# A Study on the Improvement of Management Evaluation for Public Institutions

By

JUNG, Bongsik

## **CAPSTONE PROJECT**

Submitted to

KDI School of Public Policy and Management

In Partial Fulfillment of the Requirements

For the Degree of

MASTER OF PUBLIC MANAGEMENT

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#### **EXECUTIVE SUMMARY**

The management evaluation system of public institutions was first implemented in 1984 and has been operated to increase the publicity and efficiency of public institutions. This management evaluation system plays a role in inducing responsible management and autonomous management improvement of public institutions while solving the owner-agent problem caused by moral hazard.

The purpose of this paper is to identify the problems of the current management evaluation system through various literature surveys and to suggest improvement measures. Through this, it is intended to be used to improve the management evaluation system.

Despite the continuous improvement of the evaluation system, the perception and acceptance of the management evaluation system were found to be low.

A single evaluation system, single evaluation type, evaluation cycle, evaluation index, frequent revision of handbook during evaluation period, and composition of evaluation team were presented as the biggest problems of the current management evaluation system.

In response to these problems, the design of an evaluation system suitable for institutional characteristics, the establishment of a flexible evaluation cycle, easing the evaluation burden of public institutions, enhancing the reliability of the management evaluation team, and establishing a research organization dedicated to management evaluation were suggested as improvement measures.

Through this paper, the problems of the management evaluation system that have been raised so far are reorganized by type, making it easier to grasp the significance and limitations. At the same time, based on previous studies and practical experience, improvement plans for each problem were suggested. Therefore, this paper can be used to improve the management evaluation system in the future.

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#### I. Introduction

### A. The background and purpose of the study.

The management evaluation system for public institutions evaluates management performance every year to establish an autonomous and responsible management system for public institutions pursuant to Article 48 of the Act on the Operation of Public Institutions (Ministry of Economy and Finance, 2020). The ultimate purpose of the management evaluation system is to improve the quality of services to the public by increasing the publicity and efficiency of public institutions and providing professional consulting on matters requiring management improvement.

As of October 2020, the number of public institutions designated as public institutions based on the Act on the Operation of Public Institutions was 340, and as of 2019, the budget of public institutions was about 649 trillion won, which is 1.4 times the national budget and 33% of GDP (Ministry of Economy and Finance & Korea Institute of Public Finance, 2020). As of October 2020. In terms of the number, budget, and manpower of public institutions, it can be said that the proportion of public institutions in the national economy is very large. In addition, it is of great importance in terms of the role and function of public institutions such as the establishment and operation of national infrastructure, production and supply of essential public services such as water and electricity.

However, public institutions, which account for a large proportion of the national economy, inevitably have owner-agent problems. The ownership of public institutions is unclear. Therefore, different interests are formed in a hierarchical structure such as the government, the people, management and employees of public institutions. At the same time, information

asymmetry exists between them, resulting in inefficiencies such as bandit hazard (Kwak, 2003). In addition, theoretically, the government has been operating a management evaluation system for public institutions since 1984, accepting academic discussions that performance management and evaluation of public institutions should be strengthened due to the influence of new public management theory.

This management evaluation system motivates the board of directors of public institutions to improve management performance. In addition, it serves as a catalyst for members of the organization to strengthen their responsibility for achieving performance goals and motivation to increase productivity. Through this, it is contributing to the establishment of a virtuous cycle of performance management system that overcomes the owner-agent problem caused by moral hazard of public institutions and induces autonomous management improvement by reflecting the evaluation results in real management.

To this end, the government, which is an evaluator, uses state funds to operate the evaluation system, and public institutions are investing a lot of manpower and resources in evaluating and promoting performance over a year. However, although it has been more than 30 years since the management evaluation system was implemented, questions have been continuously raised as to whether the management evaluation is achieving its purpose. According to the 2013 Herald Economy's 'Public Institution Management Evaluation System Awareness Survey' of 111 public institutions, only 25% of institutions said their management evaluation was "properly evaluated" (Cho, 2013). In addition, as a result of the survey of managers in charge of management evaluation, the overall score was only 67.79 points and satisfaction was 63.8 points. (Ministry of Economy and Finance, 2018)

In order to achieve the purpose of the management evaluation system to improve the quality of service to the public by increasing the publicity and efficiency of public institutions, the management evaluation system must be reasonably designed and operated. In addition, active efforts by public institutions should be accompanied based on high acceptance of the system. However, it is difficult to expect the achievement of the goal with negative perception and low acceptance of the management evaluation system as above.

Therefore, this study aims to analyze problems throughout the management evaluation system and present improvement measures for each problem, starting with this awareness of the problem. Through this, it will be used to improve the management evaluation system in the future. Furthermore, it aims to contribute to achieving the purpose of the management evaluation system and to produce and supply higher-quality public services.

#### B. Scope and method of research

This study aims to analyze problems throughout the management evaluation system and suggest improvement measures for each problem. Therefore, the scope of the study targets the overall evaluation system and evaluation operation, such as evaluation indicators, types, results, processes, and composition of evaluators. The research method focused on literature research based on domestic and foreign books, papers, and other data. In particular, laws related to the management evaluation system, management evaluation handbook, and previous studies were summarized to achieve the research purpose. In addition, literature research was conducted using various types of data such as reports from various research institutes, media reports, and press releases from government ministries.

#### **II. Literature Review**

Until now, studies on management evaluation of public institutions have been largely conducted on the relationship between management evaluation indicators and studies related to differences in characteristics of public institutions.

#### A. A Study on the Relationship between Evaluation Indicators

Kim Soo-jin(2009) analyzed the effects of metric and non-metric indicators on the evaluation results, as well as the effects of profit indicators and non-profit indicators. As a result of the analysis, the evaluation result of the metric indicators had a relatively higher influence on the overall score than the non-metric indicators. Profit indicators had a greater influence than non-profit indicators within metric indicators, and as an alternative to this problem, measures to improve evaluation criteria reflect inflation rates in labor productivity, capital productivity, metric labor costs, and metric management costs were suggested.

