

# GUIDELINES FOR DEVELOPING AN APPOINTMENT SYSTEM FOR THE IT SUPPORT TEAM COLLEGE OF INNOVATION AND MANAGEMENT SUAN SUNANDHA RAJABHAT UNIVERSITY

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## ABSTRACT

This study aims to create an appointment system by implementing Google Applications (such as Google Form, Google Sheets, and Google Calendar), as well as to study satisfaction in use from a sample of respondents who are lecturers under the College of Innovation and Management, Suan Sunandha Rajabhat University a total of 30 people.

The research results showed that this developed system can send automatic notifications to users through google applications at the time of the appointment correctly Convenient to use, notifications can be sent to users quickly. Daily activities or appointments are notified in advance. It helps to remind and make it possible to manage time. The working steps are When the service user fills out the form requesting an appointment for filming a teaching video on Google Forms, the information will be sent to Google Sheets and then there will be a notification to Google Calendar which facilitates both service users and staff in time management and work to be convenient and fast.

**Key words:** Appointment System, Google Application, IT Support Team

## INTRODUCTION

Information technology has advanced quickly in the modern era. One of the most crucial aspects of achieving a goal and preventing the COVID-19 viral issue, which is presently widespread, is the communication process. So, working in a new way (New Norma) is a part of modern civilization. It is a rule that alters management techniques, communication styles, practices, and ways of thinking and learning in new ways. to manage the problem as we transition towards the digital era Technology has altered communication. where anybody may schedule an appointment using internet resources Sender and receiver are always interacting with one another. This makes it simpler and quicker to get news information.

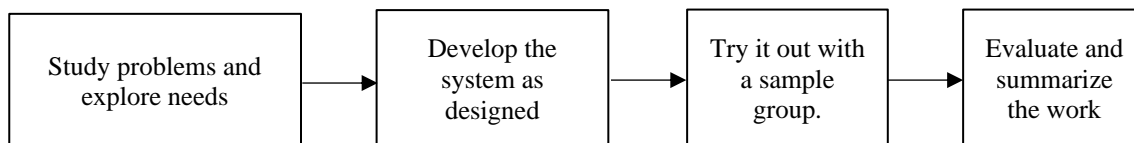
College of Innovation and Management Suan Sunandha Rajabhat University Open 100% online course. Each semester has a timetable. and the concept of participation in various fields from the role of the Democrat Party in promoting the participation of female politicians in the parliament (Pannawat Chuvichian, 2018) came to set the date and time of classes from the

educational service system that made an appointment with the instructor in each subject to take a teaching clip according to the subject area. by allowing teachers to participate in appointments Including there are steps to fix that take time to do. It is therefore very important to have an appointment schedule to inform operators and instructors of the schedule for the exact date and time of the video recording. This enables officers to determine the correct time for performing their duties with maximum efficiency.

To create an appointment system for recording videos, the researcher investigated how Google Forms and Calendar might be used. To create an online appointment system, the project's creators as well as the team in charge of recording and editing instructional videos Becoming a system that can be managed by apps is the aim. The right application. It is a straightforward system that doesn't require complex structural design or the creation of computer language commands. so that persons in charge of scheduling time may build application systems without having any programming experience and fix the issue on their own. In the beginning, therefore, intends to introduce a collection of Google for Education apps (Google Application for Education) to design a date.

## 1.2 Conceptual framework

This research has a conceptual framework for the study method and develops all 4 steps as shown in Figure 1 together with



**Figure 1** *Conceptual Framework for Study and Development Methods*

**Step 1:** Study and collect information on tools used in system development Study the problematic condition of the old appointment format. and exploring the need for appropriate notification channels. The sample group was teachers who were responsible for teaching each subject. For online courses, 30 people, used online questionnaires from the Google Forms program.

**Step 2:** Analyze and design the operation of the system. Based on the information studied and explored in Step 1, the researcher has designed a system structure map. There are processes and programs used, including Google Mail or Gmail by the responsible staff. By assigning the right to be able to add or manage event information in the event calendar. By making an appointment, the responsible staff will send the Google Forms link to the instructor. Then, when the instructor fills out the form The information will be sent to Google Sheets, and the staff will bring the date and time of the appointment to be recorded in the Google Calendar as picture 2

### ระบบจองห้อง Studio

คำชี้แจง  
 1. ระบบจองห้องจะแจ้งเตือนให้ผู้จองห้องพัก (เข้า อาคาร) เข้ามาที่ ห้องจองอัตโนมัติ  
 2. ขอสงวนสิทธิ์ในการจองห้องพัก (จองล่วงหน้า) หรือ การจองห้องพัก (จองล่วงหน้า) มาพร้อม  
 ใบจองล่วงหน้า

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ระบบจองห้องพักอัตโนมัติระบบจองห้องพัก

