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A Performance Management Framework for the Public Sector: The Balanced Stakeholder Model

Abstract

Managing performance is a major concern within the public sector. Many systems for performance management, such as the balanced scorecard, have been developed in the private sector but these tend to focus on financial targets and a small range of stakeholders, primarily shareholders. The public sector has a much wider range of objectives and of stakeholders. Previous papers have developed a performance measurement and management system (the “3 E’s” methodology) based on SSM. In this paper the methodology has been further developed to help identify sets of relevant stakeholders, both internal and external, and then try to balance their particular interests which may be independent, complementary or conflicting. The methodology decomposes activities throughout the organization; identifies key stakeholders and their interests at each level; views these in terms of four perspectives – goal, operation, stakeholder, capability; and identifies KPIs if required. A case study of its application in a Chinese hospital is included.

Key Words: KPI, performance management, public sector, stakeholders, soft systems methodology

1. Performance Management in the Public Sector

Performance management (PM) is a term borrowed from the management literature which has only recently been adopted in the public management field. The term ‘performance management’ was first used in the 1970s, but it did not become a recognized process until the latter half of the 1980s (Armstrong & Baron, 1998). Performance management has been extended to every aspect of business and management. A large number of researchers and practitioners from different fields are engaged to the exploration and study of performance management, for instance: stakeholder theory (Berman, Wicks, Kotha, & Jones, 1999; Choi & Wang, 2009; Clarkson, 1995;

Freeman, 2010; McAdam, Hazlett, & Casey, 2005; Ogunlana, 2010), strategic management (Atkinson, Waterhouse, & Wells, 1997; Freeman, 2010; Grigoroudis, Orfanoudaki, & Zopounidis, 2012; Kald & Nilsson, 2000; Kaplan & Norton, 2001a), human resource management (Farndale, Hope-Hailey, & Kelliher, 2011; Guest, 2011; Huselid, Jackson, & Schuler, 1997; Singh, Darwish, Costa, & Anderson, 2012; Van De Voorde, Paauwe, & Van Veldhoven, 2012) and operational research (Boland & Fowler, 2000; Crawford, Costello, Pollack, & Bentley, 2003; Liu, Meng, Mingers, Tang, & Wang, 2012; Wang, Liu, & Mingers, 2015; White, 2000).

1.1 Early development and successes of performance management in the private enterprise

Performance management has developed from a 'results oriented' approach to a 'process oriented' approach and then to the integration of the two in support of the organization's strategy. Early studies on performance management developed out of a concern for the measurement of performance. Initially within performance management, maximizing profits was the primary target for enterprises and, before the 1970s, financial factors were almost the only criteria for performance evaluation. Later, people paid more attention to other perspectives such as: customer satisfaction, organization strategies, extent of innovation, and so on. After the 1970s, some of these factors were incorporated in systems of performance evaluation in private companies and they aimed to reflect the operational efficiency and effectiveness, and developing trends of the enterprises. The balanced scorecard (BSC) was first introduced by Kaplan and Norton as a multi-dimensional performance measurement tool (Kaplan & Norton, 1992), but its focus soon shifted to performance management (Kaplan & Norton, 2001a; Kaplan & Norton, 2001b). The original design and initial practices of BSC focused on private enterprises. It linked the organizational strategy and vision to the four performance perspectives: financial, customer, internal process and learning and growth. From more than 20 years of development, the BSC has gained widespread acceptance as one of the most successful performance management tool for enterprises (Kald & Nilsson, 2000; Liu, Meng, Mingers, Tang, & Wang, 2012; Malmi, 2001; Mitchell, Nørreklit, Seal, & Ye, 2014). However there are still major issues in performance

management in the private sector. For instance, there are substantial issues in terms of an inappropriate focus on narrow groups of stakeholders and a small number of quantitative performance measures (often financial indicators) which tend to be short-term, and lose sight of the longer term aims and objectives (Hayes & Abernthy, 1980; Neely, Gregory, & Platts, 1995; Paridea & Chattopadhyay, 2007).

1.2 Performance management in the public sector

Much later than the private sector, performance management was gradually introduced into the public sector although it was not applied and developed as successfully as in the for-profit sector. The initial practices of PM in the public sector were centered on the assessment of value for money and other resource usage. This was normally conducted by external auditors or government authorities (Boland & Fowler, 2000). However, public sector organizations are often professional organizations providing public services. These public services are multiple and are rendered in co-production. A single output or efficiency oriented performance measurement system will inappropriately reduce the complexity of public management into a single dimension (De Bruijn, 2007) . As emphasized by Moore (1995), in the public sector the goal might be creating the social (public) value because the majority of public sector organizations still gain most of their income from the State and they have to create value for citizens, taxpayers and other stakeholders. Later researchers (Brookes & Grint, 2010; Kelly, Mulgan, & Muers, 2002) further demonstrated that all public leaders need to engage in understanding, creating and demonstrating public value. As Brookes (2010) stated,

“it requires the identification of social (public) goals, and delivering those goals in a way that secures trust and legitimacy and ensuring that the public sector organization has the capability and the capacity to deliver these stated goals” (p. 15)

More recently, it has been accepted that PM in the public sector emphasizes the consideration of wide-ranging stakeholder groups who may directly or indirectly affect or be affected by the actions of the organization, and reconciliation of the conflicting objectives into feasible plans of

action (Alford, 2002; Larsen, 2008; Moore, 1995; O'Flynn, 2007; Sanger, 2008; Yang & Holzer, 2006). As Bao, Wang, Larsen, & Morgan (2013) claimed, public PM should move from NPM (new public management) to NPG (new public governance). They argued that NPG is value centered. The goal of the public sector is to promote the larger common good not just improved efficiency, effectiveness, or responsiveness in the implementation of a given program (Alford, 2002; Moore, 1995; Moore, 1994; Stoker, 2006). And NPG emphasized the importance of creating government processes that facilitate the generation of implementable agreements among wide-ranging stakeholders who may disagree on what course of actions will produce the maximum public value (Larsen, 2008; Sanger, 2008; Yang & Holzer, 2006).

