Theoretical Structure of Administrative Management System: Methodology of Constructing Administrative management System

THEORETICAL STRUCTURE OF ADMINISTRATIVE MANAGEMENT SYSTEM

～Methodology of Constructing Administrative Management System～

Tsuyoshi KARIYA*, Seigo NASU*

Kochi University of Technology*

ABSTRACT: In Japan, local government's social security benefit costs keep increasing due to the remarkable advancements in medical technology, and the nursing care insurance system. Compounding the problem, the budget has been restricted in recent years. In addition, local government's financial situation is extremely critical and it is hard-pressed to eliminate or review it's measure or administrative works in order to keep providing public services for citizen's needs, which are complicated and diverse. As a result, local government has to manage carefully in order to maintain maximum satisfaction with the quality of service for citizen's needs. As a means to achieve public administration improvements, techniques that have been popularly used in the private sector have been applied to the public services. This is called "New Public Management (NPM)". Today these methods, which are generally interpreted as "administrative management", exist in various ways, because the situations that local government have faced is different. With NPM, they have not only to use the limited budget efficiently and effectively, but the performance indicators of the outcome have to be requested and to be evaluated qualitatively and quantitatively also. It means that local government can achieve both their business and environmental goals.

However, there has been very little research concentrated on effective methods for solving the fundamental problems. This paper proposes a method of planning policies and measures for the public administration of the social system, and techniques to evaluate its effectiveness.

KEYWORDS: NPM, Administrative Management, Logic Model, System Thinking

1. INTRODUCTION

The management of local government in our country is facing a critical phase, such as has never been experienced before, and various "problems" which have been hidden in the social, economic and cultural structural background have appeared. Today, in local government, social security benefit costs keep increasing due to the remarkable advancement in medical technology and the nursing care insurance system. In addition, resident's needs are complex and diverse, and therefore local government has continued to spend huge amounts for public services which are needed for it's people. Therefore, for local government, how services to the people can be maintained with a limited budget has become a problem.

In such a situation, as a way to maintain and control the quality of public services, a technique for imitating private companies called "New Public Management (NPM), which has for several years been used in private sector, has been widely applied in public services. Britain and New Zealand are typical representative cases of countries using such a

methodology. Though the administrative management doesn't have a clear definition of the meaning and the interpretation of local government, it is generally translated into the private management technique etc. NPM is basically translated and understood as a way of thinking that applies management principles, technique, and best practices etc used in the private sector to the public sector, improving management skills and making it more efficient. NPM adopts ideas such as, for example, introduction of thorough competing principles by privatization, evaluation by quantitative analysis and the achievement or the ex-post evaluation etc.

However, although such techniques are adopted by local government, neither an effective methodology nor techniques to solve basic problems in the administration have appeared until today. Currently, the local government not only terminates or discontinues measures and administrative works which it has done until now, but also reduces the labor costs as an emergency measure.

1.1 Objectives of this research

In this paper, on policy planning in actual local government, we aim to propose a new methodology in administrative management as well as an efficient and effective technique for constructing the plan of the policy and the measures accompanying the plan.

Therefore, we aim to set the policy objectives, measure objectives and the administrative work clearly through the plan decision of the actual local government. A further aim is to achieve system construction to which the outcome can be evaluated in addition to the output evaluation of the policy, measure and administrative work.

1.2 Composition of paper

The paper explains about the necessity of an administrative management system from the current problem and touches on the current problems and the

feature of local government that is the object of our research in Section 2. In Section 3, on the management cycle of the administration and the method of constructing the management system, we explain about structuring the problem and policy logic model in detail. The concept of the administrative management system and the method to maintain the system are described in Section 4. The summary in Section 5 considers the direction of research in the future.

2. FEATURES OF MUNICIPALITY AND NECESSITY OF NEW MANAGEMENT SYSTEM

In the following, we describe the structure and the current problem in the administration that is the focus of this research before explaining a concrete construction technique to research. After that, we describe why a new administrative management system is necessary.

2.1 Feature of municipality

Since the Japanese economy began to falter in 1990's (called "ten years lost"), local government has continued spending a lot of money on citizen's needs without evaluating needs or without ex-post evaluation based on a proper criteria and conducting a clear process of decision making (Figure.1). In addition, due to careless planning and deterioration of profit, administrative work has not only increased but the organization mechanism and administrative work have been complicated.