แจ้งเตือน

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**ชื่อ-นามสกุล \***

คำขอจองห้องพัก

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**สาขา \***

คำขอจองห้องพัก

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**เบอร์มือถือ \***

คำขอจองห้องพัก

ระบบจองห้อง Studio (กรณระบบ)

ไฟล์ แก้ไข ดู รายการ ควบคุม ข้อมูล เครื่องมือ ส่วนขยาย ความช่วยเหลือ

A1	A	B	C	D	E	F	G	H
	วันที่จอง	ชื่อ-นามสกุล	เบอร์มือถือ	สาขา	พื้นที่ห้อง	วันและเวลา จอง	วันและเวลา คืน	สถานะการจอง
1	14/6/2022, 20:46:39	Test	098541928	Test	1	16/6/2022, 9:00:00	16/6/2022, 11:30:00	
2	15/6/2022, 11:20:47	อ.นพดล ชวนโสม	086607969	CM2123 วิทยาลัยการอาชีวศึกษา	พื้นที่ 1	23/6/2022, 9:00:00	23/6/2022, 16:00:00	<a href="https://classroom.google.com/v">https://classroom.google.com/v</a>
3	15/6/2022, 11:22:43	อ.นพดล ชวนโสม	086607969	วิทยาลัยการอาชีวศึกษา	พื้นที่ 2	24/6/2022, 9:00:00	24/6/2022, 16:00:00	<a href="https://classroom.google.com/v">https://classroom.google.com/v</a>
4	15/6/2022, 18:28:49	ศ.ดร.นพดล ชวนโสม	0815756491	วิทยาลัยการอาชีวศึกษา	พื้นที่ 1	21/6/2022, 9:00:00	21/6/2022, 12:00:00	
5	17/6/2022, 10:04:58	นพ.สุวิทย์ สวัสดิ์	0924852659	01 วิทยาลัยการอาชีวศึกษา	พื้นที่ 3	27/6/2022, 13:00:00	27/6/2022, 15:00:00	<a href="https://classroom.google.com/v">https://classroom.google.com/v</a>
6	20/6/2022, 16:59:46	อ.พิชญ์นพิต ทรัพย์ทวี	0811037945	01 วิทยาลัยการอาชีวศึกษา	พื้นที่ 3	21/6/2022, 9:00:00	21/6/2022, 12:00:00	<a href="https://classroom.google.com/v">https://classroom.google.com/v</a>
7	28/6/2022, 14:04:16	นพ.สุวิทย์ สวัสดิ์	0815756491	01 วิทยาลัยการอาชีวศึกษา	พื้นที่ 1	29/6/2022, 13:00:00	29/6/2022, 15:00:00	
8	28/6/2022, 17:12:59	อ.บุญฤดี ทรัพย์ทวี	0946545154	วิทยาลัยการอาชีวศึกษา	พื้นที่ 3	6/7/2022, 9:30:00	6/7/2022, 16:00:00	<a href="https://classroom.google.com/v">https://classroom.google.com/v</a>
9	29/6/2022, 12:12:35	ศ.ดร.นพดล ชวนโสม	0866444141	SMA 2201	พื้นที่ 4	30/6/2022, 9:15:00	30/6/2022, 10:30:00	<a href="https://classroom.google.com/v">https://classroom.google.com/v</a>
10	18/7/2022, 11:02:42	อ.นพดล ชวนโสม	086607969	CM2123	พื้นที่ 1	18/7/2022, 9:00:00	18/7/2022, 16:00:00	<a href="https://classroom.google.com/v">https://classroom.google.com/v</a>
11	26/7/2022, 13:01:57	นพ.สุวิทย์ สวัสดิ์	0818817893	วิทยาลัยการอาชีวศึกษา	พื้นที่ 4	27/7/2022, 10:00:00	27/7/2022, 12:00:00	<a href="https://classroom.google.com/v">https://classroom.google.com/v</a>
12	3/8/2022, 8:10:07	ศ.ดร.นพดล ชวนโสม	0866444141	SMA 2201	พื้นที่ 4	3/8/2022, 9:00:00	3/8/2022, 9:00:00	<a href="https://classroom.google.com/v">https://classroom.google.com/v</a>
13	31/8/2022, 13:37:31	บุญฤดี ทรัพย์ทวี	0946545154	วิทยาลัยการอาชีวศึกษา	พื้นที่ 4	22/9/2022, 10:00:00	22/9/2022, 16:00:00	
14	31/8/2022, 13:40:49	บุญฤดี ทรัพย์ทวี	0946545154	วิทยาลัยการอาชีวศึกษา	พื้นที่ 4	6/9/2022, 10:00:00	6/9/2022, 16:00:00	<a href="https://classroom.google.com/v">https://classroom.google.com/v</a>
15	13/9/2022, 8:43:58	บุญฤดี ทรัพย์ทวี	0946545154	วิทยาลัยการอาชีวศึกษา	พื้นที่ 4	23/9/2022, 10:00:00	23/9/2022, 16:00:00	
16	22/10/2022, 13:04:03	นพ.สุวิทย์ สวัสดิ์	0815756491	วิทยาลัยการอาชีวศึกษา	พื้นที่ 1	15/12/2022, 9:30:00	15/12/2022, 10:30:00	
17	22/10/2022, 13:36:38	บุญฤดี ทรัพย์ทวี	0815756491	วิทยาลัยการอาชีวศึกษา	พื้นที่ 5	9/12/2022, 13:00:00	9/12/2022, 16:00:00	
18	22/10/2022, 22:50:36	นพ.สุวิทย์ สวัสดิ์	0924852659	วิทยาลัยการอาชีวศึกษา	พื้นที่ 3	8/12/2022, 13:00:00	8/12/2022, 15:00:00	<a href="https://classroom.google.com/v">https://classroom.google.com/v</a>
19	4/12/2022, 12:19:31	นพ.สุวิทย์ สวัสดิ์	0924852659	วิทยาลัยการอาชีวศึกษา	พื้นที่ 3.1	14/12/2022, 10:30:00	14/12/2022, 11:30:00	<a href="https://classroom.google.com/v">https://classroom.google.com/v</a>
20	19/12/2022, 0:30:31	ศ.ดร.นพดล ชวนโสม	0866444141	วิทยาลัยการอาชีวศึกษา	พื้นที่ 4 / 4.0, 4.1, 4.2, 4.3	23/12/2022, 9:00:00	23/12/2022, 11:00:00	<a href="https://classroom.google.com/v">https://classroom.google.com/v</a>

