

Implementing the Performance Management System in the Thai Public Sector^{*}

Kalayanee Koonmee^{**}

Abstract

The Public Sector Development Commission implemented a performance management system comprised of goal setting, performance appraisal, and incentives for performance in the Thai public sector in 2004. The ultimate objective was to improve the ability and standards of Thai public services and to continually improve the efficiency of Thai public officers. This study aims to investigate the effects of this performance management system during the period 2004-2007, and to provide some recommendations on how to improve the system. The data collection includes primary data obtained from a survey by questionnaire. There are two groups of respondents: executives and staff. They were stratified using multi-stage sampling, with a 37.1% response rate from executives and 54.7% from staff. The findings are: 1) All three components of the performance management system, i.e. goal setting, performance appraisal, and incentive allocation, had a significant effect on the efficiency and effectiveness of both agencies and individuals. The effect on agencies was higher than the effect on individuals. 2) Among the three components of the performance management system, performance agreement and performance appraisal had about the same effect. This effect was higher than the effect of performance-based pay on efficiency and effectiveness for both agencies and individuals. 3) There were some differences among different units and groups of respondents. Some management recommendations are also included.

Keywords: *Performance Management System, Incentive Allocation, Thai Public Sector*

^{*} Acknowledgement: I would like to thank the Graduate School of Human Resource Development, NIDA, for funding this research, and the Office of the Public Sector Development Commission for allowing the use of survey data.

^{**} Associate Professor, Graduate School of Human Resource Development National Institute of Development Administration (NIDA), 118 Serithai Road Klong-Chan Bangkapi Bangkok 10240 THAILAND
E-mail: kalaya.k@nida.ac.th

การดำเนินการระบบการบริหาร ผลการปฏิบัติงานในภาคราชการไทย*

กัลยาณี คุณเม**

บทคัดย่อ

คณะกรรมการพัฒนาระบบราชการได้นำระบบการบริหารผลการปฏิบัติงานซึ่งประกอบด้วยการจัดทำคำรับรองการปฏิบัติงาน การติดตามประเมินผลการปฏิบัติงาน และการจัดสรรสิ่งจุうใจตามผลการปฏิบัติงาน มาใช้ในภาคราชการไทยตั้งแต่ปี พ.ศ. 2547 โดยมีวัตถุประสงค์เพื่อปรับปรุงความสามารถและมาตรฐานของหน่วยงานราชการไทยและเพื่อปรับปรุงประสิทธิภาพในการทำงานของข้าราชการไทยอย่างต่อเนื่อง การศึกษาครั้งนี้มุ่งค้นคว้าผลกระทบของระบบการบริหารผลการปฏิบัติงานนี้ในช่วงปี พ.ศ. 2547-2551 รวมทั้งให้ข้อแนะนำงบประมาณการเพื่อการปรับปรุงระบบงาน การเก็บรวบรวมข้อมูลได้ครอบคลุมถึงข้อมูลปฐมภูมิที่ได้จากการสำรวจด้วยแบบสอบถาม โดยมีกลุ่มตัวอย่างอยู่ 2 กลุ่มด้วยกันคือกลุ่มผู้บริหารและกลุ่มข้าราชการและลูกจ้างประจำ โดยการเก็บข้อมูลดำเนินการแบบการสุ่มตัวอย่างหลายชั้น ซึ่งได้อัตราราตอบกลับจากผู้บริหารเป็น 37.1% และ 54.7% จากกลุ่มข้าราชการและลูกจ้างประจำ ผลการศึกษาพบว่า 1) องค์ประกอบทั้งสามของระบบการบริหารผลการปฏิบัติงาน อันได้แก่ การจัดทำคำรับรองการปฏิบัติราชการ การติดตามประเมินผลการปฏิบัติราชการ และการจัดสรรสิ่งจุุใจตามผลการปฏิบัติราชการ ส่งผลกระทบอย่างมีนัยสำคัญต่อประสิทธิภาพและประสิทธิผลของหน่วยงานและบุคลากร โดยผลกระทบอย่างต่อเนื่องสูงกว่าผลกระทบระยะต้นๆ 2) ในองค์ประกอบทั้งสามของระบบการบริหาร

*ผู้วิจัยขอขอบคุณคณะกรรมการพัฒนาระบบราชการ สถาบันบัณฑิตพัฒนบริหารศาสตร์สำหรับการให้ทุนวิจัย และสำนักงานคณะกรรมการพัฒนาระบบราชการสำหรับการอนุญาตให้ใช้ข้อมูลการสำรวจ

**รองศาสตราจารย์ คณะกรรมการพัฒนาระบบราชการ สถาบันบัณฑิตพัฒนบริหารศาสตร์

118 ถนนเสรีไทย แขวงคลองจั่น เขตบางกะปิ กรุงเทพฯ 10240

ผลการปฏิบัติงาน การจัดทำคำรับรองการปฏิบัติราชการและการติดตามประเมินผลการปฏิบัติราชการส่งผลกระทบด้วยระดับที่ใกล้เคียงกันต่อประสิทธิภาพและประสิทธิผลในการปฏิบัติราชการของหน่วยงานและบุคลากร ซึ่งผลกระทบนี้สูงกว่าผลกระทบจากการจัดสรรสิ่งจูงใจตามผลการปฏิบัติราชการ และ 3) มีความแตกต่างกันบ้างสำหรับผลการศึกษาที่แจกแจงลงรายละเอียดตามกลุ่มหน่วยงานและกลุ่มบุคคล นอกจากนี้ผู้วิจัยได้เพิ่มเติมข้อเสนอแนะด้านการบริหารบางประการไว้ด้วย

คำสำคัญ: ระบบการบริหารผลการปฏิบัติงาน การจัดสรรสิ่งจูงใจ ภาคราชการไทย

Introduction

Several attempts have been made to improve performance management in the public sector since the late 1980s. Public sector management has become increasingly results- and customer-focused. Making the results of public organizations more transparent allows for better prioritization of projects and programs and more effective allocation of resources. In addition, it allows for better management of the organizations themselves because performance on nonfinancial objectives becomes verifiable. There has been a clear need for the implementation of various forms of performance management system in the public sector. They provide public sector organizations with means for planning and implementing strategies; for influencing organizational behavior and to focus, compel, monitor and reward people; for communicating with stakeholders both internally and externally; and for adopting and developing the principles of a learning organization. Those public organizations, with a culture that is outcome-oriented and mission-driven, appear to have higher levels of performance than organizations lacking performance management (Grindle & Hildebrand, 1995; Moriarty & Kennedy, 2002). However, there are various issues that are unique to the public sector and still require further study and development. Experience so far has clearly shown that performance measurement systems in the public sector are not simply an adaptation of private sector measurement theory. Implementing performance management in the public sector is more difficult and there are very important differences. Typically, there is a wider range of critical stakeholders, often with conflicting interests, and each is able to exert a significant impact on the agency's survival (Pidd, 2005; Jarrar & Schiuma, 2007). In addition, Jarrar & Schiuma (2007) conclude that the implementation of the performance management system has varied widely from country to country due to contextual differences.