Moreover, the administration of former Prime Minister Junichiro Koizumi pushed the "trinity reform," focusing on reduction of subsidies from the central government, transfer of tax revenue sources and a grant-in-aid from tax money to local governments in 2004. In recent years, the deterioration of the financial picture of local government has continued and it's failure of

management and extending of municipality by the annexation of other municipalities continues.
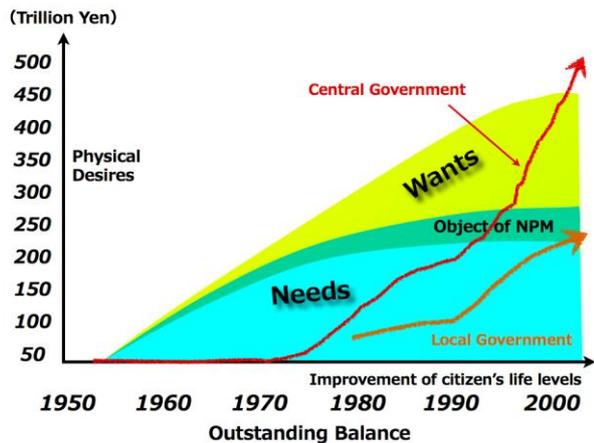

Figure.1 Improvement of citizen's life levels and Outstanding Balance

Such a situation means that central government's attempts to apply uniform policy throughout the country have been difficult as a super-aged society has developed and citizen's values have diversified. That is to say, the structure of centralized system has already become inefficient, and therefore, an independent and original management system of local government is needed. Of the features of administrative organization that became factors causing the vicious management circle of local government, the following factors (1)-(4) were clarified.

(1) Responsibility in the organization is indefinite.
(2) Local government has not become independent.
(3) The precedent principle is followed. (Persistence in custom and past success case)
(4) There is no strategy to achieve managerial goals

2.2 Necessity of new administrative management system

It is clear that current local government cannot respond to changes in the social and economic structure any longer, based on the established management cycle, as Figure.2 shows. For instance,

the local government has continued using the same methods and does not evaluate measure and administrative work, under the present situation.

Therefore, the essential needs must be ascertained, and the construction of a management system that acts for an appropriate purpose is required. The requirement is to find the essence of not the wants but needs; in other words, a type of the management system that doesn't only identify the problem but deals with the problem based on clear criteria and methods of decision making and problem solving.
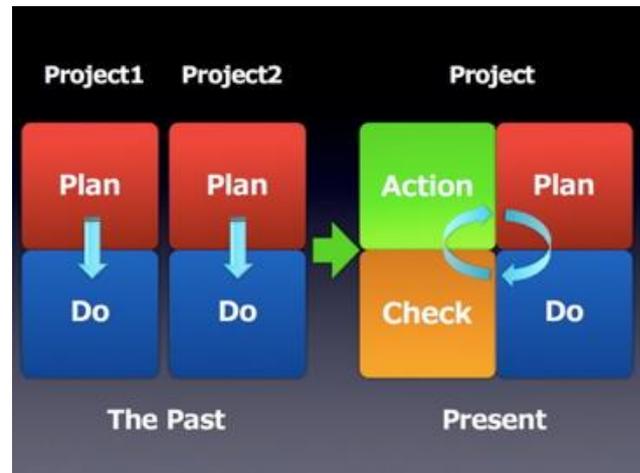

Figure.2 The past and present management cycle

For the above-mentioned reasons, the construction of a new local government administrative management system would be useful. Therefore, we have constructed a model management cycle and new administrative management system which can manage local government properly. This new administrative management system isn't only capable of establishing a variety of counter measures and numerical targets but also of evaluating them and revising the project totally.

3. CONSTRUCTION OF ADMINISTRATIVE MANAGEMENT SYSTEM

In the following, we explain the theoretical structure of "the administrative management system" that functions effectively and efficiently so that the municipality may plan, revise and evaluate policy

and measures in order to solve the problems which it has.

