

# TOWARDS EFFECTIVE PROCUREMENT AND PURCHASING

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## ABSTRACT

The objective of this study was to examine current problems and obstacles in the processes of procurement and purchasing of research consumables and equipment of The Office of General Education and Innovative Electronic Learning, Suan Sunandha Rajabhat University, Thailand. It used 1 set of questionnaires to survey a sample of 36 members of staff of The Office of General Education and Innovative Electronic Learning in 2020. Statistics used to analyze the collected data consisted of frequencies, percentages, mean values, and standard deviations. Results showed that 62 per cent of the responders were female, 70 per cent were between 31-40 years old, 72 per cent had graduated with bachelor's degrees. In terms of their positions, most of the responders were either university employees or temporary staff, both having the same proportion at 44.5 per cent.

Responses to the questionnaires regarding the effectiveness of the procurement and purchasing process, both for the overall system and its specific components, indicated a *very high* satisfaction level. The 3 components with the highest satisfaction levels were, in order, whether the correct equipment was procured, whether the appointment of the board was in accordance with the procurement and purchasing policies, and whether the procurement and purchasing were done according to plans ( $X=3.35, 3.33, \text{ and } 3.26$ , respectively). Regarding opinions on the effectiveness in distributing and record-keeping of the equipment, the level of satisfaction, both in the overall system and in its specific components, were *low*. 3 of the components having the highest satisfaction levels, in order, included whether registrations of equipment were done in accordance with The Comptroller General's Department's policies, whether records for disbursements of equipment were correct, and whether the accounting entries were in accordance with guidelines set by the Bureau of the Budget ( $X=2.95, 2.93, \text{ and } 2.90$ , respectively). The satisfaction level in the maintenance of the procured equipment was *very high*. Its components included, in order of satisfaction levels, maintenance planning and timetables, responsiveness to maintenance requests, and maintenance budgets ( $X= 3.19, 3.11, \text{ and } 2.87$ , respectively). The satisfaction level in the re-selling process, both for the overall and separate components of the process, was *very high*. The 3 components with the highest satisfaction levels, in order, were documenting of re-sold equipment, whether the re-selling process followed government regulations, and whether reports were published within a time frame stipulated in government regulations ( $X=3.15, 3.10, \text{ and } 3.07$ , respectively).

**Keywords:** Procurement, Purchasing, Accounting, Equipment, Maintenance, Disbursement

## INTRODUCTION

Procurement and purchasing of consumables and equipment are essential processes for any organization, directly affecting the organization's effectiveness by creating a convenient, responsive, cost-effective, and fast working environment. Service-readiness of an organization's procurement and purchasing processes could be an important factor in its success and the fulfilment of its missions. If an organization lacks good procurement and purchasing processes, it may perform duplicate or redundant works, reducing its efficiency, given the lack of plans that ensure the availability of a sufficient amount of consumables and equipment at any given time. Labour and capital are two most important resources, because labour and capital can solve every management problem. But this is not always the case, because materials and their procurement and purchasing are also as important to management as other resources. Organizations of different activities require materials, because materials are tools to improve the effectiveness of management. Procurement and purchasing processes use management techniques to manage resources an organization owns or acquires, to reduce costs and open opportunities to use the materials to facilitate managers, making the latter more efficient, and well as to support other departments in the organization, making them operate smoothly and efficiently.

For the above reasons, we conducted this study, aiming to increase the effectiveness of procurement and purchasing processes. The objective was to use the results from this study as a guideline in developing and improving the procurement and purchasing processes; and, moreover, to examine and evaluate the performance of the procurement and purchasing staff and provide a practical guideline for them to improve their performance correctness, in accordance with the rules and policies of Suan Sunandha Rajabhat University.

### Research Objective

To examine current problems and obstacles in the processes of procurement and purchasing of research consumables and equipment of the Office of General Education and Innovative Electronic Learning.

## METHODOLOGY

### Population and Sample

The population of this study consisted of 300 members of staff of The Office of General Education and Innovative Electronic Learning, Suan Sunandha Rajabhat University (Information from the Office's Human Resource department, February 2021).