The Balanced Scorecard, whilst originally developed in the private sector, has been diffused to public sector organizations (Modell, 2004). For the Thai public sector, the Balanced Scorecard concept has been adapted to derive four standard strategic perspectives which are used as the performance evaluation framework according to the performance agreement. These include the process perspective (efficiency practice), results (effectiveness as planned), customers (the quality of the services), and organization development. These perspectives cover both methods of strategic achievement and performance data, as well as future readiness levels of the organization and personnel. In addition, the weighting priority of each perspective reflects the modern organization management philosophy, which emphasizes ultimate goals together with a crucial management foundation—organization and personnel development.

Annual performance agreements and annual performance appraisals are now standard practices in Thai government agencies. They are carried out according to the Royal Decree on Criteria and Procedures for Good Governance, 2003. The performance agreement initiative, started in fiscal year 2004, is regarded as one of the crucial mechanisms for leveraging government capacities and as the official government working standard. As stated in the Royal Decree, one of the objectives of government development is to improve responsiveness, which is regarded as one of the government development strategies. Annual performance agreements and annual performance appraisals are practical applications of the strategic management system. The concept is to tighten the measurement of the mission or project success by employing incentive motivations, such as reward allocations, to agencies or individuals that achieve the set standards.

The annual performance agreement reflects an important change in the conceptual framework of Thai government administration, which previously concentrated on processes, regulations or budgeting, to a results-based management orientation. This new approach follows the management by objectives principle which primarily bases performance on results. The predefined objectives, activities, methods, venues, timing, responsible persons, resources, and subsidies requirements are clearly determined. The annual performance agreement methodology, as well as performance management evaluation, are a systematic vehicle for reaching strategic objectives with clearly-defined results according to the annual Thai government development plan (2003-2007).

Literature Review

There are a number of perspectives on performance management. Bredrup (1995) sees performance management as comprising three main processes: planning, improving, and reviewing. These three processes can be applied to the management of performance at whatever level of analysis one chooses: organization, business unit, department, team, or individual. Williams (2002) confines performance management to the two extremes, i.e. organizational performance and individual performance. At the organizational level a goal-oriented perspective seems to be dominant, even though there are some exceptions; for example, those which emphasize process and adaptation/learning. Individual performance is primarily seen in terms of outputs/results. However, the idea that performance can be equated with behavior is also evident, and defining individual performance—both conceptually and operationally—must be one of the key issues in performance management. Waal (2007) views the performance management process as consisting of various sub-

processes: strategy development, budgeting target setting, execution/forecasting, performance measurement, performance review, and incentive compensation. These integrated sub-processes create the performance-driven behavior of employees that is needed to become and remain a high-performance organization. Related to those perspectives is the theme of integration and linking, and many of the models present performance management as a holistic process.

A number of psychological and economic theories have supported pay for performance. The common concept of those two groups of theories is that linking pay to performance will lead to higher performance. The different concepts are the explanations of the causes. While psychological theories argue that higher performance is motivated by the impact of achievements to rewards, economic theories focus on explanations of factors relating performance to pay, i.e. the lowest cost for employers and a higher opportunity cost for employees losing jobs (Heneman & Werner, 2005; Milkovich, Newman & Gerhart, 2011). More recent research has attempted to answer the question whether an incentive plan is successful or not. Although the conclusions have been positive, the extent to which this effect then leads to favorable outcomes is less certain. There is a great deal of variance in the success of incentive plans when gauged by outcomes subsequent to pay for performance. This should not come as a surprise, however, given the care that must be taken in the assessment of the desirability and feasibility of the incentive plan, its development and management, and its evaluation (Heneman & Werner, 2005).

It has been common to analyze the workings of pay for performance in recent years through the explanations of two theories: goal-setting theory and expectancy theory. These theories shed much light on the static incentive and appraisal processes present in pay for performance. They have focused on how

management can influence employees' choice between different levels of effort or care in their work for a given set of performance norms. To understand the changes occurring in public services, however, one needs to complement the perspective provided by these theories with a more dynamic analysis of inducements for employees to agree to, and work within, a new set of performance norms (Marsden, 2004). Goal-setting theory places less emphasis on rewards and stresses the motivation power of defining appropriate work goals and engaging employee commitment to them (Locke & Latham, 1990; Brown & Latham, 2000). Of special relevance in the current context is the emphasis on dialogue between performance agreement committees and public agency heads for agency level; and between line managers and employees, for individual level, to exchange information about realistic goals and on agreeing to goals so that agencies/employees will adopt them as their own. Expectancy theory treats employees as having a degree of choice and places strong emphasis on the motivational effects of incentives and the problems posed by poorly defined targets. Employees will respond to the incentive or reward on offer if they value it (its valence), if they believe good performance will be instrumental in bringing about the desired reward (instrumentality), and if they expect that their efforts will achieve the desired performance (expectancy). Thus, although the two theories, goal-setting and expectancy, differ in emphasis, they point to the same key processes and variables for the analysis of performance pay systems: goal definition and evaluation on the one hand, and reward and motivation on the other. Mostly this literature has focused on questions of motivation and incentives for given sets of performance norms. However, it is clear that a certain level of motivational effectiveness is required from the performance management system if it is to serve as a basis for the understanding and acceptance of performance norms. Thus, in terms of empirical observation, there is a great deal of overlap between the cognitive

perspective and the motivational perspective in the variables to be tracked. The main difference in terms of outcomes is that the cognitive perspective predicts improved performance from the performance management system, even in some cases where large numbers of employees claim not to be motivated by it (Marsden, 2004).