3.1 Management cycle of the administration (PDCA Cycle)

The management cycle in the administration has been understood widely and generally as PDCA cycle until now. PDCA cycle is translated as Plan→Do→Check→Action. The required functions are assumed to be the following, which were briefly described in paragraph 1 in Chapter 1.
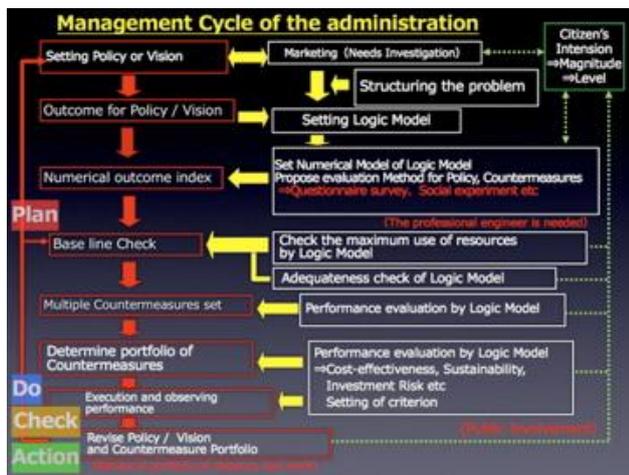

Figure.3 New Management cycle of the administration

(1) Enable efficient administrative management or investment in it.
(2) Enable the selection of the best measure for the purpose or the target for it.
(3) The process of the administration should be able to be made transparent and to achieve accountability.

To achieve these three functions, up to now, it has been necessary to decide how the techniques of administrative management or the management cycle that have been variously discussed should be understood.

Then, when the measures and administrative work based on the plan are executed, the flow of the management of the administration (new management cycle) is first shown in Figure 3.

Work in the administration is classified into investment or premeditated work and regular clerical work (office work). Regarding work that invests and is premeditated, the process itself becomes an administrative management process, because it's purpose is to plan, to be carried out, and to improve an appropriate investment intention. On the other hand, regular clerical work is an improved object, and a regular appropriate work process is an output that arises from administrative management. It aims to be planned, to be executed, and to be improved as appropriately as the work program, and the process is an administrative management process. In a word, the administrative management process aimed to derive an appropriate work program and appropriate administrative clerical work and to maintain it. In the private sector, PDCA cycle has been traditionally used up to now, and the PDCA cycle that is the management technique for improvement that has been introduced in the administration recently can be said to have a similar purpose originally.

However, municipalities in which such a management cycle has been properly adopted are very scarce.

In this paper, a concrete method of "Structuring the problem" and "logic model" etc. is adopted for solving the fundamental problems with this management cycle.

3.2 The administration and local society-the citizen's interactions

When local government tries "structuring the problem" and constructs a "policy logic model" when planning policy or measure, in the process of executing the measure, it should investigate marketing for the problem that occurs in the targeted planning. This is because it is necessary to recognize problem groups that occur in the region first when local governments plan, and then to investigate marketing based on the structure of the problem.

Investigating marketing for the citizens gives birth to the interaction between the administration and them (Figure.4).

Figure.4 The administration and local society/the citizen's interaction

3.3 Method of constructing administrative management system

In the following section, a construction method is described, showing a concrete procedure for effective policy and measures (Figure.4).

3.3.1 Structuring the problems

First of all, to identify the social and structural problems that a region had, the technique of "structuring the problem" was adopted. The concept of structuring the problem is based on Dunn[1], which is assumed to be a classic textbook on public policy. The technique based on the way of thinking which shares the formulation of the problem between stake-holders is attached to importance. And also the way of thinking is proposed various techniques (Problem Structuring Methods :PSMs) in the field of soft operational research (Soft OR) in the plan of the strategy of the organization[2].

