
ANALYSIS OF THE INFLUENCE OF WEB-BASED DIGITAL CORRESPONDENCE · SYSTEM (SINDE) IN SUPPORTING MODERN ADMINISTRATIVE TRANSFORMATION AT NUNUKAN STATE POLYTECHNIC

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Abstract

The rapid development of technology requires the world of education, especially the administrative field, to continue to innovate. Nunukan State Polytechnic has also made efforts in the use of information technology for easy access to correspondence. This study aims to analyze the influence of the implementation of a web-based digital correspondence system in supporting modern administration. The research method used is a qualitative descriptive method, which involves collecting data through observation and interviews to understand how this system affects administration at the Nunukan State Polytechnic. The system developed is the Electronic Service Manuscript System application or known as SINDE which will be implemented in 2023 and will be effective in 2024. This application presents the main features, namely letters, dispositions, information, drafts, statistics, reference data for administration in making internal and external correspondence, more precisely electronic-based outgoing and incoming mail. Letters that can be made through the SINDE application are invitation letters, official letters, and various other information letters. This application has been implemented by all Task Implementing Units (UPT), and department study programs at PNN. Since the use of SINDE, correspondence and archive management have become neater and the storage of correspondence files is better because it uses the cloud which is done online and work becomes easier so that the labor used for correspondence activities is reduced and more effective, efficient, and effective.

Keywords: Digital correspondence system, Modern administration, Web-Based system (SINDE).

INTRODUCTION

The development of information technology has brought great changes in various aspects of life, including the field of administration. In the increasingly rapid digital era, the way we communicate and interact has undergone a very significant transformation. One of the most prominent changes is the shift from paper-based conventional correspondence to digital correspondence. Digital correspondence has become an integral part of modern administration. By utilizing web-based technology, organizations can improve efficiency, productivity, and service quality.

In the face of similar challenges in managing administration in a modern way. Previously, the administrative process at PNN was carried out manually, especially in terms of correspondence and document filing. This manual process is often more time-consuming, error-prone, and difficult when it comes to document tracking. This encourages PNN to find innovative solutions to overcome existing obstacles.

In response to these challenges, PNN developed the Electronic Service Manuscript System (SINDE), a web-based platform designed to support the digital management of correspondence and

archives. SINDE will be implemented in 2023 and will be effectively used in 2024 in all Task Implementing Units (UPT) and

Study programs in the campus environment. The system aims to automate administrative processes, reduce reliance on manual methods, and improve the neatness and security of archives through cloud technology. One of the elements that supports the achievement of administrative transformation is the application of digital technology, such as a web-based application, namely SINDE, which can integrate various administrative processes in a more structured and efficient manner. With digitalization, higher education institutions can automate manual tasks, speed up workflows, and ensure that data and documents can be accessed easily and securely.

Modern Administration

Modern administration is a way of managing and organizing administrative activities by utilizing digital technology to make the process faster, easier, and more efficient. In today's era, the use of technology in administration is very important, especially in the world of education. By using digital systems, schools or universities can simplify various processes that were previously carried out manually, such as information delivery, document management, and communication between parties. Modern administration aims to create a more organized and adaptive work environment to changing times, supporting more effective and efficient learning.

1. Research Objectives

1. How does the digital correspondence system affect the quality of student work in compiling various types of official letters, such as job application letters, invitation letters, and official letters?
2. What are the obstacles faced by students and lecturers in adopting a digital correspondence system, and how to overcome these obstacles?

2. Problem Formulation

1. How does the digital correspondence system affect the quality of administrative work in compiling various types of official letters, such as job application letters, invitation letters, and official letters?
2. What are the obstacles that the administration faces in adopting a digital correspondence system, and how to overcome these obstacles?

LITERATURE REVIEW

1. Definition of Digital Correspondence System

A digital correspondence system is a method of communication and document management that uses information technology to store, manage, and distribute information electronically. According to Smith & Rupp (2021), this system replaces conventional paper-based communication with digital means, such as email, document management platforms, and electronic filing systems. This system allows users to access, send, and manage documents and information efficiently without relying on physical media.