More recently, stakeholder theory has been emphasized and stakeholders and communication have been deemed as two key factors of PM in the public sector (Choi & Wang, 2009; Clarkson, 1995; Freeman, 2010). Public organizations are complex systems that include many different groups within them, and affect many different groups and elements of their environment. As defined by Freeman (1984) a stakeholder is: '...any group or individual, who can affect or is affected by the achievement of organization's objectives (p.46).' Some of these stakeholders are important for the successful operation of the organization; some are important because of the effects that the organization has on them. In both cases the organization needs to be aware of these stakeholders and manage them successfully, the former for reasons of effectiveness, the latter for reasons of legitimacy and ethicality (Wang, Liu, & Mingers, 2015).

In spite of the wide concerns on 'stakeholders' or 'balance' in performance management, public sector organizations have turned to borrow enterprise performance management practices and successful tools for improving and demonstrating their own performance and accountability such as BSC (Hood, 1995; Kollberg & Elg, 2011; Niven, 2011). However, there is a lack of studies to examine the issues and challenges that exist in public PM implementation (Northcott & Ma'amora Taulapapa, 2012). Most existing PM frameworks do not offer practical procedures to guide us in how to identify and balance the key interests of the stakeholders which is the ultimate driving force of performance management in the public sector (Shapira & Kuhlmann,

2003). Therefore, we argue that one of the key factors in the effective implementation of PM in the public sector is the need to balance the motivations and interests among various stakeholder groups at all levels of the system, rather than simply to concentrate on a mechanistic process of decomposing objectives, monitoring, and collecting feedback. Furthermore, let us emphasize that 'implementation' is often split into 'system adoption' and 'managerial use', and it is the former that is being addressed in this paper. Thus, how to develop a framework or methodology to help public management to identify and manage the various (often conflicting) stakeholder (or interests) groups is still a huge challenge in the public PM field. In light of this, we will review some of widely used multidimensional models or frameworks in public performance measurement/management including the model of the European Foundation for Quality Management (EFQM), the Balanced Scorecard (BSC) (Kaplan & Norton, 1992; Kaplan & Norton, 1996), the Public Scorecard (Moullin, 2002), and the Performance Prism (Neely, Adams, & Kennerley, 2002).

2. Existing Performance Management Frameworks

As said, performance management has developed from performance measurement, which was reviewed in the references above, for example in (Neely, Gregory, & Platts, 1995) for companies and (Liu, Cheng, Mingers, Qi, & Meng, 2010) for the public sector. Nowadays, performance measurement is only an important aspect of performance management, which is often carried out in the guidance of various frameworks.

Depending on their starting points, the existing performance management frameworks can be divided into two types: The starting point of Type 1 is an organization's objectives/strategies, while that of Type 2 is a universal operation model for all organizations. The former usually shed light on logic steps or procedures of creating/carrying out the performance management system from the objectives/strategies of the organization, while the latter mainly aims to benchmark/diagnose the performance management for a group of organizations, since it does not relate to any particular objectives/strategies. Below we review some of the representative

examples.

Type 1 methods: Starting from an organization's objectives/strategies

Of those starting performance management from the objective/strategy, there are two subgroups of the class: those with explicit *fixed* logics and models, and those with implicit logics and models in creating/carrying out performance management. In general, the former is easier to use with detailed implementation procedures, but they usually only work for certain cases, while the latter is more flexible but often without very detailed implementation procedures.

Subgroup 1 of type 1 methods: those with implicit logics and models A classic framework in early performance management research is the PMS model developed by the United States Office of Personnel Management (United States Office of Personnel Management 2017). In this framework, five key stages of performance management are stated and the strategic elements are embodied in stage one (planning and setting expectations).

- 1) Planning work and setting expectations;
- 2) Continually monitoring performance;
- 3) Developing the capacity to perform;
- 4) Periodically rating performance in a summary fashion;
- 5) Rewarding good performance.

Nowadays, the significance of the PMS framework is reminding users to view performance management as a comprehensive system instead of a single measurement.

Otley (1999) proposed a performance management system (PMS) to analyze the operation of management control systems structured around five central issues. These five issues relate to objectives; strategies and plans for their attainment; target-setting; incentive and reward structures; and information feedback loops. He proposed five questions related to those issues:

- 1) What are the key objectives that are central to the organization's overall future success, and how does it go about evaluating its achievement for each of these objectives?
- 2) What strategies and plans have the organization adopted and what are the processes and activities that it has decided will be required for it to successfully implement these? How

does it assess and measure the performance of these activities?

- 3) What level of performance does the organization need to achieve in each of the areas defined in the above two questions and how does it go about setting appropriate performance targets for them?
- 4) What rewards will managers (and other employees) gain by achieving these performance targets (or, conversely, what penalties will they suffer by failing to achieve them)?
- 5) What are the information flows (feedback and feed-forward loops) that are necessary to enable the organization to learn from its experience) and to adapt its current behavior in the light of that experience?

Ferreira and Otley (2009) extended Otley's (1999) PMSs framework for both for-profit organizations and not-for-profit organizations. The extended framework is called 'performance management systems framework' and extended Otley's five 'what' questions to ten 'what' and two 'how' questions.

Smith and Goddard (2002) examined performance management from an operational research perspective and constructed a framework to examine the performance management process. They argued that performance management should contain four broad blocks:

- 1) Formulation of strategy;
- 2) Performance measurement instruments;
- 3) Analytic techniques;
- 4) Encouraging appropriate organizational responses.

Smith and Goddard (2002) claimed that the success of a performance management system will depend on how well these four indispensable elements of the performance management process are welded into a coherent whole.

