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Dapodik Application-Based Management Information System at The Malinau Regency Education Office (Teacher Certification Study)

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Abstrak

The implementation of management information systems based on the Dapodik Application System at the Malinau District Education Office is a challenge considering that it is located in a border area and there are still many schools that are not reached by the internet or electricity. This research discusses the implementation of the management information system based on the dapodik application system in the education office of Malinau district (teacher certification study) and the inhibiting factors in the implementation of the system. The research method used is descriptive qualitative. The inhibiting factors of the implementation are limited internet network in some schools, delays in data inputting or updating school data and/or teachers who make changes to certification data, electricity is still limited to some education units, schools and teachers still have difficulties in using the dapodik application, and changes in school dapodik operators so that they must be re-socialiser.

Kata Kunci

Management information system, dapodik application, teacher certification

Abstract

Pelaksanaan sistem informasi manajemen berbasis Sistem Aplikasi Dapodik di Dinas Pendidikan Kabupaten Malinau menjadi suatu tantangan mengingat berada di daerah perbatasan dan masih banyak sekolah yang tidak terjangkau dengan internet ataupun listrik. Penelitian ini membahas tentang pelaksanaan sistem informasi manajemen berbasis sistem aplikasi dapodik di dinas pendidikan kabupaten malinau (studi sertifikasi guru) dan faktor penghambat pelaksanaan sistem tersebut. Metode penelitian yang digunakan adalah deskriptif kualitatif. Hasil penelitian ini menunjukkan bahwa pelaksanaan sistem ini yaitu planning, organizing, actuating, dan controlling. faktor penghambat pelaksanaan adalah jaringan internet terbatas pada beberapa sekolah, keterlambatan dalam penginputan data atau pembaharuan data sekolah dan/atau guru yang melakukan perubahan data sertifikasi, listrik masih terbatas pada sebagian satuan pendidikan, sekolah dan guru masih ada yang mengalami kesulitan dalam penggunaan aplikasi dapodik, dan pergantian operator dapodik sekolah sehingga harus disosialisasi ulang.

Keywords

Sistem informasi manajemen, aplikasi dapodik, sertifikasi guru



Introduction

In today's modern era, information systems have become very important to support work activities. With the development of information technology, an information system is useful for helping improve office performance and operations. Work will be easier and more productive with supporting facilities that can be accessed online. Through a management information system, data and information can be managed optimally to determine and formulate future policies and work programs (Javaid et al., 2020).

One of the information systems that is currently developing is the management information system. Management Information Systems are implemented in every organization and institution, one of which is government institutions in the education sector (Rulinawaty et al., 2023). Management information systems facilitate and provide information for education managers to make tactical decisions. The Management Information System provides various information, including information needed to determine educational steps (Hina et al., 2019).

The implementation of information systems in an organization, known as Management Information Systems (MIS), facilitates the accessibility of diverse information required by management at all levels. In contemporary management settings, information serves as the foundation for decision-making. Although theoretically, a SIM (System Information Management) does not mandate the use of technology or computers, in practice, a sophisticated SIM relies on the incorporation of computer components. Additionally, MIS consistently involves computer-based data processing to generate information. Currently, there are two types of management information system applications, namely web-based applications and desktop-based applications. A web-based management information system application is an application that runs using a web technology base in the form of a browser. This application can be accessed from any computer using a browser without the need to install a program, as long as the computer is connected to a network (Ibrahim et al., 2020).

Currently, to improve the quality of education, the Government has initiated teacher and lecturer certification, this is stated in Law Number 14 of 2005 concerning Teachers and Lecturers. The article that states this is Article 8: "Teachers are required to have academic qualifications, competencies, educational certificates, be physically and spiritually healthy, and have the ability to realize national education goals." For the Indonesian nation to increase human resources, the government has made many efforts to overcome the problem of education quality so that the required output can be achieved. The success of education requires that all parties are involved, whether the government, society, parents, or all stakeholders, each of whom has responsibility according to their respective portions (Indrawati & Kuncoro, 2021).

