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- To encourage researchers to identify significant research issues in identified areas, in the field of Science, Engineering, Technology and Management.
- To help dissemination of their work through publications in a journal or in the form of conference proceedings or books.
- To help them in getting feedback on their research work for improving the same and making them more relevant and meaningful, through collective efforts.
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EDITORIAL

It is my proud privilege to welcome you all to the TheIRES International Conference at Zurich, Switzerland. I am happy to see the papers from all part of the world and some of the best paper published in this proceedings. This proceeding brings out the various Research papers from diverse areas of Science, Engineering, Technology and Management. This platform is intended to provide a platform for researchers, educators and professionals to present their discoveries and innovative practice and to explore future trends and applications in the field Science and Engineering. However, this conference will also provide a forum for dissemination of knowledge on both theoretical and applied research on the above said area with an ultimate aim to bridge the gap between these coherent disciplines of knowledge. Thus the forum accelerates the trend of development of technology for next generation. Our goal is to make the Conference proceedings useful and interesting to audiences involved in research in these areas, as well as to those involved in design, implementation and operation, to achieve the goal.

I once again give thanks to the Institute of Research and Journals, TheIIER, TheIRES for organizing this event in Zurich, Switzerland. I am sure the contributions by the authors shall add value to the research community. I also thank all the International Advisory members and Reviewers for making this event a Successful one.

Editor-In-Chief

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THE APPLICATION OF THE PRINCIPAL-AGENT THEORY TO THAI GOVERNMENTAL MANAGEMENT: A CASE STUDY OF SUANSUNANDHARAJABHAT UNIVERSITY

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Abstract - This article aims to review the literatures related to the Principal-Agent Theory which cover the background and the essentials of the theory, conflicts of interest between the principal and the agent, and the mitigation of such competing interests. The researcher analyzed the reviewed literatures and applied them to the governmental management in Thailand's public sector, including SuanSunandhaRajabhat University. The study focused on the principal and the agent in SuanSunandhaRajabhat University; the researcher particularly explored the principal and the agent's maximization of self-interests, their mutual agreement, the conflicts of interests between them, and the mitigation of the conflicts. The research results showed that the chancellor, the university administrators, and the academic staff, generally pursued their self-interests to a great extent. Even though the pursuit of interests in the form of contract agreements mutually benefited both parties, the university had to implement measures and approaches to mitigate the conflict of interests between the principal and the agent. This involved the development of professional ethics guidelines, the establishment of investigation and follow-up system, and the implementation of employee incentives for the academic staff.

Index Terms - Principle-Agent Theory, Thai Government Management.

I. INTRODUCTION

The principal-agency theory is a popular theory for applying to organizational administration in various institutions such as government organizations, state enterprises, and local administrative organizations, in order to describe the relationship between two parties which consist of the principal and the agent; these two entities have different roles. A principal involves the organizational administrators who want to maximize the organization's profit and benefit. This party usually tries every way to assist an organization to gain high return that is worth for their investment. Organizations are under increasing pressure to improve performance and maximize the contribution of every employee [1]. On the other hand, an agent includes the employees who have to satisfy the employer or the principal receiving to the greatest extent. In this article, the researcher used SuanSunandhaRajabhat University as a case study; this university is a governmental organization where the principal-agent theory had been applied to describe the relationship between the principle (or the university administrators) and the agent (or the academic officers of the university).

II. THE ORIGIN OF THE PRINCIPAL-AGENT THEORY

Since the late of 1700s, the theoreticians have discussed about the problem of proprietors in employing managers to manage their assets. This is because the managers could not manage the assets and make profits the proprietors want; they also lack carefulness in managing other affairs in their companies [2].

In 1976, the economists, Jensen and Meckling, had developed the principal-agent theory to describe the contractual relationship between stakeholders, managers, and officers in private organizations regarding the problems in the organization when the owner did not control the production by themselves. Afterwards, this theory was applied to explain the relationships in different fields such as accounting, economics, politics, and public administration. Additionally, it can describe the relationships between the citizens and the politicians, the ministers and the government officers, and the employers and the employees.

