

Problems of Office Automation at the Universitas Pejuang Republik Indonesia

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ABSTRACT

This study aims to 1) To find out the general overview of the implementation of office automation at the Universitas Pejuang Republik Indonesia; 2) To find out the problems of office automation at the Universitas Pejuang Republik Indonesia; 3) To find out solutions to overcome office automation problems at Universitas Pejuang Republik Indonesia. The type of research used is a qualitative research method. The data sources of this research are the Head of the BAAK (Academic and Student Administration Bureau), University Operators and Lecturers. The data collection method is carried out by interviews and documentation. The data analysis technique is carried out in 3 stages, namely; data reduction; presentation of data and then drawing conclusions. Based on the results of the research through interviews and documentation, it was found that the implementation of office automation in the aspect of value input and reporting of PDDikti at the Universitas Pejuang Republik Indonesia (UPRI) uses a website-based application called SIAKAD. Problems with office automation at UPRI include internet network disruptions and maintenance activities, academic calendar inconsistencies, and tolerance policies for student semester fee payments. The solutions to overcome the problems of office automation at UPRI include improving network infrastructure, scheduling maintenance, improving academic calendar management, implementing strict policies related to institutional rules, and strengthening the awareness and responsibility of structural officials in carrying out their main duties and functions. The implication in this study is that the leadership of Universitas Pejuang Republik Indonesia needs to implement firm and consistent policies, as well as good coordination between the faculty and the central administration to improve the efficiency of the academic process at the university. In addition, maintaining close cooperation between university operators and system developers (Aistech) as well as lecturer discipline in administrative procedures is essential to maintain the accuracy of academic data.

Keywords: Problems of Automation, Office Automation, Academic Administration

1). INTRODUCTION

Automation is an application of information and communication technology in which manual tasks that previously involved a great deal of human resources are diverted and taken over by automated functions using mechanical equipment, especially computers to facilitate and improve

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efficiency in administrative processes (Maulydiyah, 2018). Office automation cannot be separated from office technology because automation is a form of technological development, in this case the transition from manual technology to automated technology. By automating offices, working processes become more efficient and easy if you use a well-structured machine or system. Thus, the use of machines becomes crucial in increasing office work productivity (Rohmah, 2016).

Technological advancements have influenced administrative activities, particularly in the tools used by employees to carry out their duties and responsibilities, shifting from manual systems to application-based or computerized systems (Alwya, 2018). One of the sectors that leverages the advancements in information technology is the education sector (Purwaningsih, 2022). Increased productivity and ease of carrying out institutional tasks can be obtained through the use of information and communication technology. Computers and communication technology play a crucial role in improving the efficiency of the workforce with high speed, accuracy, and convenience. Today, many state institutions and universities have implemented simplified computer applications of administrative information systems, which are integrated with complex databases. This has a significant impact on increasing the productivity of employees and educators. Every company or educational institution usually has a special application (software) or website that is tailored to their needs (Ali, Susandri, & Rahmaddeni, 2015).

A modern organization, whether governmental or private, inevitably has to engage with the rapidly evolving world of information technology (Syahyuni Dedy, 2018). Faced with new competition and the standard requirements of the quality management system (ISO), more effective management is required in all areas of activity in order to perform the functions and the goals of the organization. This needs to be supported by improved quality of human resources, improved working systems, as well as improved application and mastery of technology (Semuel & Zulkarnain, 2011).

The existence of automation not only benefits administrative activities, but can also improve the quality of service and user satisfaction, both students, parents, and educators. Additionally, the use of technology will also support and facilitate communication between educational institutions and their clients (Suciowati, et al. 2022). The purpose of office automation is to improve efficiency, productivity, and accuracy in the management of office administration. More specifically, the aim of office automating is to help reduce office operating costs and improve the efficiency of the use of existing

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resources. The utilization of technology serves as a tool to enhance the efficiency and effectiveness of daily activities (Suciowati et al., 2022). In the world of education, it requires quick and up-to-date information, because information in today's era must be quickly accessible as well and connected to government websites related to education. Then the role of technology becomes crucial in accessing such information, especially in educational administrative activities (Elviera, Irawan, & Syafrina, 2019). Adopting information system practices advanced by reliable information technology can enhance the quality of education, enabling the production of up-to-date and comprehensive information. This allows all educational services to benefit from the information and provides a competitive advantage for the madrasah institution (Sonia, 2020).