Subgroup 2 of type 1 methods: Fixed Logic models for performance management

The balanced scorecard

During recent years, public organizations have increasingly adopted the balanced scorecard

(BSC) framework for their performance measurement or management system (Grigoroudis, Orfanoudaki, & Zopounidis, 2012; Kollberg & Elg, 2011; Niven, 2011; Northcott & Ma'amora Taulapapa, 2012; Santiago, 1999; Sharma & Gadenne, 2011). The BSC was first introduced by Kaplan and Norton (Kaplan & Norton, 1992; Kaplan & Norton, 1996). The original design and initial practices of BSC focused on the private sector. BSC linked the organizational strategy and vision to the four performance perspectives: financial, customer, internal process and learning and growth.

Kaplan (2008) emphasized that, since financial success is not the primary objective for nonprofit and public sector enterprises (NPSEs), they cannot use the standard architecture of the balanced scorecard and strategy map wherein financial objectives are the ultimate. NPSEs generally place highly an objective related to their social impact and mission. Some practitioners have elevated the organization's strategy or mission or customer perspective to the top of the hierarchy of perspectives of BSC. As Kaplan and Norton (Kaplan & Norton, 2001b) noted, the public sector should be accountable for how well they meet a need in society rather than how well they raise funds or control expenses.

The public sector scorecard

The public sector scorecard (PSSC) was originally developed in 2002 (Moullin, 2002) and it is an integrated quality management and performance measurement framework for the public and voluntary sectors developed from the balanced scorecard. It is designed to help the public organizations to find ways to deliver improved outcomes for service users. The fundamental construction logic and structure of the PSSC are very similar to the BSC. The Public Sector Scorecard focused on outcomes, the processes that deliver those outcomes, and the organization's capability to support its people and processes in achieving the relevant outcomes efficiently.

Soft Systems Methodology (SSM)

SSM is a systems-based general purpose problem solving methodology developed by Checkland (1972). As Checkland (2000) explained in his book: 'it (SSM) is an action-oriented process of inquiry into problematic situations in which users learn their way from finding out about the situation, to taking action to improve it (p.191).' ,which is summarized a seven-step process as shown below:

- 1) Understanding the complex problems and current situation that needs intervention.
- 2) Collecting all kinds of information about the problem and demonstrating in rich picture.
- 3) Identifying key aspects of the situation in rich picture and generate root definitions (RDs).
- 4) According to each RDs, building conception models (CMs) based on personal understanding and ideas
- 5) Comparing the CMs with the current situations in real world.
- 6) Comparing potential improvements and discussing the possibilities of the improvements.
- 7) Implementing the improvements, making changes to the situation.

He explains the complexity of problematical situations in real life contain multiple interacting perceptions of 'reality'. This comes about because different people have different taken-as-given (and often unexamined) assumptions about the world. Thus, in order to improve the performance of the social system (e.g. public sector), the fundamental idea of SSM is to identify or understand the key interests of stakeholders in the situation before taking actions. It develops notional or conceptual models of purposeful human activity based upon the root definitions that describe succinctly what a system is, and "activity models" that describe what it must do. The root definitions generally specify the Customer, the Actors, the Transformation, the Weltanschauung, the Owners and the Environment (CATWOE) which is generally not within the system's control.

Strictly speaking it is only a useful tool for carrying out performance management. When applied in performance management, firstly primary task activity models are developed that specify the outputs or services to be produced (What), the manner in which they are produced (How), and the reason for their production (Why). These models start at the top level and are decomposed

downwards to whatever level of detail is required. They can be used to develop key measures of performance in terms of three criteria (the 3E's model) (Liu, Cheng, Mingers, Qi, & Meng, 2010): efficacy (E1), efficiency (E2) and effectiveness (E3). They can also be used to identify key stakeholders at a variety of levels within the organization (Wang, Liu, & Mingers, 2015). The application area for SSM is very broad. It has been applied to all sizes of company from small firms to large corporations, from organizations in both private and public sectors including the National Health Service (Checkland & Poulter, 2010). Many researchers have applied it in the public sector and government projects and showed positive results on their performance (Crawford, Costello, Pollack, & Bentley, 2003; Liu, Cheng, Mingers, Qi, & Meng, 2010; Liu, Meng, Mingers, Tang, & Wang, 2012; White, 2000). And some researchers provided the evidence of a wide range of successful applications of SSM as a methodology used both by itself and in combination with other approaches (Checkland, 2000; Mingers, 2000).

Associated with the action chain in SSM, Zheng (2017) proposed an integrated framework, which is referred to as a performance tree framework, where organizational performance is considered to be aggregated from a performance network (consisting of actions and their consequences), and the aims of performance management is to modify and manage this network. This idea is also a base of our work here.

Type 2 methods: Standardized models from the total quality management perspective (EFQM)

The European Foundation for Quality Management (EFQM) was created by 14 presidents of European companies in 1988. The EFQM Excellence model is a non-prescriptive framework with 9 main criteria and 32 sub terms for organizational self-assessment and also for benchmarking to compare with others. It is one of the most widely used total quality management (TQM) framework in the Europe and it is the most influential Quality Awards in the world. It has been revised in 1999, but the principals still remain the same. In the new version, its aim is to enhance the performance of an organization, and thus can be viewed a performance management framework. The framework consists of nine key criteria and 32 sub-indicators