Management Information Systems implemented in organizations and institutions can certainly have a positive impact on the organization or institution considering the need for very complex information technology. Government institutions in the education sector need SIM, considering that educational institutions must be managed as one unit to manage information. Management information systems (SIM) provide data in the form of information for education managers, in this case, the Education Department and schools, to make further policies (Sofyani et al., 2020).



Education is the most important aspect of human life in improving competence and talent for survival. High-quality education is very important to support the creation of intelligent human resources. Education is a system consisting of various kinds of activities that are complex and interconnected with each other. Therefore, the education system must be managed well so that it becomes a unified management system (Efendi, 2020).

Effectively managing information systems is a crucial factor in sustaining and advancing an educational institution. The evolution of science and information technology has significantly transformed the outlook and habits of Indonesians in various domains, particularly in education. Proficient management within an educational institution is vital for its longevity. The progression of science and information technology has notably influenced the mindset and behaviors of the Indonesian populace in their undertakings, particularly within the realm of education (Alqahtani & Rajkhan, 2020).

In the field of education, the integration of educational activities with management information systems is inevitable, as they are interconnected and mutually dependent. This dynamic relationship can be characterized by education serving as a catalyst for management information systems, while these systems, in turn, play a crucial role in shaping educational outcomes. Broadly speaking, a management information system is defined as a structured system designed for processing data to aid in the execution of routine tasks, assessment, and decision-making within an organization (Szymkowiak et al., 2021).

In this regard, to ensure good management and good service, the Malinau District Education Office implements a management information system based on the Dapodik application. The Dapodik application is an application for educational units or educational institutions to collect various information about education, both related to certification, competencies, students, school facilities and infrastructure as well as educational curricula (Damayanti et al., 2023).

Implementing a management information system based on the Dapodik Application System in the Malinau Regency Education Office is certainly a challenge for the Education Department and schools considering that Malinau Regency is an area located on a border area and there are still many schools that cannot be reached by internet or electricity. Even though geographically some schools are experiencing difficulties, a management information system based on the Dapodik Application System must still be implemented without exception. Remember that the Dapodik application-based SIM is a Management Information System that every school must have. To obtain and provide reports on the existence and condition of schools, teachers, students, and the infrastructure they have. Implementation of a Management Information System based on the Dapodik application because access to data is complete and accurate, and can assist in the formulation, and planning process, and increase the productivity of employee performance at work. Based on the description above, the author is interested in researching the Dapodik Application-based management information system at the Malinau Regency Education Office.

This research is interesting, given that the location is a border area with other countries with limited electricity and internet networks, but efforts to use this application continue. This research clearly finds new things that will complement previous studies, such as previous



studies that found obstacles and need improvement. As is the case based on the value of tangible, reliability, responsiveness and assurance is still not good, so there is a need to improve the quality of dapodik application services (Novendra et al., 2022). The limited number of operators in operating applications and processing data, the consistency of the application of the Dapodik application system which often changes causes school operators to have to re-input every school year (Udiyana et al., 2023). There are also too many websites connected through Dapodik that often make operators confused, such as verval, sp.datadik, even though the electricity network and internet access are good (Widyawati & Miyono, 2024). This research complements it with data from different locations, whether the same obstacles are found or there are other things that influence. Including if there are good practices from problem solving solutions, it can be a new finding to be practised in other places.

Method

This research uses a descriptive data presentation method with a qualitative approach, namely by describing the results of research findings in depth and explaining systematically in the form of descriptive narratives. By using data collection techniques through observation, interviews, and documentation studies relevant to the research topic. Data analysis techniques are triangulated (combined) data (Sugiyono, 2014). This research took place at the Education Office of Malinau Regency with the consideration that the Education Office is an agency directly involved in the distribution of certification funds using the dapodik application. The informants of this research are the head of the office, administrative staff, and teachers who take care of teacher certification.

