisational performance management at the strategic level focuses on developing work systems and the working environment as well as developing individuals. To develop the systems and make them function effectively, it is necessary to ensure that the strategy is understood (Kaplan and Norton, 2000). A strategic approach to managing organisational performance means taking a broad and long-term view of where the organisation is going and managing performance in ways to ensure that this strategic thrust is maintained (Bourne et al., 2003). The objective is to provide a sense of direction in an often turbulent environment so that the business needs of the organisation and the individual and collective needs of its employees can be met by the development and implementation of integrated systems for managing and developing performance. Organisational performance management is strategic in the sense that it is aligned to the business strategy of the organisation and supports the achievement of its strategic goals.

The key processes related to strategic performance management are strategy analysis, strategy formulation and strategy execution, all of which are subsets of strategic management (Simons, 2000). The strategy analysis and strategy formulation process results in a concrete plan for an organisation, ready for implementation. This process is often referred to as the strategic planning process. Strategic planners primarily pay attention to the strategy analysis and the strategy formulation phases. Strategy implementation is often considered to be the major responsibility of the functional/operational managers. This explains why academics separate the strategy formulation phase (including strategy analysis) from the strategy implementation phase. This separation is found in organisations as well, where the strategy staff report and operate, somewhat disconnectedly, from the line and operational managers (Verweire and Van Den Berghe, 2004).

However, in today's environment where everything evolves and changes so quickly, integrating strategy formulation with managing its implementation is critical. In fact, the literature indicates that, in order to enhance the process of strategy formulation and implementation, performance management at the strategic level (strategy formulation) should be integrated with performance management at the operational and individual levels (execution of the strategy). Integrated performance management should help organisations to improve, consolidate or change their strategic position (Brudan, 2010).

3.0 Integrated and System-Based Performance Management

Best practice in performance management involves an integrated performance management system as different organisational levels compete for the managers' attention and organisational resources (Verweire and Van Den Berghe, 2004). The people at the different levels have the common aim of increasing the performance of the organisation (or department), but they differ in how to tackle this overall goal. The integrated view to performance management has the potential to assist individuals and organisations to better understand and align the different three levels and create a complete, holistic picture of performance that outlines the relationship between organisational and individual performance.

The need for an integrated approach to performance management is also recognised in the tax administration context.

Crandall (2010), in a recent series of technical notes and manuals from the Fiscal Affairs Department of the International Monetary Fund (IMF), proposed that a tax administration should apply performance management at the strategic, operational, and individual levels. Despite this suggestion, the discussion on performance management actually focused on how performance should be measured at these three levels. It was proposed that the measurements at the strategic level should be on the organisation's overall performance in delivering the mission and strategic goals; the measurements at the operational level should be on the effective execution of particular aspects of the organisation; and the measurements at the individual level should be based on critical elements and standards.

The OECD (2011), in its study on 49 OECD and selected non-OECD countries, reported that 64 percent of the revenue bodies do not set objectives for each member of staff at the start of the performance period. About 84 percent of the revenue bodies review the performance of each staff member at least annually. What is apparent in the OECD report is that the focus of these revenue bodies is on performance management at the individual level, with lack of integration with performance management at the operational and strategic levels.

Hanninen (2011) noted that the immediate challenge facing a tax administration is to combine performance management at the strategic, operational, and individual levels. He stated that it is important to do this so that operational and strategic levels are not separated, but support each other and have impact on how people act at a behavioural level. He added that, although measurement is a critical component of performance management to improve a tax administration, measuring and reporting alone have rarely led to organisational learning and improved outcomes.

Crandall (2010), OECD (2011), and Hanninen (2011) agree that there is a need to find a way to integrate performance management at the individual, operational and strategic levels to form an integrated approach towards tax administration performance management. However, the method to apply the integrated approach in tax administration is not offered by these three studies. The lack of integrated performance management in tax administration raised the question as to whether it is possible in practice.

The general literature on performance management proposed that strategic, operational, and individual performance management can be effectively integrated in a system-thinking view, where organisational performance improvement is the key driver (Brudan, 2010). System thinking promotes a holistic approach to managing organisational performance. It is the basis of the input-process-output-outcome model of managing performance, which assesses the entire contribution that an individual makes within the system in carrying out his or her allocated tasks (Senge, 1990). Inputs - the skills and knowledge that an individual brings to a job together with process - which is how people actually perform their jobs - are measured to assess development and learning needs. Outcomes measure the scale of an individual's contribution to the overall team, department and corporate performance, and are central to performance management. A system view focuses on integrating all components of the organisation and mapping the relationship between them.

There are two broad interpretations of a system approach in performance management, which are the 'open' and 'closed' systems. Open systems theory as formulated by Miller and Rice (1967) states that a complete system approach is undertaken when an organisation is treated as an open system that transforms inputs into outputs within the environment (internal and external) upon which it is dependent. The premise of the open system theory is opposite to the traditional organisational theories, which viewed organisations as 'closed' systems which are independent of the external environment in which they exist (Katz and Kahn, 1978). The premise of the 'closed' system is relatively conventional for modern organisations.

In searching for a model that can reflect an integrated and open system approach towards performance management, this study reviews the literature on various performance management models. It was discovered that these models can be classified into three categories: 1) integrated models; 2) system-based models; and 3) neither integrated nor system-based models. The following sections provide an overview of the integrated models and the system-based models. As the interest of this study is to find an integrated and open system approach to performance management, the models in the third category are not further described.

3.1 Integrated Performance Management Models

There are essentially five models which have proposed the integrated approach to performance management. The first model is a 'reference model' by Bititci et al. (1997).

This model has four levels: corporate, business units, business processes and activities. The reference model uses these four levels to integrate the following concepts into a single framework: 1) policy deployment; 2) competitive criteria and benchmarking; 3) process orientation; 4) normative planning; and 5) active monitoring. The framework focuses on two facets of performance measurement, i.e. integrity and deployment in implementing the above four levels.

The second model is proposed by the Public Services Productivity Panel (2000). The model contains five building blocks for a performance management framework, which are bold aspiration, coherent set of performance measures and demanding targets, accountability, rigorous performance review and meaningful re-enforcement. The framework proposes how these five building blocks should be addressed at the different levels of performance management.