There is a paradox to be explained concerning the use of pay for performance in the public sector. In the public policy debate it has been common to associate the introduction of pay for performance with the aim of improving incentives and motivation among public employees (Brown & Heywood, 2002). Since the late 1980s, the British public services embarked on the most systematic and sustained policy of extending and developing pay for performance, mostly to replace annual seniority-related pay increments with performance-related ones based on goal-setting and appraisals by line managers. Nevertheless, the government's Makinson report concluded that performance pay had not motivated public employees in Britain, and its operation had been divisive (Makinson, 2000). Given that the policy has been sustained for two decades with different political persuasions, it is difficult to understand if employee motivation is the main story. Marsden (2004) argues that an alternative explanation can be found in the use of performance pay, and of performance management more widely, to provide a framework for renegotiating performance standards—the “effort bargain”—with public employees. This is consistent with both rising organizational performance, which would explain top management's perseverance, and with the repeated evidence that pay for performance has failed to motivate many public employees.

Based on this discussion, I would expect that all three components of the performance management system implemented in the Thai public sector, i.e. performance agreement, performance appraisal, and performance-based pay, will

have significant effects on efficiency and effectiveness at both the agency and individual level. However, there are some shortfalls in operation, e.g. the cascading goals of each level of agency have little involvement from all officers, and there is unclear and unfocused communication about incentive rules and guidelines. Therefore, the effects on agencies are obvious and higher than those on individuals, and the effect of based-pay performance may be less obvious compared to that of performance agreement and performance appraisal. Specifically, the following research hypotheses were formulated:

Hypothesis 1: All three components of the performance management system, i.e. performance agreement, performance appraisal, and performance-based pay, have *significantly high effects on efficiency and effectiveness* at both the agency and individual level.

This main hypothesis will be specifically tested as follows:

For staff responses:

Hypothesis 1a Performance agreement has a significantly high effect on efficiency and effectiveness *at the agency level.*

Hypothesis 1b Performance agreement has a significantly high effect on efficiency and effectiveness *at the individual level.*

Hypothesis 1c Performance appraisal has a significantly high effect on efficiency and effectiveness *at the agency level.*

Hypothesis 1d Performance appraisal has a significantly high effect on efficiency and effectiveness *at the individual level.*

Hypothesis 1e Performance-based pay has a significantly high effect on efficiency and effectiveness *at the agency level.*

Hypothesis 1f Performance-based pay has a significantly high effect on efficiency and effectiveness *at the individual level*.

For executive responses:

Hypothesis 1g Performance agreement has a significantly high effect on efficiency and effectiveness *at the agency level*.

Hypothesis 1h Performance agreement has a significantly high effect on efficiency and effectiveness *at the individual level*.

Hypothesis 1i Performance appraisal has a significantly high effect on efficiency and effectiveness *at the agency level*.

Hypothesis 1j Performance appraisal has a significantly high effect on efficiency and effectiveness *at the individual level*.

Hypothesis 1k Performance-based pay has a significantly high effect on efficiency and effectiveness *at the agency level*.

Hypothesis 1l Performance-based pay has a significantly high effect on efficiency and effectiveness *at the individual level*.

Hypothesis 2: The effects of all three components of the performance management system; i.e. performance agreement, performance appraisal, and performance-based pay; are *higher at the agency level than at the individual level*.

This main hypothesis will be specifically tested as follows:

For staff responses:

Hypothesis 2a The effect of performance agreement is higher at the agency level than at the individual level.

Hypothesis 2b The effect of performance appraisal is higher at the agency level than at the individual level.

Hypothesis 2c The effect of performance-based pay is higher at the agency level than at the individual level.

For executive responses:

Hypothesis 2d The effect of performance agreement is higher at the agency level than at the individual level.

Hypothesis 2e The effect of performance appraisal is higher at the agency level than at the individual level.

Hypothesis 2f The effect of performance-based pay is higher at the agency level than at the individual level.

Hypothesis 3: There are no significant differences among *the effects of all three components of the performance management system*, i.e. performance agreement, performance appraisal, and performance-based pay, on efficiency and effectiveness at both the agency and individual level.

This main hypothesis will be specifically tested as follows:

For staff responses:

Hypothesis 3a There are no significant differences *among the effects of all three components of the performance management system*, i.e. performance agreement, performance appraisal, and performance-based pay, on efficiency and effectiveness *at the agency level*.

Hypothesis 3b There are no significant differences *among the effects of all three components of the performance management system*, i.e. performance agreement, performance appraisal, and performance-based pay, on efficiency and effectiveness *at the individual level*.

For executive responses:

Hypothesis 3c There are no significant differences *among the effects of all three components of the performance management system*, i.e. performance agreement, performance appraisal, and performance-based pay, on efficiency and effectiveness *at the agency level*.

Hypothesis 3d There are no significant differences *among the effects of all three components of the performance management system*, i.e. performance agreement, performance appraisal, and performance-based pay, on efficiency and effectiveness *at the individual level*.

Hypothesis 4: There are no significant differences between *executive responses and staff responses* regarding the effects of each component of the performance management system, i.e. performance agreement, performance appraisal, and performance-based pay, on efficiency and effectiveness at both the agency and individual level.

This main hypothesis will be specifically tested as follows:

Hypothesis 4a There is no significant difference between *executive responses and staff responses* regarding the effect of performance agreement *at the agency level*

Hypothesis 4b There is no significant difference between *executive responses and staff responses* regarding the effect of performance appraisal *at the agency level*.

Hypothesis 4c There is no significant difference between *executive responses and staff responses* regarding the effect of performance-based pay *at the agency level*.

Hypothesis 4d There is no significant difference between *executive responses and staff responses* regarding the effect of performance agreement *at the individual level*.

Hypothesis 4e There is no significant difference between *executive responses and staff responses* regarding the effect of performance appraisal *at the individual level*.

Hypothesis 4f There is no significant difference between *executive responses and staff responses* regarding the effect of performance-based pay *at the individual level*.