Result and Discussion

Result

Implementation of a Management Information System Based on The Dapodik Application System at The Malinau Regency Education Office

The function of a Management Information System in an organization is very important starting from the planning, organizing, implementing, and controlling stages. This function can run well if supported by adequate resources. The data-based management information system implemented in the Malinau Regency education office is very useful in carrying out management functions, where an organization needs an integrated system for managing data that is real-time, up-to-date, and valid. The following are the research results obtained by researchers regarding the implementation of a management information system based on the Dapodik application system at the Malinau Regency Education Office which includes.

1. Planning

The implementation of a management information system based on the Dapodik Application at the Malinau Regency education office contains basic education data and an integrated data management system that supports synchronized and integrated governance and information. This basic educational data aims to increase the efficiency and effectiveness of collecting educational data, making it easier to evaluate and plan education.

It's important to note that Dapodik functions as an online, real-time system for collecting and managing micro-education data. The system primarily handles various types



of data, encompassing school data, student data, educator data, employee data, and school staff information. Therefore, planning to implement a management information system based on the Dapodik application system at the Malinau Regency Education Office must be formulated and planned carefully so that Malinau Regency Education Office schools can implement the Dapodik Application-based management information system well.

Initial planning for determining actions in implementing the Management Information System (SIM) based on the Dapodik application system at the Malinau Regency Education Office. The planning made by the Malinau District Education Office includes the goals and activities needed to achieve the goals, as well as involving estimates of physical needs in the form of computers, internet networks, human resources, and funds needed to develop information systems.

The SIM based on the Dapodik application system at the Malinau District Education Office is a collection of teacher data, including certification data that must be completed by teachers to obtain certification. In its implementation, schools and teachers must fill in data according to the format in the Dapodik application. The SIM based on the Dapodik application system is Basic Education Data or Dapodik which is an integrated national scale data collection system and the main data source for national education.

2. Organizing

To make the implementation of the management information system based on the Dapodik application system at the Malinau District Education Office more effective, it needs to be supported by adequate organization and human resources who are responsible for its management. Organizing the implementation of a SIM based on the Dapodik application system in obtaining certificates is the establishment of cooperative relationships within the Malinau Regency Education Office, the placement of selected human resources so they can work efficiently, and dividing work according to tasks and functions. The organizer in managing SIM based on the Dapodik application aims to provide services to teachers in obtaining certification by placing human resources who have competence in their fields and dividing tasks to achieve goals effectively.

The organizational structure for implementing SIM based on the Dapodik application system at the Malinau Regency Education Office is arranged so that the division of tasks, a cooperation system is based on authority and is permanent in an administrative system that unites activities to complete work that is a common goal. The placement employees who manage Dapodik data certainly have the ability and have gone through training activities, as well as schools and teachers who have received socialization so that teachers can take care of certification through the Dapodik application.

To realize effective SIM management, organize the Malinau District Education Office to design an organizational structure, group and organize human resources, and divide tasks or work among employees, so that the goal of managing teacher certification can run well.

In implementing the Dapodik application-based SIM, the Malinau Regency Education Office requires qualified human resources, this is due to the increasing need for technology and information. Quality human resources are needed in an organization, for example with the Dapodik application, which is a program of the Ministry of Education and Culture

implemented in districts/cities to support the availability of real-time and valid data. To run this system, an operator is required who has IT skills and is at least able to operate a computer.

Organization for the implementation of SIM has been going well at the Malinau District Education Office. This is done so that all school data or student and teacher data can be collected in one system. In running SIM, it requires personnel or human resources who have competence in the IT field so that it can run optimally. The placement of human resources in carrying out Dapodik-based SIM in managing teacher certification has been carried out, where all assigned employees have abilities in the IT field and can carry out responsibilities according to the tasks given.

3. Actuating

The implementation of the Dapodik application-based SIM at the Malinau Regency Education Service is in line with the State's objectives stated in the fourth paragraph of the preamble to the 1945 Constitution, namely to make the nation's life intelligent. Making the education plan a success is very crucial because education is a primary human need. The success of this very noble state goal is largely determined by the involvement of all parties in implementing this law, various parties actively participate according to their portions in their respective fields. In this case, the central government issued a policy with the SISDIKNAS Law which was implemented at the provincial and district/city levels. Within the education department, an application-based information system policy known as DAPODIK is implemented.