The third model is proposed by the Australian Public Service Management Advisory Committee (APS) (2001). The model encloses corporate planning and governance, legislative and regulatory framework, outcomes and outputs structure, business planning, and performance review and feedback. The framework recognises the need for interrelated strategies and activities to improve the performance of individuals, teams and organisations. It suggested that effective performance management requires the integration of organisational, business and individual planning and performance.

The fourth model is proposed by Sole (2009), which aimed to identify and describe the core elements and levels of the performance measurement and management process. The model highlights the linkages among the main public performance dimensions and effective use of them. It underlines that the main goals of a performance management system in a public organisation is to achieve outcomes objectives by improving performance at all organisational levels. The model also distinguished the strategic, operational, and team and individual levels to better understand the performance measurement and management process. It proposes that people need different information at different levels of the organisation. There is a hierarchy of measures reflecting the structure of the organisation and each organisational level is characterised both by specific performance dimensions and uses of measures.

The fifth model is proposed by Brudan (2010). The model proposes that performance management should be integrated at the strategic/organisational level, operational/functional/team level, and individual level. It suggests that the integrated performance management approach should include performance management for learning and goal achievement, performance education, use of performance management office for integration and alignment, and combination of command and control approach to performance. However, the model is general, without specific demonstration on how to actually integrate the various elements at the different levels.

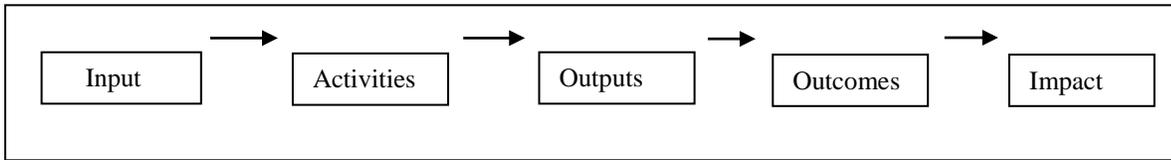
In summary, even though the above five models recognise the need to manage performance at the strategic, operational and individual levels and have proposed detailed measures on how to do this, the models fall short in providing a way to integrate these levels in an open system view of performance management. Williams (1998) emphasised that effective integration of the different levels of performance management can be achieved through a system view towards performance management; which includes performance management as a system for individual performance, performance management as a system for organisational performance; and performance management as a system for both individual and organisational performance. The following section discusses the second category of performance management models, which are the system-based models.

3.2 System-Based Models

In the context of tax administration, a basic system approach to performance has already been utilised through the use of the program logic model (ANAO, 1998). A simplified version of the program logic model is shown in Figure 2. In the model, a program is defined as a sequence of objectives. The basic steps involved in developing the logic of a program include:

- clarifying the objectives of the program (what outcomes to be sought);
- mapping the connections between the inputs, activities, output and outcomes;
- identifying the levels of outcomes to be measured (both intermediate and final)
- defining how success will look; and
- determining what performance information will be used.

Figure 2: Simplified Program Logic Model Sequence

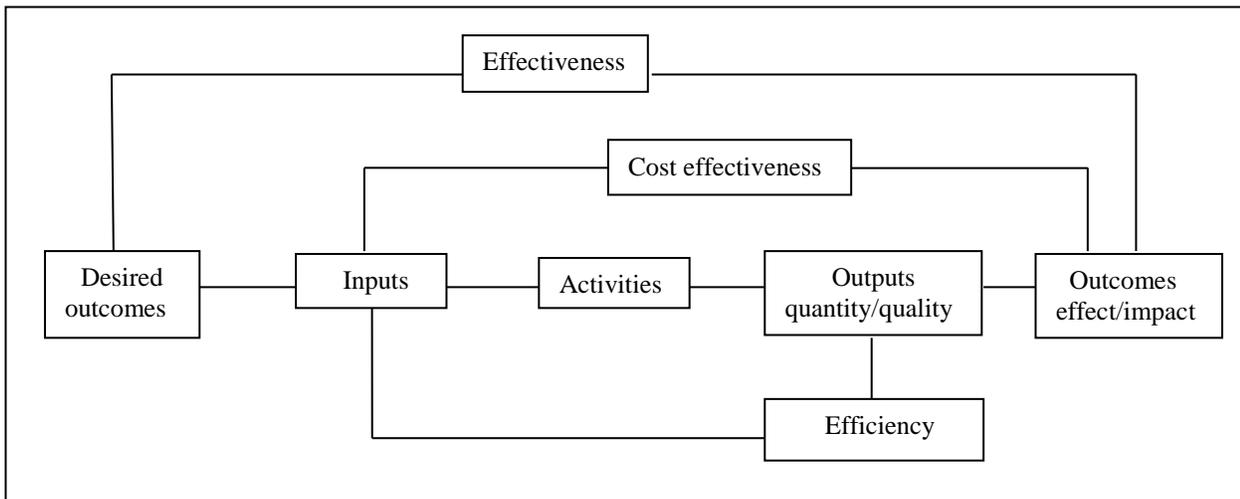


Source: ANAO (1998, p. 8).

Since the initial development of the logic model, many versions of the above sequence have been used in performance evaluations throughout the world (Australian Taxation Office, 2007). Figure 3 shows an expanded version of the sequence, incorporating the crucial stage of establishing desired outcomes before the inputs and showing the components of efficiency, cost effectiveness and effectiveness. In the sequence shown in Figure 3:

