Factors Influencing Effectiveness of the Provincial Administrative Organizations in Providing Infrastructure Public Services

Voharn Yasarawan

Abstract—The objectives of this research were: (1) to study the effectiveness of Provincial Administrative Organizations in providing infrastructure public services under the concept of Balanced Scorecard from 4 perspectives, i.e., internal process perspective, financial perspective, learning and growth perspective and customer perspective; (2) to study factors influencing effectiveness of Provincial Administrative Organizations in providing infrastructure public services; (3) to create forecasting equations to forecast the effectiveness of Provincial Administrative Organizations in providing infrastructure public services; and (4) to study guidelines for developing the provision of infrastructure public services of Provincial Administrative Organizations. The results revealed that: (1) the effectiveness of Provincial Administrative Organizations in providing infrastructure public services was at a high level; (2) organizational structure factors, organizational environment factors, and the individuals in the organization factors had a positive relationship with the effectiveness of Provincial Administrative Organizations in providing infrastructure public services at a rather high level, and policy of administration and operation factors had a positive relationship with the effectiveness of Provincial Administrative Organizations in providing infrastructure public services at a rather high level; and (3) the variables of organizational culture, communication, change management, strategic management, organizational structure, conflict management, technology, motivation, personnel quality, and politics and law can jointly interpret the variance of the effectiveness of Provincial Administrative Organizations in providing infrastructure public services at 77%.

Keywords—Balanced Scorecard, Organizational Effectiveness, Factors Influencing, Provincial Administrative Organization

I. INTRODUCTION

The Constitution of the Kingdom of Thailand, B.E. 2540 (1997) has required to set up the decentralization committee for the local administration organization and also required the enactment of an act to lay down decentralization plan and procedure in B.E. 2542 (1999) which has brought about a decentralization master and action plan to be made in B.E. 2543 and 2545 (2000 & 2002) respectively. The said decentralization plan has an objective to ask the central government to transfer its responsibility in providing public services to local administrative organizations to take care of providing public services by themselves.

And later, the first paragraph of Article 281 of the Constitution of the Kingdom of Thailand, B.E. 2550 (2007) has stipulated to give freedom to local administrative organization according to the principle of self government in line with the intention of the local people and to support the local administrative organization to serve as the main agency in providing public services and take part in solving problems in their own locality. Provincial Administrative Organization (PAO) is a local administrative organization set up in every provinces according to the Provincial Administrative Organization Act, B.E. 2540 (1997) in order to take care of provincial activity which has been separated from activity under the power of the central and regional authority. Provincial Administrative Organization is legal person and is a local authority endowed with power on provincial level according to the Article 8 of the Provincial Administrative Organization Act.

From the above mentioned duties and responsibilities of the Provincial Administrative Organization, it can be seen that the provision of public services by the Provincial Administrative Organization deals very much with the daily activities of local people especially about the infrastructure works. Due to the fact that the budget received by the Provincial Administrative Organization is more than other local administrative organizations and as well as the fact that the responsible area covering the whole province, if the provision of public services by the Provincial Administrative Organization is unable to meet the demand of local people or unable to solve problems of local people, it can be interpreted that the Provincial Administrative Organization has failed to perform the assigned mission. The study on the effectiveness of the Provincial Administrative Organizations (PAOs) in providing infrastructure public services shall be useful to be applied for improvement and development of the provision of public services as regards to infrastructure so as to truly meet the demand of people and solve the problems of people.

A. Research Objectives

The objectives of this research were to 1) study the effectiveness of PAOs in providing infrastructure public services under the concept of Balanced Scorecard from 4 perspectives, i.e., internal process perspective, financial perspective, learning and growth perspective and customer perspective. 2) study factors influencing effectiveness of PAOs in providing infrastructure public services under the concept of Steers from 4 types, i.e., the organizational structure, the organizational environment, the individuals in the organization and policy of administration and operation, 3) create prediction equations to predict effectiveness of PAOs in providing infrastructure public services, and 4) study guidelines for developing the provision of the infrastructure public services of PAOs.

Voharn Yasarawan is a master student at the Faculty of Social Sciences and Humanities, Mahidol University, Phuttamonthon 4 Road, Phuttamonthon, Nakhonpathom 73170 – THAILAND (Phone: +668 3813 9595; e-mail: voharn@live.com)
B. Hypothesis

1) Effectiveness of PAOs in providing infrastructure public services is in high level.

2) Factors about the organizational structure, the organizational environment, the individuals in the organization and policy of administration and operation affect effectiveness of PAOs in providing infrastructure public services.