The primary objective of the Dapodik application-based SIM at the Malinau Regency Education Office is to establish a database that facilitates integrated education data management. This initiative is geared towards generating comprehensive and representative data to fulfill the requirements of the ministry and other stakeholders. The subsequent aim is to enhance efficiency, effectiveness, and synergy in basic data collection activities by consolidating them into a unified data collection system.

The execution and supervision of the Dapodik application-based SIM at the Malinau Regency Government Education Service are naturally entrusted to specific individuals (human resources). These individuals bear the responsibility of ensuring that the SIM adheres to the established stages and standards. Proficient employee capabilities are crucial for SIM management, particularly in terms of individuals proficient in running applications. The adaptability of humans to various developments is highly desired. Therefore, it is essential to equip individuals with suitable competencies, capabilities, and skills, achievable through an effective human resource management system.

The Management Information Systems sector at the Malinau Regency Education Service is a SIM that has sections and certain tasks. The components involved are data collection, data storage, data processing, and data programming. In each section, there is a coordinator who is responsible for coordinating all sections and is directly responsible to top management.

The Management Information System at the Malinau Regency Education Service has sections including.



a. Data Collection Section

Tasked with collecting data, both internal and external. Internal data refers to information originating from within the organization, typically at the management level. On the other hand, external data is sourced from outside the organization, maintaining a connection with the organization's development. Personnel responsible for data collection can be selected from various work units within the organization, with vice principals serving as representatives from each unit. This approach ensures comprehensive data collection and supports the effectiveness of processing the gathered information into valuable insights for information users.

b. Data Storage Section

The data storage component plays a crucial role in securely storing data. Ensuring data security is the primary objective of data storage. When management levels necessitate data, whether in its raw form or processed, the stored data can be retrieved and utilized in accordance with the requirements of the manager, such as the school principal or deputy.

c. Data Processing Section

The data processing segment is responsible for transforming data through a defined set of steps or patterns, converting it into more valuable information. This processing can be carried out manually or with the assistance of machines. The data processing section comprises several experts whose responsibility is to shape data into information that aligns with the requirements of management levels. Given that the needs of each manager, such as the principal and deputy principal, are distinct, the data requirements for each manager also differ accordingly.

4. Controlling

Management Information Systems at the Malinau District Education Office are organized ways to collect, enter, process, and store school data, and organized ways to store, manage, control, and report information in such a way; that the managed Dapodik application-based SIM can achieve the stated goals.

Every school has a SIM based on the Dapodik application at the Malinau Regency Education Service which contains teacher data, therefore, ASN or honorary teachers must be recorded in the Dapodik application, this aims to improve the teaching profession. Teachers who are registered with the Dapodik of the Malinau Regency Education Service have the opportunity to apply for all types of activities and assistance to the government provided they are registered on the Dapodik application.

To support the effectiveness as well as the benefits and functions of organizing and implementing a SIM based on the Dapodik application, it is necessary to provide supervision as a control so that it can run effectively. At the district level, of course, the Malianu District Education Service plays an important role in implementing the Dapodik application-based SIM and also acts as supervisor and control. Meanwhile, at the education unit level, the principal of each school must be responsible as a supervisor for monitoring and supervising the school's dapodik.

The Malinau education office has appointed employees as operators to ensure that the Dapodik application can run effectively. The designated operators have gone through a

training and quality improvement process in managing the Dapodik application continuously so that in managing Dapodik Malinau Regency they have valid, accurate, transparent, and sustainable data. Dapodik data is an absolute necessity for the Education Service and education units which can later be used in preparing programs and making decisions. Apart from that, this data will also become the basis and information for the Government in formulating and making education policies.

Control of the implementation of the DAPODIK application-based SIM is carried out periodically by the Malinau Regency Government Education Office to ensure that implementation runs comprehensively in educational units in the Malinau Regency. Meanwhile, school units in Malinau Regency are being monitored by school principals to view and synchronize school data with Dapodik data from the Education Office. Schools update data on the Education Department's Dapodik application as school performance reports. The report concerns school data, students, and teacher data on facilities and infrastructure, as well as curriculum oriented towards policy making.