Administrative or enterprise jobs are generally word processors for handling letters and reporting, websites for delivery of information and communications, e-mail for mail delivery, and internal computer networks via LAN and online storage media for archive management, including the implementation of web-based Academic Information System (SIAKAD) designed for the purposes of academic data management with the application of computer technology using both hardware and software, so that all academic activities processes can be managed as useful information in management and decision-making (Dwiyatno, Sulistiyono, Abdillah, & Rahmat, 2022).

The preliminary research revealed that the implementation of office automation at Universitas Pejuang Republik Indonesia (UPRI) frequently encounters inconsistencies in the aspect of grade input and reporting. The grades entered through the Academic Information System (SIAKAD) often do not match those reported to PDDIKTI. This research is essential to identify and understand the factors that cause such inconsistencies, as well as to formulate solutions that can be applied to improve efficiency and accuracy in the management of academic data at UPRI.

2). METHODS

The research uses a qualitative approach with phenomenological studies methods to study the problems of office automation at the Universitas Pejuang Republik Indonesia. This method was chosen because it was able to dig into individual experiences in depth and reveal how such experiences contributed to an understanding of the subject being studied (Fiantika et al., 2022). The research was carried out at UPRI, Makassar. The main source of data in this study is primary data obtained through

in-depth interviews with key informants. These informants include the head of the BAAK (Biro Administrasi Akademik dan Kemahasiswaan), operators and lecturers.

In addition to primary data, the research also uses secondary data obtained from a variety of documentation sources. Secondary data includes books, journals, institutional reports, and previous research relevant to office automation and academic management topics. The data collection process in this study is carried out systematically and thoroughly. In-depth interviews are used as the primary method of obtaining direct information from informants. Documentation is also collected as supplementary data that supports the validity of the findings. Researchers act as the main instrument in this research, which means the direct involvement of researchers in data collection and analysis is key to ensuring accurate and valid interpretation (Sugiyono, 2021).

Data analysis is carried out through several stages, starting with data reduction, then presented narratively. Once the data is presented, researchers draw preliminary conclusions based on the findings that have been analyzed. These conclusions are then verified through a review of the data to ensure consistency and accuracy (Fauzi, et al. 2022). The research uses a triangulation techniques, including triangulating sources, methods, and theory (Moleong, 2017).

3) RESULTS AND DISCUSSION

Implementation of Office Automation at Universitas Pejuang Republik Indonesia (UPRI)

In the era of educational modernization, office automation has become a vital aspect in enhancing the efficiency and effectiveness of administrative processes in higher education institutions. At Universitas Pejuang Republik Indonesia (UPRI), this automation is implemented through a web-based Academic Information System (SIAKAD) used for student grade input and data reporting to the PDDikti (Pangkalan Data Pendidikan Tinggi). This system enables the online management of academic data that can be accessed by students, lecturers, and campus operators via computers or smartphones, aiming to improve efficiency, accuracy, and integration in academic data management.

SIAKAD, developed by aistech, is an academic information system designed to facilitate the management of academic administration at UPRI. The use of this application is based on directives from the LLDikti (Lembaga Layanan Pendidikan Tinggi) to use a similar system to ensure that academic data reporting, especially student grades, is conducted accurately and on time. Lecturers at

UPRI input student grades directly into SIAKAD, while university operators are responsible for reporting the data from the campus to PDDikti.

The use of SIAKAD at UPRI has proven effective in supporting various administrative activities. In addition to grade input, SIAKAD is also used for various other academic purposes, such as class creation, student attendance recap, course assignment, and online management of student academic status. The implementation of SIAKAD aims to increase efficiency and accuracy in academic data management, facilitating more integrated and effective administrative processes within the university.

The implementation of SIAKAD at UPRI has successfully reduced the workload of lecturers and administrative staff, allowing them to focus more on other academic tasks. Previously, student grade input was done manually, which required more time and effort. With automation through SIAKAD, the need to receive printed documents from lecturers and manually input them into the reporting system is no longer necessary. Data is taken directly from SIAKAD and reported to, which not only simplifies the work but also makes the grade input process more structured and accessible anytime, anywhere. The efficiency, effectiveness, and flexibility of this system allow the university to achieve the desired results accurately and promptly, while also adapting to various user needs.