Yang Han-ju(2010) analyzed the correlation between the evaluation categories and evaluation results of 51 quasi-governmental institutions excluding strong and small institutions. As a result of the analysis, there was a significant correlation between the leadership and strategy categories and the management system categories, and there was no significant correlation between the management system category and the management performance category. In addition, there was no significant correlation between leadership and strategy categories and management performance categories.

Park Mi-jeong(2010) studied the reliability of non-metric indicators and the linkage between indicators. In the case of linkage between indicators, it is generally expected that if a high score is received in the process indicator, a high score is also expected in the performance indicator, but It was found that other phenomena frequently occur. As a result of analyzing the correlation between leadership strategy, management system, and management performance in the 2009 management evaluation results, both public and quasi-governmental organizations showed a fairly high correlation between the leadership strategy and management system sectors. In the case of the management performance sector, both the leadership strategy sector and the management system sector showed low correlation. It was inferred that these results were caused by the occurrence of a time lag between the timing of management decision-making and the timing of performance derivation.

Cho Taek & Lee Chang-kyun(2010) measured the accuracy of management evaluation through correlation analysis between financial soundness indicators and metric results. As a result of the measurement, only the debt ratio and the total asset growth rate showed limited composition validity in the results of the metric, and no other significant relationship was found.

This study provided implications for the need to develop a metric that reflects the characteristics of the institution in order to increase the validity of the metric.

Lee Hong-beom(2015) analyzed the impact of publicity and profitability on evaluation results by defining major business, government-recommended policies, and national evaluation as publicity and defining sales growth rate, total asset growth rate, liquidity ratio, labor productivity, and capital productivity as profitability. As a result of the analysis, publicity showed a significant positive relationship with the evaluation results, and profitability showed

a significant positive relationship only in capital productivity. These results presented the basis for objective judgment on the operation and performance of public institutions and the argument for whether the evaluation system can be used as an institutional means to induce management activities and management improvement based on the harmony of publicity and profitability.

#### B. A study on the difference in institutional characteristics

Kwon Min-jung & Yoon Sung-sik(1999) analyzed the relationship between scale of institution and evaluation results by defining assets, sales, and costs as scale, but the analysis results did not show a significant relationship between the organization's size and evaluation results.

Cho Taek & Song Sun-ha (2010) compared and analyzed the effect of the management evaluation system on the management efficiency of quasi-governmental institutions before and after the introduction of the management evaluation system. As a result of the analysis, the management cost ratio decreased significantly after the introduction of the evaluation system, and the labor cost ratio index and the total labor cost increase rate also decreased significantly after the introduction of the management evaluation system. However, it was found that there was no significant difference in the rate of increase or decrease in the number of people and the debt ratio. From these results, there were some differences depending on the characteristics of each institution, but it was inferred that the introduction of the management evaluation system had a generally positive effect on the management efficiency.

Park Yong-sung & Nam Hyung-woo(2011) analyzed the correlation between institutional history, scale of institution, financial soundness, and management evaluation grade. As a result

of the analysis, only some variables of debt ratio and organization size had a significant effect on management evaluation grade.

Kang Hye-jin(2017) analyzed the effect of the characteristics of the head of the institution and the institution on the evaluation results using the type of public institution as a control variable. As a result of the analysis, it was found that the background of the head of the institution and the evaluation results had a significant relationship, and when looking at this in detail, it was found that former bureaucrats had a more positive effect on the management evaluation results than political circles. However, there was no significant relationship between the region, age, and education level of the head of the institution. On the other hand, when looking at the type of institution, it was found that public institution II had a negative effect on the management evaluation results than public institution I.

Choi Hye-young(2017) studied the halo effect on the evaluation results of 113 institutions in 2015. As a result of the analysis, it was found that the longer the gap of the head of the institution and the more negative media reports, the more negative the evaluation results were. In addition, it was analyzed that the evaluation results of the previous year had a positive effect on the evaluation results of the current year.

### III. Management evaluation system for public institutions

#### A. Background and purpose of introduction

The management evaluation system was attempted to operate in 1968, before the current system was introduced. However, these attempts failed. In order to establish management

evaluation, the autonomy of public institutions is first premised, and it is necessary to link evaluation and compensation and upgrade the evaluation system, but at the time, everything was insufficient and lacking (Choi, 2017). However, since then, demands and efforts to eliminate inefficiency of public institutions have continued. In the 1980s, the international trend of combining economic liberalism and new managerialism began to emerge in order to break down bureaucracy externally and increase efficiency by implementing a small government. As a result, a major change in the operation of public institutions in Korea began.

In response to the criticism that the Government Investment Agency Budget Accounting Act enacted in 1962 violates the autonomous operation of public institutions, the Government Investment Agency Management Act was enacted and promulgated on December 31, 1983. Accordingly, the first management evaluation was conducted on the management performance in 1983 from March to June 1984 (Jang et al., 2013). Since then, with the enactment of the Act on the Operation of Public Institutions in 2007, it has been established as the current management evaluation system and has been in operation until now. Table 1 shows the transformation process of the management evaluation system.

Table 1. The transformation process of the management evaluation system

Category	1983~2003	2004~2006	2007~2010	2011~2013	2014~
Related laws	Government Investment Agency Management Act		Act on the Ope	Act on the Operation of Public Institutions	
Evaluation team	26 to 50 people		109 to 158 people		
Evaluation section	3~6	3	3	3	2
Evaluation grade	Metric : 5~9 Non-Metric : 3~9	Metric & Non- Metric : 9	Metric & Non- Metric : 9(2007) Metric & Non- Metric : (2008~10)	Metric & Non- Metric : 9	Metric & Non- Metric : 9

Adjusted from Kim, 2018

This management evaluation is a system that fairly and objectively evaluates management efforts and performance every year to establish an autonomous and responsible management system for public institutions. Through this, the purpose of ultimately improving public service is to increase the publicity and management efficiency of public institutions (Ministry of Economy and Finance, 2020).

