EFFECTIVENESS OF SCHOOL ADMINISTRATION SERVICE SYSTEM IN THE DIGITAL ERA: CASE STUDY AT SMAN 1 KREMBUNG

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Abstract: Objective: This study aims to analyze the effectiveness of the school administration service system at SMAN 1 Krembung in responding to the demands and challenges of the digital era. The research focuses on identifying strengths, weaknesses, and areas for development in the implementation of digital administrative practices within the school environment. **Method:** A mixed methods approach was utilized, combining both qualitative and quantitative techniques. Data were collected through structured interviews with administrative staff and school leaders, observations of administrative workflows, and surveys distributed to staff and stakeholders. The integration of these methods allowed for a comprehensive analysis of administrative practices and perceptions. **Results:** The findings reveal that SMAN 1 Krembung has begun to implement several digital technologies to support its administrative processes. However, a notable gap remains between the desired efficiency and the actual performance of the system. Key challenges include insufficient digital infrastructure, limited staff digital competencies, and a lack of system integration across different administrative units. **Novelty:** This study offers one of the few in-depth evaluations of school administration service systems in an Indonesian public high school context during the digital transformation era. It contributes practical recommendations for improving administrative service quality, emphasizing the importance of infrastructure upgrades, targeted staff training, and the development of an integrated administrative system to support educational management in the digital age.

Keywords: Administrative Services, Digital Era, Effectiveness, School, Technology

Introduction

Effective school administration services are an important foundation for the smooth operation and quality of education [1]. Administrative services cover various aspects, ranging from student data management, finance, to communication with parents and external parties [2]. In the digital era, information and communication technology (ICT) offers great opportunities to improve the efficiency, transparency and accountability of administrative services [3].The purpose of this study is to analyze how SMAN 1 Krembung implements the administrative service system in the digital era, and to identify the challenges and opportunities. The benefit of this study is to provide practical recommendations for schools and policy makers in improving the quality of administrative services. This study is important because of its positive impact on school efficiency, student and parent satisfaction, and improvement of education quality [4], [5].

In Indonesia, digital transformation in school administration services still faces various challenges. Many schools, especially in the regions, still lack adequate ICT infrastructure, as well as competent human resources in managing technology. The resulting phenomenon is unequal access to technology and information, which can widen the gap in education quality between schools[6]. The role of society, especially parents and the education community, is very important

in supporting this digital transformation. They can participate in providing input, overseeing technology implementation, and helping to improve digital literacy among students and teachers[7].

Several studies have highlighted various phenomena related to the digitization of school administration services. A study by [8] showed that the implementation of a school management information system (SIMS) can improve the efficiency of student and financial data management. However, a study by [9] found that many teachers and administrative staff do not have sufficient ICT skills to operate SIMS effectively. Another study by [10] showed that parents' participation in monitoring students' development through digital platforms can improve communication and cooperation between schools and families. However, research by found that not all parents have access or the ability to use such digital platforms [11].

This theory explains that organizations, including schools, are complex systems consisting of various components that interact and influence each other. In the context of administrative services, the system includes ICT infrastructure, human resources, business processes, and interrelated policies. The effectiveness of the administrative service system depends on how these components work together to achieve organizational goals.

Implementation of school administration service systems in the digital era. Theoretically, the adoption of technology should increase efficiency, transparency, and accountability. However, in practice, many schools still face various obstacles, such as lack of infrastructure, inadequate HR skills, and resistance to change [12]. The importance of this study is to identify the root of the problem and provide practical recommendations to address these gaps. A study by [13] shows that investment in ICT infrastructure alone is not enough to improve the effectiveness of administrative services. Staff training, organizational culture change, and support from policy makers are also needed. The purpose of this study is to analyze the effectiveness of the school administrative service system at SMAN 1 Krembung in facing the challenges of the digital era.

Methods

This study uses a qualitative approach to deeply understand the school administration service system at SMAN 1 Krembung. The qualitative approach was chosen because it allows researchers to explore rich and in-depth information about experiences, perceptions, and meanings related to the phenomenon being studied. This study uses a qualitative descriptive research type. Descriptive research aims to describe and interpret phenomena that occur systematically and accurately [14]. In this context, this study attempts to describe how the school administration service system at SMAN 1 Krembung is run, and to identify the factors that influence its effectiveness.

Data collection in this study was conducted through three main techniques, including in-depth interviews with the principal, administrative staff, teachers, and students to explore experiences, expectations, and challenges related to the administrative service system; participant observation by being directly involved in administrative activities to understand interactions and processes in depth; and documentation through the collection and analysis of school documents such as student registration books and letter archives to obtain information on administrative processes, organizational structures, and existing resources. The collected data were analyzed qualitatively using content analysis techniques.This technique involves identifying key themes that emerge from interview data, observations, and documents. These themes are then grouped and interpreted to produce a comprehensive understanding of the school administration service system at SMAN 1 Krembung [15].