Data in the Malinau Regency Dapodik application is used as a reference for data on programs of the Ministry of Education, Culture, and Research (Kemendikbud). Therefore, every school education unit in Malinau Regency is required to fill in Dapodik data correctly which will have a positive impact on the school. Schools that input data correctly will receive various forms of assistance, including ease in processing teacher allowance certification, BOS, and assistance with educational facilities and infrastructure. Apart from that, data on Dapodik need to be monitored by the Education and School Department because it can be used to verify and validate data on teachers/teachers, education units, National School Identification Numbers, and National Student Identification Numbers.

Factors Inhibiting the Implementation of a Management Information System Based on the Dapodik Application System of the Malinau Regency Education Office

The very important implementation of the Dapodik application-based SIM at the Malinau Regency Education Service is the Dapodik operator. The Education Service explains that a Dapodik operator must have computer skills capable of operating MS Office and have the ability to browse the internet; because this application not only contains installed data but also requires installing other applications that are related to each other to support the teacher certification program. For the Malinau Regency education office, this is still an obstacle and challenge in itself because operators in the field, namely schools, often change because only honorary school staff are not attached and can quit at any time.

The Dapodik application-based SIM is of course closely related to a sufficient internet network that supports more effective use. The uneven internet network in the Malinau Regency is an obstacle to implementing the Dapodik application-based SIM at the Malinau Regency Education Office, where all educational units must be connected to the internet network to make it easier to manage.



Discussion

Implementation of a Management Information System Based on the Dapodik Application System at the Malinau Regency Education Office

1. Planning

From the results of this research, researchers can conclude that planning for implementing a Management Information System (SIM) based on the Dapodik application system at the Malinau Regency Education Office has been carried out. This planning is carried out as an effort to ensure that the management information system application can run effectively. The planning that has been carried out certainly includes the objectives of the implementation, the funding sources used, operator training, procurement of equipment needed, and the existence of human resources who will be responsible for implementing this programme (Rulinawaty & Samboteng, 2020). In addition, there needs to be a plan to organise socialisation and training activities aimed at all elements of human resources involved, both at the Malinau district education office, school management, and teachers or operators who will be responsible for updating the latest data filling in the Dapodik application. Through planned training and socialisation activities, teachers are expected to be able to fill in and complete data to meet the requirements for applying for teacher certification allowances in the Dapodik application at the Malinau district education office.

2. Organizing

Based on the findings presented in this study, it can be concluded that the organisational efforts for the implementation of Dapodik based on the management information system have been carried out effectively and efficiently at the Malinau District Education Office. The successful implementation of this programme is supported by the presence of human resources who have competence in the field of information technology, so as to ensure the smooth operation of data entry in Dapodik. These outcomes align with George R. Terry's perspective, asserting that organizing involves determining, grouping, and arranging various activities necessary for goal attainment. It also includes the placement of employees in relation to these activities, providing suitable physical resources for work requirements, and establishing authority relations delegated to each person in connection with the execution of expected activities (Rulinawaty et al., 2022).

3. Actuating

Based on these results, it can be concluded that the implementation of the Dapodik application-based SIM in the Malinau Regency education office is good, where employees placed in positions can work together and have the ability so that school, student, and teacher data can be combined well. In carrying out its duties and functions, the Malinau Regency Education Office is facilitated by the Dapodik application so that the Malinau Regency Education Office can monitor the condition of schools and the development of schools in the Malinau district. These results are supported by George R. Terry's opinion that Mobilization arouses and encourages all group members to have the will and work hard to achieve goals sincerely and in harmony with the planning and organizing efforts of the leadership. Based on this theory, it can be seen that the Malinau Regency education office is mobilizing all available resources to implement the Dapodik application-based SIM

properly. Schools in Malinau Regency are also encouraged to always update school data which includes data on teachers, students, infrastructure, and student graduation according to current conditions.

4. Controlling

From this explanation, it can be understood that the Malinau District Education Office has an important role in supervising or controlling the implementation of the Dapodik application-based Management Information System (SIM), especially in filling in and changing teacher certification data; where this application helps the implementation of school assignments both in terms of time efficiency, energy and very effective costs.