Hypothesis 5 The effects of each component of the performance management system, i.e. performance agreement, performance appraisal, and performance-based pay, are not significantly different among the three agency categories; i.e., *departments, higher education institutes, and provinces*.

This main hypothesis will be specifically tested as follows:

For staff responses:

Hypothesis 5a The effects of performance agreement on efficiency and effectiveness *at the agency level* are not significantly different among the three agency categories, i.e. *departments, higher education institutes, and provinces*.

Hypothesis 5b The effects of performance appraisal on efficiency and effectiveness *at the agency level* are not significantly different among the three agency categories, i.e. *departments, higher education institutes, and provinces*.

Hypothesis 5c The effects of performance-based pay on efficiency and effectiveness *at the agency level* are not significantly different among the three agency categories, i.e. *departments, higher education institutes, and provinces*.

Hypothesis 5d The effects of performance agreement on efficiency and effectiveness *at the individual level* are not significantly different among the three agency categories, i.e. *departments, higher education institutes, and provinces*.

Hypothesis 5e The effects of performance appraisal on efficiency and effectiveness *at the individual level* are not significantly different among the three agency categories, i.e. *departments, higher education institutes, and provinces*.

Hypothesis 5f The effects of performance-based pay on efficiency and effectiveness *at the individual level* are not significantly different among the three agency categories, i.e. *departments, higher education institutes, and provinces*.

For executive responses:

Hypothesis 5g The effects of performance agreement on efficiency and effectiveness *at the agency level* are not significantly different among the three agency categories, i.e. *departments, higher education institutes, and provinces*.

Hypothesis 5h The effects of performance appraisal on efficiency and effectiveness *at the agency level* are not significantly different among the three agency categories, i.e. *departments, higher education institutes, and provinces*.

Hypothesis 5i The effects of performance-based pay on efficiency and effectiveness *at the agency level* are not significantly different among the three agency categories, i.e. *departments, higher education institutes, and provinces*.

Hypothesis 5j The effects of performance agreement on efficiency and effectiveness *at the individual level* are not significantly different among the three agency categories, i.e. *departments, higher education institutes, and provinces*.

Hypothesis 5k The effects of performance appraisal on efficiency and effectiveness *at the individual level* are not significantly different among the three agency categories, i.e. *departments, higher education institutes, and provinces*.

Hypothesis 5l The effects of performance-based pay on efficiency and effectiveness *at the individual level* are not significantly different among the three agency categories, i.e. *departments, higher education institutes, and provinces*.

Methodology

The research methodology in this study includes the collection of primary and secondary data from various sources. Survey by questionnaire was used to gather the primary data. The questionnaires were completed by two groups: executives (officials that were granted an annual extra cash award) and staff (government officers or government employees granted incentives). The researcher focused on the topics of goal setting, performance appraisal, extra cash reward, and reward allocation. The research data were obtained simple random sampling and stratified multi-stage sampling from staff of departments, provinces, and higher education institutes. This research covers 290 agencies. The researcher expected sampling data with an

expected error of 5%; therefore, the researcher randomized 168 (rounded up to 170) agencies. In order to meet the standard sample size for the estimated population of 9,750 executives, the researcher randomized 1,380 executives that obtain annual extra cash rewards (using a 95% confidence level and allowing a sampling error at 5%), and for more than 1,000,000 government staff members, 3,600 staff members that receive incentives were randomized (using a 99% confidence level and a sampling error at 5%,) (Kanchanawasi, 2002, p.35). The sample figures for each unit category (departments, higher education institutes, and provinces) were determined proportional to the population of the agency categories to be sampled.

The pretest data were collected using the field data survey method, with 30 study cases from National Institute of Development Administration personnel. The survey data were aggregated for the reliability test, and the coefficient of Cronbach Alpha was 0.93, which is satisfactory. The questionnaires were amended by abridging or simplifying some questions, making them easier to understand. The questions mostly invited responses on a four point Likert scale ranging from 'strongly disagree' to 'strongly agree' The questionnaires also included a section for staff to provide written answers to certain questions. Although not extensively analyzed in this report, they provided valuable insight into some other responses.

When the actual data survey was conducted, there were 512 responses to the 1,380 executive questionnaires distributed, giving a response rate of 37.1%. The majority of the executive respondents were male (64.9%), 50 years of age or above (73.4%), with more than 25 years of service (76.0%), and the highest education level was a master's degree (62.3%). To the 3,600 questionnaires sent to staff there were 1,969 responses, or a 54.7 % response rate. The majority of staff respondents were

female (56.5%), between 40-49 years of age (40.7%), with more than 25 years of service (32.2%), and the highest education level was a bachelor's degree (45.4%).

Results

All research hypotheses were tested by means of t-tests, and F-tests. The key findings can be summarized as follows:

1) All three components of the performance management system, i.e. performance agreement, performance appraisal, and performance-based pay, had a highly significant effect (with means higher than 2.50 out of 4.00) on efficiency and effectiveness at both the agency and individual level, with only an exception of performance-based pay at the individual level, which had only a moderate effect according to public staff (mean equals 2.4818). A summary is shown in Table 1.

Table 1: Effects on efficiency and effectiveness at agency and individual level

Performance management system components	Hypothesis	Agency level		One Sample Statistics		Hypothesis	Individual level		One Sample Statistics	
		Mean	Std dev.	t-test	p value		Mean	Std dev.	t-test	p value
Effects on efficiency and effectiveness (Staff responses)										
Performance agreement	H1a	2.9982	0.5360	40.014	.000**	H1b	2.8978	0.5711	29.551	.000**
Performance appraisal	H1c	2.9823	0.5528	37.450	.000**	H1d	2.9125	0.5701	30.644	.000**
Performance-based pay	H1e	2.5417	0.8284	2.091	.037*	H1f	2.4818	0.7135	-1.029	.304

Table 1: Effects on efficiency and effectiveness at agency and individual level (continued)

Effects on efficiency and effectiveness (Executives' responses)										
Performance agreement	H1g	3.0276	0.5812	20.199	.000**	H1h	2.9868	0.6404	16.636	.000**
Performance appraisal	H1i	3.0166	0.5617	20.210	.000**	H1j	2.9875	0.5938	18.006	.000**
Performance-based pay	H1k	2.6239	0.7796	3.439	.001**	H1l	2.5888	0.7197	2.592	.010*

** $p < .01$, * $p < .05$

2) All three components of the performance management system, i.e. performance agreement, performance appraisal, and performance-based pay, showed higher effects on efficiency and effectiveness at the agency level than at the individual level, with only an exception of the effect of performance appraisal according to executives, which showed an insignificant difference. Results are summarized in Table 2.