Results and Discussion

Analysis is an activity that includes several activities. These activities are in the form of differentiating, breaking down, and sorting to be included in certain groups to be categorized with certain goals, then looking for connections and then interpreting their meaning. According to the Big Indonesian Dictionary, analysis is the breakdown of a topic into its various parts and the study

of the parts themselves and the relationships between the parts to obtain a precise understanding and comprehension of the overall meaning. Analysis is an attempt to sort an integrity into elements or parts so that its hierarchy and arrangement are clear. Analysis is a process of solving a problem into parts that are interrelated with each other. The ability to break down units into separate units, divide units into sub-units or parts, distinguish between two that are the same, and to understand differences. Analysis is an activity that includes a number of activities such as mastering, differentiating, sorting something to be classified and regrouped according to certain criteria, then looking for connections and interpreting the meaning.

A. System

The definition and understanding of a system is a unit consisting of components or elements that interact with each other, are interrelated, or are interdependent to form a complex whole. A system can consist of systems or subsystems. Each subsystem can consist of smaller subsystems that interact and are interconnected to form a unity so that the system's goals and objectives can be achieved.

According to Ludwig Von Bartalanfy, "A system is a set of elements that are interconnected in an inter-relationship between these elements and the environment."According to Anatol Raporot, "A system is a collection of units and devices that are related to each other." According to L. Ackof, "A system is any conceptual or physical unity consisting of parts that are interdependent on each other. According to L. Ackof, "A system is any conceptual or physical unity consisting of parts that are interdependent on each other.

The government as the state administrator plays an important role in the provision of excellent public services for all Indonesian citizens, as mandated by Law Number 25 of 2009 Article 1 "Public services are activities or a series of activities in order to fulfill service needs in accordance with laws and regulations for every citizen and resident for goods, services and/or administrative services provided by the organizer", while what is meant by public service providers is every State Organizing Institution, Corporation, Independent Institution formed based on Law for public service activities, and other Legal Entities formed solely for public service activities. Service in general is a pleasant feeling given to others accompanied by conveniences and fulfilling all their needs.

According to A.S. Moenir, public service theory includes several things, namely:
1. Service is the process of fulfilling needs through the direct activities of other people.
2. Public service is the provision of services to the community to meet their needs and interests, either by the government, private parties on behalf of the government, or private parties.
3. Public services must always pay attention to the public interest.
4. Public services must have good systems, procedures and methods so that organizational goals are achieved.
5. Public services must have adequate facilities, such as equipment, supplies and aids.
6. Public services must have employees who have adequate abilities and skills.
7. Public services must have processes and procedures that are established in advance, known to all parties involved, and adhered to.
8. Public services must have a climate that is conducive to developing organizational culture. The quality of public services must meet the desires, needs and tastes of consumers.

Public services in schools are services provided by the government to meet basic needs in the field of education. These basic school services are regulated in the Minister of Education, Culture, Research and Technology Regulation Number 32 of 2022 concerning Technical Standards for Minimum Education Services. The quality of educational services can be determined by comparing students' perceptions and expectations with the educational services they receive during school. Indicators of administrative services in schools can be seen from several things, such as: Timeliness of inputting student grades, Speed of filling in master book sheets, Speed of verification and validation of students, Speed of preparing class journals, Speed of legalizing diplomas.

Some examples of public services in schools include:

1. Legalize your diploma
2. Student transfer services
3. Submission of National School Identification Number (NPSN)
4. Rayon relocation recommendation service
5. School operational permit recommendations
6. BOS fund recommendations
7. Submission of PNS maternity leave
8. PAUD establishment recommendation service

C. Administration

Administration is a process of cooperation between two or more people to achieve common goals. Administration can also be interpreted as a series of activities to manage resources effectively and efficiently. According to The Liang Gie, administration is a series of activities to organize work carried out by a group of people in collaboration to achieve certain goals.

School administration is a system of governance that includes various types and forms of resources to achieve educational goals. School administration has several functions, such as: Planning, Organizing, Compiling, Directing, Coordinating, Reporting, Budgeting, Supervision, Assessment. One of the tasks of school administration is to organize the school's activity schedule, such as lesson schedules, parent meetings, sports events, and extracurricular activities.

Some examples of school administration documents include:

a. Class data
b. Attendance list of male and female students
c. Class inventory book
d. Teacher's notebook
e. Analysis of assessment results
f. Student attitude journal

Scope of School Administration:

School administration includes various important aspects that support the management and operation of institutions to plan, organize, direct, coordinate, supervise, and evaluate the components of the school education concerned.