2. Implementation of Digital Correspondence System in Education Administration

The use of digital correspondence systems in academic settings has shown significant benefits in improving the effectiveness and efficiency of administration. A study by Johnson *et al.* (2020) revealed that universities that implement digital correspondence systems have experienced an

increase in speed in managing correspondence, especially in the communication process between sections that requires quick coordination. The system also helps in documenting important communications and ensuring information accessibility for lecturers, administrative staff, and students.

3. Benefits of Digital Correspondence System

- **Time and Cost Efficiency:** According to research from Kumar & Singh (2019), digital systems save time and operational costs by reducing the need to print and distribute physical documents. In the long run, institutions can cut the cost of logistics and filing of physical documents.
- **Transparency and Accountability:** Digital correspondence systems allow for accurate and orderly recording of communications carried out. According to Brown (2021), this digital record increases transparency because the information stored in the database can be accessed as needed and makes it easier to track messages or documents.
- **Real-Time Data Access:** Digital devices provide quick access to documents stored in the system. This is stated by Lee & Park (2022) who explained that this real-time access simplifies the decision-making process and provides faster services for system users.

4. Challenges in the Implementation of the Digital Correspondence System

Despite having many advantages, the implementation of a digital correspondence system is also faced with various challenges. According to a study by White (2020), some of the main challenges faced include:

- **Data Security and Privacy:** Data stored in digital systems is vulnerable to cyberattacks. This requires institutions to implement strong security protocols so that personal and institutional data is protected.
- **Resistance from Users:** Not all users immediately accept the new digital system. Research by Chen & Hu (2019) shows that some administrative staff have difficulty adapting and feeling comfortable with the change from manual to digital systems, especially those who are used to traditional methods.
- **Implementation Cost:** While it saves costs in the long run, the initial cost for the development and maintenance of digital systems can be a bottleneck. According to Wilson (2021), the cost of hardware, software, and staff training requires significant budget allocation in the early stages of implementation.

5. Technological Developments in Digital Correspondence Systems

As technology advances, digital correspondence systems are also evolving. Research from Andrews (2022) shows that cloud-based technologies are now often used in digital correspondence systems, allowing for easier access and integration between platforms. In addition, artificial intelligence (AI) is beginning to be used to make it easier to classify documents, automate workflows, and analyze data more in-depth. The use of AI, according to Brown (2021), allows for the prediction of document needs and the automation of follow-up based on the content of the communication, thereby further increasing productivity.

6. The Influence of the Digital Correspondence System on Administrative Transformation in Higher Education

In the context of higher education, the digital correspondence system plays an important role in supporting administrative transformation to be more modern and efficient. Research by Ahmed et al. (2020) shows that universities that have adopted digital systems in correspondence tend to have more effective data management, faster decision-making, and increased satisfaction for academic service users, both lecturers, students, and staff.

7. Conclusion from the existing literature

From the various studies above, it can be concluded that the digital correspondence system makes a significant contribution to the efficiency, accessibility, and quality of administration in the academic environment. However, to achieve optimal results, colleges must address challenges related to security, user adaptation, and initial costs. By overcoming these challenges, universities can utilize the digital correspondence system as an important step in realizing a more modern and responsive administration.

RESEARCH METHOD

The method used in this study is a qualitative descriptive method. Data was collected through direct observation of SINDE usage and in-depth interviews with administrative staff and other users. Data analysis was carried out to understand the extent to which SINDE has an impact on administrative activities.

Research Steps:

1. Observation: Make direct observations of administrative processes using SINDE
2. Interview: Soliciting opinions from system users, such as administrative staff, lecturers, and institutional leaders, regarding the advantages and disadvantages of SINDE.
3. Data Analysis: Processing the collected data to identify changes that have occurred since the implementation of this system. The cloud-based system allows for neater and more secure storage of mail archives. Documents that were previously stored physically can now be accessed digitally, reducing the risk of losing documents due to physical damage. In addition, the statistics feature on SINDE provides in-depth information regarding the number of letters processed, the type of documents, and the dispositions made. This data is very useful for management evaluation and decision-making.
4. Impact on Human Resources

The implementation of SINDE reduces the workload of administrative staff, so that the workforce that previously focused on correspondence activities can be diverted to other more strategic tasks. This shows that this system not only improves efficiency but also optimizes human resources.