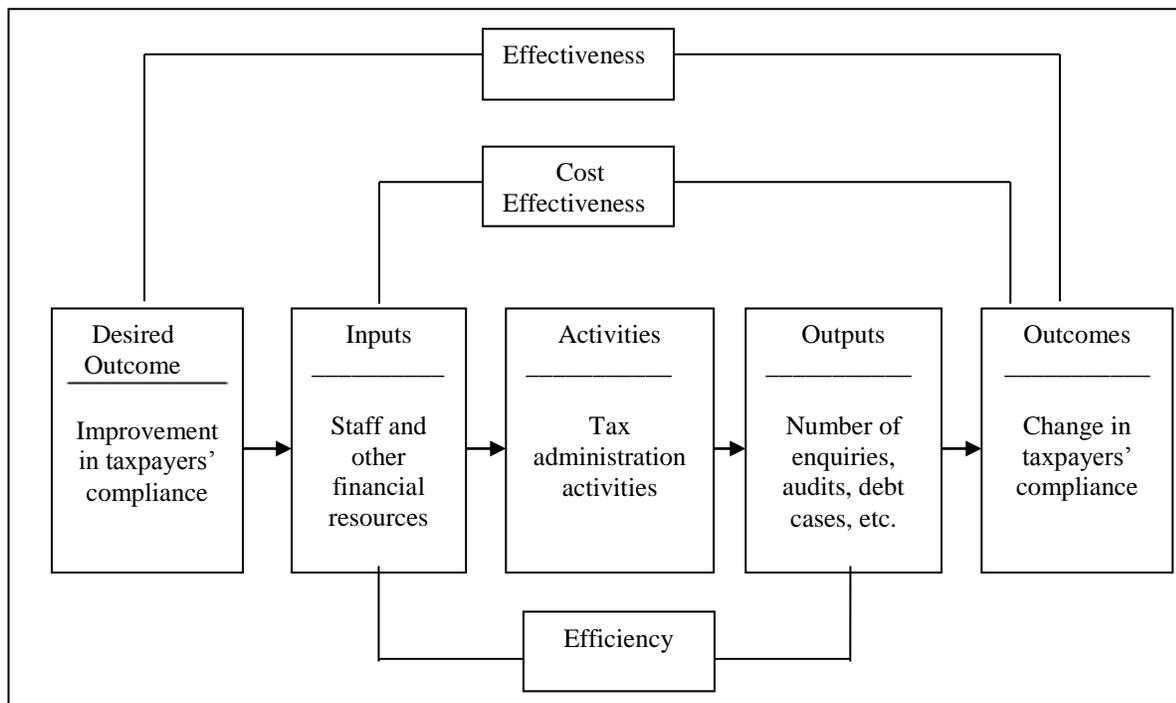
- efficiency measures assess the relationship between outputs and the inputs used to produce them;
- cost effectiveness measures evaluate outcomes as a proportion of the total inputs required to produce them; and
- effectiveness measures assess the whole sequence in terms of how it achieved the intended objectives or outcomes.

Figure 3: Expanded Program Logic Model Sequence



Source: Australian Taxation Office (2007, p. 14).

Figure 4 shows another version of the framework, which is the expanded program logic model sequence in detail with items under each of the categories (OECD, 2008). In this model, the relationship among the process of inputs, activities, outputs, and outcomes is clearly projected, together with how this process relates to the efficiency and effectiveness in the tax administration system. Within this model, efficiency measures reflect the relationship between outputs and inputs used to produce them, while effectiveness measures reflect the outcomes achieved against the desired outcomes.

Figure 4: Expanded Program Logic Model Sequence, with Detail Items

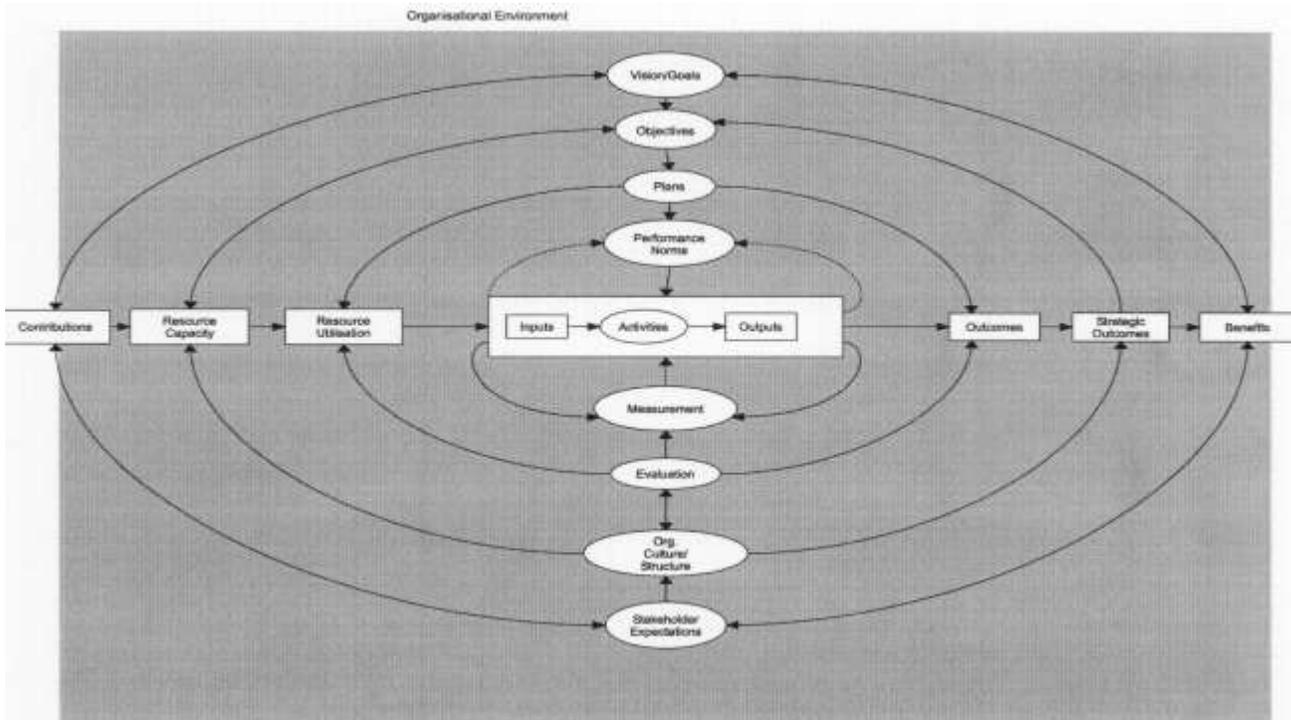
Source: OECD (2008, p. 13)

Even though Figure 4 is based on a system approach to performance management, it does not have the attribute of an open system theory. The model in Figure 4 displays the view of a 'closed' system where an organisation is independent of the external environment in which it exists.