III. THE PRINCIPAL-AGENT THEORY: PROBLEMS AND PROBLEMS MITIGATION

According to the principal-agent theory, human behavior can be understood in the form of contract by which one side (employer/principal) makes an exchange agreement with another side (employee/agent). An agent is authorized to make decision and take operational responsibility in instead of the principal due to the agreement or contract conditions created by both sides [3]. The agent generally receives rewards as the compensation of his/her operations; his/her work must be accepted by the principal. The relationship between the principal and the agent mentioned above may arise from some limitations of the principal, for example, the lack of some certain skills or knowledge. Thus, the principal needs an agent to work in instead of him/her. The principal must investigate the performance of an agent appropriately; this is in line with the division of labor.
principle for maximizing the efficiency and the effectiveness. In regards to the principal-agent theory, there are two keywords that need to be emphasized: "principal" and "agent". A "principal" refers to a shareholder, a proprietor, or an employer. Whilst, an "agent" refers to an executive or employee. Moreover, some theorists may define a "principal" as a group of leaders consisting of a director, managers, and foremen while an "agent" may involve a group of workers [4].

An assumption based on the theory is concluded by which the individuals are rational and always seek for advantages to the greatest extent. They mainly focus on their own benefits; hence, there is always the conflict of interest between the principal and the agent due to their imbalanced relationship. The agent usually has an advantage over the principal as they can exploit the data as well as the uncertain circumstances, especially in regards to the manufacturing process or the transformation of resources to a product according to the condition set by or the demand of the principal. The agent often takes an advantage from this situation to pursue for self-interest [5].

There are three main causes of the conflict between a principal and an agent as listed below:

1. The conflict of interest or the pursue of self-interest of both sides. An agent normally tries to maximize his/her benefit but may not concern about his/her performance that would affect the principal’s interest. Therefore, their benefits sometimes are not matched or balanced due to the agent’s misbehavior [6]. In some cases, if both sides only pursue for their own self-interest, the agent may refuse to choose the best way to benefit the principal.

2. Moral hazard. A principal cannot be sure that the agent has tried his/her best to work with his/her full performance. This problem often refers to the misbehavior that causes the inefficiency in terms of administration.

3. Adverse selection. A principal may receives inadequate information for assessing an agent. This may cause asymmetric information that leads to the overestimated assessment and exaggerated expectation. This may also lead to the inappropriate assignments for the agent.

When a principal and an agent work together based on their self-interest motivation and their benefits may not match or may be even opposed, this challenges the relationship between both sides because the principal cannot completely control the working operations or receive the full information from the agent with the low capital. This can affect the motivation and the meeting of the work target. Considering these problems carefully, there are two main methods to fight against these issues:

First, the principal may use ‘control’ to prevent and resolve the conflict between the principal and the agent. This is also a mechanism to reinforce the agent to work with his/her full performance. An effective follow-up and investigation system is to establish the committee for implementing a strategy to achieve the organizational goals and investigating the agent’s performance whether it has met the target or not. Second, the principal should increase the agent’s motivation by giving high compensation and good welfare system to them.

IV. THE IMPLICATIONS OF THE THEORY IN PRACTICE

1. Since the principal, regardless the number of the persons, cannot operate the work by themselves, so they have to employ an agent who has skills and knowledge to work in place of them.

2. Both sides substantially seek for their own self-interest. The agent works for the principal in exchange for his/her own highest benefit, so the principal should strictly control the agent.

3. The principal controls the agent by making a contract between both sides, establishing the follow-up and investigation system, and employing a committee to investigate the agent. All of these cause high expenses and consume a lot of time; if the principal consider that it is not worthy enough to do so, then they should stop the control.

4. The role of an effective principal is to control the agent’s behaviors, to investigate the agent who works in the organization, and to find the mechanism to reinforce the agent to perform in the way that maximize the principal’s profit the most; for example, setting up the rule for assessing operation results and developing the agent control measure to prevent the future problems.