Additionally, the implementation of this automation provides greater flexibility for lecturers and administrative staff in accessing and inputting academic data. Processes that previously took a long time can now be completed in a much shorter time, allowing lecturers and administrative staff to allocate their time and resources to other important tasks. In this regard, automation not only increases efficiency but also enhances overall productivity within the university environment.

The success of this automation implementation is not without adequate infrastructure readiness. At UPRI, information technology infrastructure is a key factor in the successful implementation of SIAKAD. A stable and fast internet network, upgraded hardware, and well-integrated software form the foundation for the smooth operation of SIAKAD. The Head of the Biro Administrasi Kakademik dan Kemahasiswaan at UPRI confirmed that the internet network used has been upgraded to be more stable and faster to support the performance of the SIAKAD system. Additionally, hardware such as computers and servers have been upgraded to handle greater workloads and ensure the system runs smoothly.

University operators also stated that the SIAKAD system runs smoothly thanks to the support of a good network and adequate hardware. Whenever there are system repairs or maintenance, the

grade input process is not disrupted, allowing academic data management and reporting to be carried out more efficiently and effectively. Technical support from the system provider, Aistech, is also continuously provided to ensure that the software used is always updated and well-integrated.

However, infrastructure readiness not only covers technical aspects such as hardware and internet networks but also includes support from the university in managing human resources. This includes technical training provided to university operators and administrative staff, as well as lecturers, to ensure they can operate SIAKAD effectively.

To maximize the benefits of this automation system, technical support in the form of training is an important step that continues to be carried out at UPRI. This training aims to ensure that all users, both operators and lecturers, understand and can operate SIAKAD properly. University operators undergo training from aistech related to grade input and system operational procedures, as well as receive regular socialization from regarding system changes or updates.

Lecturers at UPRI also receive special training to ensure they can operate the system effectively. This training is conducted periodically, especially when there are changes or updates to the SIAKAD system. On some occasions, the training also involves workshops or seminars organized by the university and the system provider to discuss new ways of optimizing the use of technology in academic data management.

Through this training, the university ensures that all parties involved in academic data management can use the system optimally, reducing the risk of errors and increasing user confidence in using the technology. Additionally, the training provides an opportunity for lecturers and administrative staff to ask questions or provide feedback regarding the use of the system, so that SIAKAD can continue to be improved according to user needs.

In addition to technical support, data security is also a major concern in the implementation of SIAKAD at UPRI. The system is equipped with backup features that allow users to regularly download student grade data. This data backup is performed after reporting, with the data being saved in .json format and backed up to a local server or external hard drive. This routine backup procedure is crucial to maintaining the security and availability of data in case of issues with the main system.

This data backup process is regularly carried out by university operators to ensure that all academic information is safely stored and can be accessed again if needed. In the context of data

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management, backup is a crucial step to protect data from potential loss due to technical failures, accidents, or cyber-attacks. With this backup feature, UPRI demonstrates its commitment to maintaining the integrity and security of academic data, which is an important asset for the university.

Office Automation Problems at Universitas Pejuang Republik Indonesia

1. Technical Problems

Office automation at Universitas Pejuang Republik Indonesia (UPRI) faces various technical problems that impact operational efficiency and effectiveness. The main issues include network disruptions, system errors, and the need for software maintenance. These obstacles can hinder the smooth input and reporting of academic data, which is crucial for supporting organized and structured educational processes at the university.

a) Network Disruptions

Network disruptions at UPRI are a frequent problem, especially due to an unstable computer network. When the network does not function optimally, access to the Academic Information System (SIAKAD) becomes limited or even impossible. This causes disruptions in critical academic administrative processes. Mr. Suhenrik, a lecturer at UPRI, noted that slow networks and unstable signals are often the main obstacles. Even if the network is fine, other problem such as system maintenance can make SIAKAD inaccessible, even when the network is functioning well.