3) Factors about the organizational structure, the organizational environment, the individuals in the organization and policy of administration and operation can jointly predict effectiveness of PAOs in providing infrastructure public services.

II. LITERATURE REVIEW

A. Balanced Scorecard

Robert S. Kaplan & David P. Norton proposed the aim of the Balanced Scorecard is to clarify and communicate a company's vision and strategy into action. The balanced scorecard framework is founded on four perspectives, the four perspectives are:

1. The internal process perspective

The internal process perspective is concerned with the internal processes within a company that create and deliver the goods and services of the company. It is also concerned with the processes that are to deliver the value proposition defined in the customer perspective. It focuses on the activities and key processes required in order for the company to excel at providing the value expected by the customers, so that the measures in the customer perspective will be supported. Measures in this perspective could also be implemented to support the measures in the financial perspectives, where e.g. smaller lead-times or better quality may result in greater profits. Measures in the internal perspective could be: lead-time, innovation rates, service measures, quality measures, efficiency measures, costs reductions etc.

2. The financial perspective

The financial perspective entails the use of traditional financial measures that try to examine, whether or not the company's strategy is contributing to the bottom-line improvement of the company. The financial perspective is therefore trying to evaluate the results obtained from the strategy, and is trying to capture the strategy's success in traditional financial terms. The selection of financial measures will most likely be inspired by the life cycle stage of the products or services being supplied by the company.

3. The learning and growth perspective

The learning and growth perspective is the foundation of any strategy and focuses on the human and intangible assets of the company. This focus is mainly on the internal skills and capabilities that are required to support the value-creating internal processes. This perspective tries to define the human and developmental requirements of the company that will enable ambitious objectives in the other three perspectives to be achieved.

4. The customer perspective

The aim of the customer perspective is to define the value proposition of the company. The company will try to define the value it wants to apply to the end-user that will potentially satisfy the customer's needs. Measures that are selected for the customer perspective should measure the quality and perceived value of the products or services that are supplied to the customer. Measures in this perspective may be delivery times, innovation, quality, performance, service, costs etc. Likewise, measures in the customer perspective should also try to evaluate the results of the value proposition such as: customer satisfaction, customer retention etc.

[3]

B. Factors Affecting the Organizational Effectiveness

Steers proposed vital variable affecting the organizational effectiveness. They were classified into 4 types as follow:

1. The Organizational Structure— it showed relationship between human resources specified in the organization and the more it had rules, and regulations as the regulating tools for personnel behavior, it would be more hindrance to the effectiveness. The short chain of command proved to be more effective. Also, it was proposed that nature of bureaucratic, and technology of mass product might be better to bring success or effectiveness for an organization.

2. The Organizational Environment – it meant to the success or the effectiveness of an organization. It was divided into the internal and the external ones. Steers proposed that the internal ones were the organizational climates, but he gave more importance to the external ones. They affected the organizational effectiveness in related to the uncomplicatedness of jobs. The static ones and unlikely moving also with uncertain environments were the management with inadequacy of information for decision-making made them lack ability to precisely forecast the situation. Therefore, vital roles of the management were to comprehend environments, restructuring and rationally adapting to those situations.

3. The Individuals in the Organization – their behaviors influenced the organizational effectiveness would endeavor to build work climates facilitating its personnel not only for routine jobs but to be responsible to thinking and creativity leading to the organizational goals as well as for its survival and its growth.

4. Policy of Administration and Operation – it shared the effective operations and the managerial roles should view the following:

4.1 Defining the goal and operation – the management being able to evidently define goal and objectives, the operation would have been constructive.

4.2 Procuring and Using Resources – it was the attentiveness paid to personnel including coordinating process among various systems within an organization to uniquely work, in consistent to the policy and the control system following its achievement.

4.3 Work Environment – behavior attitude of working depended on the interpersonal and environment and manipulating personnel should be relevant to the nature of works.

4.4 The communication Process – it should be prevailing both vertically and horizontally.

4.5 Leadership and Decision-Making: the leader needed to coordinate and respond to the organizational goal to meet the changing environment by balancing the changes and the existence.

[5]

III. RESEARCH METHODOLOGY

The research of factors influencing to the effectiveness of the PAOs in providing infrastructure public services is a quantitative research that has been conducted according to the following steps:

A. Population and sample group

1. Population was the administrators of PAOs, the civil servants of PAOs and the employees under 76 PAOs, 20,112 persons in total.