When the local government plans policy with stakeholders, difference of recognition and confrontation in opinion or attitude to the strategy between stake-holders occurs, because quite different understanding and recognition naturally
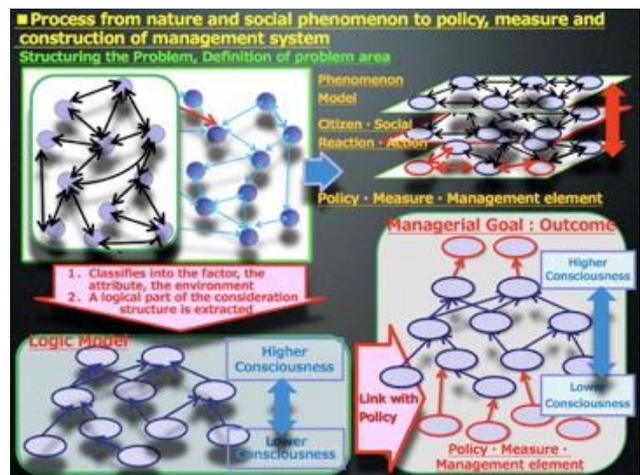

Figure.5 Method of constructing administrative management system

exist among the stake-holders and the method of the interpretation is different among them. Therefore, it is necessary to investigate the causal relation based on the cause and the result in order to understand the occurrence of the problem at the first stage of the policy analysis. The method of structuring the problem plays an important role in planning of policy. By structuring the problem, it not only becomes easy to analyze the cause but also to understand the current state before public service to the residents is provided.

3.3.2 Policy logic Model

In the following section, we explain the process by which we adopted "structuring the problem" for the logic model described in the next paragraph. The outcome, the output, the resource, the environment and the attribute (cultural background) that will become the managerial goal of the plan coexist in structuring the problem. Therefore, when constructing the administrative management system, it is important to distinguish the environment and the attribute etc. from structuring the problem and, in other words, to construct the policy logic model. That is why if this means is not used so that the local government may achieve the plan at the stage of structuring the problem, it will be difficult for the

stake-holders to understand the plan easily. How to structure the problem and define the problem area is explained above (On the left side of Figure.5).

3.4 Construction of Policy Logic Model

Here, we explain in detail about the policy logic model that shifts from structuring the problem to the administrative management system. The Figure at the bottom left of Figure 5 shows the stage (except the attribute and the environment) from structuring the problem. At this stage, it has to be judged whether the problem area which the stake-holders are about to plan gives priority to citizen's considerations or the phenomenon model in itself, or is a reaction of citizens and society. And the form which the policy, the measure and the management element has taken becomes policy logic model (The right of Figure.5).

First of all, we describe what the logic model is.

3.4.1 Logic Model

In order to construct an administrative management system for strategic targets, the theoretical relationship between the strategic target and actual countermeasures or services has to be investigated in multiple parameters such as cost and benefit. Theoretically obscure relationships do not provide us accountability for the governmental budget, and the result is that citizens become skeptical of public management.

The logic model describes how actual countermeasures and investments are theoretically connected to the final strategic target, and it also functions in multiple ways for NPM procedure and policy/strategy evaluation systems.

Although the Program Logic Model was introduced in "Logic Model Development Guide[3]" published by W.K.Kellogg Foundation in 1998, if the history of the logic model is traced, it started in the 1970's as a model to evaluate a policy by J.S.Wholey of The

Urban Institute policy think tank in the United States. Moreover, policy promotion management and town planning using the logic model have appeared recently, and a logic model involving the stake-holders also exists.
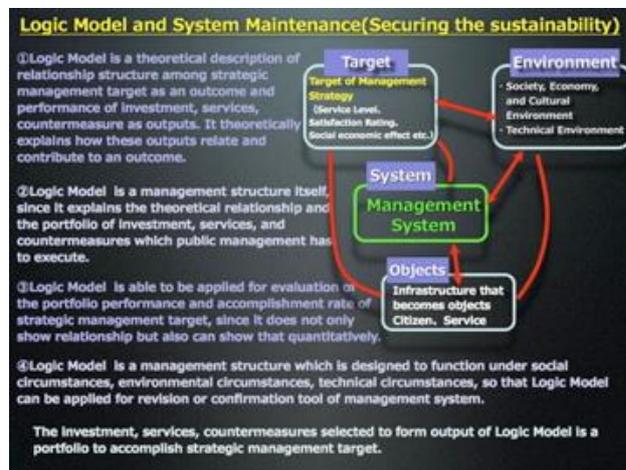

Figure.6 Logic Model and System Maintenance

Until now, the logic model hasn't had a clear definition, because its role in a concrete management process corresponding to the form of necessary logic model and the function is not referred to in administrative management in "the Kellogg foundation evaluation handbook."

