

TRAINING ON ELECTRONIC RECORDS MANAGEMENT SYSTEMS TO IMPROVE OTKP STUDENTS' COMPETENCIES AT SMK NEGERI 7 MEDAN

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Abstract

This community service program purpose to enhance the competencies of vocational high school students through training on electronic records management systems to reduce the competency gap between vocational education graduates and the demands of the digital workplace. The target participants were students of the Office Automation and Governance Program at SMK Negeri 7 Medan. A preliminary situation analysis revealed that students faced challenges in understanding electronic records management concepts, had limited experience in managing digital archives, and lacked readiness to utilize modern administrative technologies, including computer-based and cloud-storage systems. The program was implemented through workshops on electronic records management, hands-on practice in digital archive management, application-based document filing simulations, and mentoring and evaluation activities. These methods were designed to provide practical learning experiences that enabled students to apply electronic records management procedures in accordance with modern office administration standards. SMK Negeri 7 Medan supported the program by providing facilities and promoting the sustainability of digital-based learning practices. The expected outcomes included improved student knowledge and practical skills in electronic records management, documentation of activities through photographs and videos, and the publication of a journal article. This program is expected to strengthen students' digital competencies and improve their readiness to compete in the technology-driven workplace.

Keywords: Digital Transformation; Electronic Records Management; Office Administration; Student Competence; Work Readiness.

INTRODUCTION

What happens when students are trained for office administration roles but are still more familiar with manual filing systems than digital document management? In an era where organizations are rapidly shifting toward paperless workflows, this gap raises an important concern regarding the readiness of vocational school graduates for the modern workplace. The advancement of information and communication technology has significantly transformed administrative practices, particularly in records and document management. Today, most organizations rely on electronic records management systems to ensure efficiency, accuracy, accessibility, and data security. However, in many vocational education settings, including Office Automation and Governance (OTKP) programs, learning activities are still partially dominated by conventional or theoretical approaches with limited exposure to digital archival systems. This condition creates a competency gap between what students learn in school and what is required in the world of work.

At SMK Negeri 7 Medan, students of the OTKP program are prepared to become future administrative personnel who are expected to master office technology, document processing, and records management. Based on initial observations and discussions with teachers, students still face challenges in understanding and practicing electronic records management systems. These include limited experience in using digital filing applications, lack of familiarity with cloud-based storage systems, and insufficient practical training in managing electronic documents systematically. Similar findings emphasize that vocational students require stronger integration of digital competencies to meet industry expectations (Sutabri, 2019; Sedarmayanti, 2018). The urgency of this issue lies in the increasing demand for administrative workers who are not only capable of handling documents but also able to manage information digitally in a secure and efficient manner. According to UNESCO (2020), digital skills are essential for workforce readiness in the 21st century, particularly in administrative and office-based occupations.

Therefore, strengthening students' competencies in electronic records management is no longer optional but necessary to ensure their competitiveness in the labor market. Based on this situation, a community service program is designed in the form of training on electronic records management systems for OTKP students at SMK Negeri 7 Medan. The main objective of this activity is to improve students' competencies in managing digital documents through systematic training that includes understanding concepts of electronic records, practical use of digital filing systems, and application of cloud-based storage technologies. The problem-solving approach offered in this program includes theoretical explanation, hands-on practice, and guided simulation of electronic records management processes. Through this method, students are expected to develop both technical skills and digital literacy that align with current industry needs in office administration. Ultimately, this community service activity is expected to bridge the gap between vocational education and industry requirements by equipping students with relevant competencies in electronic records management. This initiative also supports the development of adaptive, skilled, and work-ready graduates who can compete effectively in the era of digital transformation (Arikunto, 2019; Mulyasa, 2018).

LITERATURE REVIEW

Electronic Records Management Systems (ERMS) are widely recognized as essential tools in modern office administration. ERMS facilitate the systematic creation, storage, retrieval, and disposal of digital records, ensuring efficiency, accountability, and data security in organizational processes. According to Arsip Nasional Republik Indonesia (2012), electronic records management is essential for maintaining reliable and accessible organizational documentation in the digital era. Similarly, Sedarmayanti (2018) emphasizes that digital-based records management improves administrative efficiency by reducing dependency on paper-based systems and enhancing workflow effectiveness.