The implementation of the Dapodik application-based SIM at the Education Service in Malinau Regency is in line with the Republic of Indonesia Government Regulation No. 17 of 2010 concerning the Management and Implementation of Education in Article 38 Paragraph 1; which states that to organize and manage the national education system in the regions, the district/city government develops and implements a district/city education information system based on information and communication technology (Sandrayani et al., 2022).

Effective SIM management based on the Dapodik application can provide benefits, namely making education unit data stored in one place and the history of teacher certification at Dapodik. So processing becomes easier. The data reported by educational units in the Dapodik system varies. Starting from institutional data, teachers, student data, curriculum, employees, facilities, and employees. Dapodik must be filled in by educational units or schools in Malinau Regency, the aim of which is to report institutional data to minimize the risk of violations and irregularities in school management.

Factors Inhibiting the Implementation of a Management Information System Based on The Dapodik Application System of the Malinau Regency Education Office

Based on the results of interviews with several informants, the implementation of this policy is already underway but has not been optimal due to a lack of socialization in all education services or schools due to limited funds. As is known, Malinau Regency has a very wide geographical area and is spread across 3T areas, namely remote, isolated, and underdeveloped, and is on the Indonesian-Malaysian border. Schools in remote and inland areas certainly do not have adequate networks, so inputting data or making changes to data requires a long time.

From year to year, the Malinau Regency Education Office experiences the same problems related to the internet network. Where every year schools and teachers will make data changes, so schools must have an internet network to make it easier to input and change data. The use of information systems in an organization needs to be supported by good resources to improve organizational performance. The success of an information system is influenced by the ease of utilizing technology in the system that will help its work. The use of information system technology must pay attention to the efficiency and effectiveness of the system. Another thing in achieving successful management of management information systems is evaluation.

Problems like this are certainly an obstacle for the Malinau district education office in implementing an effective SIM based on the Dapodik application system. Even though the Department of Education has implemented it, in the field there are always problems, including



delays in inputting and updating data. With such a delay, it will have an impact on the Government in formulating and making policies oriented towards improving and quality of education in Malinau Regency.

In Yuda Ikhwan's research, he also found the same problem, namely: (1) Delays in entering data; (2) administrators including schools and teachers have difficulty entering data; (3) no internet connection; (4) Power failure, not operating 24 hours; (5) to access the official website, stable internet access is needed to view the final data from the website (Ikhwan, 2019). *Changing the strategy to take advantage of opportunities and minimize the weaknesses* (Malohing et al., 2022). *Relevant agencies should provide specialised training to human resources related to improving employee performance as well as improvements in facilities and infrastructure* (Paisal et al., 2022).

Based on the results of this research, the researcher can conclude that the inhibiting factors for implementing a Management Information System (SIM) based on the Dapodik application system of the Malinau Regency Education Office are.

1. Not all education units in Malinau Regency have an internet network, and every education unit to input data into the Dapodik application requires internet network access.
2. There is a delay in inputting data or updating data for both schools and teachers who make data changes in processing certification.
3. Electricity in some areas of Malinau Regency is not reached by schools.
4. There are still schools and teachers who experience difficulties in using the Dapodik application, making it difficult to update data. This is due to the limited socialization activities of the Malinau Regency Education Office.
5. Frequent changes in school Dapodik operators require re-socialization.

Through an integrated dapodik management information system strategy (integrated) can provide more accurate and quality information to support the development of operations, management, and decision-making functions within an organization (Annida & Syahrani, 2022). It requires qualified operators and educators who can create conditions so that all components are interrelated and can work well together to achieve institutional goals (Rulinawaty & Samboteng, 2020). Management Information System is a system that processes organisational data and in its implementation there are several problems and challenges faced by the world of education related to digitalisation, namely the professionalism of education personnel that is not yet optimal, learning strategies that are still conventional while the development of digitalisation of education continues to grow, the challenge of improving school management information systems that need to be improved, the development of digitalisation that must continue to be developed, and the challenges of advances in science and technology (Widyawati & Miyono, 2024).