The Rouse and Putterill's (2003) model is currently the most comprehensive performance management model based on an open system approach. The model is characterised by two areas or levels of concern. First, an organisation's macro-micro view of the key production or service processes and strategy evaluation which outlined the basic dimension of performance. Second, a trichotomic dimension of performance characterised as performance evaluation, performance measurement and performance analysis. These two dimensions are incorporated into the following four cycles:

- 1) the basic process core elements of an organisation involving inputs - activities - outputs; and the performance measurement and performance norms associated with them;
- 2) planning - evaluation and resource - achievement dimensions;
- 3) organisational context concerning capacity and capability of the organisation where a combination of people, practices, technology and infrastructure enables execution of the organisation's business process; and
- 4) the overall model involving the interface between organisation and stakeholders and the influence of organisation environment throughout all levels.

Rouse and Putterill's (2003) model is shown in Figure 5. The macro-micro view of the model provides valuable insights for practitioners and researchers to consider when undertaking organisational performance management.

Figure 5: A Macro-Micro View of Performance

Source: Rouse and Putterill (2003, p. 799)

Despite being the most comprehensive model to date, it is still not practically easy to apply the model. This is because the model shows the process of transforming inputs into outputs/outcomes, i.e. the 'transformation process' as just 'activities', and treating it as a 'black box'. The idea of adopting the 'black box' approach towards complex processes that interact with each other across multiple functions to drive specified goals is common. A key reason for adopting the 'black box' approach is that it removes the complexity associated with the internal workings of each particular component in a system (Rice, 2010). Instead, it focuses directly on the inputs, outputs and assumptions needed to connect each function with other functions to which they are related. While developing the system specification, the details of what is inside the 'box' are deemed unimportant (hence the name 'black box'), as it is assumed that the specified activities represented by the 'black box' can meet its objectives. In most cases, however, this assumption is fallacious. Meyer (2003) stated that the problem with the 'black box' approach is that it masks the differences within organisations and their business units. He suggested that, in this case, we may have to rethink the organisation and its relevant units for managing performance.

In summary, the existing performance management models are either based on the integrated view or the system-based view to performance management. The integrated models propose how to integrate the strategic, operational and individual levels and measure them accordingly. However, the models do not demonstrate how the different levels interact in an open system view, where an organisation needs to consider both the internal and external environment in which it exists. On the other hand, the system-based models do not display how the three levels of performance management are integrated as the models adopted the 'black box' approach towards the transformation process. The 'black box' in the transformation process involves performance management at the operational level, which must be linked to organisational strategy (strategic performance management) and human resources (individual performance management). Consequently, there is a need to combine the integrated view and the open system view to form a holistic approach to performance management that can be adopted in practice.

In order to do this, the emphasis must be on the transformation process (operational level) of an organisation because this is the centre of activities where both the strategic and individual levels interact to perform the functions of the organisation. The transformation process is also the phase where the institutional and behavioural factors interact with each other. This calls for an alternative approach which can highlight the detailed components of the transformation process at the operational level of an organisation.

In this regard, this study turns to the broader scope of organisation development studies, which have various approaches that can be utilised to describe the details in the transformation process for performance management purposes. The following section discusses the approaches in organisation development studies that can potentially be used to combine and enhance the integrated and open system approach to performance management.

4.0 Combining and Enhancing the Integrated and Open System Approach

Waddell et al. (2007) describe organisation development as a system-wide application of behavioural science knowledge to the planned development and reinforcement of organisational strategies, structures and processes for improving an organisation's effectiveness. Beer (1980) describes organisation development as a process of data collection, diagnosis, action planning, intervention and evaluation aimed at: (1) enhancing congruence between organisational structure, process, strategy, people and culture; (2) developing new and creative organisational solutions; and (3) developing the organisation's self-renewing capacity. French (1969) refers to organisation development as a long-range effort to improve an organisation's problem-solving capabilities and its ability to cope with changes in its external environment. The broad scope of organisation development as described by the above definitions is reflected in the various approaches available in the field. These approaches have the potential to be used for performance management purposes. Specifically, organisational diagnosis, which is the major approach in organisation development, has shown promise to be used in highlighting the detailed of components of the transformation process in an organisation.

4.1 Organisational Diagnosis

Organisational diagnosis is a process based upon behavioural science theory for entering a human system, collecting valid data about human experiences with that system, and feeding that information back to the system to promote increased understanding of the system by its members (Alderfer, 1981). Assessing organisational effectiveness by means of a well-planned and well-executed diagnostic process is generally understood to form part of a broad organisational management strategy aimed at improving overall effectiveness of systems management (Cummings and Worley, 2005; French and Bell, 1999). Diagnosis also evaluates an organisation to determine the gap or variance between what is and what ought to be (Stahl, 1997). The gaps or variances identified are then prioritised in relation to action plans that, if needed, rectify any variances.

Diagnosis entails understanding a system's current functioning. More specifically, organisational diagnosis is described as consisting of investigations that draw on concepts, models and methods from the behavioural sciences (Martins and Coetzee, 2009). Such investigations are generally aimed at examining an organisation's current state, at finding ways to solve problems, or at enhancing organisational effectiveness. It also involves the process of collecting pertinent information about current operations, analysing the data obtained, and drawing conclusions regarding potential change and improvement (Cummings and Worley, 2005; Slocum and Hellriegel, 2007). These aspects of organisational diagnosis are particularly useful for performance management purposes, particularly in examining the 'black box' in the transformation process of an organisation. In addition, diagnosis can also be utilised to understand the behavioural aspect of an organisation that can affect its performance management. There are many approaches to organisational diagnosis, which are typically depicted in a model. A range of models are discussed in the next section.