### B. The Role and Function of the Management Evaluation System

The roles and functions of the management evaluation system can be largely divided into five categories. First, the management evaluation system provides a foundation for re-establishing the relationship between the government and public institutions through performance contracts. By clearly defining and stipulating the roles of the government and public institutions, it is possible to solve the problems caused by reckless intervention of the government in the past, and to realize the decoupling of the relationship between government and public institutions. Based on this process, the management evaluation system can reduce overlapping interventions of related ministries, give ministers clear statutory authority, and minimize other opportunistic intervention factors of the government (Jang et al., 2013).

Second, the management evaluation system plays a role in motivating the board of directors through performance evaluation. Voluntary motivation for management innovation can be induced because it guarantees management autonomy and holds responsibility for performance(Kim, 2009).

Third, the management evaluation system functions to clearly define management goals and distinguish between public interest and profitable purposes. Therefore, a system will be

established to focus resources on the core competencies of public institutions through the connection of clear management goals and information systems. In this process, the agent objective function of public institutions can partially solve the owner-agent problem by shifting from an ambiguous concept of maximizing social well-being in the past to a clear and measurable objective function derived from evaluation indicators(Kim, 2009).

Fourth, the management evaluation system allows the government, labor unions, board of directors, and other interest groups to adjust their expectations for the role of public institutions. The ambiguous role arising from the past ownerless company or owner-agent problem is changed to a clear management goal-seeking system according to the establishment of contractual relations with the government, adjusting the level of expectations of stakeholders. Therefore, the management evaluation system can reduce uncertainty and instability arising from the business environment faced by public institutions through the government's simplification of the management control system or a clear definition of the mutual role(Kim, 2001)

Fifth, the management evaluation system enhances the transparency of public institutions. It analyzes the management status and reports the results to the President and the National Assembly, while at the same time notifying the media to increase transparency (Jang et al., 2013).

#### C. The current management evaluation system

The government (the Minister of Economy and Finance) evaluates the overall management performance for one year for public institutions based on the Act on the Operation of Public Institutions. A separate management evaluation team composed of experts such as university professors and certified public accountants is in charge of the evaluation. As of 2020, the management evaluation team conducts an evaluation of 131 institutions on management and major business categories(Ministry of Economy and Finance, 2020). The evaluation results of the previous year are determined by June 20 every year through a resolution of the Public Institution Steering Committee. The evaluation results are used for differential payment of incentives for each institution and personnel measures for underdeveloped institutions. Table 2 shows the basic contents of the public institution evaluation system currently in effect in Korea.

Table 2. The current management evaluation system of public institutions

Category	Details		
The law	Act on the Operation of Public Institutions		
Organization in charge	Minister of Economy and Finance.		
Deliberation and resolution	Public Institution Steering Committee		
Target institutions	Public Institutions(131)		
Evaluation period	Until June 2, the results of the previous year's evaluation are confirmed		
Evaluators	Management evaluation team		
Evaluation indicators	Business management category and major business category		
Evaluation method	Absolute and relative evaluation		
Use the results	Determining the amount of incentives and penalties for sluggish institutions		

Source: Management evaluation manual of public institutions (Ministry of Economy and

*Finance, 2020)* 

The management evaluation of public institutions is evaluated by classifying the evaluation types according to the size of the institution (assets, capacity, and income) pursuant to Articles 4 and 5 of the Act on the Operation of Public Institutions, and the evaluation types are shown in Table 3.

*Table 3. Evaluation type* 

Туре		Criteria	
public	public institution I	Among public institutions designated pursuant to Articles 4 to 6 of the Act on the Operation of Public Institutions, large-scale institutions whose main business is planning, construction, and management of infrastructure (SOC)	
institution	public institution II	Among public institutions designated pursuant to Articles 4 to 6 of the Act on the Operation of Public Institutions, institutions whose main business is the promotion of industries in a specific field	
quasi- governmental institution	Fund management type	An institution designated as a fund-managed quasi- governmental institution among institutions with a capacity of 50 or more employees pursuant to Articles 4 to 6 of the Act on the Operation of Public Institutions and entrusted with the management of funds under the National Finance Act	
	Consignment execution type	Pursuant to Articles 4 to 6 of the Act on the Operation of Public Institutions, the number of employees is 50 or more, and among non-fund-management quasi-governmental institutions, an institution designated as a consignment execution type.	
	Small giant type	Among institutions designated as a consignment execution type pursuant to Articles 4 to 6 of the Act on the Operation of Public Institutions, institutions with less than 300 employees and institutions designated as fund management quasi-governmental institutions with less than 1 trillion won	

Source: Management evaluation manual of public institutions(Ministry of Economy and Finance, 2020)

The management evaluation indicators consist of two categories: business management and major business to systematically and comprehensively evaluate the management performance

of public institutions(Ministry of Economy and Finance, 2020). The total score is 100 points, 55 points in the business management category and 45 points in the main business category, and the management evaluation category and evaluation indicators system are shown in Table 4. However, since businesses are different for each public institution, major business categories are comprehensively evaluated for each major business.

