

THE PROCESS OF CLASSROOM AND LABORATORY RESERVATION IN THE COLLEGE OF INNOVATION AND MANAGEMENT

Maneerat Thong-on^{1*}, Jiraporn Boonying², Yenjit Kongpan³

*^{1,2,3}College of Innovation and Management, Suan Sunandha Rajabhat University, Dusit,
Bangkok, Thailand*

E-mail: Maneerat.th@ssru.ac.th, jiraporn.bo@ssru.ac.th, yenjit.ko@ssru.ac.th

ABSTRACT

This research aims to improve the college's online classroom and laboratory booking process, as today's classroom and laboratory bookings are outdated. It is a documented booking system whereby the requester must contact the staff directly. Therefore, the classroom and laboratory booking process has been developed to help support systematic operations and reduce hassles.

They developed an online classroom and laboratory reservation system, where we studied and gathered various data from inquiries from classroom and laboratory booking administrators. The applicant has booked a classroom and laboratory and has studied the documents for booking a laboratory classroom. Study the work process of booking classrooms and laboratories and make them aware of problems in booking classrooms and laboratories. The needs of each user's side The researchers concluded the development of the system was divided into 5 stages. 1. Collect information on requirements 2. Design the process 3. Develop the booking process 4. Test the booking of room 5. Prepare the documentation and instruction manual. It was found that the classroom and laboratory booking system developed by researchers can make booking classrooms and laboratories easier to use. It facilitates and benefits classrooms and laboratories. This makes it easier and faster to book a room. and reduce errors in booking more redundant laboratory classrooms.

Keywords: Process, Classroom Reservation, Laboratory Reservation

INTRODUCTION

1. Introduction

Nowadays, information technology is increasingly important in human life. It is a part that makes it more comfortable in many ways, and in different places, more technology is being used. Make the work process systematic and fast due to working in all departments. All organizations require a meeting to discuss, which requires a meeting place.

College of Innovation and Management Suan Sunandha Rajabhat University Classes are organized. Organize training, conferences, and teaching and learning activities, each of which requires a venue to conduct activities. This has led to the current classroom and laboratory booking process, where the College of Innovation and Management's classroom and laboratory reservations are currently outdated. As a documented booking, users must come to the One Stop Service to contact the staff or by talking on the phone. To know the availability at the desired time. Once you know it, you still need to write a document to request the use of the room. With these steps, there are drawbacks: the officer may forget to record the details or the details are not recorded. In some cases, guests are not booked in advance, so redundant meeting rooms may be used. Errors may occur during the instructor's communication with staff, as well as errors that may occur in the process of checking for staff availability.

We found problems with classroom and laboratory booking services, so we designed an online classroom and laboratory booking process. It can reduce paper consumption. Simplifies classroom requests and reduces time to request classrooms. Reduce mistakes in classroom requests Reduce the problem of duplication of classroom use and facilitate academic staff, academic support, students, and outsiders.

2. Objective

To improve the online classroom and laboratory booking process of the College of Innovation and Management.

LITERATURE REVIEW

System Development Life Cycle: SDLC

System Development Life Cycle: SDLC is the process of developing work systems or information technology systems to help solve business problems or meet the needs of the organization. system development is divided into 7 stages: 1) Problem recognition is the first important activity to set clear goals for improvement by using the system to help classify the acquired problem information, group, and prioritize it. To select the most suitable projects to develop. 2) Feasibility Study on whether modifying the system with minimal cost and time but with probable results is appropriate. 3) Analysis: Collection of information on the problems of the needs that are available for system design. 4) The user will analyze the operation of the old system (As Is) and the needs of the new system (To Be), and then use the results of the study and analysis to write a system flowchart diagram and data flow diagram. The design uses the results of the analysis to design a logical design to solve the problem. Focus on the design of the outline on paper and send it to the system designer for design. Details of device features used, the technology used, database type, design, and appropriate network Characteristics of data entry 5) Development & Test is a coding process to develop a system from paper to a system according to the specified characteristics. Ensure accuracy and meet your needs.