corresponding with each criterion. The dimension of performance is placed at the end of the framework, which is viewed as a logical result of the good operations above. The nine key criteria are grouped into two categories. The “Enablers” category of the criteria (leadership, people, policy and strategy, partnerships and resources, and processes) includes operational and managerial elements that can be viewed as inputs for a well-running business. Furthermore, the “Results” category consists of expected outcomes (people results, customer results, society results and key performance results) as a consequence of the sound operation and management. As what has been stated in Bou-Llugar, Escrig-Tena, Roca-Puig, & Beltra’n-Martin, (2009), the ‘Enablers’ criteria examines what the organization does, and the ‘Results’ represent what the organization achieves. Nabitz, Klazinga, and Walburg (2000) reviewed the practices of TQM in European health care and they claimed that one way to meet the challenges in creating a high performance organization in health care is the approach of the European Foundation for Quality Management (EFQM). The European Foundation for Quality Management (EFQM) was created by 14 presidents of European companies in 1988. The EFQM Excellence model is a non-prescriptive framework with 9 main criteria and 32 sub terms for organizational self-assessment and also for benchmarking to compare with others. It is one of the most widely used total quality management (TQM) framework in the Europe and it is the most influential Quality Awards in the world. It has been revised in 1999, but the principals still remain the same. The framework consists of nine key criteria and 32 sub-indicators corresponding with each criterion. The dimension of performance is placed at the end of the framework, which is viewed as a logical result of the good operations above. The nine key criteria are grouped into two categories. The “Enablers” category of the criteria (leadership, people, policy and strategy, partnerships and resources, and processes) includes operational and managerial elements that can be viewed as inputs for a well-running business. Furthermore, the “Results” category consists of expected outcomes (people results, customer results, society results and key performance results) as a consequence of the sound operation and management. As what has been stated in Bou-Llugar, Escrig-Tena, Roca-Puig, & Beltra’n-Martin, (2009), the ‘Enablers’ criteria examines

~~what the organization does, and the 'Results' represent what the organization achieves.~~

The above best-practice logic/benchmarking methods are also adopted by a similar performance measurement framework—initiated in the US—Malcolm Baldrige National Quality Award framework (MBNQA) created by U.S. Commerce Department. In the MBNQA framework, 1,000 points are assigned to seven key criteria linking with each other by a modeled logic of best-practice, (Bou-Llusar, Escrig-Tena, Roca-Puig, & Beltra'n-Martin, 2009).

This type methods have been used in performance management of public sector. For example, Nabitz, Klazinga, and Walburg (2000) reviewed the practices of TQM in European health care and claimed that one way to meet the challenges in creating a high performance organization in health care is the approach of the EFQM. However, since it does not start from any particular objectives/strategies, such methods are not suitable for setting up a performance management system for a particular company, as shown in the further discussions below.

2.1 Evaluation of PM frameworks

From the literature review, there are two kinds of performance management methods that can be applied to PM in the public sectors and which have their own advantages and disadvantages.

~~The second type of method (standardized models with implicit logics) start from a universal organization operation model and thus is suitable for benchmarking since it does not relate any particular objectives/strategies, which is actually its work-base. Then it assists an organization in improving performance by comparing its performance with the benchmarks. Thus it may not be effective to improve a specific performance coming out from particular objectives/strategies. Further they cannot be used to create a performance management system for a particular organization and thus are not suitable for our research, although they are often used as a performance diagnostic tool. Moreover, every public organization has its unique strategic choice, participants, stakeholders and external environment and thus from the diagnostic results by using~~

~~EFQM, it is often difficult to know how to improve the performance in a particular organization.~~

~~Of the Type 1 models~~ which begin with the objectives and strategies of an organization. ~~The first Sub-group 1 of Type 1~~ the methods summarize and refine the performance management activities according to some internal logic and then derive key performance indicators (KPIs). They are quite flexible and powerful in the sense that they are applicable to many types of organizations. Some of the frameworks (e.g. Ferreira & Otley, 2009) have a strong logical flow from strategy to outputs and outcomes, although may be slightly too general to provide any detailed guidance for real applications, which is very useful for inexperienced users.

The ~~second Sub-group 2 of Type 1 methods~~ approach is represented by the BSC, and PSSC. It has been widely used in private sector enterprises with some success since having fixed explicit logic models, they are easier to use with quite detailed procedures to follow for beginners. However, their logic only works for certain types of organization (such as private and for-profits), so do the frameworks. For instance, the inherent priority for the finance performance in the four dimensions of balanced scorecard made it unsuitable for public sector organizations, thus it needs to adjust the original four dimensions when it is applied to the public sectors.

However, the above frameworks ~~aim to~~ provide performance information but mostly on short term aims and furthermore do not adequately address the key question about how such information is used by relevant managers. They often focus on a narrow group of stakeholders, and a small number of generally quantitative, short-term performance indicators. Such quantitative measures of performance are fundamentally imperfect - they all have their particular biases and inaccuracies. Therefore, in using this information for management control it should be done with thought and judgement rather than formulaically (Otley 1999). More research into these problems can be found under the heading of RAPM (Reliance on Accounting Performance Measurement) on the consequences of evaluative style on managerial behaviour and performance, which identifies the causes of many of the problems encountered, such as influences of culture and personality on the relation between reliance on these measures in the evaluative style of superiors and work-related attitudes of subordinate, see e.g., (Harrison, 1993;

Hopwood,1972), and (Otley & Fakiolas,2000) for the development of the concept of RAPM and its measurement.

Another factor omitted in the above frameworks is the wider stakeholders and their objectives: the larger range of stakeholders involved and potentially conflicting objectives, which are important in for the public sector, as discussed in Section 1. Even if some optimized strategies and key indicators are obtainable by using the adjusted balanced scorecard, it is still often difficult to implement effectively in the public sector as they involve unbalanced conflicting objectives of wider stakeholders. Moreover, none of these existing PM frameworks offered the practical procedures to guide us how to identify and balance the key interests of the stakeholders, which is the ultimate driving force of performance management for the public sector (Shapira & Kuhlmann, 2003). Thus, those activities decomposed by the BSC or SSM may not be necessarily balanced with the key interests of the ‘involved stakeholders’ in the organization, and therefore are often hard, if not impossible, to implement (Wang, Liu, & Mingers, 2015). Furthermore developing well-balanced sub-activities and indicators helps to address wider stakeholders and use the quantitative information with a more informed discussion. _

The second-Type 2 of methods (standardized models with implicit logics) start from a universal organization operation model and thus is suitable for benchmarking since it does not relate any particular objectives/strategies, which is actually its work-base. It is based rationality of management (Broadbenta & Laughlin, 2009). Then it assists an organization in improving performance by comparing its performance with the benchmarks. Thus it may not be effective to improve a specific performance coming out from particular objectives/strategies. Further they cannot be used to create a performance management system for a particular organization-and thus are not suitable for our research, although they are often used as a performance diagnostic tool. Moreover, every public organization has its unique strategic choice, participants, stakeholders and external environment and thus from the diagnostic results by using EFQM, it is often difficult to know how to improve the performance in a particular organization. Thus they are not suitable for our research, although often used as a performance diagnostic tool.

