

Study of User Satisfaction with the GPS Transportation Laboratory for Enhancing Operational Process Efficiency

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Abstract

This research employed a survey method, collecting data from a sample of 120 individuals. The satisfaction questionnaire regarding the use of the GPS transportation laboratory was used to improve the efficiency of operations for the Faculty of Logistics and Supply Chain, Suan Sunandha University. The questionnaire covered four topics: 1. Computers and equipment, 2. IT staff services, 3. Environment and landscape, and 4. Network and information systems.

The research results show that users of the GPS transportation laboratory at the College of Logistics and Supply Chain from From a sample of 120 people who found that the overall level Medium 68.85 ($\bar{x} = 3.45$, S.D. = 0.61) If we consider the details ound that respondents were satisfied with

- 1.Computer and equipment the overall level high 71.37 ($\bar{x} = 3.57$, S.D. = 0.63)
- 2.IT staff service the overall level high 71.76 ($\bar{x} = 3.59$, S.D. = 0.84)
- 3.Environment and landscape the overall level Medium 66.53 ($\bar{x} = 3.33$, S.D. = 0.48)
- 4.Networking and Information Systems the overall level Medium 65.75 ($\bar{x} = 3.29$, S.D. = 0.48)

Keywords: satisfaction, performance

1. Introduction

Science and technology education is an important factor in economic development and society to progress and is one of the tools that are extremely important to human resource development nowadays, Thailand has realized the importance of science and technology more due to the technological advancements involved more and more people's daily life So that all Thai people have knowledge and understanding of science and technology according to the potential of each person Whereas, the National Education Act, B.E. 2452 has established educational management guidelines based on the principle that all learners have the ability to learn and develop themselves and considered the learners to be the most important learning management process content needs to be organized interest-based activities aptitude and differences of learners practice skills in dealing with situations and applied to learners to learn from real experiences practice thinking feasible Solve the problem as including cultivation moral ethics value and desirable characteristics teachers can set up an atmosphere environment learning materials facilitate learning (National Education Act B.E. 2542)

Which the College of Logistics and Supply Chain, Suan Sunandha Rajabhat University it is another educational institution that prioritizes investment in technology by accelerating the development of education, providing education to develop the quality of people for people who will help develop the country by providing teaching and learning that sees technology as a high-quality tool that will increase the efficiency of education management to be used as a tool for country development both economic society and education until there is a difference between a country that is ready with technology and a country that is lacking in the era of educational reform Therefore, education management that promotes effective learning and increase the learning achievement of the learners, so it is very important to the learners themselves

For the above reasons the researcher realized the importance of studying the satisfaction level of accessibility computer lab to develop operational processes for efficiency of the College of Logistics and Supply Chain, Suan Sunandha Rajabhat University to access and take advantage of research results to develop the learning quality of learners in each category appropriately

Pimploi Tirastittam (2022) research studies the relationship between various factors contributing to value creation from talented personnel, including corporate branding, personnel branding, and employer branding, human resource management processes, and high-efficiency work systems (HPWS). Therefore, the data for this research was obtained from IT personnel working in Thai government agencies.

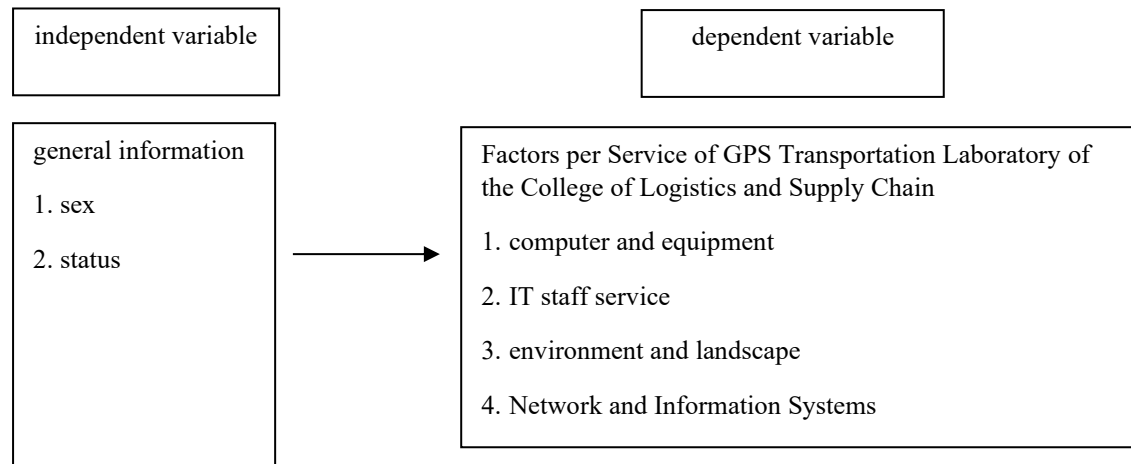
Thawiphong Chintana Kham (1998) gave the definition of satisfaction as it is a person's inclination towards something which can reduce tension and meet the needs of people, resulting in satisfaction with that