In this research, the logic model is defined as shown in Figure.6.

3.4.2 Structuring the problem and policy Logic Model concerning the execution plan, using special fixed health checkup as a case

Next, we explain the construction of the logic model in "Execution plan for special fixed health check up etc." It is treated as a case with this research as follows (Figure.7-9).

In this plan, health conditions associated with adult lifestyle trends have been increasing among young people for several years. For example, the number of people who have high blood pressure and diabetes is increasing rapidly. The reason is deterioration in lifestyle, caused by the increase in living costs, changes in the family, and the change in social

structure.

The Ministry of Health, Labour and Welfare obligated basic health checkups for medical insurance subscribers from 40 to 74 years old to try and improve lifestyles and health in April, 2008. This plan is called "the execution plan for special fixed health checkup" and includes the special health checkup and special health guidance which is supposed to be adopted after the checkup.

To achieve the control of final medical treatment expense－the objective of the plan in this research－a methodology that plans policy and measure is proposed through the implementation of this plan in existing local government. By structuring the problem, when citizens suffer from health problems associated with adult lifestyle habits, it is understood that enormous medical treatment expense will be
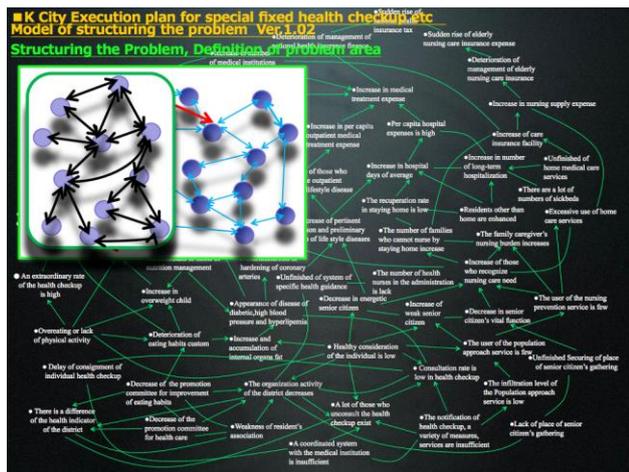

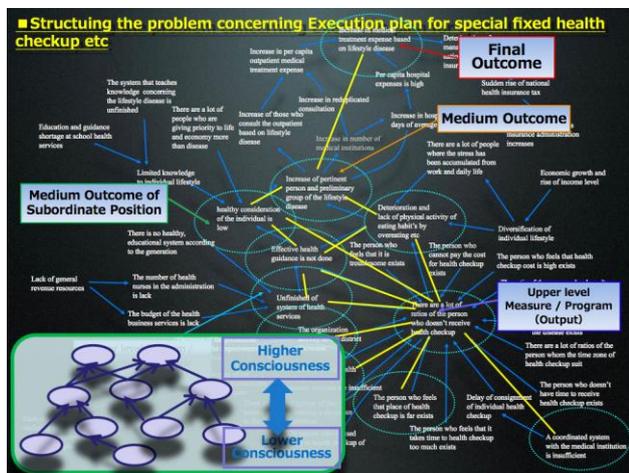Figure.7 Structuring the problem

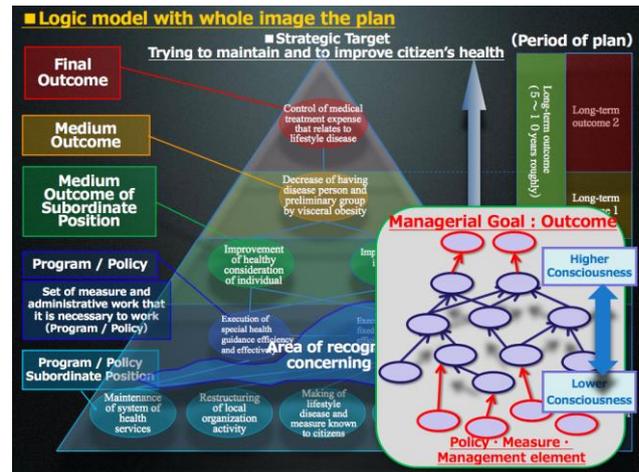Figure.8 Structuring the problem concerning the lifestyle disease

Figure.9 Policy Logic Model concerning the execution plan for special fixed health checkup etc

incurred as a result of long-term hospitalization or multiple consultations at a medical institution.