*Table 4. Evaluation categories and evaluation indicators* 

Evaluation Categories		Evaluation Indicators	
Business Management	Management strategy and leadership	Strategic planning, Management improvement, Leadership	
	Social values	Job creation, Equal opportunities and social integration, Safety and environment, Win-win cooperation and regional development, Ethical management	
	Work efficiency	Labor and capital productivity	
	Organization, personnel, and financial management	Organization, personnel management, Financial budget operation and performance.	
	Remuneration and benefits	Remuneration and welfare, Total labor cost management, Eabor-management relations	
	Cooperation and participation	Innovation efforts and performance, Public communication	
Major Business	Comprehensive evaluation of the adequacy of planning, activities, and performance for each major business		

Source: Management evaluation manual of public institutions(Ministry of Economy and Finance, 2020)

Comprehensive management evaluation results are presented by summing the evaluation scores by sector and dividing them into six grades: excellent, outstanding, good, normal, insufficient, and very insufficient. The evaluation results are used for personnel, performance-based differential payments, budget feedback, and management improvement. In particular, for

public institutions with poor management performance, the Minister of Economy and Finance may propose the appointing authority to dismiss the head of the relevant institution and executive directors after a resolution by the Public Institution Steering Committee. For institutions with excellent management performance, the government should reflect the increase in the expense budget within 1%, while for institutions with poor management performance, the reduction is reflected within 1%. In addition, sluggish institutions support management consulting and receive management improvement plans to reflect their performance in the evaluation of the next year.

### D. Perception and acceptance of the management evaluation system

As pointed out earlier, in order to achieve the purpose of the management evaluation system, public institutions must actively make efforts to implement it based on their high acceptance of the management evaluation system. In order to find a desirable improvement plan for the management evaluation system, it is necessary to first consider the perception and acceptance of the management evaluation system.

The Herald Economy conducted a survey on 111 public institutions in 2013 on their perception of the management evaluation system. 47.1% (32) of the institutions that responded to the survey said that the management evaluation did not properly evaluate the institution's work characteristics or purpose of establishment. This means that nearly half recognize it as putting uniform standards. On the other hand, only 25% of the respondents said they 'evaluated properly'. In addition, when asked whether the evaluation method or standard is appropriate, only 16 out of 70 (22.9%) answered appropriate, and 26 (37.1%) answered inappropriate (Cho, 2013).

At the same time, when asked about the contribution of management performance evaluation to the value pursued by public institutions and the extent to which the current evaluation indicators reflect the institution's efforts and performance, positive answers did not exceed half(Yoon & Ra, 2013).

The results of the survey conducted by the Ministry of Economy and Finance, the organizer of the management evaluation system, were similar. As a result of the survey on the acceptance and utilization of the management evaluation system for public institutions targeting those in charge of management evaluation, the overall score was 67.79 points, the dimension evaluation score was 71.78 points, and the satisfaction level was 63.8 points (The Ministry of Economy and Finance, 2018). Dimension evaluation was conducted in six categories: pre-stage procedure, manual content, evaluation team activity, evaluation procedure and progress process, evaluation result utilization, evaluation system operation, and management consulting.

As pointed out earlier, public institutions account for a very large proportion of the national economy. These public institutions inevitably have owner-agent problems due to information asymmetry, and the government operates a management evaluation system to solve this problem. In order for such an evaluation system to achieve its purpose, there must be no major flaws in the system itself, and at the same time, public institutions must actively practice it based on high acceptance. However, according to the results of the survey examined earlier, the acceptance or satisfaction of public institutions is very low, and through this, achieving the purpose of management evaluation is inevitably a long way off.

#### E. Problems with the management evaluation system

Since the introduction of the management evaluation system of public institutions, it has changed according to changes in the internal and external environment, and has been continuously improved by reflecting the problems raised at the same time. However, even today, problems are continuously being raised with respect to the overall management evaluation, such as evaluation type, evaluation indicators, and evaluation operation.

There are different positions among the Ministry of Economy and Finance, other government ministries, public institutions, and experts on the fact that the current management evaluation system evaluates various public institutions on the same basis. First of all, it is pointed out that despite the different purpose of establishment and business characteristics of public institutions, these differences are not reflected in the evaluation indicators, resulting in unfair comparisons. While it is inefficient to operate public institutions in a direction different from the purpose of establishment, there is also a position that competitive environment can be created and transaction costs can be minimized only when evaluation results are compared (Yoon & Ra, 2013).

Problems repeatedly pointed out by academia, experts, and public institutions include a single evaluation type, short evaluation cycle, validity of evaluation indicators, infringement of autonomy in institutional operation, and reduction of expertise in management evaluation teams. The problems of the current public institution management evaluation system, including previous studies and requirements for system improvement by the Board of Audit and

Inspection, the National Assembly, and the relevant public institutions, are summarized as follows.

### 1. Problems of a single evaluation system and evaluation type

First, the most frequently pointed out in previous studies is the problem of a single evaluation system and evaluation type. Each public institution has different business characteristics, size, purpose of establishment, and environment in which the institution is located. However, the reason for the problem is that these differences are not considered significantly in the current management evaluation system.

Park Mi-jung(2010) pointed out that different evaluation criteria and weights should be applied according to the characteristics, purpose of establishment, and history of each institution, but these differences are not recognized under the current system. Therefore, Park argued that the types of public institutions should be subdivided through a close analysis of the situation facing each institution, and evaluation indicators and weights should be applied differently for each type.

Kwon Mi-jung & Yoon Sung-sik(1999) pointed out that there are differences in management evaluation results between each evaluation group according to the classification by industry. Therefore, they argued that institutions such as SOCs with high heterogeneity need to be subdivided. They also argued that the proportion of common indicators among small groups needs to be increased, and the specificity of institutional indicators needs to be considered more.

Lee Seok-won(2005) pointed out that when institutions are evaluated on the same basis and the results are compared with each other, unfair comparisons occur because the difference between the purpose of establishment and the business environment is not reflected in the evaluation indicators. In this way, the most discussion on the management evaluation system is the issue of evaluation type. In other words, the classification of types under the management evaluation system is difficult to secure equity between institutions because different management issues, business maturity, and scale are not sufficiently reflected.