Mr. Andika Ariandi, a university operator, also identified unstable signals or network "downtime" as the main problem. Although their team was able to overcome issues related to weak network speed, more serious disruptions to the signal remain a challenge to be faced.

b) Maintenance

System maintenance is a necessary process to maintain the optimal performance of the technological infrastructure at UPRI. However, this process often becomes an obstacle in office automation. Mr. M. Syukur A, Head of Biro Adminsitrasi Akademik dan Kemahasiswaan at UPRI, highlighted that although the system overall runs well, network disruptions, errors, and repeated maintenance processes remain challenges. Although maintenance is important for updating and repairing the system, it can cause downtime that affects productivity and the smoothness of academic administrative processes.

2. Non-Technical Problems

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In addition to technical problems, UPRI also faces non-technical challenges that impact the effectiveness of office automation. These challenges include the misalignment of the academic calendar, non-compliance with institutional rules, and inconsistent policies. These problems can lead to inefficiencies in the process of academic data input and reporting, which ultimately affects the overall operations of the university.

a) Misalignment of Academic Calendar

The misalignment of the academic calendar at UPRI causes overlap and irregularity in the implementation of academic activities, such as class scheduling, exams, and grade submission. The Head of the Biro Administrasi Akademik dan Kemahasiswaan at UPRI, Mr. M. Syukur A, explained that the academic calendar often does not proceed as it should, with faculties conducting the tri dharma perguruan tinggi activities of according to their own preferences. As a result, unsynchronized schedules lead to delays in grade input and academic data reporting.

Mr. Andika Ariandi, a university operator, added that operators are often constrained by reporting deadlines. When the required data from SIAKAD or grades from lecturers are not entered according to the predetermined schedule, operators have difficulty reporting the data on time. This is often caused by lecturers who do not input grades by the set deadline, resulting in delays in reporting and processing academic data.

b) Payment Tolerance

The payment tolerance policy at UPRI, although intended to assist students facing financial difficulties, also creates problems in academic data input. Mr. Suhenrik explained that students who have not completed their payments are not registered as active students for the current semester in SIAKAD. As a result, lecturers often have to input grades based on data from the previous semester. This not only causes confusion in grade reporting but also affects the accuracy and synchronization of academic data at UPRI.

The statement letters submitted by students to obtain payment tolerance are often required to process this request. However, while this process helps students who are experiencing financial difficulties, it complicates the input and reporting of academic data, as student status must be adjusted according to the university's financial regulations.

Solutions to Overcome Office Automation Problems at Universitas Pejuang Republik Indonesia

Office automation at Universitas Pejuang Republik Indonesia (UPRI) faces various technical and non-technical challenges, particularly in the aspect of student grade input and reporting to the PDDikti (Pangkalan Data Pendidikan Tinggi). To overcome the problems, UPRI has formulated a series of solutions aimed at improving the efficiency and effectiveness of implementing office automation technology. These solutions include enhancing network infrastructure, improving academic calendar management, fostering more effective communication with the IT team and application vendors, and implementing stricter institutional policies.

1. Enhancement of Network Infrastructure and Facilities

One of the main solutions to solve technical problem in office automation at UPRI is improving the network infrastructure and facilities used by faculty operators. UPRI recognizes that a stable and fast internet connection is crucial to supporting the smooth running of administrative processes, including student grade input. Therefore, UPRI has taken steps to increase the speed and stability of the internet connection used on campus.

This improvement involves using larger and more stable bandwidth, with network speeds reaching 30 Mbps in some faculties. The network speed is tailored to the operational needs of each administrative office, ensuring that administrative processes, including grade input, can run smoothly without interruption. Additionally, UPRI has provided adequate computer equipment for operators in each faculty. For faculties that do not yet have permanent computer facilities, UPRI offers a solution in the form of laptops that operators can take home. With these facilities, operators can work from home if needed, without reducing productivity or disrupting the smooth running of administrative processes.

However, despite these measures, technical challenges can still occur, especially if there are disruptions to the internet network. In dealing with such situations, UPRI has established good communication with the network service provider to ensure that issues can be resolved as quickly as possible. If prolonged disruptions occur, the university is prepared to file complaints with the service provider to expedite the repair process. Thus, although UPRI relies on external service providers, they strive to minimize the negative impact of technical disruptions that may arise.