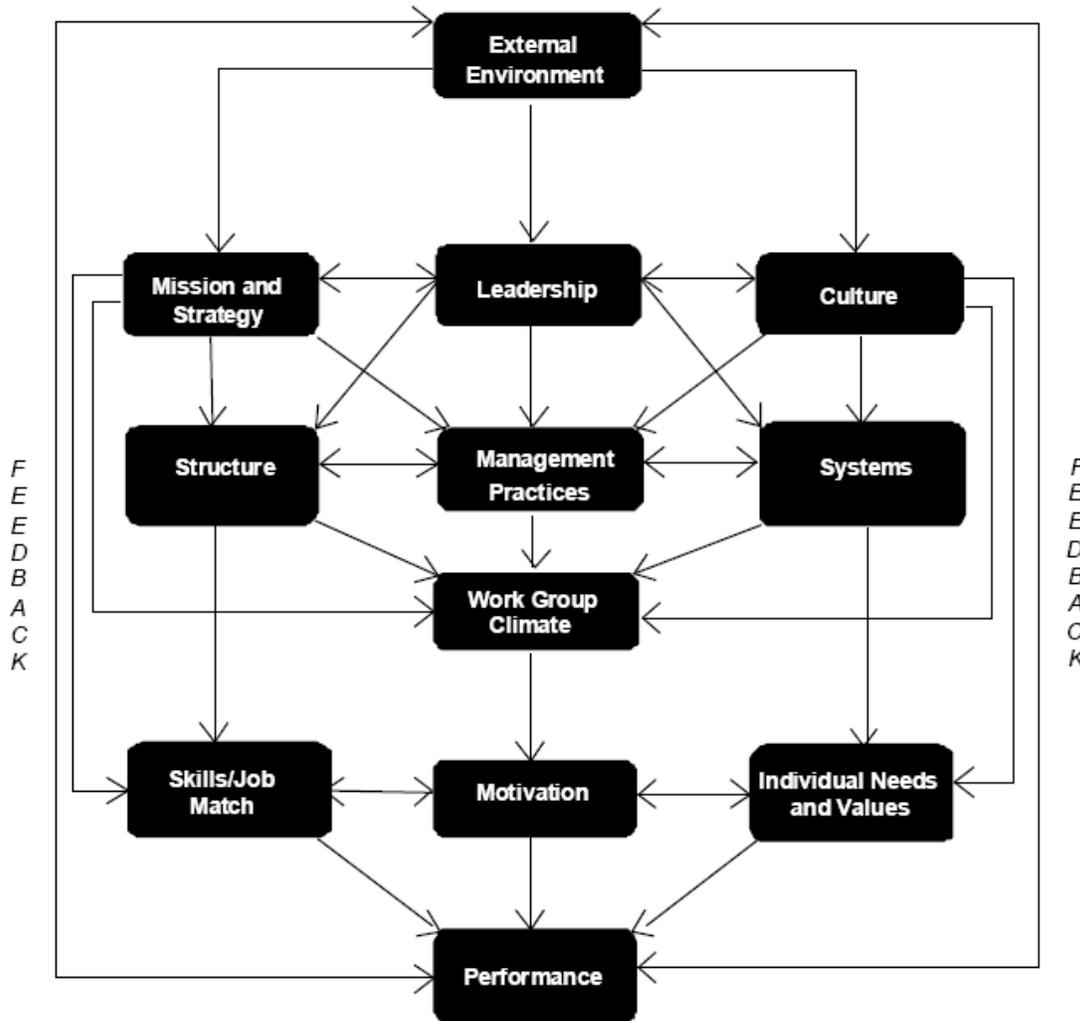
4.2 Diagnostic Models

Falletta (2005) summarised ten organisational diagnosis models and their characteristics, ranging from the model developed in 1951 to 1992.¹ Out of the ten models, only two models, i.e. the congruence model (1980) and the Burke-Litwin model (1992), rely upon the notion of open system theory as a major assumption. This attribute is particularly important for a system-based approach towards performance management because a complete system approach is undertaken when an organisation is treated as an open system that transforms inputs into outputs/outcomes within the environment (internal and external) upon which it is dependent. The other eight models overemphasise the variables within an organisation; with limited feedback from the environment and displaying the attributes of 'closed' systems. The congruence model and the Burke-Litwin model are also the only two models which propose that the relationships between variables in an organisation are reciprocal (two-way), showing the existence of interdependence between the variables. This feature is important in a system-based performance management.

¹ To date, the latest diagnostic model that has been developed in the field of organisation development is the Burke-Litwin model (1992).

The Burke-Litwin (1992) model integrates many organisational factors and is relatively new compared to other diagnostic models (see Figure 6). The model has been developed to examine organisational change and performance and has several strengths. First, the model enriches the conceptual map of an organisation by providing a comprehensive set of variables that better depict organisational dynamics. Second, by separating variables into transformational and transactional, the model provides a way of examining the impact of changes of different variables. Third, it provides a link between an assessment of the wider institutional context and nature and process of change within an organisation.

Figure 6: The Burke-Litwin Model



Source: Falletta (2005, p. 27)

Despite these strengths, the Burke-Litwin model has its limitations. Its emphasis on the importance of external environment as the most powerful driver for change seems to deride the importance of internal environment in influencing individual and organisational performance. The model makes the following key assumptions: 1) the external environment is the most powerful driver for change; 2) changes in the external environment lead to significant changes within an organisation – its mission and strategy, its organisational culture and its leadership; 3) changes in these key factors lead to other changes within an organisation – changes to structure, systems and management practices; and 4) together these changes affect motivation, which in turn impacts on individual and organisational performance. The premise of this model that the external environment is the main trigger of organisational change which in turn affects individual and organisational performance is perhaps overstated. This is because some organisational changes are initiated by leadership or by internal factors rather than by external environment.