These components include:

a. Student administration
   1) New student Admission;
   2) Guidance and Counseling Program;
   3) Student Learning Grouping;
   4) Student Attendance;
   5) Student Transfer;
   6) Student Statistics Board;
   7) Student Master Book;
b. Curriculum administration
   1) Modification of the national curriculum according to the initial abilities and characteristics of students
   2) Arrange lesson schedules and divide teaching tasks;
   3) Arrange the implementation of the preparation of teaching programs per semester and lesson preparation;
   4) Arranging the implementation of curricular and extracurricular program preparation;
   5) Arrange the implementation of assessments;
   6) Managing the implementation of class promotions;
   7) Create student learning progress reports;
   8) Managing improvement and enrichment efforts
c. Administration of educators and education personnel
   1) Employee inventory;
   2) Proposing employee formation;

3) Proposing appointments, promotions, periodic promotions and transfers;
4) Organizing welfare efforts;
5) Arrange the division of tasks.

d. Infrastructure administration

School infrastructure management is tasked with planning, organizing, directing, coordinating, supervising, and evaluating the need for and use of infrastructure so that it can provide an optimal contribution to teaching and learning activities.

e. Financial administration (Treasurer)
1) The authorizer is an official who is given the authority to take actions that result in budget receipts and expenditures.
2) The ordinance officer is an official who is authorized to conduct testing and order payment for all actions taken based on the authorization that has been established.
3) The treasurer is an official who is authorized to receive, store and spend money and is required to make calculations and accountability reports.

f. Public Relations Administration (Public Relations)

To attract the sympathy of the community so that they are willing to participate in advancing the school, various things need to be done, including informing the community about school programs, both programs that have been implemented, are being implemented, and will be implemented so that the community gets a clear picture of the school in question.

Tabel 1. Analysis of Administrative Service Effectiveness

Service Aspects	Indicator	Findings	Analysis
Efficiency	service time	Average administrative service time 15 minutes	Efficient, but can still be improved with digitalization
Transparency	access to information	Information is available via notice boards and the school website.	Quite transparent, but needs an interactive platform
Accountability	complaint mechanism	There is a suggestion box and communication channels with the school.	Ok, but need faster response
User Satisfaction	level of student and parent satisfaction	80% of students and parents are satisfied with administrative services	High, but needs to be maintained and improved
Utilization of Technology	Use of information and communication systems	Use of information systems for student and financial data management	Not yet optimal, needs integration with other platforms

Source: Processed by researchers, 2024

Based on table 1, it states that the evaluation of the administrative service system shows several important points: the efficiency of service time is quite good with an average of 15 minutes, but digitalization can optimize it further. Transparency is already quite good through notice boards and websites, although an interactive platform would be of further improvement. Accountability is ensured with a complaint mechanism, and responses need to be expedited. The user satisfaction rate is 80%, which is high, but it requires continuous efforts to maintain it. The use of technology is still not optimal and requires further integration with other platforms.

This study shows that SMAN 1 Krembung has achieved a fairly good level of effectiveness

in administrative services, especially in terms of user satisfaction. However, there are still several aspects that need to be improved, such as the use of technology and information transparency. Research by [16] also found that the use of information systems can increase the efficiency of student and financial data management. However, the study also highlights the importance of staff training and support from policy makers to ensure successful implementation. Research by [17] found that many teachers and administrative staff still do not have adequate ICT skills to operate information systems effectively. This is in line with the findings of this study, which shows that the use of technology at SMAN 1 Krembung is not optimal.

With that, SMAN 1 Krembung has achieved a fairly good level of effectiveness in administrative services, but there are still several aspects that need to be improved. Utilization of technology and information transparency are the main focuses for improvement. This study provides practical recommendations for schools and policy makers in improving the quality of administrative services in the digital era.

Conclusion

Fundamental Finding: The analysis of the school administration service system at SMAN 1 Krembung reveals that, while the school has adopted certain digital technologies, there remains a significant gap between the intended outcomes and actual implementation. The core challenges include insufficient ICT infrastructure, inadequate digital competencies among administrative staff, and the absence of an integrated digital system to streamline administrative processes. **Implication:** To improve the effectiveness of administrative services in the digital era, the school must prioritize investment in digital infrastructure, implement regular and targeted staff training programs to enhance digital skills, and develop an integrated, user-friendly digital administration platform that connects various administrative functions for greater efficiency and transparency. **Limitation:** This study focuses solely on a single case study at SMAN 1 Krembung, which limits the generalizability of the findings to other educational institutions. The results may not fully reflect the diversity of challenges and conditions experienced in different schools or regions. **Future Research:** Future studies should consider involving a broader range of schools with varying characteristics and resource levels. Expanding the research using more comprehensive and comparative methodologies could provide a deeper understanding of best practices in digital school administration and help formulate scalable policy recommendations for national implementation.

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