2. Sample group was the administrators of PAOs, the civil servants of PAOs and the employees under the PAOs. The sample group was selected by using the cluster random sampling according to the provincial group. Then, the researcher selected the PAOs for being the group representatives by one PAO per a provincial group. The sample group was selected by using the simple random sampling and got the representative PAO of provincial group by one PAO per one provincial group, 18 PAOs in total. After that, the number of representative population of provincial group was calculated to find the appropriate proportion and size of the sample group. The sample group got was 400 persons.
B. Research Instrument

The research instrument of this research was questionnaire which the contents consisted of 4 parts as follows:

Part 1: Questionnaire about general data of the responders which included gender, age, educational level, work experiences, and position level.

Part 2: Questionnaire about factors influencing the effectiveness of PAOs in providing infrastructure public services.

Part 3: Questionnaire about criteria to evaluate the effectiveness in 4 aspects.

Part 4: Open-end questionnaire about guidelines for development in providing the infrastructure public services of PAOs.

C. Data Analysis

According to the data analysis from the questionnaire; the researcher investigated the complete of all questionnaires, then processed all of the completed questionnaires by statistic processing by computer. The statistic significance was at 0.05 level was used to be the criteria to accept or deny the research hypothesis for further data discussion. The statistics used in this data analysis included 1) mean, standard deviation, percentage, 2) Pearson Product Correlation Coefficient, and 3) Stepwise Multiple Regression Analysis.

VI. RESEARCH RESULTS

1. The analysis result of effectiveness of PAOs in providing infrastructure public services as overview found that the effectiveness of PAOs in providing infrastructure public services were at a high level in every aspect (mean = 3.67). The customer had the most average (mean = 3.89), secondly were the internal process, financial, and learning and growth factors (mean = 3.67, 3.57 and 3.54, respectively).

2. The analysis results of relationship between the organizational structure factors and the effectiveness of PAOs in providing infrastructure public services indicated that:

(X₁) The appropriateness of organizational structure had the effectiveness of PAOs in providing infrastructure public services at the moderate level (r = 0.581).

(X₂) The certain and clear rules and regulation of organizational structure and effectiveness of PAOs in providing infrastructure public services were at the moderate level (r = 0.501).

(X₃) Decentralization of power of organizational structure and effectiveness of PAOs in providing infrastructure public services were at the moderate level (r = 0.495).

(X₄) Allocation according to skills of organizational structure and effectiveness of PAOs in providing infrastructure public services were at the moderate level (r = 0.541).

(X₅) Appropriateness of commandment of organizational structure and effectiveness of PAOs in providing infrastructure public services were at the moderate level (r = 0.581).

3. Analysis result of relationship between the organizational environment factors and effectiveness of PAOs in providing infrastructure public services indicated that:

(X₆) Economic condition of organizational environment and effectiveness of PAOs in providing infrastructure public services were rather low level (r = 0.329).

(X₇) Social condition of organizational environment and effectiveness of PAOs in providing infrastructure public services were rather low level (r = 0.320).

(X₈) Politics and law of organizational environment and effectiveness of PAOs in providing infrastructure public services were rather low level (r = 0.297).

(X₉) Technology of organizational environment and effectiveness of PAOs in providing infrastructure public services were rather low level (r = 0.389).

(X₁₀) Organizational culture of organizational environment and effectiveness of PAOs in providing infrastructure public services were at a rather high level (r = 0.708).

(X₁₁) Organizational atmosphere of organizational environment and effectiveness of PAOs in providing infrastructure public services were at a rather high level (r = 0.666).

4. Analysis result of relationship between the individuals in the organization factors and effectiveness of PAOs in providing infrastructure public services indicated that:

(X₁₂) Organizational attachment of individuals in the organization and effectiveness of PAOs in providing infrastructure public services at the moderate level (r = 0.503).

(X₁₃) Personnel quality of individuals in the organization and effectiveness of PAOs in infrastructure public services at the moderate level (r = 0.600).

(X₁₄) Morale and spirit of work of individuals in the organization and effectiveness of PAOs in providing infrastructure public services at the moderate level (r = 0.507).

(X₁₅) Work motivation of individuals in the organization and effectiveness of PAOs in providing infrastructure public services at the moderate level (r = 0.583).

(X₁₆) Work responsibility of individuals in the organization and effectiveness of PAOs in providing infrastructure public services at the moderate level (r = 0.529).

5. Analysis result of relationship between the policy of administration and operation factors and effectiveness of PAOs in providing infrastructure public services indicated that:

(X₁₇) Strategic management of policy of administration and operation and effectiveness of PAOs in providing infrastructure public service at the moderate level (r = 0.543).