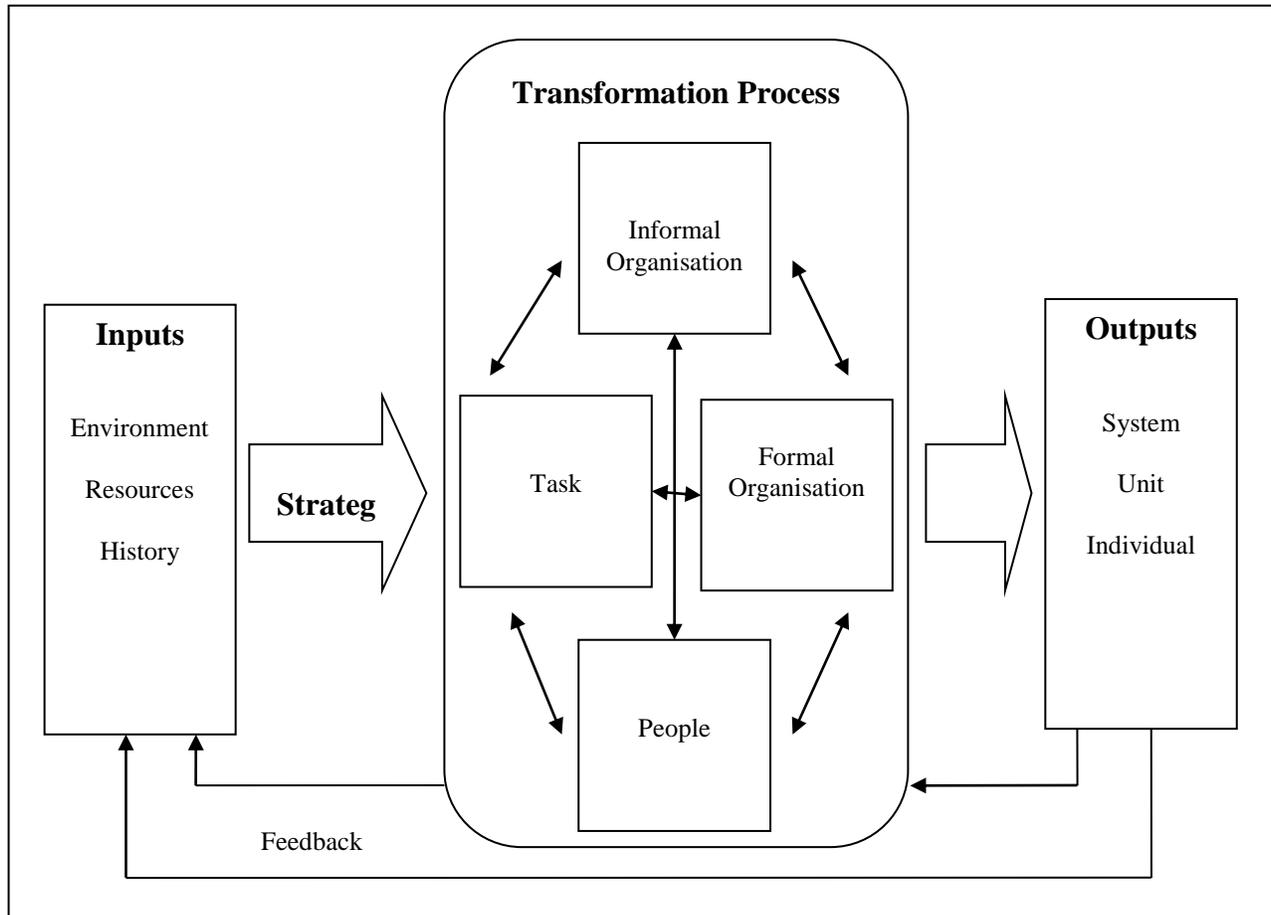
In addition, Cawsey and Deszca (2007) pointed out that, while the model does have both the environment and individual/organisational performance as variables, these are viewed as just two of the 12 variables. As a result, there is no apparent flow from environment to organisational performance. The complexity of the model also makes it more difficult to keep track of all variables and develop clear action plans to improve them.

The other diagnostic model of interest is the congruence model (1980) which has been developed by Nadler and Tushman, originally in the mid-1970s, and was drawn from fit (or congruence) models developed by Seiler (1967), Lawrence and Lorsch (1969), and Lorsch and Sheldon (1972). The model has been developed and refined over nearly three decades of academic research and practical application in scores of major organisations (see, for example, Nadler and Tushman, 1980, 1997, 1999; Wyman, 2003; Antoncic and Hisrich, 2004; Nadler 2006). The congruence model has a reasonably complete set of organisational components and presents them in a way that encourages straightforward organisational analysis (Cawsey and Deszca, 2007). It specifically links input factors to the organisational components and outputs. Additionally, it provides a useful classification of internal organisational components while showing the interaction among them. The model highlights both mismatches and congruence, and considers the influence of the external environment (Martins and Coetzee, 2009). The congruence model has proven to be particularly useful in understanding and analysing organisational performance and has found wide acceptance among researchers of organisations (Wyman, 2003).

The congruence model positions an organisation as an open system that transforms input from the external environment into output of various types (Nadler and Tushman, 1980). The congruence model suggests that in order to fully understand an organisation, it must first be understood as a system that consists of some basic elements:

- the input it draws from both internal and external sources;
- the strategy it employs to translate its vision into a set of decisions about where and how to compete, or in the case of government agency, the public policy results it wants to achieve;
- the critical transformation process through which people, working within the context of both formal and informal arrangements, convert input into output; and
- its output – the products and services it creates in order to fulfil its strategic objectives.

The congruence model suggests that an organisation is made up of internal components or parts that interact with each other. These components exist in states of relative balance, consistency, or ‘fit’ with each other. The different parts of an organisation can fit well together and function effectively, or fit poorly and lead to problems, dysfunctions, or performance below potential. The congruence model for diagnosing an organisation is depicted in Figure 7.

Figure 7: The Congruence Model

Source: Nadler and Tushman (1999, p. 48)

The congruence model enables a step-by-step identification and analysis of the input, strategy, transformation process, outputs and feedback mechanisms of an organisation, with a view to identifying systematic deficiencies that lead to inefficiency and ineffectiveness in its operations. The organisation - consisting of four organisational components which are the formal arrangement, the informal arrangement, the people, and the core task - is driven by an articulated strategy. The central idea of the congruence model is that the effectiveness of an organisation in achieving its objectives depends on the congruence or fit between these four components. According to Nadler and Tushman (1999), the more closely these components is aligned with each other and with the strategy of the organisation, the more effective the overall performance. Indeed, Wyman (2003) suggested that the interaction between each set of organisational components is more important than the components themselves and, if they are tightly aligned, they will determine the organisation's ability to compete and succeed.

The congruence model is particularly attractive because the components in the transformation process of the model shed some light on the 'black box' of an organisation. The interrelations of the four components, i.e. formal organisation, task, informal organisation and people in the model, provide a way to make connections between the different organisational levels for the purpose of performance management. In addition, the four components can possibly be used for understanding the institutional and behavioural factors in the transformation process. This is because the institutional factors that affect performance can be assessed through the components of formal organisation and task, while the behavioural factors can be assessed through the components of informal organisation and people.

The congruence model has previously been used in a different context of tax administration by Gill (2000). Gill used the model in his diagnostic framework for tax administration reform purposes.

Gill's framework proposes diagnostic questions and organisational deficiencies likely to be encountered and possible reform options for a revenue administration. Even though Gill's diagnostic framework is quite comprehensive, there are a few areas that are not fully addressed. In particular, the informal organisational arrangement and people could be expanded. Gill's framework was less focused on the behavioural aspect of a tax administration, i.e. the role of informal organisation (organisational culture) and people's attitudes in improving tax administration performance. In addition, the nature of the diagnostic framework developed by Gill is more suitable for the purpose of tax administration reform, which is a 'one-off' project to improve performance as opposed to the cyclical and dynamic nature of a performance management system where continuous performance improvement is sought.