### 2. problems of the evaluation cycle

Unlike private companies, public institutions need large-scale investments due to their business characteristics, and the results of the investment are often seen over a long period of time. However, management evaluation conducted on a yearly basis tends to focus on short-term goals and performance by public institutions, not mid- to long-term goals. Since management evaluations are conducted on a yearly basis and follow-up measures such as salaries and personnel, public institutions tend to focus on efforts to introduce new systems or show differentiation from other institutions rather than maturity or settlement of existing systems. As a result, the purpose of management evaluation is blurred, and there is a limit to presenting the future development direction of institutions (Min, 2014).

This evaluation cycle problem is also closely related to the heavy evaluation burden of public institutions and the consulting function for evaluation results. Nam Hyung-woo (2012) pointed out management evaluation is conducted every year, so public institutions are interested in external public opinion based on the evaluation results rather than promoting their original work. Therefore, he argued that financial soundness should be evaluated annually, but that

major business activities and management system sectors should be evaluated at least every two years.

Lee Oh & Yoo Seung-hyun(2010) pointed out there are many cases where the institution's goals (daily work) and means (management evaluation) have been transferred due to heavy evaluation burdens. Therefore, it was argued that it was necessary to link the evaluation cycle with the term of the head of the institution, limit the amount of performance reports, apply the standard form, and introduce measures to suspend evaluation for excellent institutions. The Board of Audit and Inspection (2011) also pointed out that the Ministry of Strategy and Finance implemented measures to ease the burden of evaluation in 2010, but there was no practical effect by simply reducing the amount by 50 pages without measures such as simplifying the report form. Accordingly, it was requested to improve that measures such as simplifying the preparation of management performance reports should be devised.

Min Byung-chan(2014) pointed out that the management evaluation results report comes out every July to August, so the feedback of management evaluation results is slow. This is because the evaluation team's work is heavy, and in reality, it is difficult to perform both functions of evaluating the report and consulting on management issues at the same time. Therefore, it was pointed out that when forming a management evaluation team, some additional evaluation members should be commissioned so that management improvement can be achieved through reflux of evaluation results.

Kwak Chae-gi(2003) emphasized that the improvement performance of the current year on problems in the previous year must be checked and reflected in the evaluation results, and that

excellent management cases should be discovered and spread to all institutions. Park Mi-jung (2010) also argued that since the current management evaluation system focuses only on providing incentives through evaluation, consulting functions should be strengthened through cycle adjustment of management evaluation.

#### 3. Problems with evaluation indicators

Cho Taek & Lee Chang-kyun(2010) verified the validity of the metric indicators to see how well the management evaluation evaluates the performance of public institutions. As a result of analyzing the standard validity, composition validity, and content validity through correlation analysis between the results of the metric evaluation and major financial ratios, the standard validity was found to be insufficient. Therefore, it was argued that the correlation between the standards generally known to be valid and those evaluated in management evaluation was somewhat insufficient, so it was necessary to supplement them.

Lee Chang-gil Lee & Choi Seong-rak(2010) analyzed the possibility of errors in relative evaluation occurring in the evaluation process targeting the 2007 management evaluation results. As a result, it was found that there was a significant relationship between the degree of variance of the score and the difference between the average score and the evaluation score. This means that there is a possibility that non-metric evaluation, which is nominally made by absolute evaluation, is practically made by relative evaluation, so they argued that the criteria for absolute evaluation should be clarified.

Park Mi-jung(2010) raised the question of the scoring criteria of non-metric indicators, examining the correlation of evaluation indicators and suggesting that the indicators that should

be logically correlated according to the ambiguous criteria of non-quantitative indicators are not. Nam Hyung-woo(2012) argued that non-metric indicators should be minimized and metric indicators should be expanded because competitive efforts to maximize the halo effect increase evaluation-related incidental costs and amplify dissatisfaction with evaluation.

In addition to the validity of management evaluation indicators, criticism continues on the appropriateness of the evaluation indicator calculation method. Choi Yeon-sik et al.(2015) pointed out that there is an incentive to adjust the current performance so that the next goal is not excessively set by applying the ratchet principle based on past performance information.

In addition, the management evaluation system was introduced to enhance efficiency by ensuring the management autonomy of public institutions as much as possible, and to secure accountability accordingly. Therefore, an evaluation that fits the purpose of establishing a public institution should be conducted. However, beyond this, the issue of excessive use as a means to achieve government policy goals continues to be raised. The evaluation of government-recommended policies to check whether government policy items are implemented is expanded, which is contrary to autonomous and responsible management, and conflicts between indicators may occur. For example, the conversion to regular workers through public institutions evaluates how quantitatively revealed regular workers have been made without considering the current status of non-regular workers, future regular employment plans, budget and personnel needed for future projects. Therefore, institutions are hiring too much to score without considering management efficiency and long-term plans (Park, 2019). In addition, the evaluation results may vary depending on how quickly the institution strategically reflects the government policy announced that year, which may lead to different

evaluation results from the original purpose of management evaluation. In fact, in the past, when the government pushed for the introduction of a wage peak system and a performance-based salary system to public institutions, it gave additional points for management evaluation according to the introduction period, inducing competition among each institution.

#### 4. Frequent revision of the manual during the evaluation period

Another factor that reduces the acceptance of evaluation by public institutions is frequent revision of evaluation manual during the evaluation period. The management evaluation manual is the biggest guideline for management evaluation. Usually, public institutions prepare for the N-year evaluation in accordance with the manual temporarily confirmed at the end of N-1. Thereafter, public institutions are evaluated by June of N+1 according to the manual finalized at the end of year N. In other words, there are two manuals for evaluating year N. However, if there is a big difference between the manual temporarily confirmed at the end of N-1 and the manual finally confirmed at the end of N, public institutions cannot efficiently prepare for management evaluation.