ปฏิทิน

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สัปดาห์	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
สัปดาห์ที่ 1																																	
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Picture 2 Design of appointment system operations

**Step 3:** Testing the use of the automatic appointment system through the Google Calendar application with the sample group, which is an online course instructor. College of Innovation and Management Suan Sunandha Rajabhat University, 30 people, by testing the use for a period of 3 months.

**Step 4:** Study and analyze the satisfaction of using the automatic appointment system through the Google Calendar application. The sample group was instructors in online courses. College of Innovation and Management Suan Sunandha Rajabhat University, 30 people have passed the system trial. with a specific selection method, the data collection tool was used as an online questionnaire using the Google Forms program. There were 5 question topics, consisting

of 1) notification efficiency. 2) completeness of information 3) Ease of use 4) suitability 5) Overall Satisfaction It is a scaled question with a value of 5 levels, i.e. very good level is equal to 5 points, the good level is equal to 4 points, the medium level is equal to 3 points, low level is equal to 2 points and the least level. equal to 1 point

## **RESEARCH METHODOLOGY**

### **2.1 Sample population**

The sample group was instructors in online courses. College of Innovation and Management Suan Sunandha Rajabhat University, 30 persons were selected by purposive sampling.

### **2.2 Research tools**

The Google Application Program, which includes Google Calendar, Google Drive, Google Mail, Google Sheets, and Google Forms, is one of the tools used in system development. Tools for gathering data are Online questionnaires utilizing the Google Forms application. Measured The level of satisfaction in each component is a 5-level Rating Scale.

### **2.3 data analysis**

Descriptive statistics including percentage mean, and standard deviation were used for data analysis. In this regard, the interpretation of the mean criteria finding the range and stratum, then using the difference obtained to determine the criteria for measuring the opinion level as follows:

- 4.21- 5.00 indicates an extremely high level
- 3.41- 4.20 indicates a high level
- 2.61- 3.40 indicates a moderate level
- 1.81- 2.60 indicates a low level
- 1.00 - 1.80 indicates an extremely low level

## **RESULTS AND FINDINGS**

### **3.1 Appointment calendar test results**

Appointment calendar test results Adding and Managing Appointment Information This system uses a calendar from the Google Calendar program that can create sub-calendar entries to separate group events. And can set the color scheme displayed on the calendar. For the convenience of viewing information and planning appointments, the Google Calendar program supports many devices such as computers, tablets, or smartphones. Which is convenient to use and has a simple and user-friendly menu.