Despite the strengths of the congruence model, its limitation is also acknowledged. In particular, it is noted that the congruence model tends to over-simplify the complex reality that an organisation deals with as it utilises fewer variables as compared to the Burke-Litwin model. However, fewer variables also mean that they are more manageable, hence are more suitable as a diagnostic tool for the purpose of application in performance management.

5.0 An Integrated and Open System Performance Management Model

It has been highlighted that the literature on performance management does not adequately address the problems in performance management practices. These problems involved the need for an integrated and open system approach to performance management and the need to divulge the 'black box' approach to performance management.

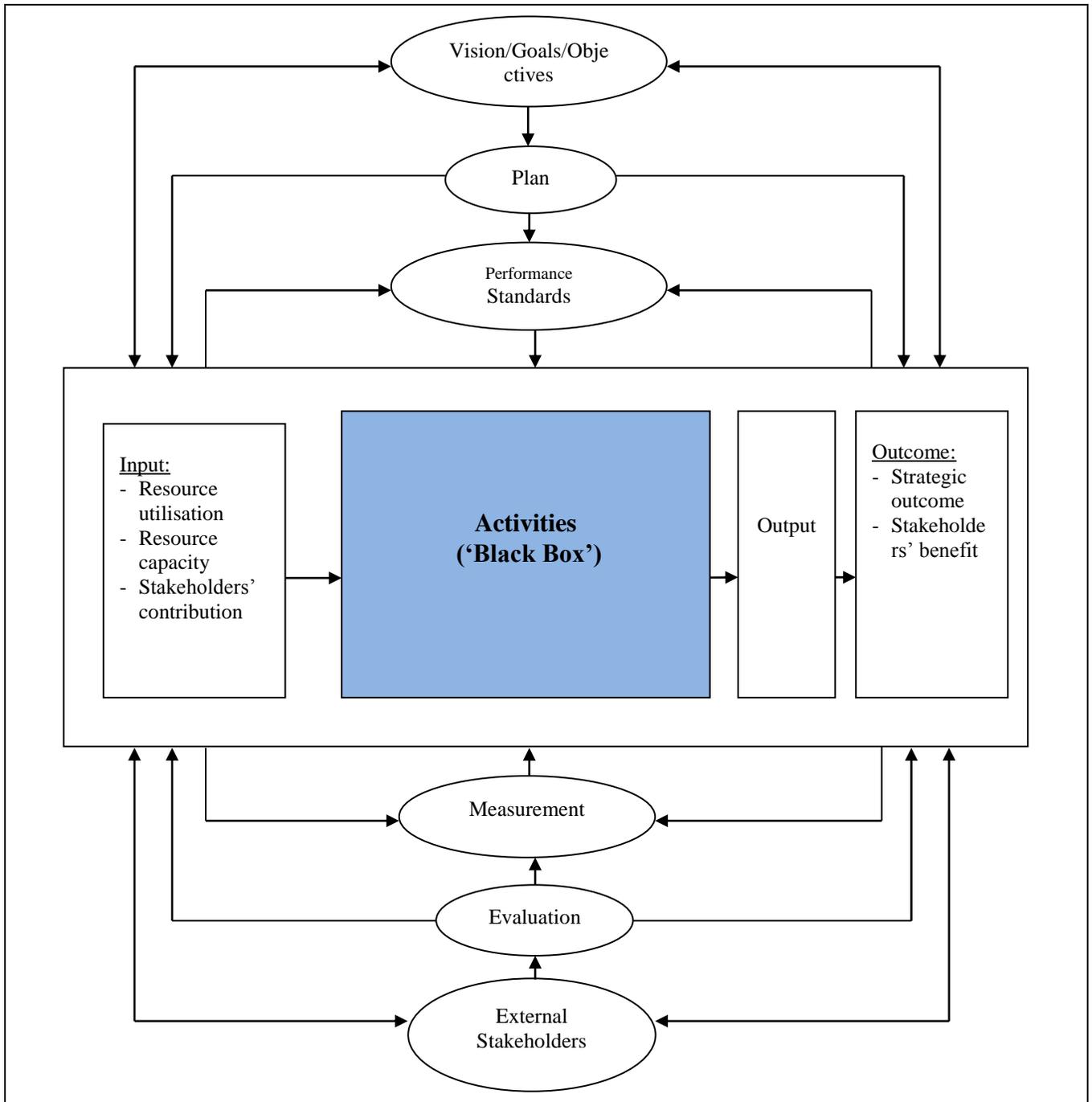
Current thinking indicates that it is important to approach performance management through an open system view of an organisation. The key or most significant feature of an open system is the recognition of external environmental factors. This study reviewed the existing system-based models in the literature and it was concluded that Rouse and Putterill's (2003) model is the most comprehensive with the attributes of an open system performance management. The macro-micro view of the model proposed by Rouse and Putterill (2003) provides valuable insights for evaluating organisational performance. The model has both the attributes of a performance management cycle and an open system view, which can form the basis to develop the performance management framework for this study.

The original version of Rouse and Putterill's (2003) model (refer to Figure 5) is modified to enable its application in tax administration practice by:

- combining the 'stakeholders' contribution', 'resource capacity' and 'resource utilisation' into the component of 'input'; and
- combining the 'strategic outcomes' and 'benefits to the stakeholders' into the component of 'outcome'.

In the original model, Rouse and Putterill (2003) dissect the elements of 'inputs' and 'outcomes' to demonstrate in great detail how the elements are connected to the 'stakeholders'. However, in order to approach performance management in an integrated way, it will be beneficial to illustrate the elements of 'inputs' and 'outcomes' collectively for the purpose of examining their connections with the 'stakeholders'. The modified version of Rouse and Putterill's (2003) model is presented as 'an open system model for performance management' in Figure 8. It is noted that, at this point, the model is far from being complete as it displays the substance of the 'black box' in the transformation process which is termed as 'activities'. In addition, Figure 8 does not adequately illustrate the integration of the strategic, operational and individual levels of performance management.