Satisfaction arising in the process of providing services between service providers and service users it is the result of recognizing and evaluating the quality of the service that the client expects to receive and what the client actually receives in each situation satisfaction levels may not be constant. It may vary over time Service satisfaction consists of 2 parts (Sukhothai Thammathirat University Unit 8-15, 2002) consists of

1. Elements of quality perception of service products The service recipient will know that the service received has characteristics according to the commitments of each type of business as it should be, how much such as Guests staying at the hotel will be accommodated in the room they have booked Customers entering the restaurant should be served exactly what they ordered etc. it is a service that customers should receive according to the nature of the service each type This will make the customer satisfied with what they want.

2. Components of perceived quality of service The customer will know how appropriate the way the service is presented in the service provider's service process whether it is convenient to access the service Behavior of service providers according to their roles and the service response of the service provider to the service recipient in terms of job responsibility use of language to convey meaning and conduct in service

mindset



1.1 Objective

1. To study service recipients' satisfaction level on using the GPS transportation laboratory of the College of Logistics and Supply Chain, Suan Sunandha Rajabhat University.

2. To compare service recipients' satisfaction on using the GPS transportation laboratory of the College of Logistics and Supply Chain, Suan Sunandha Rajabhat University.

2. Methods

Population and sample groups

The population of this research were the

Study on user satisfaction with the GPS transportation laboratory, Logistics and Supply Chain. Suan Sunandha Rajabhat University by studying and collected questionnaires from October 2025 to July 2026.

The researcher collected data for this research. By sending questionnaires according to the number of sample groups of 120 people from the College of Logistics and Supply Chain. Suan Sunandha Rajabhat University and professors from the College of Logistics and Supply Chain Suan Sunandha Rajabhat University

The sample group were

1. Logistics and Supply Chain College Student Suan Sunandha Rajabhat University 115 students

2. Lecturer, College of Logistics and Supply Chain Suan Sunandha Rajabhat University 5 people

The research tools

The samples were collected from students and faculty users of the GPS transportation laboratory. By submitting a satisfaction questionnaire to Computer Laboratory, College of Logistics and Supply Chain. Suan Sunandha Rajabhat University through the Internet, an

online questionnaire linked to the website of the College of Logistics and Supply Chain Suan Sunandha Rajabhat University and send a link to the email of the sample

Data analysis

Data analysis for this research is divided into the following steps:

1. Processed by a computer program
2. Analysis of the general data of the sample using descriptive statistics. (Descriptive Statistic) frequency and percent
3. Analyze the accessibility satisfaction questionnaire. Accessing the GPS Transportation Laboratory. College of Logistics and Supply Chain Suan Sunandha Rajabhat University with descriptive statistics including mean score (\bar{X}) and standard deviation (S.D.)

By setting the criteria for analysis To interpret the satisfaction level measurement of the sample. Regarding quality assurance, the scoring range has been set as follows.

- An average of 4.50 – 5.00 means satisfaction is at the highest level.
- Mean 3.50 – 4.49 mean a high level of satisfaction.
- Mean 2.50 – 3.49 means medium level of satisfaction.
- Mean 1.50 – 2.49 means there is a low level of satisfaction.
- An average of 1.00 – 1.49 means the least satisfied.