Table 2: Comparison of effects on efficiency and effectiveness between agency and individual level

Performance management system components	Hypothesis	Agency level		Individual level		Paired Samples Statistics	
		Mean	Std dev.	Mean	Std dev.	t-test	p value
Effects on efficiency and effectiveness (Staff responses)							
Performance agreement	H2a	3.0078	0.5314	2.9055	0.5678	9.386	.000**
Performance appraisal	H2b	2.9939	0.5465	2.9178	0.5675	6.219	.000**
Performance-based pay	H2c	2.5719	0.8202	2.4893	0.7113	5.351	.000**

Table 2: Comparison of effects on efficiency and effectiveness between agency and individual level (continued)

Effects on efficiency and effectiveness (Executive responses)							
Performance agreement	H2d	3.0367	0.5865	2.9929	0.6410	2.127	.034*
Performance appraisal	H2e	3.0286	0.5616	2.9907	0.5970	1.652	.099
Performance-based pay	H2f	2.6698	0.7701	2.6002	0.7188	2.465	.014*

** $p < .01$, * $p < .05$

3) Among the three components of the performance management system, performance agreement and performance appraisal yielded about the same effect on efficiency and effectiveness at both the agency and individual level. This effect was higher than the effect of performance-based pay. This statement is true according to both executive and staff responses. Results are summarized in Table 3.

Table 3: Comparison of the effects of the three components of the performance management system at agency and individual level

Performance management system components	Hypothesis	Performance agreement		Performance appraisal		Performance-based pay		Statistical Test	
		Mean	Std dev.	Mean	Std dev.	Mean	Std dev.	F-test	p value
Effects on efficiency and effectiveness at agency level									
Staff responses	H3a	2.9993	0.5338	2.9858	0.5499	2.5433	0.8212	278.346	0.000**
Executive responses	H3c	3.0273	0.5814	3.0164	0.5619	2.6239	0.7796	60.034	0.000**
Effects on efficiency and effectiveness at individual level									
Staff responses	H3b	2.8984	0.5684	2.9128	0.5684	2.4882	0.7107	251.240	0.000**
Executive responses	H3d	2.9868	0.6407	2.9892	0.5946	2.5890	0.7199	56.586	0.000**

** $p < .01$, * $p < .05$

4) All three components of the performance management system; i.e. performance agreement, performance appraisal, and performance-based pay, showed no difference in terms of effect on efficiency and effectiveness at both the agency level and the individual level for executive responses and staff responses. Results are summarized in Table 4.

Table 4: Comparison of the effects of each component of the performance management system between executive responses and staff responses

Performance management system components	Hypothesis	Executive responses		Staff responses		Paired Samples Statistics	
		Mean	Std dev.	Mean	Std dev.	t-test	p value
Effects on efficiency and effectiveness at agency level							
Performance agreement	H4a	3.0284	0.5834	3.0775	0.5145	-1.380	0.168
Performance appraisal	H4b	3.0142	0.5640	3.0684	0.5098	-1.531	0.127
Performance-based pay	H4c	2.6108	0.7882	2.6439	0.7614	-0.623	0.534
Effects on efficiency and effectiveness at individual level							
Performance agreement	H4d	2.9890	0.6485	3.0264	0.5326	-0.936	0.350
Performance appraisal	H4e	2.9912	0.5997	3.0066	0.5284	-0.417	0.677
Performance-based pay	H4f	2.5782	0.7172	2.5558	0.6916	0.432	0.666

** $p < .01$, * $p < .05$

5) For the staff responses, both performance agreement and performance appraisal had the lowest effects on the efficiency and effectiveness of departments. These effects were significantly lower than those on provinces and higher education institutes. However, the effects of performance-based pay at the individual level among the three agency categories were not significantly different. In addition, the effects of performance-based pay at the agency level of provinces were significantly higher than those on departments. Results are summarized in Table 5A.

Table 5A: Comparison of effects on efficiency and effectiveness among the three agency categories (Staff responses)

Performance management system components	Hypothesis	Department		Higher education Institute		Province		Statistical Test	
		Mean	Std dev.	Mean	Std dev.	Mean	Std dev.	F-test	p value
Effects on efficiency and effectiveness at agency level									
Performance agreement	H5a	2.9003	0.5609	3.0998	0.4890	3.0469	0.5167	24.833	.000**
Performance appraisal	H5b	2.8913	0.5544	3.0685	0.5708	3.0344	0.5175	19.394	.000**
Performance-based pay	H5c	2.4907	0.8463	2.5324	0.8611	2.6195	0.7704	3.864	.021*
Effects on efficiency and effectiveness at individual level									
Performance agreement	H5d	2.7878	0.5525	2.9532	0.6181	2.9994	0.5292	26.031	.000**
Performance appraisal	H5e	2.8151	0.5729	2.9660	0.5819	2.9982	0.5370	19.946	.000**
Performance-based pay	H5f	2.4422	0.6906	2.4900	0.7838	2.5281	0.6823	2.200	.111

** $p < .01$, * $p < .05$

For executive responses, all three components of the performance management system, i.e. performance agreement, performance appraisal, and performance-based pay, had the highest effects on efficiency and effectiveness in higher education institutes. These effects were significantly higher than those in departments except for the effects of performance-based pay at the agency level. Results are summarized in Table 5B.