In addition, such a situation causes the deterioration of the health insurance budget of local government and by causal relation a sudden rise in insurance tax (Figure.8).

Thus, to achieve the outcome of controlling medical treatment expense that is set as a long-term strategy and the middle outcome of decreasing obesity, a logic model by which the link between the purpose and the means for the accomplishment of a goal that is shown in Figure.9 was constructed.

In this plan, it is necessary to make clear to citizens the execution of this plan. Therefore, it is clear that such a construction is an effective means of demonstrating to the citizens.

4. CONCEPT OF ADMINISTRATIVE MANAGEMENT SYSTEM AND SYSTEM NAINTENANCE

In this section, we explain about the theoretical structure of the administrative management system and the method of maintaining the constructed system. Maintaining the system means optimizing it.

4.1 Administrative Management System
In making the actual plan in the local government, it

is essential that the method of planning policy and measure in the administration is constructed in the process through structuring the problem and the logic model.

The logic model which is constructed to achieve the target of the plan is shown as the administrative management system itself, because logic model is variously influenced by the social, cultural, economical environment which is surrounding the model as well as business objectives, capital and so on. Figure 10 is a description of a typical administrative management system.

Figure.10 Administrative Management System

If the whole world is considered as a society, the society is composed of environments other than the administrative management system, and to achieve the final outcome of the system that was above-mentioned, measure and administrative work, etc. need to be planned first, and then executed. Next, the middle outcome can be achieved from the executed measure and administrative work. And then the final outcome based on the middle outcome is achieved. From the result obtained, the outcome concerning the policy and the management can be attained by constructing a logic model.

4.2 Method of System Maintenance

From the concrete measure and the administrative work located at the bottom of the administrative

management system, to the managerial goal which is located at the top, to achieve the concrete measure and administrative work efficiency and effectively, the execution of the special health checkup and special health guidance is an indicator of the output or the outcome. In addition, whether the policy, the measure, the administrative work and services that were planned are executed by analyzing quantitatively and evaluating, is the idea of system maintenance (monitoring).

The constructed system has to be revised with the evaluation function of the outcome index etc, as it is influenced by environmental factors such as management strategy targets, and the social, economic, cultural and technical environment. This method of carrying out correction improvement is the concept of system maintenance. In other words, the method for the correction of the system is based on changes in the environmental condition and monitoring. In addition, to set the managerial goal and evaluate it, various outputs and the outcome indices among the logic models through structuring the problem have to be located. Therefore, evaluation is needed to connect elements among the logic models to the base by deriving it quantitatively, by using the questionnaire survey and so on, because logic model needs the mechanism that changes the goal setting. Business and service are provided based on the set target, and they are measured as results. Afterwards, various targets are modified by comparing and verifying the numerical targets derived from the results data and the evaluation function, and thus it becomes possible to reset against the business objective.

5. Conclusion and Future Activity Research

In this paper, we have proposed the construction of an efficient and effective administrative management system through the making of a plan based on the decision making in a real municipality. The act of

sharing the recognition of the problem enables the policy and the measure that is planned and services to be evaluated as to whether they are effectively executed, as well as demonstrating the accountability to the local population by constructing a administrative management system that makes good use of structuring the problem and the logic model. Since policy which supplies public services is demanded by citizens in the current crisis, the research technique in this paper is effective.

In the near future, after the questionnaire survey which was made through structuring the problem has been finished, its result will be analyzed, verified, and the evaluation function of the model will be derived. And citizens' needs will be reflected in the measure and the administrative work in the future. A portfolio of the measures and the administrative work from which derived the system will be developed, and the interaction of the administration, the region, and society will take place.

REFERENCES

1) Dunn, W.N. *Public Policy Analysis* (2003). An Introduction. Third edition, Prentice Hall,

2) Rosenhead, J, and Mingers, J.(ed.): *Rational Analysis for a Problematic World Revisited*, Second edition, Wiley (2001)

3) W. K.Kellogg Foundation, *Logic Model Development Guide* (1998)