6) Implementation is the process of implementing a fully developed system to install and start using it in practice. In this section, in addition to installing the system, it is used. Support procedures must also be prepared to make it fully usable. 7) System maintenance is a maintenance process. The system continues after the start of operation. System users may encounter problems later, such as problems due to unfamiliarity with the new system. Follow-up and evaluation Collect

system update requests Analyze the data, request system improvement, and then design the work that needs to be improved and installed, which requires training to use the system for the user to know the satisfaction of the user.

The organization's implementation of the system development cycle guidelines will allow for efficient operation. Have clear guidelines and procedures for implementation. It is easy to control the time and budget by choosing to follow all or part of the guidelines, which may vary depending on the method or procedure to be adopted, which can be adjusted to suit the readiness of each organization.

The concept of developing a classroom and laboratory reservation system in Suthas Sukhampa. (2015). said that the process of developing a classroom and laboratory reservation system starts from 1) analyzing the needs of users to study the needs in various areas such as section design, administrators having the scope of work, adding, deleting, editing classroom information, and improving classroom information. The operation, approval/cancellation, booking Members such as booking rooms, meetings, choosing the date and time of booking classrooms and laboratories, 2) applying various needs to analyze the system and design a new system, 3) designing a new system using a data flow diagram. And 4) patterns, analysts can use stream diagrams instead of explanations of both the logical and physical characteristics of information systems. The design of the classroom reservation system and the online laboratory should be based on the needs of users within the organization by designing with the user in mind as the main within the system, using simple language to convey to the user easily. The system will check in the database if there is no duplicate database to receive the right to book classrooms and laboratories, and within the system will indicate the name of the booker Jenjira Jamsiri et al. (b30>2557) have mentioned that the classroom reservation system and online laboratory, the Rajamangala University of Technology Lanna Phitsanulok Start by collecting data using questionnaires, then use the data obtained to analyze the needs of the user to meet the needs of the user as much as possible and continue to develop the system.

System Analysis and Design

McLeod and Schell. (2011). explained. The Systems Development Life Cycle is there. Step 7 is 1). Problem recognition: Understand the problem 2) Feasibility Study to determine what the problem is and decide whether the development of an information system or the modification of an existing information system is feasible at the least cost and time and effective. 3) Satisfactory Analysis by collecting various data obtained from the feasibility study process to write data flow diagrams, data dictionaries, and structured decisions to help in the analysis 4.) The design begins to decide how to structure the program. 5) What should be done in the design of the program, and the design of the program, system security must be taken into account to prevent possible mistakes. 6) Construction at this stage may be considered as purchasing new software or developing a program entirely by itself or updating the existing one. and 7) Maintenance, i.e. fixing the program after use. Reasons why programs need to be modified after using them The reasons why most systems need to be fixed are 2. This is (1) there is a problem in the program and (2) the operation of the organization or business has changed.

Bigs, Birks, and Atkins. (1980). proposed an idea of the system development phase, which consists of four stages: 1) System Planning is the first step in the development of a system by formally changing the mindset that a new system has been requested consisting of preliminary surveys and feasibility studies for system development, 2) System Requirements study provides the basic information that is important for creating the approach to development. System analysis and operations, user system needs survey Using technical support methods 3) System

development is a process that begins with the acceptance of concepts. And it will end up developing into a complete system that can be put into practice. Determination of the technical characteristics of the technical development system used to support the system. Application of characteristics to computer programs, testing programs Development of operation manuals, and system control Training system users Implementation of the plan and 4) system implementation is an important step after the system is tested. At this stage, the system needs to be reconfigured to be suitable for re-use, and the results must be reviewed after the system has been put into practice. This is to allow the system to be developed. It is as complete as possible and also keeps the system intact.