One of the main purposes of this study was to design a generic performance management model or methodology (referred to as the Balanced Stakeholder Model - BSM) to fuse those separated key tasks of public PM (sustainability of PM, strategy decomposition, stakeholder identification and balancing interests) into a cohesive framework.

However we believe that there is not such a thing as a truly integrated performance management frameworksystem at all levels, as discussed by Malmi and Brown (2008) under the theme of such systems being 'packages' rather than 'systems', although some researchers are still aiming for it. As discussed in Folan and Browne (2005), a successful PM system has two frameworks, one structural and one procedural, as well as a number of other performance management tools. Also as discussed in Zheng (2017) – there may exist integrated frameworks at the top levels, although all the existing performance frameworks need to use various packages (like SSM or the 3E system) to help achieve different tasks of PM at micro levels, and these packages continuously evolve. Therefore, here we will try to develop an integrated PM framework at the top levels, with loosely-packaged tools for the lower level the public sector.

3. A New Performance Management Framework: the Balanced Stakeholder Model (BSM)

As discussed above, there is no existing PM framework that offers practical procedures to guide us on how to identify stakeholders and balance their key interests, which is the ultimate driving force of performance management for the public sector (Shapira & Kuhlmann, 2003). In this section we aim to develop a normative PM framework such as the BSC with some suggested implementation approaches (e.g. to identify key stakeholders) for the public sector.

We will start from the top objectives of an organization, which should have been accepted by the key top stakeholders with agreed plans of actions and goals. But before this we will often need to discuss rationality of management associated with long term aims as an orientation of our PM system (Broadbenta & Laughlin, 2009). Here we will focus on sustainability of PM system by considering how to balance key stakeholders' interests. The next step is how to translate the

goals and contexts into a series of manageable key activity and stakeholder systems.

Thus, we introduce the Balanced Stakeholder Model (BSM). From the systems thinking perspective, BSM is designed as a stakeholder-oriented performance management framework especially applied in performance management in the public sector. It aims to answer two fundamental questions: 1) How to translate the complexity of public goals and contexts into a series of manageable key activity and stakeholder systems. 2) How to help public sector managers to decide which combination of factors (activities, stakeholders and balanced interests) is more likely to lead to success.

Therefore, the main tasks of the BSM are to decompose the strategic goals of the organization into the necessary activities at a variety of levels, identify internal and external stakeholders, and balance their key interests. SSM is the fundamental method for strategy decomposition and this forms a core part of our stakeholder identification and analysis method (Wang, Liu, & Mingers, 2015). In order to balance interests, the BSM will identify the key interests, more importantly, the key conflicting interests among the stakeholders, then try to balance them by making a balancing strategy or plan, and then to amend the overall objectives and strategies of the organization. Thus, BSM takes the key interests of stakeholders as a part of the organizational goals (objectives) for further decomposition in order to keep discussing 1) does this objective represent the common interests of us all? 2) Do the objective and relative activities damage the key interests of particular stakeholder group or individual? 3) If there is a conflict, how to make a suitable balancing strategy by amending the objective or action plans? Thus our objective set consists not only of strategies and financial targets but also key interests of employees, customers and other stakeholders, even outside the organization.

At this stage, we wish to reiterate the importance of discussions on the appropriate uses of the metrics and quantitative information produced in the BSM, as they will inevitably be partial and imperfect as pointed in Section 2.1. We should pay attention to the rich literature which identifies the causes of many of such issues encountered, as influences of cultures. Furthermore giving the fact that well-balanced sub-activities and indicators are being identified by the key stakeholders

in the BSM, we should utilize them to discuss how to use the quantitative information adequately during the processes.

However, BSM by itself cannot directly uncover the key interests or conflicts of stakeholders. Those interests are normally identified through different kinds of formal or informal communication with stakeholders such as questionnaires, interviews, formal or informal meetings and so on. Although the BSM emphasizes the importance of identifying and attempting to balance the stakeholders’ interests throughout the whole process of decomposition, in reality it may be difficult to achieve these. We will discuss this in more detail in later sections.

3.1 Introduction to the stakeholder identification and analysis method

We proposed a systemic methodology for identifying and analyzing the stakeholders of an organization at many different levels. The methodology is based on soft systems methodology and is applicable to all types of organization, both for profit and non-profit (Wang, Liu, & Mingers, 2015).

Based on CATWOE from SSM and the idea of the “involved” and the “affected” from critical systems heuristics (CSH) (Reynolds & Holwell, 2010), we have developed a framework of different categories of potential stakeholders (Table 1).

The Involved				The Affected	
Owners who can create, change or destroy the system and who supply the Weltanschauung	Customers who are the direct recipients of the output of the system. They may be	Actors who perform the activities of the system	Partners groups who are directly necessary for the system, e.g., suppliers of resources	External groups indirectly affected by the systems activities	External groups who indirectly affect the systems activities

	seen as beneficiaries or victims				
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Table 1: Categories of stakeholders derived from CATWOE and CSH

The stages of this method can be summarized into the following five steps:

1. Determine the overall objectives (or mission) of the organization (or part of it).
2. Search for “initial stakeholders”.
3. Build root definitions (RDs) and conceptual models (CMs) – in practice, one often repeatedly ask questions “what to do”, “why to do”, “how to do” to build RD and CM.
4. Continuously decompose the activities into lower levels, e.g., by asking what to do and how to do.
5. A complete set of stakeholders can then be produced from the key activity models bottom to top and level by level. Through the process of inducing and summarizing the stakeholders, the set could clearly represent the functions of the stakeholders at each level of key activities in the process of achieving the organizational strategic goal.