Figure 8: An Open System Model for Performance Management



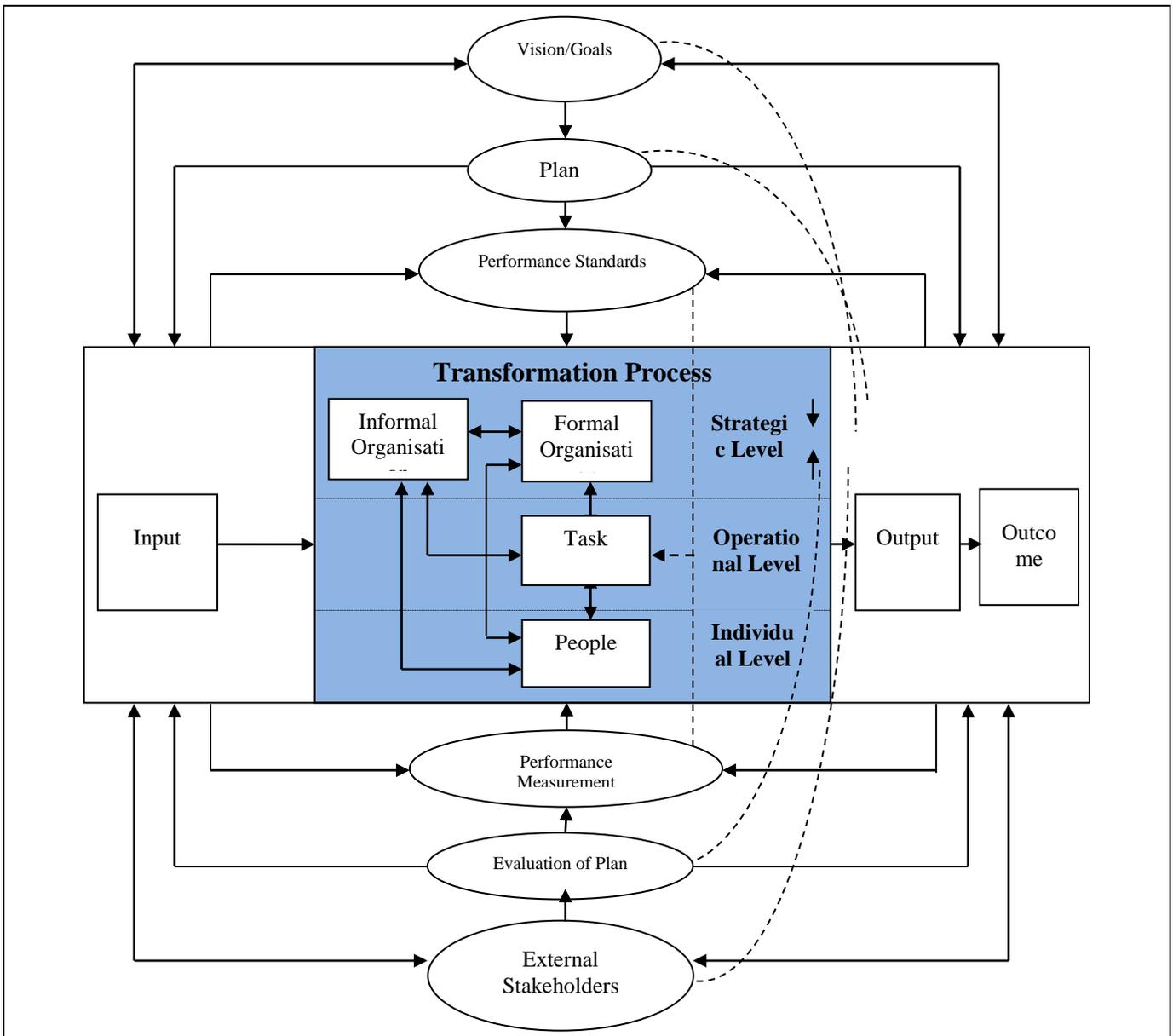
Source: Adapted from Rouse and Putterill (2003, p. 799)

An approach that could possibly shed some light on the ‘black box’ in the transformation process was identified in this study. Specifically, organisational diagnosis, a core activity in organisation development, has shown promise to be used in highlighting the detailed components of the transformation process in an organisation. Among the various diagnostic models for organisational diagnosis, the congruence model is particularly useful because the components of formal organisation, informal organisation, task and people in the model (refer to Figure 7) can provide details of the ‘black box’ / ‘activities’ in Figure 8. The interrelations of the four components in the congruence model provide a way to make connections between the different organisational levels and can possibly be used for understanding the institutional and behavioural factors in the transformation process.

The best possible method to integrate the different levels of performance management is to merge an open system model of performance management with the congruence model. The model presented in this study does this by replacing the ‘black box’/‘activities’ in Rouse and Putterill’s model in Figure 8 with the components of the congruence model, i.e. formal organisation, informal organisation, task and people. Consequently, a new model which is called an ‘integrated and open system’ performance management model for tax administration evolves (Figure 9).

The model in Figure 9 illustrates how various components in performance management are interrelated with arrows connecting them and how they need to be integrated at the different levels of performance management, i.e. strategic, operational and individual levels. The integrated approach, linking together all levels of performance management now underpins this holistic performance management system. The integrated view to performance management has the potential to assist a tax administration to better understand and align the different levels and create a complete, holistic picture of performance that substantively expose efficient and less than efficient aspects of a tax administration. The connective model in Figure 9 provides a holistic framing of performance management, highlighting the issues to be addressed when undertaking performance management.

Figure 9: An Integrated and Open System Performance Management Model for Tax Administration



Source: Author

6.0 Conclusion

The focus of enquiry of this study is on identifying the gap of knowledge in the previous literature and proposing new ways to look at the discipline of performance management for a tax administration. While there are various studies on tax administration performance, a study which proposes a holistic approach to tax administration performance management is lacking in the literature. Most of the tax administration performance studies concentrated on the small scope of performance measurement instead of the whole process of performance management. Hence, this study proposes a holistic performance management model, which combines an integrated model (the congruence model) with an open system model (Rouse and Putterill's model), as a guide for a tax administration to evaluate, improve and manage its overall performance management system. However, further research is required to identify how the emerging approach for an integrated and open system performance management can be translated into better outcomes for a tax administration.

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