3. Results and Discussion

The research entitled " Study of User Satisfaction with the GPS Transportation Laboratory for Enhancing Operational Process Efficiency"

Table 1. General information of the sample who answered the questionnaire

general information	number (people)	percent
sex		
man	40	33.33
female	80	66.67
include	120	100.00
status		
logistics college student	115	95.83
Lecturer of the College of Logistics	5	4.17
include	120	100.00

Table 1. Consider the personal information of the sample respondents. of 120 people, found that most of the respondents were female, 80 people, representing 66.67% and 40 males, representing 33.33 %, being students of the College of Logistics, 115 people, representing 95.83 % teachers of the College of Logistics, 5 people, representing 4.17%

Table 2. satisfaction assessment results

Questions of the satisfaction assessment form	percent	S.D.	average	meaning
1. Computer and equipment				
1.1 The availability and completeness of the computer providing GPS services	72.71	0.65	3.61	high
1.2 Availability and completeness of the map display equipment provided	70.67	0.77	3.53	high
1.3 Availability and integrity of audio and mic services	70.17	0.67	3.51	high
1.4 The number of computers is sufficient for the service	72.33	0.49	3.62	high
1.5 Modern equipment and systems for service	71.50	0.59	3.58	High
include	71.37	0.63	3.57	high
2. IT staff service				
2.1 Friendly, courteous, and willing to service	70.33	0.88	3.52	high
2.2 Attentive, enthusiastic in service	71.33	0.91	3.57	high
2.3 Consulting, recommending usage and solving problems	73.33	0.95	3.67	high
2.4 knowledgeable	71.83	0.49	3.59	high
2.5 Convenience in contacting for service	73.00	0.94	3.65	high
2.6 Quickness in solving problems and services	70.83	0.82	3.54	high
2.7 Quality and accuracy of work provided	71.67	0.91	3.58	high
include	71.76	0.84	3.59	high
3. Environment and landscape				
3.1 The equipment inside the room was appropriately arranged	66.33	0.47	3.32	medium
3.2 The interior decoration of the room and the cleanliness of the room	68.67	0.51	3.43	medium
3.3 Room comfort	67.17	0.48	3.36	medium
3.4 The right amount of lighting inside the room	65.67	0.47	3.28	medium
3.5 Optimum temperature in the room	65.83	0.49	3.29	medium
3.6 Atmosphere and service location	65.50	0.45	3.28	medium
include	66.53	0.48	3.33	medium
4. Network and Information Systems				
4.1 The internet is ready enough to provide services	66.17	0.52	3.31	medium
4.2 Internet speed	65.33	0.44	3.27	medium
include	65.75	0.48	3.29	medium

4.50 – 5.00 = highest, 3.50 – 4.49 = high, 2.50–3.49 = moderate, 1.50–2.49 = low, 1.00–1.49 = least

Table 2. The research results show that users of the GPS transportation laboratory at the College of Logistics and Supply Chain from From a sample of 120 people who found that the overall level Medium 68.85 (\bar{x} = 3.45, S.D. = 0.61) If we consider the details ound that respondents were satisfied with

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4. Conclusion

subject research Study on satisfaction level of user in the GPS transportation laboratory for performance development of working process by this research It is an exploratory research research tools are: 1) Satisfaction questionnaire on the services of the College of Logistics and Supply Chain GPS transportation laboratory, 4 items : 1.Computer and equipment 2.IT staff service 3.Environment and landscape 4.Networking and Information Systems to develop GPS transportation laboratory of the College of Logistics and Supply Chain Suan Sunandha Rajabhat University the samples were divided into 2 groups : 1.Logistics and Supply Chain College Student Suan Sunandha Rajabhat University 2. Lecturer, College of Logistics and Supply Chain Suan Sunandha Rajabhat University with a simple random method (simple random sampling)

a study of the satisfaction of the sample access to the College GPS transportation laboratory labs, Logistics and Supply Chain Suan Sunandha Rajabhat University this time, the researcher has applied the principles of designing and developing an efficient operational process the results of questionnaires were summarized and collected by the researcher data with mean (\bar{x}) and standard deviation (SD) the results showed that users of the College of Logistics and Supply Chain GPS transportation laboratory labs satisfaction is medium to high.

5. Suggestions

1. The GPS transportation laboratory should be improved and developed to be more efficient.
2. The system and internet speed should be improved to enable users of the GPS transportation laboratory to utilize information from the internet more effectively.

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