(X₁₈) Communication of policy of administration and operation and effectiveness of PAOs in providing infrastructure public services were at a rather high level (r = 0.682).

(X₁₉) Leadership and decision of policy of administration and operation and effectiveness of PAOs in providing infrastructure public services were at the moderate level (r = 0.509).

(X₂₀) Change management of policy of administration and operation and effectiveness of PAOs in providing infrastructure public services were at a rather high level (r = 0.658).

(X₂₁) Conflict management of policy of administration and operation and effectiveness of PAOs in providing infrastructure public services were at a rather high level (r = 0.624).

6. Analysis result of relationship between the factors affecting the effectiveness of PAOs in providing infrastructure public services as overview indicated that:

The overview of organizational structure and the overview of effectiveness of PAOs in providing infrastructure public services was at a rather high level (r = 0.664).

The overview of organizational environment and the overview of effectiveness of PAOs in providing infrastructure public services was at a rather high level (r = 0.630).

The overview of individuals in the organization and the overview of effectiveness of PAOs in providing infrastructure public services was at a rather high level (r = 0.678).

The overview of policy of administration and operation and the overview of effectiveness of PAOs in providing infrastructure public services was at a high level (r = 0.822).

7. The analysis result of multi correlation coefficient between the factors influencing effectiveness of PAOs in providing infrastructure public services revealed that the factors influencing in linear and effectiveness of PAOs in providing infrastructure public services had 10 variables which included organization culture (X₁₀), communication (X₁₈), change management (X₂₀), strategic
According to the study of factors influencing effectiveness of PAOs in providing infrastructure public services; the researcher would like to discuss the results to answer the research objectives as follows:

1. Effectiveness of PAOs in providing infrastructure public services as overall found that effectiveness of PAOs in providing infrastructure public services were at a high level in every aspect including the financial perspective, internal process perspective, customer perspective, and learning and growth perspective (Mean = 3.98, 3.96, 3.94 and 3.84, respectively). The result research suggested that PAOs focused on the providing infrastructure public services by allocating budgets to organize several projects, manage the budgets expense plan according to the necessary and requirement of people, follow, investigate and evaluate the operation of infrastructure which enhance the effectiveness and efficiency in money expenses. According to Phra Nantaphat Saenmarong studied the effectiveness of medical care of office of the welfare promotion commission for teacher and educational personnel under the concept of Balanced Scorecard. From the study, it was found that the internal process perspective, the overview of effectiveness of the internal process perspective was in moderate level, especially in the task and strategy of the organization perspective. Regarding the financial perspective, the overview of effectiveness in the financial perspective was in moderate level, especially in the service for arrangement of budget and in the use of resources effectively. Regarding the learning and growth perspective, the overview of effectiveness in the learning and growth perspective was in moderate level, especially in the satisfaction of personnel and training perspective. Regarding the customer perspective, the overview of effectiveness in customer perspective was in moderate level in particular sample groups had satisfaction on service providing systems, convenience and timeliness.  

2. Factors influencing effectiveness of PAOs in providing infrastructure public services found that the organizational structure factors and effectiveness of PAOs in providing infrastructure public services were at a rather high level (r = 0.664). According to the research result, it was found that the organizational structure is the basic components which are very crucial towards the operation of the organization. The organizational structure is about the determination on mission or responsible work, organizational management, system work management or form of work as well as setting the man power to be concordant with the operation of mission towards the organization. This will be the crucial roles through the effectiveness which will lead to the goals of organizations.

The organizational environmental factors and effectiveness of PAOs in providing infrastructure public services were at a rather high level (r = 0.630). The research result suggested that the organizational environment factors affects the efficiency of the organization because in the present condition, there is quick and severe alteration from the economic, social and political condition which affected the operation result of organization. The organization must adjust itself by strategic adjustment in operation continuously to be concordant with the change condition of social, economic and politic sides.

The individuals in the organization factors and effectiveness of PAOs in providing infrastructure public services were at a rather high level (r = 0.678). The research result suggested that the personnel condition in the organization which had attachment with organization, high ability will be able to work for the assignment efficiently. If the personnel in the organization have no quality, it will affect the effectiveness of organization.

V. DISCUSSION

According to the study of factors influencing effectiveness of PAOs in providing infrastructure public services at 77% (R² = 0.883) and the prediction error (S.E.) was equal to 0.272. 