However, previous studies also indicate that the implementation of ERMS in educational settings is often limited by inadequate infrastructure, lack of training, and low digital literacy among learners. This suggests that while the concept of ERMS is well-established in professional environments, its integration into vocational education still requires further development and practical adaptation. Vocational education, particularly in OTKP programs, is expected to equip students with both technical and soft skills relevant to office administration. Mulyasa (2018) highlights that competency-based education must focus on aligning learning outcomes with workplace demands. In this context, ERMS training plays a crucial role in bridging the gap between theoretical learning and practical workplace requirements. Studies in vocational training suggest that students who engage in hands-on digital administration practices demonstrate higher levels of readiness for employment. However, gaps remain in the consistent application of digital records management tools in classroom instruction, indicating a need for structured training programs that simulate real workplace environments.

Several theoretical frameworks support the use of ERMS training in improving student competencies. Experiential Learning Theory (Kolb) suggests that learning is most effective when students engage in direct experience followed by reflection and application. This theory strongly supports practical training in electronic records management systems, where students actively practice digital filing and document organization. In addition, Technology Acceptance Theory (Davis, 1989) explains that users' willingness to adopt technology is influenced by perceived usefulness and ease of use. This is particularly relevant in vocational education, where students must be encouraged not only to use ERMS tools but also to understand their relevance in professional settings.

Despite its advantages, there are ongoing discussions regarding the effectiveness of digital transformation in vocational education. Some studies argue that the rapid adoption of digital systems without adequate foundational skills may lead to superficial understanding rather than deep competency development. Others highlight the digital divide as a major barrier, particularly in schools with limited access to technology infrastructure. These discrepancies indicate that while ERMS offers significant benefits, its implementation must be carefully designed, combining both theoretical instruction and structured practical training to ensure meaningful learning outcomes. Based on the reviewed literature, there is a clear gap in the implementation of structured Electronic Records Management Systems training within vocational schools, particularly in OTKP programs. While ERMS is widely used in professional environments, its integration into student competency development remains limited and inconsistent. Therefore, this study addresses the need for a structured training program on ERMS to enhance students' competencies at SMK Negeri 7 Medan. The program aims to bridge the gap between vocational education and industry requirements by providing practical, technology-based learning experiences that improve students' digital literacy, technical skills, and work readiness in the field of modern office administration.

METHOD

This study uses a **descriptive qualitative method** to describe the implementation of Electronic Records Management Systems (ERMS) training in improving the competencies of OTKP students at SMK Negeri 7 Medan. This method focuses on understanding and explaining the implementation of activities in a natural setting without manipulating variables. The design of the activity is carried out through a structured training program consisting of theoretical explanation, guided practice, and evaluation. The training is designed to introduce students to the concept of electronic records management, followed by hands-on practice in managing digital documents using electronic filing systems and cloud-based storage platforms. The activity is conducted in a collaborative learning environment involving instructors, students, and facilitators from the community service team.

The target audience of this program is students of the Office Automation and Governance (OTKP) program at SMK Negeri 7 Medan. The participants are selected based on their relevance to the field of office administration and their need to develop competencies in digital records management as part of their vocational skills development. The materials used in this training include modules on electronic records management systems, digital archiving procedures, classification and retrieval of electronic documents, and data security in digital storage. The tools used consist of computers or laptops, internet access, cloud storage applications, and office productivity software to support the implementation of electronic records management practices.

The design of the tools focuses on usability, accessibility, and efficiency in managing digital records. The performance of the tools is evaluated based on their ability to support students in storing, organizing, retrieving, and securing electronic documents effectively. The productivity aspect is measured through students' ability to complete assigned tasks within the training sessions accurately and efficiently.

Data collection techniques in this study include observation, interviews, and documentation. Observation is used to monitor student participation and skill development during the training process. Interviews are conducted with selected students and instructors to gather in-depth information about their experiences and challenges. Documentation is used to support the data in the form of training materials, student outputs, and visual records of activities. If there is an image in the content of the paper, then the image is placed after the paragraph that relates/discusses the image with 1 space (10 pt); captioned with Image and Arabic number (bold), followed by the title of the image placed under the image in question, the font size of the image description is 10 pt.