For example, the Ministry of Strategy and Finance revised the 2013 Management Evaluation Manual, which was finalized in December 2012, in November 2013, laying the groundwork for reducing incentives in case of a lack of self-rescue efforts for debt management. Public institutions prepared for management evaluation in accordance with the manual confirmed at the end of 2012, and suddenly, at the end of 2013, a reduction in incentives in case of a lack of self-rescue efforts for debt management was added(Min, 2014). In fact, due to the ambiguous regulations in Table 5, many institutions have cut incentives by more than 50%, and some institutions have strongly protested.

Table 5. The basis for restricting incentives to institutions with excessive debt

year	Timing of revision	contents of revision.
2013 manual	2013.11	10 institutions, such as Korea Electric Power Corporation, which have high financial risks such as debt size and debt ratio, may partially limit the payment of incentives according to the evaluation results of self-rescue efforts for debt management according to the mid- to long-term financial management plan

Source: Management evaluation manual of public institutions (Ministry of Economy and Finance, 2013)

In addition, as shown in Table 6, there are cases where the index or weight has changed at the time of impending evaluation(Ministry of Strategy and Finance, 2018)

Table 6. Indicators and weights of public institution in 2018

	indicator	weights
The 2018	Public participation	2
Manual (2017.12)	Open innovation	2
	Public communication	6

	indicator	weights
The 2018	Innovation Efforts and Performance	6
Manual (2019.1)	Public communication	4

Source: Management evaluation manual of public institutions(Ministry of Economy and Finance, 2018

Frequent revision of the evaluation manual during the evaluation period lowers the reliability and acceptance of the management evaluation system, and at the same time poses a heavy burden on public institutions.

#### 5. The problems of the evaluation team

The government has been replacing the evaluation team by a large margin every year to prevent collusion between public institutions and evaluation teams. Frequent replacement of these evaluation teams can hinder the consistency and accumulation of expertise in evaluation. Lee Oh & Yoo Seung-hyun(2010) pointed out that the loss of consistency of evaluation criteria due to frequent replacement of evaluation teams may undermine the objectivity and reliability of evaluation, so explicit standards for the composition and operation of management evaluation teams should be established and the term system should be introduced. Park Mi-jung(2010) also argued that in order to solve the lack of expertise due to frequent replacement of evaluation committee members and concentration of origin and major, expertise should be strengthened by guaranteeing the term of office of evaluation committee members and continuing operation of management evaluation team.

Park Seok-hee(2009) argued that the evaluation team's neutrality, fairness, and objectivity should be secured by strengthening accountability and expertise in the evaluation process and results through a certain period of term guarantee (2 to 3 years). The Board of Audit and Inspection (2011) pointed out that the selection of evaluation committee members is operated without fair and objective principles, and that it is difficult to conduct in-depth evaluation of major business indicators of public institutions that include information on various specialized fields. Therefore, it was pointed out that it is necessary to clarify the criteria for selecting evaluation committee members and devise a plan to have experts from various fields participate in the management evaluation team.

#### IV. Improvement plan of management evaluation system

#### A. Design of a management evaluation system suitable for institutional characteristics

The current management evaluation system applies uniform evaluation criteria to public institutions in different environments and ranks public institutions according to the evaluation results. This is one of the biggest reasons for causing competition and inequality among public institutions and lowering acceptance of the management evaluation system. This is because there are institutions that achieve their goals without special efforts due to changes in the external environment, while there are institutions that have poor performance despite the efforts of members of the organization.

In order to solve this problem, it is necessary to exclude the ranking of public institutions and design a management evaluation system suitable for the characteristics of each institution. Currently, the major business indicators consist of unique projects carried out by public institutions, so all indicators for each institution are different. There is no reason not to reflect the characteristics of each institution for business management indicators. It is necessary to closely analyze the current situation of each public institution and subdivide the types of public institutions, as well as set evaluation indicators and weights differently for each institution.

Park Kyung-jin(2019) argued that in reflecting the characteristics of each institution in the evaluation system, it should be reflected in the evaluation indicators in consideration of the characteristics of each public institution rather than a uniform method. For example, Park pointed out that even if it is an indicator of financial soundness, public institutions with high

own income and quasi-governmental institutions with low own income should measure it with other indicators.

Park Mi-jeong(2010) argued that in order to improve problems in the evaluation system, such as inefficiency due to uniform evaluation and lack of linkage between evaluation indicators, it is necessary to subdivide public institution types and apply different evaluation indicators and weights. In addition, Park argued that in order to design a management evaluation system suitable for the characteristics of the institution, the maturity of each public institution and the history of the institution (establishment period) should be considered. This is because accordingly, the areas in which the institution should focus its capabilities change.

Sung Si-kyung et al. argued that when aiming for customized evaluation based on the current management evaluation system, it is necessary to classify and evaluate the public institution II, consignment execution type, and small and strong type by industry. On the other hand, it was evaluated that it is desirable to maintain the present type of public institution I and fund management type. Basically, along with assets, personnel, and their own income standards, public institution II, consignment execution, and small and strong types are classified according to industry classification, and alternatives can be prepared to differentiate the indicator system and evaluation system.

In order to create a management evaluation system suitable for the characteristics of the institution, it is necessary to give up ranking of public institutions. Sequencing should be based on the same standard, because the management evaluation system suitable for the characteristics of the institution is not the same standard, so ranking itself is impossible. It is

true that there is a benefit of ranking the creation of a competitive environment to eliminate inefficiency of public institutions. However, since it is judged that the loss due to the uniform application of standards is greater, it would be desirable to exclude the ranking of evaluation results and create a management evaluation system that reflects the characteristics of each institution.

#### **B.** Flexible evaluation cycle

The management evaluation system does not only evaluate the performance of the institution, but also has a consulting function of presenting improvement directions. However, as pointed out earlier, it is difficult for the consulting function to play its role in the evaluation that is supposed to be given a year as it is now. At the same time, it is necessary to adjust the evaluation cycle flexibly to reduce the evaluation burden of public institutions.