The principle of service is extremely important in providing services to customers, which is in line with the concept of Kulthon (1985) commenting on the principle of good service that considering the concept of service. It shows that the goal of the service is to create satisfaction for the service users. Therefore, to measure whether the service will achieve the goal or not is one way. is a measure of satisfaction of people who receive services because of this measure of satisfaction It answers the question of whether the service agency has the capacity to respond to the needs of the people or not, how much, and how. Enough to summarize the meaning of the service that It is a service practice to meet the needs and necessities of customers or people who come for services. (Jiraporn Boonying, Yenjit Kongpan. 2022)

RESEARCH METHODOLOGY

To get a good classroom and laboratory reservation system. More efficient Therefore, the researchers analyzed the current classroom and laboratory booking system to know the advantages and disadvantages of the current process system. This enables the management of various data to be used to the fullest efficiency. We studied and collected various data used in system analysis and development. From inquiries to the staff in charge of the classroom and laboratory reservation system. Requesters use classrooms and laboratories. Study the booking documents and work process in booking classrooms and laboratories. Make aware of problems in booking classrooms and laboratories. The needs of each user's side Make the developed system clear. It also makes the system easy to operate and minimizes system errors. The system development is divided into 5 stages as shown in Figure 1 as follows:

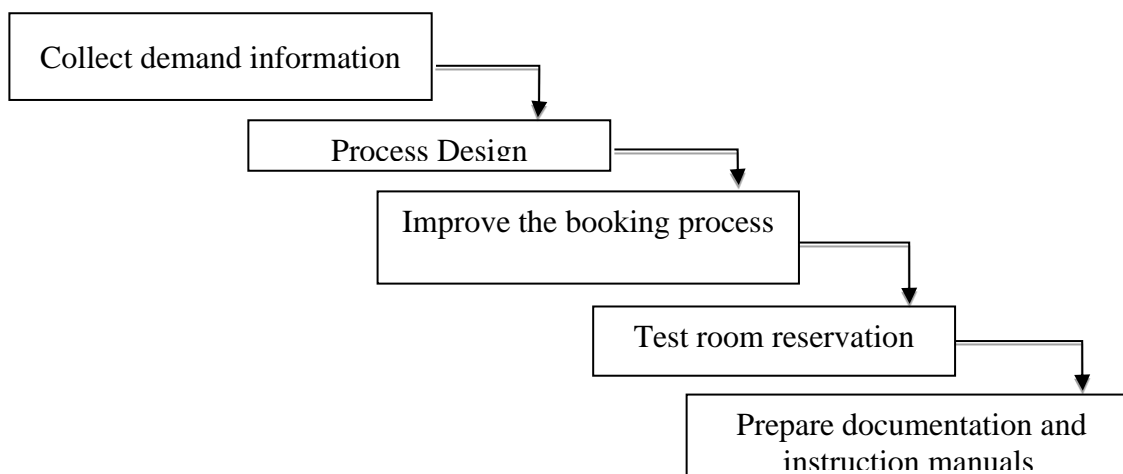


Figure 1: Steps to develop the system

CONCLUSION

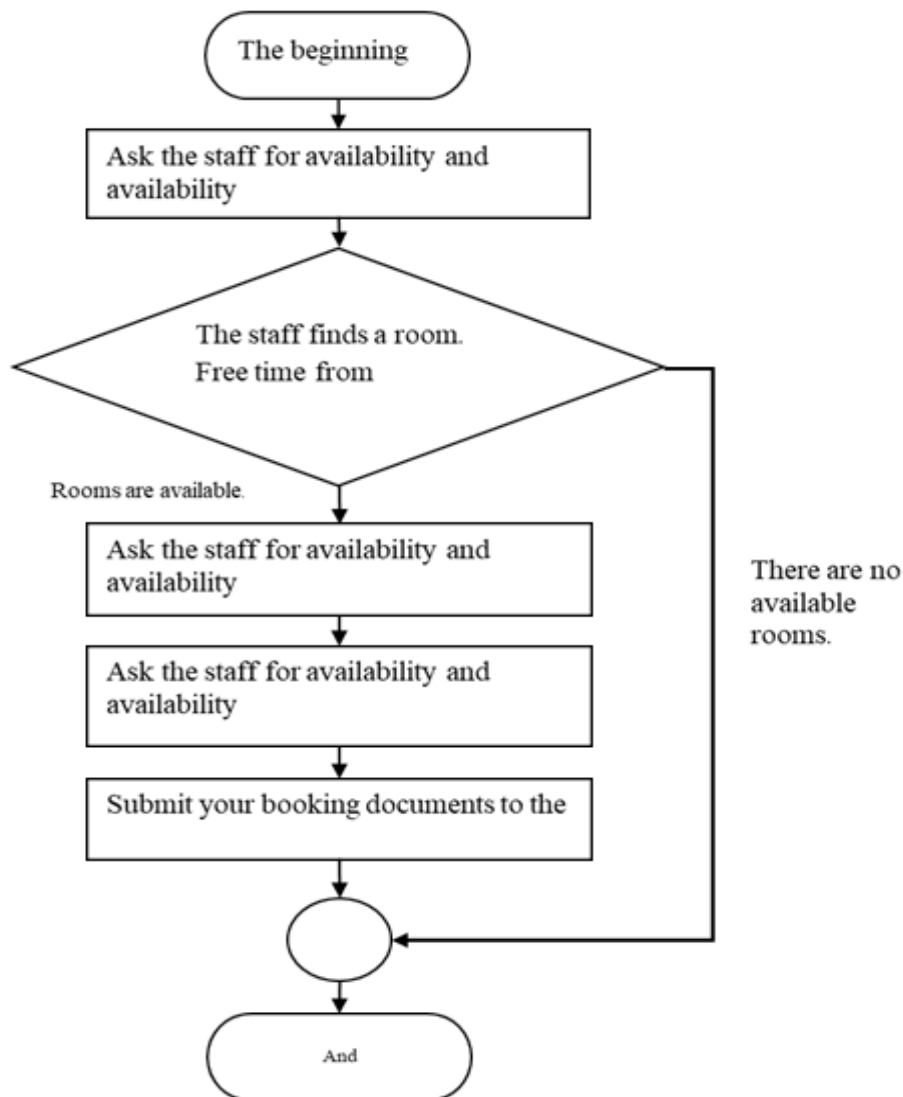
We asked classroom and laboratory booking administrators about the current booking process by booking the current room. The steps are as follows:

Step 1: The requester uses the room to contact the staff to inquire about the free time in the classroom and laboratory as required by the requester.

Step 2: The staff will find the room available for the requester to use.

Step 3: The requester fills out the document to request the use of the room.

Step 4: The requester submits the yoke to the staff to make a reservation.



Picture 2: How to book an old room

Based on the analysis of the current classroom and laboratory booking system.