Table 5B: Comparison of effects on efficiency and effectiveness among the three agency categories (Executive responses)

Performance management system components	Hypothesis	Department		Higher education Institute		Province		Statistical Test	
		Mean	Std dev.	Mean	Std dev.	Mean	Std dev.	F-test	p value
Effects on efficiency and effectiveness at agency level									
Performance agreement	H5g	2.9493	0.6129	3.1958	0.5283	2.9956	0.4914	8.886	.000**
Performance appraisal	H5h	2.9576	0.5536	3.1353	0.5719	3.0085	0.5452	4.631	.010*
Performance-based pay	H5i	2.5577	0.8057	2.7132	0.7088	2.6944	0.7986	2.136	.119
Effects on efficiency and effectiveness at individual level									
Performance agreement	H5j	2.9028	0.6850	3.1371	0.5678	3.0000	0.5545	6.309	.002**
Performance appraisal	H5k	2.9104	0.6129	3.1425	0.5341	2.9778	0.5808	7.147	.001**
Performance-based pay	H5l	2.4750	0.6902	2.7500	0.6924	2.6804	0.8002	6.988	.001**

** $p < .01$, * $p < .05$

Discussion

The high effects of all three components of the performance management system

The effects of all three components of the performance management system; i.e. performance agreement, performance appraisal, and performance-based pay; on efficiency and effectiveness were high. The government executives and staff perceived and reported that annual performance agreements highly affected their work process improvement, leveraging the effectiveness of the organization's mission and the responsiveness of public services. It also escalated the management system and the quality of internal organization management. The government executives and staff agreed that performance appraisal by the external organizations/persons also highly affected working efficiency and effectiveness. In addition, it created an opportunity to review and to improve performance results aligned to the predefined opening Key Performance Indicators (KPI). Although the performance-based pay effects gave the lowest means among three components of the performance management system, most executives and staff provided a positive opinion on the criteria and procedures of performance-based pay, reporting that they were appropriate and useful for the development of government administration, that they promoted efficiency in the organization's agencies, increased personnel satisfaction, and improved the quality of work.

The higher effects at the agency level than at the individual level for all three components of the performance management system

The executives and staff viewed that performance agreement and performance appraisal affected government agencies more than individuals. This is

because some agencies do not spread their goals over the whole mission, and do not cascade Key Performance Indicators to every level thoroughly. This creates driving forces for only some sub-units or some persons, and creates weak points on individual appraisals. The performance appraisal adopts four perspectives of the scorecard concept: encouraging organizations to improve their missions to cover strategic goals, the efficiency of the internal management process, quality of products and services for public interests / services recipients, and to develop staff competency. Performance appraisal has influenced individuals to change aspects of their working behavior, although there are some weak points in appraisal operations, e.g. low standardization in performance appraisal and performance feedback, low standardization and discontinuity of the defined criteria, and lack of cascading goals at the individual level, which is reflected in the higher effects of performance appraisal at the agency level than at the individual level. Those that change their working behaviors are limited to persons involved in, and responsible for, performance targets / key performance indicators; however, there are efforts to bring about systematic changes at all organizational levels. While executives and staff view that performance-based pay is useful to the development of government administration, they also state that there is more success at the agency level than at the individual level. In addition, the executives emphasize that extra money/incentive bonuses are not a primary working motive itself. The high achievement and contribution of personnel is not only for the sake of the extra annual cash reward or incentive bonus, but depends on the character of individuals—some subordinates admit the cash incentive is important as additional income but that it does not affect their work performance behavior.

The effects of all three components of the performance management system are lowest in departments

Generally, public officers from departments are the ones that criticize initiatives more, possibly because of their closeness to the central authority that creates those initiatives. Besides a number of comments on the implementation of performance agreements and performance appraisals, the concern most often raised by both executives and staff—especially those that work in departments—was regarding the higher cash rewards given to executives. This may explain the low attitudinal effects of the performance management system.

In 2003, 62 new universities, mostly those that were upgraded from teacher colleges, joined the new performance management system. Those universities obviously understood clearly what needed to be done for performance agreements. The survey results showed a high attitudinal effect of performance agreements and performance appraisals in higher education institutes, although the effect of performance-based pay was less obvious.

Management recommendations

Even though the study concludes that the implementation of the performance management system in the Thai public sector has supported public administration development and has increased the efficiency and quality of work in both agencies and personnel; its implementation has faced many problems and hindrances. The key issues have been collected and synthesized as follows.

Problems and suggestions for the performance agreement implementation

It can be said that performance agreement or goal-setting is one of the sub-systems of the performance management system and is an important step toward whole-organization development implementation, including the establishment of performance standardization. The implementation of the annual performance agreement in the past has had some drawbacks, as detailed below.

i. The correspondence of Key Performance Indicator targets with the mission of public agencies

The performance agreement process in the past focused only on the signature of agency heads for the goals already set by performance agreement committees. This resulted in strategic goals not being in line with the agencies' mission. In addition, many Key Performance Indicators did not correspond with the agencies' mission. The cause of this problem may be that there were several different types of organization, such as security agencies, policy and research agencies, legal execution agencies, and foreign affairs negotiation agencies, while there was only one goal setting standard for all government agencies. The standard may lack flexibility in adjusting goals to suit the organization's mission. In the case of provinces, besides the variety of their strategic mission grouping, there were also variations in perspectives resulting from geography, location, revenue, resources, population, and local culture. For higher education institutes, there were also differences in size, age, potential, and the identity of each institute.

ii. The inflexibility of the performance agreement process echoes the implementation of prevalent performance management deployment, i.e. the goals have been initiated from top to bottom.

This deployment structure/system is regarded as a conceptual framework for results-based management—one-way communication (top-down communication) rather than the expected two—way communication. Although some researchers see the benefits of two—way communication for goal setting, in practice the participation of the lower levels is restricted to acknowledgement of agreed objectives. The lack of input or control over objective-setting impedes the performance management system (Stiles, Gratton, Truss, Hope-Hailey, & McGovern, 1997; Williams, 2002; and Marsden, 2004). Therefore, the Office of the Public Sector Development Commission (OPDC) should consider a balance between standard objectives for all agencies and flexible ones in accordance with the basic characteristics of each agency.

iii. The redundancy or contradiction of some Key Performance Indicators

Some Key Performance Indicators (KPIs) set from the requirements of certain central government agencies are redundant and the measurement criteria are different, for example, the KPI in the budget management used by the Comptroller General's Department and the Bureau of the Budget. In addition, some mandatory KPIs contradict each other; for example, infrastructure saving vs. numbers of activities needed to achieve. In addition, some KPIs contradict the agency's mission, for example, energy saving in security agencies.