Considering that evaluation of financial performance needs to be conducted annually, it is desirable to maintain the current one-year cycle evaluation of metric indicators including financial performance. However, considering that non-metrict indicators are the main evaluation factors compared to the previous year, it is recognized that the annual evaluation is inappropriate as strategic/leadership improvement efforts and business improvement efforts are often expressed after more than a year. Therefore, it is necessary to actively consider evaluating non-measurement indicators every two to three years. Through this, it will be possible to solve the problem of focusing on short-term performance and to accurately evaluate the improvement trend of management performance from a longer-term perspective. To this end, it is also necessary to positively review the introduction of a management competency certification

system that certifies management competency through a separate evaluation team and maintains the grade for two to three years for certified institutions(Public Institution Management Research Institute, 2015).

However, if the evaluation cycle is extended in this way, moral hazard or neglect management of public institutions may be a problem. Therefore, measures to block this in advance should also be considered at the same time. This is why a supplementary device is needed to check the performance of implementation every year, such as in the case of developed countries (Yoon & Ra, 2013). This is because it is necessary to prevent neglect management by selecting institutions with insufficient performance inspection results or poor regular evaluation results as special management institutions and conducting one-year evaluations as before. Improving the evaluation cycle is the best way to reduce the burden on institutions. However, the timing of report preparation, the amount of report preparation, incentive payment method, and payment period should be reviewed at the same time.

#### C. Alleviation of evaluation burden on public institutions

Public institutions have no choice but to invest a lot of resources and capabilities in preparing for management evaluation because the results of management evaluation determine performance-based bonuses for organizational members, including the board of directors. Interviews with employees in charge of management evaluation in public institutions vary depending on the institution, but in the case of the public institution I, it was found that they usually prepare for management evaluation for five months (December to April).

In order to ease the evaluation burden on public institutions, measures such as flexible adjustment of the evaluation cycle pointed out earlier, early confirmation of guidelines for preparing management performance reports, and simplification of performance reports are necessary. Usually, the Ministry of Economy and Finance distributes guidelines for preparing N-year management performance reports to public institutions from January to February of N+1. The deadline for preparing a management performance report is usually early March. It is very insufficient time to prepare 250 pages of performance reports and much more reference materials. Therefore, in order to alleviate the evaluation burden of the institution, it is necessary to determine and notify the preparation guidelines early.

In addition, simplifying management performance reports is a necessary task. Although the amount has decreased slightly from 300 to 250 pages since the 2016 evaluation, the evaluation burden is not a problem of the amount. The Ministry of Economy and Finance guides the writing guidelines to write concisely, focusing on core contents, using Hangul below, and includes examples of writing. However, since the evaluation score is likely to vary depending on the appearance and content of the management performance report, public institutions, which are evaluated, are also spending a lot of time and effort decorating the report (Min, 2014). It is also pointed out that it may hinder the fairness of the evaluation method as it works in favor of large-scale institutions that can invest a lot of manpower and resources (Lee & Yoo, 2010). Therefore, it is necessary to reduce the volume of the management performance report while creating a standard form so that all public institutions can use it the same.

#### D. Improving the reliability of the management evaluation team

In order to increase the acceptance of public institutions for the management evaluation system, the reliability of the management evaluation team, which is an evaluator, should be prioritized. To this end, it is necessary to clarify the requirements for the appointment of a management evaluation team. In March 2010, the "Regulations on the Composition and Operation of Evaluation Teams" were enacted in accordance with the resolution of the Public Institution Steering Committee, but the appointment of evaluation committee members is still taking place at the discretion of the Ministry of Strategy and Finance (Park, 2010). Therefore, it is necessary to increase the reliability of the evaluation team's expertise by establishing clear standards for the qualifications of evaluation committee members.

Subsequently, it is necessary to enhance understanding of public institutions and strengthen expertise through guaranteeing the term of office of the current evaluation team or continuous operation of the evaluation team. The number of management evaluation teams in public institutions is 120 to 160 per year, but in 2013, 126 out of 156 evaluation teams newly participated in the evaluation, and the ratio of new personnel exceeded 80% (Min, 2014). The management evaluation team usually needs to understand public institutions, understand management performance reports, and complete the evaluation within three months, but it may take a considerable amount of time for new evaluators to grasp institutional characteristics and business details. Accordingly, it is necessary to first consider a plan to guarantee the term of office of the evaluation committee members for a certain period of time (2 to 3 years). Through this, it is possible to enhance the evaluation committee's understanding and expertise in public institutions while also strengthening the management consulting function to check

improvements in the previous year's deficiencies. In addition, a plan to organize the evaluation team at all times can be a good alternative. The current evaluation team is a temporary organization, and when the evaluation of the year is completed (June every year), the evaluation team is naturally disbanded. Therefore, it is necessary to consider ways to increase the consistency and expertise of evaluation by introducing a management evaluation organization because it is difficult to accumulate the capabilities and know-how of individual evaluation committee members or evaluation team.

In this regard, since the results of the 2020 management performance evaluation of public institutions were announced, there have been cases in which some public institutions have revised their evaluation results due to errors in the process of applying evaluation allocation and aggregating ratings. The Ministry of Strategy and Finance said the reason was that the multi-level mutual verification system did not work properly in the process of conducting independent evaluations, and that it would consider establishing a permanent evaluation agency dedicated to management evaluation(Ministry of Strategy and Finance, 2021)

## E. (Medium and long-term countermeasures) Establishment and operation of a research organization dedicated to management evaluation

The management evaluation system of public institutions with a history of 38 years has been steadily revised and supplemented and is recognized to have contributed to improving the efficiency and publicity of public institutions. Problems with early management evaluation were short-term performance evaluation, continuous difficulty in developing evaluation indicators or improving evaluation techniques, frequent modification of evaluation indicators,

appropriateness of the proportion of metrics and non-quantitative indicators, and excessive interest in bonuses (Lee & Ra, 2015). Surprisingly, it is not much different from the problems pointed out until recently through many previous studies. This is a disproving that both the past and the present understand the problems of the management evaluation system, but failed to come up with an alternative to improve it. This is why the management evaluation system is completely re-examined and fundamental system reform is required, as the Ministry of Strategy and Finance said in a press release (Ministry of Economy and Finance, 2021).