3.2 Four perspectives of BSM

One of the most distinctive features of BSM is, when combined using with our Stakeholder Identification and Analysis method (Wang, Liu, & Mingers, 2015), that it helps us to keep alignment with the actual organizational strategic goals and management hierarchy structure during the whole decomposition and analysis processes. And the findings (key activity and stakeholder systems) can be better presented to the managers so that they can more directly understand and perceive them and to help them to make decisions. Furthermore, it is able to allow managers to allocate the jobs and stakeholders into related key operational and supportive departments, as well as to set performance indicators and rewards system. Generally speaking, BSM smoothly fused our system-based stakeholder identification and analysis method into the

public PM framework and made it more practical to public managers (they can easily understand and adopt it without OR expertise).

The BSM consists of four logically linked perspectives. The first perspective of the BSM is the 'goal', where goal normally refers to the system's objectives. The rationale is that the BSM is a performance management framework especially designed to be applied in the public sector from a stakeholder and systems perspectives. If we view the public sector as a system, the performance or output of the system will be significantly decided by its own system goals and affected by its wider systems. Therefore, for this purpose, the BSM also starts by analyzing the primary goals.

The BSM considers the stakeholder as the second perspective, differing from other existing frameworks. We consider a much wider and deeper range of stakeholders including both internal key participants (involved groups) and the external groups (affected groups) (Wang, Liu, & Mingers, 2015) through the different levels of organizational hierarchy. We used 'stakeholder' as one of our key perspectives instead of 'customers' in BSC or 'service users' in PSSC. According to the literature of stakeholder theories, one of the key points is considering the wider stakeholders in effective management (Friedman & Miles, 2002; Goodpaster, 1991; Wood & Jones, 1995). Some researchers have emphasized the balancing of interests and the salience for management (Clarkson, 1995; Mitchell, Agle, & Wood, 1997). Moreover and Shapira (2003) summarizes three categories of PM studies and concludes that the ultimate driving force behind modern performance management for the public sector is to balance the interests of the key stakeholders according to their actual contributions. Therefore, balancing the contributions and demands of the stakeholders and hence determining the extent to which implicit claims are fulfilled is the core of this balanced stakeholder model.

The goals and interests of the key stakeholders are to be fulfilled by the next two perspectives: Operation and Capability, which are similar to the most widely used existing PM decomposition tools (such as BSC, PSSC), discussed in the above sections. According to the purposes of the BSM, it aims to decompose the strategies then select the combination of the key activities and

stakeholders and match them into the current management hierarchy. It is necessary to emphasize that the entire decomposition processes should involve the people (stakeholders) in the situation. Agreement or at least accommodation should be generated to ensure that the interests of different stakeholder groups have been considered and balanced.

Furthermore, in order to ensure that organizations operate more efficiently and effectively, they need to obtain necessary resources. These resources include physical resources such as funds and facilities, and non-physical resources like staff, learning and growth, knowledge and external partnership -this is what we call ‘capability perspective’.

To sum up, the organizational strategy is the core of the BSM, and it is surrounded by the following four perspectives: goal, stakeholder, operation and capability (see Figure 1 below).

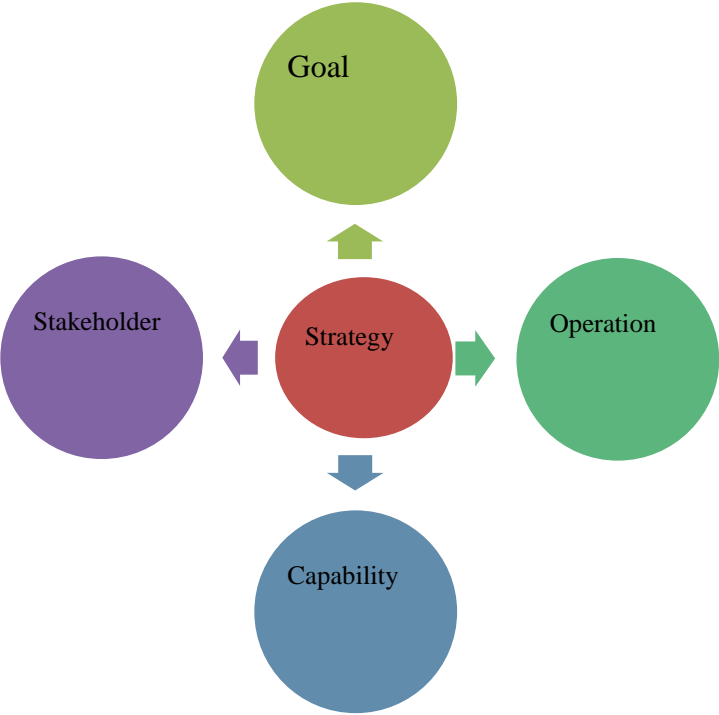


Figure 1 The Four Perspectives

Unlike the other existing models that often only apply to the top level of an organization, the BSM is applicable to any level of an organization from overall strategic level to departmental or

even individual day to day operational level. Compared to the BSC for example, clearly, the BSC takes finance as its top goal. Therefore it is more suitable for for-profit companies. And the BSC only addresses two key stakeholders: the company (owner or shareholders) and its customers, which are extremely important in private companies. However, the literature review of stakeholder theory suggests that there is a much wider range of stakeholder groups that the organization should consider. Therefore, we believe that the BSM is more suitable for the public sector in this regard.

3.3 Five steps to use the balanced stakeholder model

Step 1 Understand the key system goals.