2. Effective Communication with IT Team and Application Vendors

Fast and effective communication between operators, the internal IT team, and application vendors is a key component in supporting the successful implementation of office automation at UPRI. In this context, UPRI has built a clear and structured communication network to address technical issues that may arise during the process of grade input and academic data reporting.

When technical issues arise, operators at UPRI can immediately contact the internal IT team or the application vendor responsible for the Academic Information System (SIAKAD) used by the university. This step enables quick and effective problem resolution, thereby reducing disruptions to administrative processes. Moreover, good communication between operators and application developers also helps in improving the overall system performance.

In this effort, UPRI also encourages lecturers to communicate with operators if they encounter difficulties in using the SIAKAD application. This ensures that any problems faced by end users can be addressed immediately, allowing the grade input process to proceed smoothly. With open and effective communication, UPRI can minimize the risk of technical errors and ensure that the automation system used operates optimally.

3. Improvement of Academic Calendar Management

In addition to technical problems, UPRI also faces challenges in academic calendar management that can affect the smooth running of the automation process. Head of Biro Administrasi Akademik dan Kemahasiswaan explained that to address this issue, UPRI needs to improving academic calendar management, aiming to avoid schedule misalignment that can disrupt the process of grade input and academic data reporting.

These improvements in academic calendar management include better scheduling and more effective coordination between various departments at UPRI. By ensuring that the academic schedule remains on track, UPRI seeks to reduce the stress and confusion caused by sudden schedule changes or delays. Additionally, better planning also helps to ensure that all administrative processes, including grade input, can be completed on time.

The importance of good academic calendar management is also recognized by the university leadership, particularly the Vice Rector responsible for academic affairs. With support and attention from the leadership, UPRI can ensure that the automation system used for grade input runs smoothly

and efficiently. This also reflects the importance of synergy between academic calendar management and technology in supporting the success of office automation at UPRI.

4. Implementation of Strict Institutional Policies

Another non-technical solution implemented by UPRI is the enforcement of strict institutional policies related to academic regulations and student payments. As a private university, UPRI must comply with the system implemented by the Kemendikbudristek (Kementerian Pendidikan, Kebudayaan, Riset dan Teknologi). Therefore, UPRI has emphasized the importance of adhering to applicable rules, especially in terms of academic data reporting and administration to PDDikti.

The implementation of strict institutional policies is aimed at ensuring that all procedures and processes carried out at UPRI are in accordance with the applicable regulations. By adhering to the regulations set by PDDikti, UPRI can maintain the integrity of the institution and ensure that they meet the required national standards. Additionally, compliance with these rules also supports the achievement of efficiency and effectiveness in the day-to-day operations at UPRI.

5. Increasing Awareness and Compliance Among Lecturers

The awareness and compliance of lecturers with existing procedures are also important aspects of addressing the problems of office automation at UPRI. To ensure that the automation system operates effectively, UPRI has made efforts to increase lecturers' awareness of the importance of timely student grade reporting. By raising this awareness, UPRI hopes that lecturers will be more disciplined in following established procedures.

The increase in lecturers' awareness is also supported by the implementation of a notification system that helps remind lecturers of the deadlines for grade input. With these notifications, lecturers are expected to be more consistent in inputting grades before the deadline, thereby reducing the possibility of delays and errors in the input process. Additionally, the awareness and compliance of lecturers also contribute to the smooth running of the grade input process and support the institution's goal of providing high-quality educational services.

Overall, the solutions implemented by UPRI to address office automation challenges cover various aspects, both technical and non-technical. With improved network infrastructure, effective communication, better academic calendar management, the implementation of strict institutional policies, and increased awareness among lecturers, UPRI aims to create a more efficient and organized academic environment.

4). CONCLUSIONS

Universitas Pejuang Republik Indonesia (UPRI) has implemented office automation through the Academic Information System (SIAKAD) to streamline academic administration, particularly in student grade input and data reporting to PDDikti. This system, developed by aistech, significantly enhances efficiency, accuracy, and integration by allowing online management of academic data, accessible to students, lecturers, and administrative staff. The success of this automation relies heavily on a stable internet network, upgraded hardware, continuous technical training, and strong data security measures.