The problems raised in previous studies, including those raised in this study, are those that have a lot of room for improvement if they are studied steadily and with a lot of resources, even if it is difficult to solve completely. Therefore, it is necessary to actively review the establishment of a research institute dedicated to management evaluation for fundamental system reform. There is a research center for public institutions under the Korea Institute of Public Finance, which plays a similar role. Founded in 2009, the research center of public institutions played an important role in supporting management evaluation, such as participation in evaluation criteria and indicator development (Lee & Ra, 2015). However, in order to fundamentally improve the current management evaluation system, it is necessary not to stay in the support function like the research center of public institutions, but to play a leading role in the management evaluation system(Kim, 2019). It is necessary to present specific solutions to the problems presented so far and play a heavy role in forming a consensus among many stakeholders surrounding management evaluation.

Through this dedicated research organization, it is possible to continuously improve the evaluation system, indicators, and evaluation process. Currently, the Ministry of Economy and

Finance is planning to simplify evaluation indicators and apply customized evaluation indicators for each institution and type (Ministry of Economy and Finance, 2021). Simplifying evaluation indicators and creating customized evaluation indicators for each institution and type are very difficult. Moreover, it is very difficult to obtain the consent of various stakeholders surrounding management evaluation. The improvement and establishment of current indicators takes place once or twice a year for a period of about a month. Since the period is short, when a public institution submits an indicator improvement plan, the management evaluation team (including the research center for public institution) plays a role in coordinating and deciding. Public institutions have incentives to design indicators in favor of scoring, and information asymmetry inevitably occurs between public institutions and management evaluation teams. With such limited time and manpower, it is difficult to fundamentally improve the management evaluation system as well as secure the reliability of the evaluation indicators.

In order to create customized evaluation indicators for each institution and type, indicators should be carefully reviewed to be faithful to their own purpose of establishment based on a deep understanding of individual public institutions, set mid- to long-term goals, and consider the flexibility and scalability of indicators (Korea Institute of Public Finance, 2015). In addition, customized evaluation may be difficult to balance between institutions, which may hinder practical fairness (Kim, 2019). This is why an independent and professional organization is needed. This is not just a problem with evaluation indicators, but the same applies to the overall evaluation system. There are also problems that can be solved by short-term prescriptions, but most of them are intertwined problems that have been operated for a long time. Not only are interests different among stakeholders, but each has its own history and reason. There is a limit

to solder prescriptions, and it is difficult to obtain consent from many stakeholders. Therefore, the organization dedicated to management evaluation must invest a lot of resources steadily and for a long time, but it can create reasonable improvement measures that many stakeholders can agree on.

In addition, a dedicated research organization can provide management evaluation consulting based on its expertise in evaluation systems and evaluation indicators. The current management evaluation system provides the same management evaluation manual to public institutions of the same type. However, the ability to understand manuals varies widely. The reality is that institutions with ample finances receive various consulting and prepare proper performance reports, while institutions with poor circumstances do not properly understand the management evaluation manual (Kim, 2019). Therefore, if a dedicated research institute provides appropriate management evaluation consulting, it can be expected that the institution's management performance will be improved as well as the burden of evaluation will be greatly reduced. In addition, through role adjustment, practical consulting can be expected by the dedicated organization to reflux the evaluation results of the current management evaluation team.

## V. Conclusion

Public institutions play an important role in supplying goods and services directly related to the lives of the people, and their scale is so large that it accounts for 33% of the national GDP, accounting for a very large portion of the national economy. However, public institutions often maintain their exclusive status in the market while their ownership is unclear. Therefore, it is

necessary for these public institutions to continuously manage publicity and efficiency.

The management evaluation system for public institutions has been used as a key management tool for the past 30 years to improve publicity and efficiency by evaluating the management performance of institutions every year since 1984. Until now, the management evaluation system has been developed through revision and supplementation, but the system has not been fully established yet, and at the same time, the acceptance of evaluation is not high. This report presented the problem of such management evaluation or the reason for low evaluation acceptance. The reasons are problems with a single evaluation system and evaluation type, problems with evaluation cycles, problems with evaluation indicators, frequent manual modifications during the evaluation period, and problems with evaluation team composition.

In order to improve the single evaluation system and evaluation type problem, it was pointed out that the ranking of public institutions should be excluded, and a management evaluation system suitable for the characteristics of each institution should be designed beyond reclassification(segmentation) of public institutions. Regarding the issue of appropriateness of the management evaluation team, a plan was proposed to establish clear standards for the qualifications of evaluation committee members and to guarantee the term of office of the evaluation team or to organize it at all times. In addition, it was emphasized that in order to fundamentally improve the management evaluation system, including the above problems, a research organization dedicated to management evaluation should be established to improve the regular evaluation system, indicators, and evaluation process.

Through this study, the significance and limitations of the management evaluation system of

public institutions were more easily identified by reorganizing the management evaluation problems raised so far by type. It is also meaningful in that it proposed improvement measures based on prior research and practical experience so that it can be used to improve the management evaluation system in the future. However, the improvement plan proposed in this study has a limitation in that empirical analysis has not yet been conducted through specific data. If the validity of the improvement plan is verified through further research in the future, a better plan can be suggested.

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