Conclusions

Implementation of a Management Information System Based on the Dapodik Application System in the Malinau Regency Education Office, namely (1) Planning which includes efforts made to realize a SIM based on the Dapodik application system by preparing the facilities and infrastructure to be used, resources to be used, creating objectives for implementing the SIM,

as well as targets to be achieved through socialization and training activities. (2) Organizing the implementation of SIM based on the Dapodik application system, forming cooperative relationships with the Malinau Regency Education Office and with educational units, placing human resources according to ability, and dividing work according to duties and functions. (3) Actuating the implementation of the Dapodik application-based SIM is already underway, where teachers can process certification and schools can report education unit data periodically. (4) Controlling is carried out by the Malinau Regency Education Service, while at the education unit level, the school principal is responsible as supervisor for monitoring and supervising the school Dapodik. Meanwhile, the factors inhibiting the implementation of a Management Information System (SIM) based on the Dapodik application system of the Malinau Regency Education Office are: (1) The internet network is limited to a few schools; (2) Delays in inputting data or updating school data and teachers who make data changes processing certification; (3) Electricity is still limited in some educational units; (4) There are still schools and teachers who experience difficulties in using the Dapodik application; and (5) Change of school Dapodik operator so that socialization must be re-socialized.

Daftar Rujukan

- Alqahtani, A. Y., & Rajkhan, A. A. (2020). E-Learning Critical Success Factors During The Covid-19 Pandemic: A Comprehensive Analysis of E-Learning Managerial Perspectives. *Education Sciences, 10*(9), 1-16. <https://doi.org/10.3390/educsci10090216>
- Annida, A., & Syahrani, S. (2022). Strategi Manajemen Sekolah dalam Pengembangan Informasi Dapodik di Internet. *Educational Journal: General and Specific Research, 2*(1), 89–101. <https://adisampublisher.org/index.php/edu/article/view/71>
- Damayanti, W. K., Khoeriyah, N. D., Koswara, N., & Handayani, S. (2023). Implementation of Operational Assistance Policy in The Implementation of Early Childhood Education (Bop Paud) in Improving The Quality of PAUD in West Bandung District: 10.2478/bjlp-2023-000005. *Baltic Journal of Law & Politics, 16*(2), 58–76. <https://knia.stialanbandung.ac.id/index.php/knia/article/download/938/pdf>
- Efendi, S. (2020). The Role of Human Capital in The Education Sector in Efforts to Create Reliable Organizational Human Resources. *International Journal of Science and Society, 2*(1), 405–413.
- Hina, S., Selvam, D. D. D. P., & Lowry, P. B. (2019). Institutional Governance and Protection Motivation: Theoretical Insights into Shaping Employees' Security Compliance Behavior in Higher Education Institutions in The Developing World. *Computers & Security, 87*, 101594. <https://doi.org/10.1016/j.cose.2019.101594>
- Ibrahim, F., Susanto, H., Haghi, P. K., & Setiana, D. (2020). Shifting Paradigm of Education Landscape in Time of The Covid-19 pandemic: Revealing of A Digital Education Management Information System. *Applied System Innovation, 3*(4), 49. <https://doi.org/10.3390/asi3040049>
- Ikhwan, Y. (2019). Pengelolaan Sistem Informasi Manajemen di Dinas Pendidikan Pemuda dan Olahraga Kabupaten Gunungkidul. *Hanata Widya, 8*(2), 29–40. <https://journal.student.uny.ac.id/ojs/index.php/fipmp/article/view/16272>