Analysis result of multi regression of factors influencing effectiveness of PAOs in providing infrastructure public services indicated that: organization culture (X₁₀), communication (X₁₂), change management (X₁₃), strategic management (X₁₄), organizational structure (X₁₅), conflict management (X₁₆), technology (X₁₇), motivation (X₁₈), personnel quality (X₁₉), and politics and law (X₂₀) influenced effectiveness of PAOs in providing infrastructure public services at the statistical significance at 0.05. 

This can be written in equation to show the relationship as follows:

\[
\hat{Y} = 0.188 + 0.201X_{10} + 0.211X_{12} + 0.133X_{20} + 0.141X_{17} + 0.085X_{15} + 0.106X_{13} + 0.047X_{19} + 0.075X_{15} - 0.099X_{13} + 0.048X_8 \tag{1}
\]

The equation of the multiple regressions for standard score was

\[
\hat{Z} = 0.272X_{10} + 0.304X_{12} + 0.158X_{20} + 0.160X_{17} + 0.108X_{15} + 0.150X_{13} + 0.055X_{19} + 0.113X_{15} - 0.126X_{13} + 0.069X_8 \tag{2}
\]

Analysis result of development guidelines in providing infrastructure public services of PAOs was included:

1. PAOs should provide the materials, equipment, and several durable articles used in providing infrastructure public services, such as backhoe, hydraulic, materials for road reparation, etc. to be sufficient and concordant with the mission of provincial administrative organizations.

2. PAOs should develop the personnel to increase the effectiveness of PAOs in providing infrastructure public services consistently and continuously.

3. PAOs should admire the personnel who had outstanding operation in providing infrastructure public services to give morale and spirit to other personnel.

4. PAOs should allocate the budgets in providing infrastructure public services to be sufficient for the troubles and needs of people.

5. Administrators and council members of PAOs should emphasize the support and enhancing PAOs in providing infrastructure public services.

6. PAOs should improve and reduce the stages of operation in providing infrastructure public services to be flexible and quick for helping people.

7. The central part should emphasize and have sincerity to distribute the power in providing infrastructure public services of PAOs to originate the concordance and direct to the people’s needs.

8. PAOs should improve and develop the management system in providing infrastructure public services to be update and transparent which can be investigated.

9. PAOs should give the opportunity for every sector to participate in providing infrastructure public services.

10. PAOs should order or rearrange the importance of several basic infrastructure to be concordant and direct to the needs of people really as well as originating the worth or value in providing infrastructure public services.
The policy of administration and operation factors and effectiveness of PAOs in providing infrastructure public services were at a high level ($r = 0.822$). According to the research, it suggested that the operation and management policy is the determination to direction of organization which is the most important in leading the organization to be successful and achieve the goals of organization. According to Narongpol Kuvijitsuwan studied factors influencing organizational effectiveness: a case study of Wihandang municipality, Saraburi province. The result of the study revealed that: organization characteristics, environment characteristics, personnel characteristics, and administration policy and performance had positive relationship with the organizational effectiveness. [1]

3. Variables of organization culture, communication, change management, strategic management, organizational structure, conflict management, motivation, personnel quality, and politics and law jointly could describe the variance of effectiveness of PAOs in providing infrastructure public services at 77%. According to Ruja Rodkhem studied the development of an evaluation model for the organizational effectiveness of colleges under the ministry of public health by the balanced scorecard approach. The research results revealed that: the casual variables that had total effect on organizational effectiveness of colleges under the ministry of public health were: leadership, organizational climate, communication, organizational culture, strategic management, technology, external environment. Organizational attachment, and motivation, respectively. [4]

VI. CONCLUSION

The study provides an important exploratory analysis to evaluate the effectiveness of PAOs in providing infrastructure public services. The results show that: 1) the effectiveness of PAOs in providing infrastructure public services was at a high level, 2) the organizational structure, the organizational environment, the individuals in the organization and policy of administration and operation had a positive relationship with the effectiveness of PAOs in providing infrastructure public services and 3) the variables of organizational culture, communication, change management, strategic management, organizational structure, conflict management, technology, motivation, personnel quality, and politics and law can jointly interpret the variance of the effectiveness of PAOs in providing infrastructure public services at 77%.

ACKNOWLEDGMENT

This research was successfully conducted with the support in knowledge and suggestion from Assoc.Prof.Dr.Somboon Sirisunhirun, Asst.Prof.Dr.Kamonporn Sornsee, and Asst.Prof.Dr.Noppadol Udornwisawakul, the research advisors. The researcher would like to express the appreciation for the useful advice and suggestion during the research. Finally, Thank you Provincial Administrative Organizations (PAOs) for giving the chance in research conducting as well as related persons for the assistance and suggestion to the completion of this research.

REFERENCES


