Guidelines for managing the repair notification system Faculty of Fine and Applied Arts Suan Sunandha Rajabhat University

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Abstract

Research on this matter Objectives: 1) To study the management of the repair notification system. Faculty of Fine and Applied Arts Suan Sunandha Rajabhat University 2) To develop guidelines for managing the repair notification system. Faculty of Fine and Applied Arts Suan Sunandha Rajabhat University 3.) To improve performance and reduce work procedures.

From the study of management guidelines for the repair notification system Faculty of Fine and Applied Arts Suan Sunandha Rajabhat University Resulting in guidelines for the development of guidelines for managing the repair notification system. Faculty of Fine and Applied Arts Suan Sunandha Rajabhat University in a better way It is convenient and able to manage information about repair notifications very well.

Keywords: Repair notification system**,** personnel, efficiency

1. Introduction

Currently, the development of the country in terms of society, economy, and all sectors has been progressing rapidly, especially in the post-COVID-19 era. Human lifestyles have been pushed to transition into information systems more. This includes work related to the notification system for the repair of public utilities within government agencies, which is crucial for enhancing work development and gaining a competitive advantage in organizational development. This is especially important in the current high-competition environment. The transformation of document systems from traditional paper-based or handwritten forms into electronic document formats, and the shift in communication methods using information technology, has greatly assisted in managing various types of data, both existing and new, through network technologies or the internet. This enables the efficient management of information in a fast manner, allowing communication and data exchange between individuals, regardless of their location anywhere in the world.

From the interviews with administrators, staff, and students of the Faculty of Fine and Applied Arts at Suan Sunandha Rajabhat University, it was found that most people, when facing issues with damaged materials, equipment, building facilities, and public utilities, were unaware of the proper channels for submitting complaints or reporting such problems. As a result, they often resort to using social media platforms, particularly the LINE application, by sending direct messages to the personal LINE accounts of staff members. While this method is convenient, it does not allow for proper recording of repair requests in an organized manner, causing delays,

and it cannot be used as official data. Therefore, there is a need to develop a more modern repair notification system that is faster, more efficient, and capable of organizing and storing data systematically.

Based on the importance mentioned, the researcher is interested in studying the development of the repair notification system at the Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University. This study will be conducted through document analysis, research review, and interviews with staff members who use the repair notification service within the organization.

1.1 Research Objective

1.1.1 To study the management approach of the repair notification system at the Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University.

1.1.2 To develop a management approach for the repair notification system at the Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University.

1.1.3 To improve work performance and reduce work processes.

2. Body of paper

The research study on the management approach of the repair notification system at the Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University, has the following objectives: 1) To study the management approach of the repair notification system at the Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University. 2) To develop the management approach of the repair notification system at the Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University. 3) To improve work performance and reduce work processes.

2.1 Methods

2.1.1 Population and Sample

For the study on the management approach of the repair notification system at the Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University, the researcher has defined the primary data providers for this study as the staff responsible for building and facilities management within Suan Sunandha Rajabhat University, totaling 10 people.

2.1.2 Research Tools and Tool Quality Assurance

The researcher prepared before going to the field for data collection to ensure that the information or answers obtained were accurate and aligned with reality. Understanding the context of the data providers was essential, and the researcher made sure to study this before conducting interviews for data collection. The tools used in this research include:

2.1.2.1 The Researcher: The researcher is the most important tool in the study. The researcher ensured physical readiness and prepared necessary equipment, such as a voice recorder, camera, notebook, and the interview questions, before going into the field for data collection.

2.1.2.2 Voice Recording Device: To facilitate the research process, the researcher used a voice recorder. Before conducting the interviews, the researcher obtained permission from the interviewees to record their responses.

2.1.2.3 Camera: To enhance the credibility of the research findings, the researcher used a camera. Permission was obtained from the interviewees before taking any photographs.

2.1.2.4 Notebook and Pen

2.1.2.5 Interview Question Guidelines

2.1.3 Data Collection

2.1.3.1 Secondary Data Collection: This involves studying concepts, principles, and relevant research materials, such as books, textbooks, and research documents. The information obtained from these studies and literature reviews was used to create a framework for formulating the interview questions.

2.1.3.2 Primary Data Collection: This data is obtained through interviews using a conversation method and open-ended questions (Interview Guide), which allows for flexibility and covers the research topics. Additionally, observation, note-taking, photography, and the use of a voice recorder were utilized.

2.1.3.3 Interviews: The researcher used in-depth interviews as the method for data collection. Broad interview questions were created as a guideline for the interviews, allowing for flexibility and the ability to adapt questions as needed. The interviews were conducted in a conversational, informal manner to prevent any anxiety in the interviewees, which could affect the reliability of the data. The questioning process may have adjusted the order of questions depending on the situation or context.

2.1.3.4 Observation: The researcher used non-participant observation, gathering data by observing various activities and engaging in collaborative work with the quality assurance staff and the policy and planning division. The researcher took notes and captured photographs of the events to analyze and further review the details.

2.1.4 Data Analysis

The researcher conducted data analysis based on the objectives of the study by categorizing the data analysis according to the study's objectives. The analysis utilized information from literature, textbooks, documents, and related research, combined with data obtained from in-depth interviews and participant observation, to identify connections and relationships within the data. After gathering the data, the researcher analyzed and synthesized it to identify common categories or types. Once the analysis and synthesis were completed, the researcher summarized the findings and verified the accuracy of the data.