- Indrawati, S. M., & Kuncoro, A. (2021). Improving Competitiveness Through Vocational and Higher Education: Indonesia's Vision for Human Capital Development in 2019–2024. *Bulletin of Indonesian Economic Studies*, 57(1), 29–59. <https://doi.org/10.1080/00074918.2021.1909692>
- Javaid, M., Haleem, A., Vaishya, R., Bahl, S., Suman, R., & Vaish, A. (2020). Industry 4.0 Technologies and Their Applications in Fighting Covid-19 Pandemic. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 14(4), 419–422. <https://doi.org/10.1016/j.dsx.2020.04.032>
- Malohing, M. C., Milwan, M., & Wibowo, S. (2022). Strategi Peningkatan Kualitas Pelayanan Publik Pegawai Kantor Kecamatan Malinau Barat Kabupaten Malinau. *Ideas: Jurnal Pendidikan, Sosial, dan Budaya*, 8(3), 813–822. <https://doi.org/10.32884/ideas.v8i3.904>
- Novendra, R., Jalinus, N., Waskito, W., Afriansyah, A., & Rasfira, A. (2022). User Satisfaction Analysis Service Quality of Dapodik Applications (Educational Data) Using Servqual Method. *Journal of Applied Engineering and Technological Science (JAETS)*, 3(2), 185–189. <https://doi.org/10.37385/jaets.v3i2.790>
- Paisal, P., Muhtar, E. A., & Milwan, M. (2022). Analisis Kinerja Pegawai dalam Pelayanan Tunjangan Guru di Dinas Pendidikan Kabupaten Malinau. *Ideas: Jurnal Pendidikan, Sosial, dan Budaya*, 8(2), 455–462. <https://doi.org/10.32884/ideas.v8i2.696>
- Rulinawaty, R., Beliu, J. J., Fina, Y. N., Salim, K., & Herman, S. R. W. (2023). *Kompleksitas dan Dinamika Birokrasi di Indonesia (Pertama)*. Literakata Karya Indonesia.
- Rulinawaty, R., Darojat, O., & Sudrajat, A. (2022). Collective Organizational Engagement to Enhance Organizational Performance: Case of Indonesia Office Services. *JKAP (Jurnal Kebijakan dan Administrasi Publik)*, 26(2), 127–143. <https://doi.org/10.22146/jkap.66886>
- Rulinawaty, S. A., & Samboteng, L. (2020). Leading Agile Organization Can Indonesian Bureaucracy Become Agile. *Journal of Talent Development and Excellence*, 12(3s), 330–338.
- Sandrayani, N. M. D. F., Purwanto, A. J., & Rulinawaty, R. (2022). Pengaruh E-Government dan Budaya Organisasi terhadap Kinerja Aparatur Sipil Negara (ASN) pada Sekretariat Daerah Kabupaten Jember. *Jiemar: Journal of Industrial Engineering & Management Research*, 3(6), 191–203. <https://doi.org/10.7777/jiemar.v3i6.429>
- Sofyani, H., Riyadh, H. A., & Fahlevi, H. (2020). Improving Service Quality, Accountability and Transparency of Local Government: The Intervening Role of Information Technology Governance. *Cogent Business & Management*, 7(1), 1735690. <https://doi.org/10.1080/23311975.2020.1735690>
- Sugiyono, M. (2014). *Penelitian Pendidikan Pendekatan Kuantitatif Kualitatif R&D*. Alfabeta.
- Szymkowiak, A., Melović, B., Dabić, M., Jeganathan, K., & Kundi, G. S. (2021). Information Technology and Gen Z: The Role of Teachers, The Internet, and Technology in The Education of Young People. *Technology in Society*, 65, 101565. <https://doi.org/10.1016/j.techsoc.2021.101565>
- Udiyana, I. B. G., Putri, A. A. M. A. Y., Utari, I. A. P. A., Astini, N. N. S., Kusuma, I. N. A., & Karwini, N. K. (2023). Improving The Effectiveness of Primary School Administration Services Based on The Education Management Information System with The Dapodik

Application and Education Service Facilities. *Journal of Management, Economic, and Financial*, 1(2), 51–59. <https://doi.org/10.3390/educsci10090216>

Widyawati, W. D., & Miyono, N. (2024). Penerapan Digitalisasi Sistem Informasi Manajemen Dapodik di UPTD SPNF SKB Kota Salatiga. *Didaktik: Jurnal Ilmiah PGSD STKIP Subang*, 10(1), 997–1015. <https://doi.org/10.36989/didaktik.v10i1.2684>