However, UPRI faces several challenges, including network disruptions, system maintenance issues, and misalignments in the academic calendar, which can delay grade input and reporting processes. To overcome these problems, UPRI has focused on improving network infrastructure, fostering effective communication between IT teams and application vendors, and enforcing strict institutional policies. Additionally, efforts to increase awareness and compliance among lecturers regarding timely grade reporting are aimed at further enhancing the overall efficiency and effectiveness of the automation

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REFERENCES

- Ali, E., Susandri, & Rahmaddeni. (2015). Sistem Informasi Akademik (SIAKAD) untuk Solusi Kompleksitas Manajemen Data dan Informasi di Perguruan Tinggi. SATIN: Sains dan Teknologi Informasi, 1(1), 63–68. Retrieved from https://jurnal.stmik-amikriau.ac.id/index.php/satin/article/view/14/pdf
- Alwya, U. (2018). Penggunaan Aplikasi Manajemen Surat (AMS) Sebagai Bentuk Otomatisasi Kantor dalam Hal Administrasi pada PT PLN (Persero) Sektor Pembangkitan dan Pengendalian Pembangkitan Ombilin. Diss. Universitas Andalas.
- Dwiyatno, S., Sulistiyono, S., Abdillah, H., & Rahmat, R. (2022). Aplikasi Sistem Informasi Akademik Berbasis Web. *PROSISKO: Jurnal Pengembangan Riset dan Observasi Sistem Komputer*, 9(2), 83–89. https://doi.org/10.30656/prosisko.v9i2.5387
- Elviera, C. D., Irawan, D., & Syafrina, D. N. (2019). Pengembangan Tata Usaha Sekolah Berbasis Teknologi Informasi. *MUKADIMAH: Jurnal Pendidikan, Sejarah, dan Ilmu-Ilmu Sosial*, 3(1), 1– 6. https://doi.org/10.30743/mkd.v3i1.676
- Fauzi, A., Baiatun Nisa, Darmawan Napitupulu, Abdillah. (2022). Metodologi Penelitian. CV. PENA PERSADA. Purwokerto.
- Fiantika, F., Wahyuni. (2022). Metodologi Penelitian Kualitatif. PT. Global Eksekutif Teknologi (1st ed.). Padang.
- Maulydiyah, N. I. (2018). Penerapan Otomatisasi dalam Administrasi Perkantoran. Malang.
- Moleong, L. J. (2017). Metodologi Penelitian Kualitatif (Cet XXXVII). Bandung: PT Remaja Rodaskarya.
- Purwaningsih, Y. (2022). Implementasi Sistem Informasi Manajemen Pendidikan (SIMDIK) dalam Meningkatkan Mutu Pendidikan di Madrasah Ibtidaiyah. *Borobudur Educational Review*, 2(2), 68–76. https://doi.org/10.31603/bedr.6546
- Rohmah, N. (2016). Otomatisasi Kantor dan Efisiensi Kerja Sekretaris Departemen Maintenance PT Primayudha Mandirijaya. Universitas Kristen Satya Wacana.
- Semuel, H., & Zulkarnain, J. (2011). Pengaruh Sistem Manajemen Mutu ISO Terhadap Kinerja Karyawan Melalui Budaya Kualitas Perusahaan (Studi Kasus PT. Otsuka Indonesia Malang). 162–176.
- Sonia, N. R. (2020). Implementasi Sistem Informasi Manajemen Pendidikan (SIMDIK) dalam Meningkatkan Mutu Pendidikan di Madrasah Aliyah Negeri 2 Ponorogo. *Journal of Chemical Information* and Modeling, 1(1), 94–104. https://doi.org/https://doi.org/10.21154/sajiem.v1i1.18
- Suciowati, E., Yusuf, M., Zulfana, H., & Kusna, L. (2022). Basis Komputer Sebagai Dasar Sistem Informasi Manajemen Pendidikan Islam. *Sasana: Jurnal Pendidikan Agama Islam*, 1(1), 27–32.

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https://doi.org/10.56854/sasana.v1i1.62

Sugiyono. (2021). Metode Penelitian Pendidikan (Cet III). Bandung: Alfabeta.

Syahyuni Dedy. (2018). Otomatisasi Kantor dalam Menangani Surat Masuk dan Keluar dalam Sebuah Organisasi Modern. *Jurnal Widya Cipta. III*(2), 1–9.