2.2 Results

The repair notification management system at the Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University, was developed to enhance the efficiency of reporting public utility repairs by incorporating information technology. The researcher studied relevant knowledge and information, and the results of the study are as follows:

2.2.1 Study of the Repair Notification System Management

The study of the ready-made repair notification system on the website "Naichang.net" focuses on a platform with forms for reporting repairs. The system allows the creator to input the department’s information and create a channel for submitting repair requests via the internet. This enables repair requests to be made anytime, anywhere. The system offers a complete menu

for use, including the ability to create categories and types of repairs, collect data, and generate notifications via the LINE application on the mobile phones of the responsible personnel. This system facilitates both the repair requesters and the technicians without any cost. The Faculty of Fine and Applied Arts has the following repair notification procedure:

2.2.1.1 When damage occurs to equipment or building facilities, the requester submits a repair request by filling out a repair form with the building department staff.

2.2.1.2 The building department staff who receives the request acknowledges it.

2.2.1.3 The building department staff who received the request conducts an initial inspection.

2.2.1.4 Results of the initial inspection: 1.) If the building department staff can fix the issue: The process is completed. 2.) If the building department staff cannot fix the issue, they will coordinate with a specialized technician from an external company or organization to conduct further inspection. 2.1) The specialized technician from the external company or organization submits a repair quotation. 2.2) The quotation is presented to the management and department heads for review and approval. 2.2.1) If the repair is approved, the specialized technician from the external company or organization proceeds with the repair and submits the payment request documents after completing the repair. 2.2.2) If the repair is not approved, the process is considered complete.

2.2.2 Development of the Repair Reporting System Management Approach The process of repairs through the online repair reporting system is as follows:

2.2.2.1 Receive repair notifications through the online repair reporting system by checking the system daily.

2.2.2.2 Open the online repair reporting system to view details and report issues/requests for repairs. These are categorized into 8 types, including: 1.Computers/Equipment. 2. Electrical. 3.Plumbing. 4. Elevators. 5. Air Conditioning. 6. Tables and Chairs. 7. Buildings and Facilities 8. Others.

2.2.2.3 Ask for more details from the person reporting the issue in case the problem information is unclear or if additional details about the issue are needed.

2.2.2.4 Check the condition of the reported issue and assess whether it can be repaired. If repairable, proceed with the repair. If not, inform the procurement department to order the necessary equipment or proceed with contacting a service company for repair.

2.2.2.5 Report the work results to the person who reported the issue. Record a report of the work results and send it to the supervisor. Update the repair status in the online repair request system every time after completing the repair.

2.3 Discussion

The online repair notification system meets the needs of service users, as it allows repair requests to be made through a web application, both on Desktop PCs and Mobile Devices. This provides convenience, speed, and ease of use. Additionally, users can immediately check the status of repair work and approval at each stage of the process. The system can also display repair costs for each job. Approvers can make immediate decisions on whether to repair or not. Furthermore, the system reduces the total repair notification process time, averaging only 7.25 days, with the trend expected to decrease continuously. The study also showed that, in terms of

costs, previously, the approximate cost before making a repair decision was unknown, which could lead to inefficient repairs and unclear repair cost calculations.

From the repair requesters, the maintenance repair notification system has been improved to specify areas and calculate costs based on the area that the department is responsible for. This has made cost estimation clearer, more accurate, and allows for better budget forecasting for future maintenance within the faculty.

The study of stock control management by the procurement staff showed that it solved the problem of maintenance staff wasting time waiting for materials and equipment. By adjusting the procurement process to keep materials and equipment in stock according to the needs of the maintenance staff, the system can track the usage history of materials. The procurement department can evaluate and estimate the supply needs, which impacts the time taken to distribute equipment to maintenance staff. Staff will receive the equipment within 1-2 days after approval of the requisition. This aligns with the study on the development of activities for receiving and storing goods in the warehouse, which found that the process time has decreased and non-value-added activities have been reduced, leading to a shorter overall work cycle (Nonglak, 2014). However, there are still some materials that require longer procurement times, such as specialized scientific equipment that may need to be ordered from abroad, resulting in a backlog of work orders waiting for processing.

This is consistent with the research of Assistant Professor Dr. Pijitra Jomsri, (2022: Abstract), Thailand 4.0 policy is a policy of the Thai government with the objective of driving Thailand towards economic development by emphasizing the value-based economy system that increases value and potential in the production and service sectors that are the foundation of the current economic system of Thailand through the use of innovation, technology and creativity. The technological innovation that helps connect the physical world and digital information is Internet of Things (IoT) technology.. (Assistant Professor Dr. Pijitra Jomsri, Faculty of Science and Technology, Suan Sunandha Rajabhat University)

3. Conclusion

The results of the development of the online maintenance repair management system show that the system allows for repair work orders to be submitted, with approval steps clearly defined. It displays the time duration for each step, making the work of maintenance staff more convenient in checking materials, equipment, and estimating repair costs for each work order. The findings from the research on the use of the system are as follows:

1) The operation steps are clear and can be verified.

2) The system allows for measuring the efficiency of each work process, separating maintenance work and campus locations.

3) The system can predict and show trends in procuring materials and equipment to match the work, as well as assess the situation for repairs.

The result of using the repair management system is that it can reduce the time spent in the repair notification process throughout the entire procedure.

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