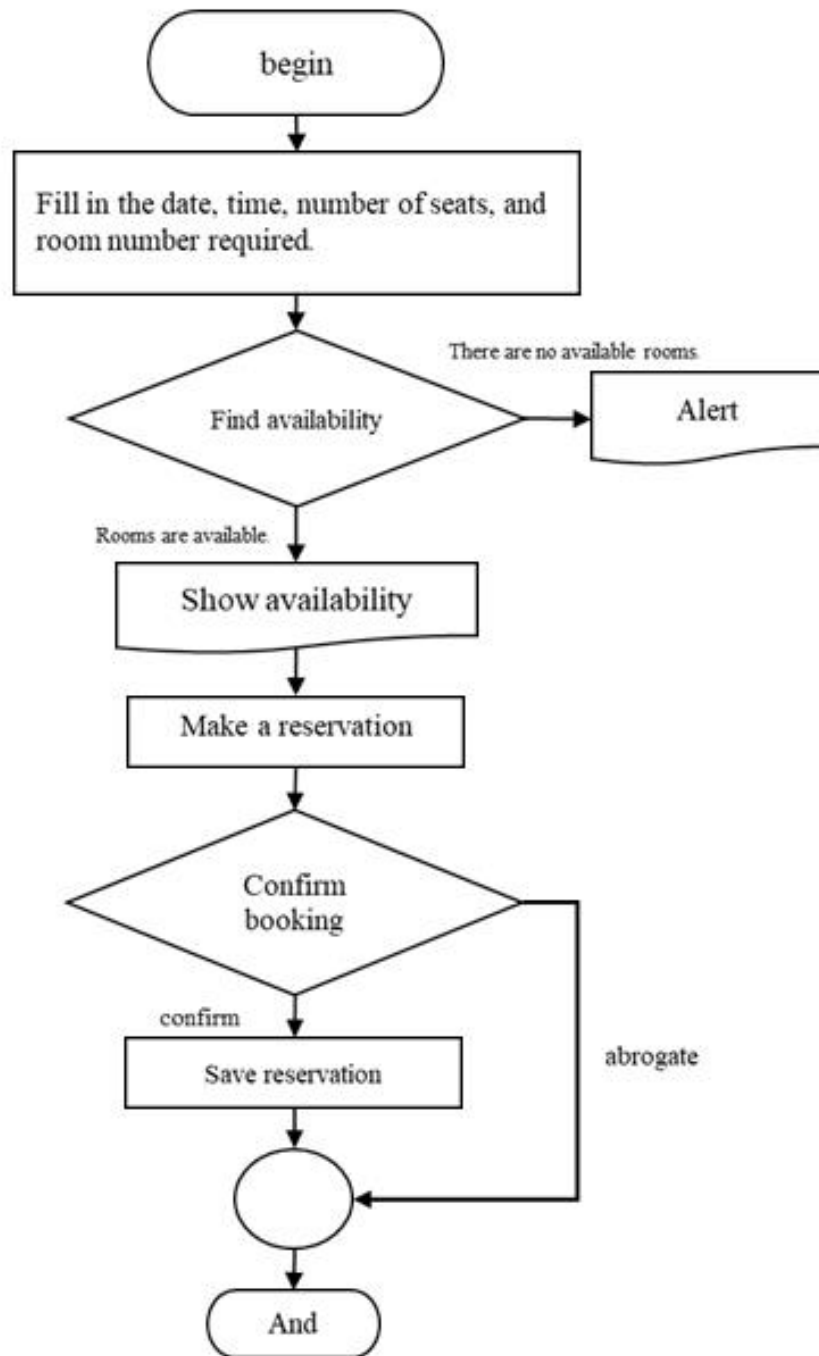
The researchers foresaw the following problems and disadvantages of booking a room:

1) The officer is obliged to check the date. Classroom and laboratory free time

2) Inconvenience in booking classrooms and laboratories as the requester must contact the staff directly to ask for the date. Room availability and also need to do the paperwork to book the room.

3) It is also an outdated booking system. This makes it difficult to store and find documents and can result in loss.

We then implemented a new process of booking classrooms and laboratories through an online booking system. The procedures are as follows:



Picture 3: New Room Booking Process

From the development of the classroom and laboratory booking process, it can be seen that the online classroom and laboratory booking system can make booking classrooms and laboratories easier. It can facilitate and benefit the requester to use the room. This makes it faster to book a room. No paperwork is required to book a room which reduces the burden on staff to collect documents, as well as avoiding mistakes in booking duplicate rooms.

SUGGESTIONS

1. There should be publicity about the importance and benefits of using online classrooms.
2. Intensive and continuous workshops should be held to ensure the understanding of the room users.

REFERENCES

- Biggs, C. L., Birks, E. G., & Atkins, W. (1980). *Managing the systems development process*. Engle wood Cliffs, NJ: Prentice Hall
- Genjira Jamsir. Development of online meeting room reservation system the Rajamangala University of Technology Lanna Phitsanulok: The 18th National Conference on Graduate Studies, Northern Rajabhat University, and the 4th Lampang Research Conference
- Jiraporn Boonying, Yenjit Kongpan. (2022). Study satisfaction on service quality of Castella Taiwan in Bangkok area. College of Innovation and Management, Royal
- Laudon, K. C., & Laudon, L. P. (1996). *Management information systems (4th ed.)* New Jersey: Prentice-Hall.
- Piranut Triyan. Development of an online meeting room reservation system for MEA. Source: <https://coop.tni.ac.th/new/attachments//676.pdf>
- Prentice-Hall. (2015). Development of The Conference Room Management System of Nakhon Ratchasima College: The 2nd National Conference on "Creating and Developing for Progress to the ASEAN Community"