Image: PkM Team Delivering Material



Image: PkM Team Interacting with SMK Student

RESULTS AND DISCUSSION

The implementation of the Community Service Program (PkM) began with observation and coordination activities with the school in March 2026. The community service team conducted a needs analysis and held discussions with the Principal and teachers of the Office Automation and Governance (OTKP) program at SMK Negeri 7 Medan regarding the competencies that need to be improved among students. Based on the observation results, it was found that students still have limitations in understanding the concept of electronic records management, lack practical experience in managing digital archives, and have not yet optimally utilized information technology to support modern office administration activities.

Subsequently, in April 2026, the community service team, assisted by university students, carried out training and mentoring activities for students of the OTKP program at SMK Negeri 7 Medan. The activities were conducted using lecture methods, interactive discussions, demonstrations, hands-on practice, and evaluation. The materials delivered included the basic concepts of electronic records management systems, digital records management procedures, the use of cloud-based storage media, techniques for classification and retrieval of electronic records, as well as the security and maintenance of digital documents.

The results obtained from this community service activity are as follows:

1. Students understand the basic concepts of electronic records management systems, including their functions, benefits, and roles in supporting modern office administration.
2. Students are able to manage digital records systematically through processes of storing, organizing, searching, and maintaining electronic documents.
3. Students acquire skills in using digital storage technologies such as cloud storage and computer-based storage media to support efficient records management.
4. Students understand the importance of information security and are able to apply simple measures to maintain the confidentiality and security of electronic documents.
5. Students demonstrate improved digital competencies relevant to the needs of the workforce, particularly in office administration and modern records management.
6. A strong collaboration has been established between Universitas Sumatera Utara and SMK Negeri 7 Medan in supporting the improvement of vocational students' competencies through technology-based training activities.

The activities provided to participants included:

1. **Training on the Basic Concepts of Electronic Records Management Systems**
This activity aimed to improve students' understanding of the definition, functions, benefits, and principles of electronic records management systems. Through this session, students gained insight into the development of modern records management systems and the importance of digital records management in supporting the effectiveness of office administration.
2. **Practice of Digital Records Management**
In this session, students were given the opportunity to directly practice creating digital folder structures, classifying documents based on specific categories, as well as storing and retrieving electronic records. This activity helped students understand the procedures of digital records management in an effective and efficient manner.
3. **Training on the Use of Cloud Storage for Records Management**
Participants were introduced to cloud-based storage media as a tool for managing electronic records. Students were trained to upload, store, access, and share documents digitally, supporting the implementation of a more modern and paperless administrative system.
4. **Training on Security and Maintenance of Electronic Records**
This activity aimed to provide students with an understanding of the importance of data security and digital records protection. The materials covered document access management, password usage, data backup, and efforts to maintain electronic records so they remain secure and easily accessible when needed.
5. **Evaluation and Mentoring**
At the end of the program, the community service team conducted an evaluation of students' understanding and skills through practice and discussion. In addition, mentoring was provided to ensure that participants were able to independently apply the knowledge gained in managing electronic records.

Overall, this community service activity ran smoothly and received positive responses from both the school and the participants. The electronic records management system training program successfully improved the

knowledge, skills, and digital competencies of OTKP students at SMK Negeri 7 Medan. This activity is expected to support the development of competent graduates who are adaptive to technological advancements and ready to face the demands of the digital era.

CONCLUSION

Based on the results of the community service implementation, it can be concluded that:

1. There is an improvement in students' understanding of the concepts, functions, benefits, and procedures of managing records using Electronic Records Management Systems as part of modern office administration.
2. There is an improvement in students' practical skills in managing digital records, including storing, organizing, retrieving, maintaining, and securing electronic documents through hands-on practice using digital records management technology.
3. This community service activity can serve as a strategic effort to enhance students' digital competencies in vocational education and bridge the gap between graduates' competencies and the needs of the business and industrial world (DUDI), particularly in the field of office administration and information-based records management.

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