It is suggested that the OPDC integrate criteria, formats, types of data, and reporting forms in order that some duplicated KPI's and some contradictory KPI's be cancelled. Furthermore, KPI reports should be minimized, standardized, and simplified.

iv. The appropriateness of operation timing

One important comment regarding annual performance agreement implementation is that the negotiation process of the Key Performance Indicators was carried out too late and that agreement on the details of the measurement criteria supporting the agreement were produced too slowly. The completion of the aforementioned was usually in the next fiscal year. This creates problems with objective establishment and with synchronizing the budget with the plan. Public agencies should execute the plan at the beginning of the year, instead of spending time on creating it. Annual performance agreement setting should redefine a new time line for matching and completing the plan before the fiscal year or ahead of the next fiscal year. In addition, in higher education institutions there may be confusion on the performance management agreement time frame, since institutions currently have to operate considering both the academic and fiscal year, possibly causing problems in data gathering and data reporting. In order to alleviate confusion, a standard time frame should be defined.

Problems and suggestions for performance appraisal implementation

The problems and suggestions for improvement of the annual performance appraisal relate to both the agency and individual levels. The conclusions are as follows:

i. The standard of assessors

Performance appraisal at the agency level is assessed by external bodies (TRIS Co. Ltd. for assessing government agencies and provinces, and the Office for Standards in Education for assessing the higher education institutes). Assessment by external parties improves integrity, helps parties understand the strengths and weaknesses of agencies, and stimulates enthusiasm to achieve. However, there are some aspects that require improvement. These include the

standards and qualifications of the assessors. Regarding assessment standards, the results of the assessment should have a minimized judgment / decision-making gap among assessors. Regarding the quality of assessment, there were comments that the assessors do not understand well the evaluated works (for instance security work, foreign trade negotiation work, policy/academic work, etc.). Furthermore, the assessors from different organizations which have different assessment concepts and different judgment/decision-making processes generate substandard and unreliable assessments. As a consequence, the agencies do not accept the ratings and this reduces the motivation to perform.

It is recommended that the qualifications of assessors be standardized so as to minimize the assessment gap. If possible, there should be training for all assessors. For the assessment of special mission agencies, the assessor selected should understand how the agency works, or possibly there should be a special assessment team composed of specialists from those agencies, similar agencies, or from higher education institutes that specialize in matters relating to those special mission agencies.

For the performance appraisal at the individual level of each agency, currently there are various concepts and various appraisal justifications. The consequence is differences in individual appraisals among agencies (the problem can be alleviated if the individual appraisal rating does not relate to incentives such as salary increases, promotion or incentive allocation, etc.). The idea of performance appraisal being linked to incentives is quite new to the Thai government. The Office of the Civil Service Commission has just changed remuneration based on seniority to remuneration based on performance (Civil Service Act 2008). There needs to be an improvement in supervisors' concepts of personnel appraisal as well as supervisor' training in appraisal skills.

ii. Feedback

One of the most important objectives of performance appraisal is the improvement of the organization units/individuals, so feedback or advice from assessors is important. Current performance management only requires assessment scores without detailed feedback. Although there are verbal recommendations and feedback by some assessors, they tend to vary with each assessor and are of little help. Therefore, feedback, both official and verbal, should be improved.

iii. Clarification of personal objectives

During the past implementation period, clarification of performance objective setting was strict at the agency level. As a result, performance measurement was outstanding at the agency level. However, the OPDC has emphasized the linkage of incentive allocation to every level, from agency to individual performance. Because of the unclear individual objectives, the agency heads in each agency perform their individual staff appraisals subjectively. In addition, the criteria of assessment are not synchronized with agency objectives. This issue creates embarrassment for many agency heads. It has also led to doubt as to the accuracy of judgments and fairness of the supervisors' appraisals.

At present, the OPDC conducts training in performance cascading in order to provide recommendations to many agency officers on how to cascade agency KPIs to lower levels including the individual level. There are now many organization agencies implementing performance cascading to the middle management level. This will lead to objective cascading at the individual staff level. Defining objectives is scheduled at the beginning of the year. These will help management to appraise their

subordinates more easily and to solve the problem of non-acceptance of ratings by subordinates who may see the process as unfair.

Problems and suggestions for performance-based pay implementation

The problems and suggestions for improvement of performance-based pay in the form of incentive allocation in previous implementation are as follows:

i. Rewarding incentives according to performance results

Incentive bonus and extra cash reward allocation are a management tool for encouraging good work performance results. One major reason why incentive allocation is not able to motivate officers is that the incentive is not allocated in line with work performance. In many cases, the persons that contribute to essential Key Performance Indicators may be granted the same incentive amount as others that have worked routinely. Many managers have proposed that the OPDC should tighten criteria and procedures on incentive allocation in order to tie them clearly to performance results. However, this standardization might have a drawback, as the public agencies cannot design their own incentive distribution to suit the agency's mission and responsibilities. There may be a return to primitive government management-centralization, close control measures, and the elimination of options for executive management to adapt to their own agencies. It is suggested that the OPDC have close mentoring and grant authorization and opportunity for organizational management so that criteria suitable to their own agency's nature and culture can be adjusted. In addition, if the incentive allocation is to mirror the results of each agency, higher education institutes and provinces down to the individual level, there should be a well-structured appraisal system from the agency to the individual level as well. Otherwise, there might be doubt about the supervisor's appraisal and the supervisor's allocation

of incentives. Currently, goal-setting and performance appraisal are well-constructed at the agency level only. This situation creates an individual perspective of unfairness in incentive allocation. The study results show that officials and employees believe that incentive allocation is not synchronized with performance results. Therefore, the OPDC should clarify its performance appraisal at the individual level.

ii. Unequal incentive rewards between executives and staff

The topic raised most often—by both executives and staff—was that the extra cash reward for executives and the incentive reward for staff were not equal. Some managers were made uncomfortable by large amounts received and some staff felt that they were being treated unfairly. A lot of thought has gone into the extra cash reward system for management, however, a single tool (extra cash reward) is used to achieve several objectives, including reducing the salary gap between the private and public sector as well as stimulus of performance management. The time line payment is close to the incentive bonus payment time line; thus, there are still overwhelming problems regarding distributive justice. Nevertheless, the OPDC is trying to mitigate the problem by allocating 50% of extra cash rewards for executives to staff. However, unfair allocation because of inequitable incentive rewards still exists.