### 3.2 Satisfaction assessment results

Satisfaction evaluation results for using automatic event reminders and appointments through the LINE application. From the sample of users, which are personnel under the Department of Computer Science. Faculty of Science Chiang Mai University in the amount of 36 people, consisting of 27 academic personnel and 9 academic support personnel. The evaluation results were as follows: Notification efficiency Received satisfaction at the highest level ( $\bar{x} = 4.84$ , S.D.=0.37) in terms of completeness of the notification information. Received a high level of satisfaction ( $\bar{x} = 4.40$ , S.D.=0.71) in terms of ease of use. received satisfaction at the highest level ( $\bar{x} = 4.72$ , S.D.=0.46) in the accuracy of the data. was satisfied at the highest level ( $\bar{x} = 4.68$ , S.D.=0.56). received the satisfaction result at the highest level ( $\bar{x} = 4.76$ , S.D.=0.44) and the overall average satisfaction score was at the highest level ( $\bar{x} = 4.68$ , S.D.=0.50), as shown in Table 1.

**Table 1** Results of satisfaction assessment from users

Clause	Question	Average	Standard deviation	Level of satisfaction
1	Notification performance	4.84	0.37	most satisfied
2	The completeness of the notification sent information.	4.40	0.71	very satisfied
3	ease of use	4.72	0.46	most satisfied
4	Notification accuracy	4.68	0.56	most satisfied
5	overall satisfaction	4.76	0.44	most satisfied
	average evaluation	4.68	0.50	most satisfied

## DISCUSSION

3.3.1 The test results of the work in the part of the calendar to record events by using the Google Calendar program. The test results showed that the Google Calendar program can easily add and save event data. It's convenient and free to use. can be shared with all personnel to view activities Compatible with computers smartphones and tablets which the responsible staff can use as well As for the recorded appointment information, it can be used as information for planning the video clip shooting in advance. to avoid conflicting appointments In addition, the recorded activity data can be compiled into a summary report of the activities for each year. To be used as part of the report on indicators according to the mission of the agency that has been completed. The research results are also consistent with Janya Chuenarrom (2019) who has developed a time reservation system for using dental laboratory equipment. Faculty of Dentistry Prince of Songkla University by using Google Sheets and Google Calendar. The experimental results showed that

it can help facilitate service users and staff in managing time and work. Able to collect statistical data on usage accurately convenient and fast

3.3.2 The result of user satisfaction assessment on the use of the automatic appointment system via Google Calendar from a sample group of users, namely teachers in online courses. College of Innovation and Management Suan Sunandha Rajabhat University, 30 persons were selected by purposive sampling. There are satisfaction scores in the following areas: Notification efficiency It can help remind and make users more able to participate in activities. There was a satisfaction score at the highest level ( $\bar{x} = 4.84$ , S.D = 0.37). Appointment time, location, and appointment details Received a high satisfaction score ( $\bar{x} = 4.40$ , S.D = 0.71) in terms of ease of use. The system sends notifications to the user's email. Helps to receive notifications immediately. There was a satisfaction score at the highest level ( $\bar{x} = 4.72$ , S.D = 0.46) for the correctness of notifications. The system can send notifications according to the time specified correctly, ie 1) Sending a summary of each day's appointments and 2) Sending reminders before the appointment time. Received the satisfaction score at the highest level ( $\bar{x} = 4.68$ , S.D = 0.56) in terms of overall satisfaction towards using the system. received the highest satisfaction score ( $\bar{x} = 4.76$ , S.D = 0.44) and the average overall satisfaction score from all aspects was at the highest level ( $\bar{x} = 4.68$ , S.D = 0.50).

## CONCLUSION

Automatic notification of events and appointments via Google Calendar by applying this developed Google Application. Can automatically send notifications to users via Gmail on mobile phones when the appointment time is right. convenient to use Alerts can be sent to users quickly. There is a summary of the list of activities or appointments for each day to be informed in advance. This helps to remind and make it possible to film teaching video clips on the specified date and time. As for the recorded activity data, it can be used as appointment planning information. and create a report summarizing total activities in each year To show the results of activities that are consistent with indicators according to the mission of the agency that has been completed. They received the highest level of satisfaction with the efficiency of notifications ( $\bar{x} = 4.84$ , S.D = 0.37), the completeness of information sent notifications at a high level ( $\bar{x} = 4.40$ , S.D = 0.71). The highest level of usage ( $\bar{x} = 4.72$ , S.D = 0.46), the accuracy of the data at the highest level ( $\bar{x} = 4.68$ , S.D = 0.56), and the overall satisfaction at the highest level ( $\bar{x} = 4.76$ , S.D. = 0.44) and the average satisfaction score was included in the highest level ( $\bar{x} = 4.68$ , S.D = 0.50).

## SUGGESTION

### Research recommendations

5.1. Suggestions for applying the research results in This research can be applied and developed for notifications in other areas, for example, for use with the test date notification form. Notification system for the delivery schedule of goods picking Salary document submission notification system or online classroom booking system

5.2. Suggestions for further research The development of automatic reminders of events and appointments via Google Calendar should be further developed to be able to be used with notifications in other channels such as notifications via Facebook. Via short messages (SMS), e-mail, or LINE to allow the system to have a variety of applications and reach more groups of users.

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