Normally, we analyze the system goals from the top level of the organization, which means we need to consider both the organizational and the wider (upper level of) system goals. However, we can also start from any level of organization. For instance, we can start from analyzing the departmental objectives (as a system goal) and then align them with the organization's overall strategies (as wider system goals). When we analyze the system goal, it is not only to think about the objectives (what to do?), upper system goals (why to do it), but also the critical paths to achieve the objectives (how to do it)). This is also known as the root definition (RD) in SSM.

Step2 Identify and analyze stakeholders

Using the CATWOE analysis in SSM can help us to identify some of the stakeholders such as owners, actors, customers. However, as we discussed before, performance management in the public sector trends to consider a much wider range of stakeholder groups. To this end, we can use the method of stakeholder identification and analysis in Wang, Liu, & Mingers (2015). The goal and the stakeholders are mutually supportive to each other. On the one hand, the goal has to be decided and carried out by stakeholders (both involved and affected by the action of the organization in order to achieve those goals.). On the other hand, to represent the collective interests of stakeholders the organization has to put their key interests into its overall strategic

objectives for further decomposition and effective implementation.

Step 3 Balancing stakeholder interests

This is a core step of our method. As we discussed in the beginning, it is very important to try to balance the key interests of different stakeholder groups in order to minimize the resistances and to implement the PM more efficiently and effectively. First of all, it is not possible and necessary to identify all the interests of stakeholders. Our priority is to identify and balance the key interests among stakeholders in support of the system goals. This normally can be done through the stakeholder meeting by discussing following key questions: 1) Does this objective represent the common interests of us all? 2) Do the objective and relative activities damage the key interests of particular stakeholder group or individual? 3) If there is a confliction, how should we make a suitable balancing strategies by amending the objective or RD?

Step 4, Decompose the objectives and develop KPIs

After we reach an agreement about our objectives among the stakeholders at the top level, then we can start to decompose the objectives into more detailed key-activity systems, (i.e., steps 3-4 in Section 3.1, similar to conceptual models in SSM. However, they differ from CMs in that our BSM models have four logical perspectives. Our model shows not only the key actions but also objectives, stakeholders and the causal links among those key activities. The BSM models are more like strategic maps, and are more suitable for a performance management tool. Again, at each level of the decomposition, we will try to involve as many stakeholder groups as possible to discuss and debate the course of activities the organization will choose. This process is vital to minimize the risk of occurring resistances and conflictions during the implementation stage. And it gives us a second chance to rethink the key activity systems from both the systematic feasible and local desirable point view.

In the stakeholder literature, there are several methods or theories that try to identify, analyze or balance the interests of stakeholders. For example, the risk-based model of stakeholders

proposed by Clarkson (1995) distinguished ‘voluntary stakeholders’ and ‘involuntary stakeholders’. The “power-interest grid” method proposed by Eden and Ackermann (1998) which is a means of mapping potential stakeholders on a two-dimensional grid. Or, Mitchell’s (1997) model which discussed how to give different degrees of salience or priority to the different stakeholder groups from a macro level perspective. In comparison with the methods mentioned in the literature, our approach, by utilizing the SSM, is able to carry out in-depth analysis through the whole processes of strategy intervention, decomposition and deployment at different levels, related to organizational strategies and the key supporting activities (Liu, Meng, Mingers, Tang, & Wang, 2012). We explicitly link stakeholder identification, analysis and the interest balance with strategy and top management by starting to identify stakeholders from the top level of an organization according to its objectives and strategies. Also our approach can conveniently disaggregate the identified stakeholders according to the management hierarchy of the organization for management (Wang, Liu, & Mingers, 2015).

Step5 Allocate the key activities into the ‘operation’ and ‘capability’ perspectives

After initial decomposition, we can then allocate the decomposed key activities (key tasks) into operational units (departments or teams) and the capability perspective (both internal staff learning and growth and external partnership and supports). Through the locating and mapping process, it gives us a second chance to rethink the key activities systems from both the systematic feasible and local desirable point view. The operational processes (key activities) are supported by key activities in the ‘capability’ perspective. After decomposition and allocation, the inter-relations and logic within the key activities are clearly presented in BSM models. We may find some of the operational or supportive key activities are missing. And sometimes we also could identify some of decomposed activities are not well fitted in the model - they may not be key activities for these particular goals and stakeholders, and then they could be removed from our list. During the processes KPIs are also developed by applying the 3E theory (Liu, Cheng, Mingers, Qi, & Meng, 2010).

Step 6 Repeat step 1 to 5 to build sub-system or sub-strategy level of BSM until all the key activities and indicators are clearly to be seen.

The differences between using the BSM and SSM-based method in the decomposition stage are: the BSM has four logic-related perspectives which give more guidance for the public sector management practitioners. SSM is a generic tool, but is much more difficult to apply properly. Moreover, the stakeholders and their key conflicting interests are clearly identified and presented in the BSM, but they are not in the conceptual models of SSM. Consequently, SSM often only decomposes some optimal or the most efficient CMs (key activities). However, these activities are not necessarily balanced with the key interests of the stakeholders, which are therefore often hard to be implemented in public sectors. In the Appendix, we will illustrate how to adopt the BSM step by step in a real case study very briefly, and leave the full details to another work.-

5. Conclusion

In this paper we have further developed ~~out~~ performance management ~~framework~~system to pay particular attention to the identification of all relevant organizational stakeholders and to ways of ensuring that their varied interests are balanced as much as possible in developing key activities and performance indicators. In comparison with other methods, our approach is much more suitable for the public sector than private sector oriented methods such as the balanced scorecard. And in comparison with other public sector approaches, our method gives more systemic, systematic and detailed guidance to:

- Construct appropriate activities for the organization from top level strategy down to detailed operations
- Identify relevant stakeholders and their interests at each level
- Use this information to assist in balancing stakeholders' interests

- Analyze the activities in terms of the four perspectives – goal, operation, stakeholder, capability
- Where desired, produce detailed KPIs

This methodology was illustrated with a real example of its use in a Chinese hospital.