V. THE APPLICATION OF THE PRINCIPAL-AGENT THEORY IN THAI PUBLIC SECTOR ADMINISTRATION: A CASE STUDY OF SUANSUNANDHARAJABHAT UNIVERSITY

In this article, the researcher had applied the principal-agent theory to the Thai public sector administration, SuanSunandhaRajabhat University in particular. The “principal” consists of the college president and executives. The “agent” consists of the academic officers of the university. The researcher had specified the issues related to the principal-agent theory as follows:

1. The Principal and the Agent’s Pursuit of Self-interest

The college president’s administrative goal was to develop SuanSunandhaRajabhat University to be a “Smart Archetype University of the Society” by focusing on the operations that benefit
SuanSunandhaRajabhat University. Moreover, the academic officers of the university were encouraged to work based on the key missions consisting of (1) instruction and expert graduate production, (2) research in the area of expertise (in which the research results can be used productively), (3) academic service which can provide expert researches to resolve social problems with the participation of the community, local people, and the society; and (4) art and cultural preservation by emphasizing the participation in activities related to art and cultural preservation. This can promote and support Thai art and culture, especially the SuanSunandha Palace’s culture. On the other hand, the academic officers were mainly benefited from appropriate salaries, welfares, and secured occupations.

2. The Agreement between the Principal and Agent
The college president and the academic officers must sign the employment contract; the college president signs as the employer while the academic officers sign as the employee. This kind of contract clearly specifies the working conditions of an academic officer; it includes instructional and research responsibilities, academic service, and art and cultural preservation. There were two types of employment contracts for academic officers: (1) one-year contract for part-time officers, and (2) permanent contract for the officers who will be employed until their retirement.

3. The Conflict of Interest between the Principal and the Agent
The college president and the executives had mainly focused on the university’s profit. They wanted the academic officers to act on their duties which involve teaching, researching, providing academic service, and engaging in art and cultural preservation to meet the university’s goal—to become a smart archetype university of the society. On the other hand, the academic officers were generally benefited from the appropriate salaries, welfares, and secured career paths. This shows that both sides’ interests are not well-balanced due to the fact that the college president and the executives expected the academic officers to complete their works, which are quite heavy, while some academic officers were still part-time officers and were not fully benefited from the salaries, welfares, and occupation stability unlike the permanent academic officers. Thus, the turnover rate of part-time academic officers was very high.

VI. THE MITIGATION OF THE CONFLICT BETWEEN THE PRINCIPAL AND THE AGENT
First, SuanSunandhaRajabhat University had promoted the academic officers to have occupational ethics by providing occupational ethics handbooks to encourage the academic officers to devote themselves in teaching and working for the university.
Second, there was a good follow-up and investigation system. SuanSunandhaRajabhat University assessed the working results by using the measurement system to investigate whether the academic officers had performed their duties according to the employment contract or not. Furthermore, they also used the information technology system to facilitate the input of data as well as working evaluations. This helped the principal to evaluate the agent’s work rapidly, fairly, and transparently.
Third, SuanSunandhaRajabhat University had increased the working motivation among the academic officers by adjusting the salary rate to be appropriate with the officers’ qualifications and economic conditions, providing good welfare, providing the annual bonus, providing the appropriate instruction compensation rate, and promoting the occupational stability by employing the officers as the permanent academic officers.

CONCLUSION
The principal-agent theory is a theory that demonstrates how every person in an organization is motivated to work for their self-interest. The principal mainly focuses on how to maximize the organization’s profit while the agent tries to pursue for his/her own self-interest which includes occupational stability, appropriate compensation, and good welfare system. Sometimes, the relationship between the principal and the agent is supported by each other, but there could be the conflict of interest between them from time to time. Therefore, to reduce the aforementioned conflict, they have to use strict control as an instrument to monitor the operations, establish a good follow-up and investigation system, and increase the working motivation among the officers to operate the organization more efficiently and effectively.

SUGGESTIONS
The principal-agent theory not only contributes to a university’s operation, but also benefits Thai organizational administration as a whole, as it can be applied to the management of any governmental organizations, state enterprises, and local administrative organizations as suggested below:
1) The organization should build a relationship that increases mutual benefits for both sides, for example, creating an activity that both principals and agents can take advantage of.
2) The organization should set up a good follow-up and investigation system to evaluate the agents’ performance. The selection and punishment process must be ethical.
3) The organization should have a motivation system that is appropriated with the organizational environment.

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