The sample of this study consisted of the 36 members of staff of The Office of General Education and Innovative Electronic Learning, Suan Sunandha Rajabhat University.

## **Materials**

### **1. Questionnaires on the effectiveness of the procurement and purchasing procedures**

#### **1.1 The Importance of Procurement and Purchasing Processes**

The procurement and purchasing processes are important in terms of the efficiency and effectiveness and in itself. It is part of a chain, where a compromised link affects the performance of the whole chain.

Procurement and purchasing processes consist of creation of action plans that are in accordance with the available budget and that maximize effectiveness. Budgets are tools used to control management. Managers of the procurement and purchasing department must be knowledgeable in budgeting, familiar with rules for budgeting, budget management, and budget reporting. They must also be knowledgeable in principles of budgeting related to procurement and purchasing.

#### **1.2 Concept of Efficiency**

Other than concepts relating to procurement and purchasing, another concept that can improve the effectiveness of procurement and purchasing processes is the concept of efficiency. This concept is important and essential in procurement and purchasing. This section states the meaning of efficiency, concept of efficiency, and ways to increase efficiency.

Efficiency refers to the provision of work or service that is correct, fast, using techniques that provide more convenience while minimizing the use of resources and maximizing output. Yuwanutkulatee (2005) defined efficiency as the relationship between input and output; to minimize the former while maximize the latter. It considers means to use the available resources in the least wasteful manner. We could conclude that an increase of efficiency means the minimization of resources consumed and maximization of performance; being least wasteful.

## **Data Processing**

Answers to the questionnaires were analyzed using a software, which calculated the following values.

- 1) Percentage values
- 2) Mean values
- 3) Standard deviations

The analysis was as follows.

- 1) General information of the responders was analyzed using percentages
- 2) Data related to factors that influence the web site of general education courses of The Office of General Education and Innovative Electronic Learning, Suan Sunandha Rajabhat University in the 2nd semester and the summer semester of the academic year 2021 were analyzed using basic statistics, consisting of the following.

The questionnaires contained 5-level rating scales using Likert's method. The scores and their descriptions were as follows.

Very high was equivalent to the score of 5, meaning the responder strongly agreed with the statement.

High was equivalent to the score of 4, meaning the responder agreed with the statement.

Medium was equivalent to the score of 3, meaning the responder neither agreed nor disagreed with the statement.

Low was equivalent to the score of 2, meaning the responder disagreed with the statement.

Very low was equivalent to the score of 1, meaning the responder strongly disagreed with the statement.

Descriptions given to different ranges of mean scores were as follows.  
mean scores Opinion

4.51 - 5.00 Most appropriate

3.51 - 4.50 Very appropriate

2.51 - 3.50 Appropriate

1.51 - 2.50 Inappropriate

1.00 - 1.50 Most inappropriate

## RESULTS AND DISCUSSION

Results from this study were as follows.

5.1 In terms of the procurement process, we have surveyed the satisfaction level of 36 responders. The results are shown in Table 1.

**Table 1** Opinions on the effectiveness of the procurement process

Content	X	S.D.	Opinion level
<b>1) Effectiveness of the procurement process</b>			
1. Procurement and purchasing processes were done according to the annual plan	3.14	0.63	Very high
2. The processes of procurement and purchasing followed the specified plans	3.26	0.58	Very high
3. Purchased equipment were correct and met their specifications	3.35	0.61	Very high
4. Purchased equipment fulfilled specified standard and quality	2.92	0.70	Low
5. The distribution and acceptance processes were in accordance with the government regulations	3.13	0.63	Very high
6. The board was appointed in accordance with the procurement and purchasing regulations	3.33	0.64	Very high
<b>Total</b>	<b>3.19</b>	<b>0.48</b>	<b>Very high</b>

Shown in Table 1, the opinions on the procurement process, both overall and in different components, were very high. 3 components with the highest opinion levels, in order of their average scores, were whether the purchased equipment was correct and met their specifications, whether the board was appointed in accordance with the procurement and purchasing regulations, and whether the processes of procurement and purchasing followed the specified plans ( $X = 3.35, 3.33,$  and  $3.26,$  respectively).