It is suggested that the extra cash reward for executives be redesigned and that the remuneration given to close the salary gap between the private sector and public sector be separated from the incentive reward. Also, the performance reward incentive sum should be the same for everyone and should have the same criteria and procedure for appraisal and allocation.

iii. The incentive forms

The executives of departments, higher education institutes, and provinces believe that the incentive allocation is not suitable for their organization's culture. For instance, their agency stresses teamwork but the criteria allocated to individuals cause disunity. The executives and staff have proposed that the agencies manage the lump sum of the reward. The agencies should be able to identify allocation formats that suit the nature of their own organization's mission or culture, for example, using the reward to support the organization's welfare system or to procure necessary equipment, etc. It might also include transforming the incentive motivation from a monetary base to psychological forms, such as recognition and honorary awards, budget for personnel development, etc. Kalayanee Koonmee (2008, manuscript in Thai) has studied the incentive formats most preferred by officials and employees. The research results show that the most preferred motivator was to receive more than the usual salary increase. The second was an upgrade or promotion. The incentive bonus as provided by the OPDC was ranked third. Non-monetary incentives, in order of preference, included group or single tours for education, positive feedback from supervisors, a plaque, and additional holidays.

It is recommended that the types of incentives should be varied and included both money payments (the favorite form) and non-monetary forms. A variety of incentives will reinforce motivation and will be able to fulfill numerous personnel needs for each team-/individual. In addition, the integration of all incentives into the one system or an aggregation, including the utilization of these incentives in a corresponding and concurrent way (some being the responsibility of the Office of the Public Sector Development Commission-OPDC, and others the responsibility of the

Office of the Civil Service Commission-OCSC) will enable managers to use these tools effectively.

Limitation of this study and future study

Like most studies, this research employed an *ex post facto* research design. In order to gain more confidence in the research findings, research in the evaluation of any interventions should be designed as experimentation. In addition, most of the outcomes measured in this study were based on attitudinal measures. Future research should investigate the effects on other types of outcomes, including an organization's objective performance criteria, such as tangible achievements, number of improved processes, number of initiatives, and proportion of trained personnel. Also, qualitative research such as structured interviews should be added to investigate in-depth attitudes.

Appendix

Measures of the performance agreement effect

Agency level

- Performance agreement makes the agency set work goals more clearly.
- Performance agreement helps the agency increase its work efficiency and effectiveness.
- Performance agreement helps the agency leverage quality of management.

Individual level

- Performance agreement helps you more clearly recognize the agency's goals.
- Performance agreement increases the quality of your work.
- Performance agreement makes you more dedicated to your work.

Measures of the performance appraisal effect

Agency level

- Performance appraisal makes the agency work toward the set goals.
- Performance appraisal helps the agency increase its work efficiency and effectiveness.
- Performance appraisal helps the agency leverage the quality of management.

Individual level

- Performance appraisal makes you more enthusiastic in your work.
- You have improved your work efficiency according to your rating.
- You have improved your work quality according to your rating.

Measures of the performance-based pay effect

Agency level

- Performance-based pay helps the agency increase its work efficiency and effectiveness.

Individual level

- You are satisfied with the incentive payments received.
- You are more dedicated to your work after receiving the incentive.
- You have improved your work efficiency and work quality after receiving the incentive.

References

- Bredrup, H. (1995). Background for performance management. In A. Rolstadas (Ed.), *Performance management: A business process Benchmarking approach*. London: Chapman & Hall.
- Brown, M., & Heywood, J.S. (Eds.). (2002). *Paying for performance: An international comparison*. Armonk, N.Y.: M.E. Sharpe.
- Brown, T.C., & Latham, G.P. (2000). The Effects of Goal Setting and Self-Instruction Training on the Performance of Unionized employees. *Relations Industrielles*, 55(1): 80-95.
- Grindle, M.S., & Hildebrand, M.E. (1995). Building sustainable capacity in the public sector: what can be done? *Public Administration and Development*, 15(5), 441-63.
- Heneman, R. L., & Werner, J. M. (2005). *Merit pay: Linking pay to performance in a changing world*. Greenwich, Connecticut: Information Age Publishing Inc.
- Jarrar, Y., & Schiuma, G. (2007). Measuring performance in the public sector: challenges and trends. *Measuring Business Excellence*, 11(4): 4-8.
- Kalayanee Koonmee. (2008). Effects of the incentive allocation in Thai public sector. *National Institute Development Administration Journal*, 48 (1/2551): 107-135. (Manuscript in Thai).
- Sirichai Kanchanawasi. (2002). *Applied statistics to behavioral research* (3rd ed.). Bangkok: Chulalongkorn University Press. (Manuscript in Thai).
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. Eaglewood Cliffs, NJ: Prentice Hall.

- Makinson, J. (Chair). (2000). *Incentives for change: Rewarding performance in National Government Networks*. London: Public Services Productivity Panel, HM Treasury.
- Milkovich, G.T., Newman, J.M., & Gerhart, B. (2011). *Compensation* (10th ed.). Singapore: McGraw-Hill Education (Asia).
- Marsden, D. (2004). The role of Performance-Related Pay in Renegotiating the "Effort Bargain": The Case of the British Public Service. *Industrial & Labor Relations Review*, 57(3): 349-370.
- Modell, S. (2004). Performance measurement myths in the public sector: a research note. *Financial Accountability and Management*, 20 (1): 39-55.
- Moriarty, P., & Kennedy, D. (2002). Performance measurement in public sector services: problems and potential. In: A. Neely, A. Walters and R. Austin (eds.), *Performance measurement and management: Research and action*. Cranfield, UK: Cranfield School of Management.
- Pidd, M. (2005). Perversity in public service performance measurement. *International Journal of Productivity and Performance Management*, 54(5/6), 482-93.
- Stiles, P., Gratton, L., Truss, C., Hope-Hailey, V., & McGovern, P. (1997). Performance management and the psychological contract. *Human Resource Management Journal*, 7(1): 57-66.
- Waal, Andre de. (2007). *Strategic performance management: A managerial and behavioural approach*. New York: Palgrave Macmillan.
- Williams, Richard, S. (2002). *Managing employee performance: Design and implementation in organizations*. London: Thomson Learning.