5.1 Limitation and further research

First, the balancing of the stakeholders' interests is one of the key themes in this research. The BSM provides a feasible way (or procedures) for balancing interests during strategy decomposition and deployment processes. However, the interests could be identified and balanced through many other ways, especially for small groups (even individuals) in the organizations. Therefore, it is necessary to further study how to balance the interests under different situations.

Second, BSM needs the management of organization to identify stakeholder's interests, and to make an alignment (or compromise) with their needs. Both of these activities add transaction costs to the management of the organization. The identification and balancing process (e.g. discussion or survey) takes time and money. Those resources devoted to stakeholder identification and balancing thereby create opportunity costs because they cannot be put in other ways to enhance performance.

Appendix: Brief Summary of Case Study: BSM in a Public Hospital in China

The Chinese healthcare system and public hospitals are at the reforming stage (Chen, 2009). There are challenges in the healthcare system and in the management of public hospitals. For example, they lack sufficient investment from the government (Yip, Hsiao, Chen, Hu, Ma, & Maynard, 2012). The government has fixed the prices of medical services and commonly used medicines which are always lower than the actual costs and so hospitals have to rely on charges to fill their financing gap (Liu & Mills, 2005; Yip, Hsiao, Chen, Hu, Ma, & Maynard, 2012). Consequently, many Chinese public hospitals just simply adopted the financial performance related payment systems. The rewards for medical staff do not link to personal performance, risk, responsibility, technical capacity and service quality, but often only related to the departmental incomes (Xia, Zhang, & Tian, 2011). All these lead to the inefficient use of the medical resources, the high cost of healthcare services and the increasingly prominent contradictions between doctors and patients in the Chinese public hospitals (Zhou & Li, 2012). Thus there is an urgent need for them to adopt a multidimensional stakeholder oriented PM framework in order to face these challenges (Tian, Zhang, & Liang, 2010).

Hospital H is a traditional Chinese medicine (TCM) hospital which is committed to providing medical treatment, teaching, research, rehabilitation and health care for local citizens. Hospital H has many TCM services such as oncology, and has a large market share with regard to oncology and orthopedics in the local area, but its overall performance in terms of efficiency is relatively worse than its main competitors. Invited by hospital H, the performance management system working group was set up, consisting of different key stakeholder groups in the hospital. The aim of this project was to examine the performance management system of hospital H, and further to adjust and implement the improved system. The balanced stakeholder model (BSM) was applied in this case study.

Brief summary of Building the BSM

Step 1. Understand the key system goals

Firstly, we need to understand the vision and mission, and the strategy of hospital H for the next five years. Then, we need to understand the system goals including both the wider system (health system goals) and strategies of the hospital H.

Step2. Identify and analyze stakeholders

To achieve the ultimate goal of the hospital, we need to identify relevant stakeholders (at the top level) by using our stakeholder identification and analysis method.

Step 3. Balancing stakeholder interests

Then we need to identify key interests of different stakeholder groups. Generally, this can be done through interviewing staff, carrying out questionnaire survey, discussing and debating with different stakeholders to balance the conflict interests. In this case, we issued questionnaires for all the staff of the hospital and also for patients, and interviewed all the top management team, some of middle management team, doctors and nurses in order to identify their particular needs.

Step4, Decompose the objectives and develop KPIs

Based on the strategy of the hospital, the root definition (RD) of the top level of the BSM is:

“A system to be a nationally recognized and preferred TCM hospital by obtaining resources, attracting the best professional medical staff, creating a selflessly dedicated hospital culture, providing training opportunities, providing a high quality of medical services, and creating a selflessly dedicated hospital culture, in order to improve the health of local residents”.

Then, we decomposed the RD into more detailed key activities known as conceptual models (CM). During the decomposition stage, it is very important to identify relevant stakeholders to each of key activities. This is the key step for further decomposition. The hospital needs to identify who is involved and is affected by this key activity. And are there any special needs or conflicting interests among them. Thus it provides a chance for the hospital to rethink its development strategy and management procedure and to see whether a proper operational mechanism can be established for supporting the realization of the goal. During the processes KPIs are also developed by applying the 3E theory (Liu, Cheng, Mingers, Qi, & Meng, 2010).

Step5, Allocate the key activities into the 'operation' and 'capability' perspectives

Then we allocate the stakeholders and key activities into the four perspectives of BSM. Some of the key interests of the stakeholders at the top level are also discussed and represented in the top level of the BSM decomposition.

Step6. Repeat step 1 to 5 to build sub-system or sub-strategy level of BSM until all the key activities and indicators are clearly to be seen.

Then we need to train the key stakeholders how to use the above system and develop associated management schemes such as penalty and award regulations, for a full implementation of the PM system.

It is very important to discuss and debate with the people in the organization in each decomposition step in order to ensure the key interests of stakeholders have been properly considered and balanced. We should also note that the BSM is an ongoing managing process, the models (objectives, stakeholders and activities) can be changed or adjust according to the changing situation.

From the feedback of the hospital, it seems that the performance management system built on the BSM worked well there. According to the financial report for the first half year of the H hospital after the implantation, the total medical incomes are 77.49 million Yuan (which is exceeded the target 70 million). The feedback from directors of the departments said that after implementation of the new performance management system, the medical staffs are more motivated than before. Although other factors must have also contributed to the achievements, the top management team believes that the new performance management system makes an important contribution.

Two key difficulties are found in this case study: Although the BSM provides a feasible way for balancing interests during strategy decomposition and deployment processes, it is very time consuming and an art to identify and balance staff interests. Therefore, it is necessary to further study how to identify and then balance the interests under the different situations. Also the stakeholder identification method is also quite time consuming as it needs a lot of discussions among the various stakeholder groups. However, managers often need to make quick decisions,

and deal with many of the unexpected urgent circumstances. Holding the discussion and debate may not be realistic during many situations. Therefore, it is needed to further improve the stakeholder identification and balancing method in the future research.

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