5.2 In terms of distribution and recording-keeping, we have surveyed the satisfaction level of 33 responders. The results are shown in Table 2.

**Table 2** Opinions on the effectiveness of the distribution and recording-keeping processes

Content	X	S.D.	Opinion level
<b>2) Effectiveness of the distribution and recording-keeping processes</b>			
1. Record keepings of consumables and equipment were in accordance with the regulations of the budgeting department	2.90	0.65	Low
2. Registration of equipment was in accordance with the regulations of the Comptroller General's Department	2.95	0.64	Low
3. Disbursement processes had correct records	2.93	0.64	Low
4. Equipment storage space was appropriate	2.84	0.70	Low
<b>Total</b>	<b>2.87</b>	<b>0.54</b>	<b>Low</b>

Shown in Table 2, the opinions on the distribution and record-keeping processes were, in both overall and in different components, low. 3 components with the highest opinion levels, in order of their average scores, were whether the registration of equipment was in accordance with the regulations of the Comptroller General's Department, whether the disbursement processes had correct records, and whether the record keepings of consumables and equipment were in accordance with the regulations of the budgeting department (X = 2.95, 2.93, and 2.90, respectively).

5.3 In terms of maintenance, we have surveyed the satisfaction level of 33 responders. The results are shown in Table 3

**Table 3** Opinions on the effectiveness of the maintenance processes

Content	X	S.D.	Opinion level
<b>3) Effectiveness of the maintenance</b>			
1. Plan and weekly/month schedules for equipment maintenance were in place	3.19	0.48	Very high
2. Budgets for maintenance were allocated	2.87	0.54	Low
3. The maintenance process was responsive and fast	3.11	0.49	Very high
<b>Total</b>	<b>3.03</b>	<b>0.42</b>	<b>Very high</b>

Shown in Table 3, the opinions on the maintenance processes were, in both overall and in different components, very high. 3 components with the highest opinion levels, in order of their average scores, were whether the plan and weekly/month schedules for equipment

maintenance were in place, whether the the maintenance process was responsive and fast, and whether the budgets for maintenance were allocated ( $X = 3.19, 3.11, \text{ and } 2.87$ , respectively).

5.4 In terms of re-selling, we have surveyed the satisfaction level of 36 responders. The results are shown in Table 4.

**Table 4** Opinions on the effectiveness of the re-selling process

<b>Content</b>	<b>X</b>	<b>S.D.</b>	<b>Opinion level</b>
<b>4) Effectiveness of the re-selling process</b>			
1. The re-selling process was in accordance with government policies	3.10	0.62	Very high
2. Documents on the re-selling process were made	3.15	0.57	Very high
3. Process reports were made within the time frame stipulated by the government	3.07	0.66	Very high
<b>Total</b>	<b>3.11</b>	<b>0.49</b>	<b>Very high</b>

Shown in Table 4, the opinions on the re-selling processes were, both overall and in different components, very high. 3 components with the highest opinion levels, in order of their average scores, were whether the documents on the re-selling process were made, whether the the re-selling process was in accordance with government policies, and whether the process reports were made within the time frame stipulated by the government ( $X = 3.15, 3.10, \text{ and } 3.07$ , respectively).

## **CONCLUSION AND RECOMMENDATIONS**

The results showed us problems in the procurement and purchasing processes. The causes of the problems were revealed and plans to address them were formed. The improvement in the procurement and purchasing processes and the plans allowed for an effective, efficient, transparent, and accountable procurement and purchasing processes. Timetable containing procedures and plans for systematic operations should be made to improve the operation’s responsiveness and effectiveness. There should be seminars for the members of staff responsible for procurement and purchasing to reduce problems encountered during their operations and to inform them about correct procedures in procurement and purchasing. There should be studies on factors affecting operational problems, and on the current managerial state of The Office of General Education and Innovative Electronic Learning, in accordance with the Procurement and Supplies Administration Act B.E. 2560 (2017).

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