RESULTS AND DISCUSSION

Correspondence is one of the important aspects of administration, both in government and private institutions. With the development of technology, digitalization is the main need to increase efficiency and effectiveness. One of the implementations of digitization in correspondence is the Electronic Service Manuscript Information System (SINDE). The following is a discussion of the

changes after and before the use of SINDE, its impact on digital transformation, as well as the signature and stamp elements in this system.

1. Changes in Correspondence Before and After the Use of SINDE include:

1. Before SINDE

- a) Manual and Slow: Correspondence is done physically, taking longer because the delivery of documents uses courier or post.
- b) Paper-Tangible Documents: All documents are printed and stored in physical form, posing a risk of loss and damage.
- c) Convolved Process: The letter requires manual attestation, such as signatures and stamps, which must go through several parties.
- d) Monitoring Difficulties: Tracking the status of a letter or document takes time because it relies on manual record-keeping.

2. After SINDE

- a) Fast and Efficient: Documents are delivered digitally through the platform, speeding up the sending and receiving process.
- b) Save Paper: The paperless system reduces the use of paper, supporting the eco-friendly movement.
- c) Real-Time Monitoring: SINDE provides a document tracking feature so that users can monitor their status directly.

2. Positive and Negative Influences of the Use of SINDE include:

1. Positive Influence

- a) Time and Cost Efficiency: The use of SINDE reduces mail delivery times and operational costs, such as paper and ink purchases.
- b) Eco-friendly: Paperless systems support environmental conservation efforts by minimizing the use of paper.
- c) Document Security: With digital encryption, documents are better protected from the risk of loss, theft, or damage.
- d) Accessibility and Transparency: SINDE allows access to documents from multiple locations and makes it easier to oversee the correspondence process.
- e) Administrative Modernization: Improve the image of an organization that is considered adaptive to technology.

2. Negative Influence

- a) Reliance on Technology: In the event of a technical glitch, the entire system can be disrupted, hindering smooth operations.
- b) User Resistance: Not all users are familiar or comfortable with digital systems, especially those who are familiar with manual processes.
- c) Initial Implementation Cost: Requires significant investment in technology infrastructure, training, and system maintenance.
- d) Cybersecurity Risks: Digital documents have the potential to be targeted by cyberattacks if systems are not properly protected.

3. Signatures and stamps in SINDE include:

In SINDE, physical signatures and stamps are replaced by:

- Electronic Signatures (TTE): TTEs use cryptographic technology to provide authentication and validation of digital documents. This system is protected by the Electronic Information and Transaction Law (UU ITE).
- Digital Seal: The stamp of an institution or company is made in digital form to legally mark documents. These stamps often have verification elements such as QR Codes that point to the authentic data of the document.
- Digital Attestation: Electronic signatures and digital stamps replace physical versions, shortening the authentication flow.

CONCLUSION

The implementation of the Electronic Service Manuscript Information System (SINDE) at the Nunukan State Polytechnic is an innovative step in supporting modern administrative transformation. The system has succeeded in improving the efficiency of correspondence governance through digitization of processes, such as cloud-based storage, real-time mail management, and reduced reliance on physical documents. SINDE also speeds up the administrative flow and allows for more transparent monitoring, making the administrative process more effective and environmentally friendly.

However, this transformation also faces challenges, such as the need for user training, adjustments to technology infrastructure, and strengthening data security to protect documents from cyber threats. Overall, SINDE has proven itself to be an important tool in supporting the modernization of administration at the Nunukan State Polytechnic, creating a system that is more responsive to the needs of the times and strengthening the competitiveness of the institution in the digital era.

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