



## **Digital Transformation in School Administration Personnel Management: Applying Technology for Efficiency and Accountability**

Nur Afni Aprilia, Sultoni\*, Agus Timan

Program Studi Administrasi Pendidikan, Universitas Negeri Malang, Jawa Timur, Indonesia  
[nur.afni.2101316@students.um.ac.id](mailto:nur.afni.2101316@students.um.ac.id), [sultoni.fip@um.ac.id](mailto:sultoni.fip@um.ac.id), [agus.timan.fip@um.ac.id](mailto:agus.timan.fip@um.ac.id)

**Abstract:** This study discusses digital transformation in the management of school administrative personnel, which is a solution to improve efficiency and accountability in education management. The problem raised is the challenge faced by school administration personnel in managing administration conventionally. Such management often results in information delays and administrative errors. The purpose of this study is to explore the application of digital technology in school administration management and its impact on the performance of administrative staff. The method used includes the analysis of the review literature, namely by collecting, analyzing, and synthesizing various sources of literature relevant to the research topic. The results show that the application of information and communication technology significantly improves operational efficiency, accelerates decision-making, and increases accountability through a transparent reporting system. The conclusion of this study confirms that digital transformation not only reduces administrative workload, but also creates a more responsive and organized learning environment, supporting the achievement of higher educational goals.

**Keywords:** Digital Transformation, School Administrators, Efficiency, Accountability.

### **Introduction**

Digital transformation has become one of the key factors in increasing efficiency and accountability in various sectors, including education. School administration personnel play a role in supporting the implementation of education in schools so that education in schools is carried out effectively and efficiently (Putri & Rusdinal, 2024). Schools as educational institutions need a system that is not only efficient but also transparent and accountable in managing human resources, administration, and services to students. With the application of technology, schools can overhaul administrative processes that were previously conventional to be more automated and integrated. Through technology, schools can automate many administrative tasks, from data management to reporting easily and quickly. The use of digital technology in the field of school administration is no longer just a lifestyle that describes modern schools, but a necessity (Putri & Rusdinal, 2024). Digital transformation can be a solution to improve the quality of management in schools.

The use of information and communication technology in the management of school administration personnel allows real-time data collection, storage, and processing. This will make it easier for management to make data-based decisions, reduce administrative errors, and increase productivity. For example, by using a cloud-based school management system, all administrative data can be accessed by relevant parties without time and location restrictions, supporting better collaboration between



teachers, administrative staff, and parents of students. With a more structured report, management can evaluate effectively.

One of the important aspects of digital transformation is increased accountability in the management of school administrative personnel. With a transparent reporting system, the school can monitor the performance of administrative staff more effectively. The implementation of technology will provide a clear visualization of performance and expenses, so that management can conduct more in-depth evaluations and make informed decisions for continuous improvement. Sholikah and Hermanto (2021) stated that accountability is very important for educational institutions that are financed or have a dependence on the public. This high accountability will have a positive impact on public trust in the school. Thus, technology not only improves efficiency, but also integrity in education management.

However, this digital transformation is not separated from challenges. The readiness of human resources in adopting technology is a determining factor for successful implementation. Putri and Rusdinal (2024) stated that personnel who have skills and expertise in the field of administration, especially school administration, are needed who can meet the criteria for school administration personnel. Therefore, training and competency development of school administration personnel is an important step to ensure that they can make optimal use of technology. In addition, adequate technological infrastructure must also be ensured so that all elements in the school can be integrated properly. Seeing the importance of digital transformation in the management of school administrative personnel, research and in-depth understanding of this process are becoming increasingly relevant. By applying technology appropriately, schools can not only improve operational efficiency but also create a better learning environment.

## **Method**

This study uses a descriptive qualitative approach. The research method used is through literature review. Literature review is an approach used to collect, analyze, and synthesize various sources of literature relevant to the research topic. Systematic techniques to collect and test critically, according to Norlita, et al. (2023) literature review is to integrate and collect the results of a research study of a research question or topic that wants to be explored. The process begins by identifying the problem to be solved. The researcher then conducted a systematic literature search through various sources. These sources include Google scholar, Garuda Dikti, and Taylor & Francis. After that, the literature that has been collected will be selected based on certain criteria, such as relevance, credibility, and recency. The analysis stage is carried out by the researcher by comparing the findings in the literature to find gaps or consistency in them. Synthesis of various literature is carried out to summarize the results of previous research. Literature reviews help researchers understand existing research and identify contributions that can be made through new research. The method is often used in the early stages of research to strengthen theoretical and methodological foundations. The results of the literature review will be used to formulate sharper research questions.



## Results and Discussion

### Result

School administration staff significantly impact the quality of educational services, but their qualifications often do not meet the required standards. School administration personnel require special skills. Adequate skills will realize optimal performance. This is in line with the research of Suryana, et al. (2018) which states that school administration personnel are human resources in schools who are not directly involved in the implementation of teaching and learning activities but play a role in supporting the smooth learning process and school administration. Furthermore, Pramudya, et al. (2018) stated that school administration personnel in this case occupy an important role as education personnel with their duties which are not only to assist schools in administrative affairs but also include several important activities in school quality development such as management, development, supervision and technical services.

However, not all schools have well-trained resources. Constraints such as inadequate human resources and infrastructure have led some staff to face challenges in basic computer operations. The research of Rahman and Afriza (2021) states that some of the problems in the implementation of online management information systems can be seen from the following symptoms: 1) there are still school administration personnel who are not optimal in the correspondence process, 2) there are still school administration personnel who are not optimal in operating basic forms of computers, 3) there is still a lack of public services for school administration personnel, and 4) there is still a lack of skills for school administration personnel. This is in line with the research of Putri and Rusdinal (2024) which stated that in general, school administration personnel still manage the implementation of these affairs in a manual way and have not been managed based on digital technology. Therefore, high qualifications and competencies are essential to increase productivity in administrative roles. Awareness is needed in increasing adaptability to the main task.

School administration personnel must be able to keep up with technological developments by utilizing technology in carrying out their duties. To obtain these competencies, capacity building is needed through education and training. This empowerment requires support from school principals to make fundamental improvements in the effectiveness of empowering school administration personnel. In addition to support, school principals must also carry out supervision. Mardiyanti and Setyaningsih (2020) stated that the supervision program contains guidance to educators/principals and school administration staff, monitoring the implementation of national education standards, assessing the performance of school administrative staff, and compiling reports on the implementation of supervision programs, and conducting professional coaching and training for school principals, educators and education administration staff, and so on Carry out managerial supervision based on the format and instruments set by the Education Office.

Digital transformation in education is crucial to adapt to modern needs, and effective schools require good accountability practices. Putri and Rusdinal (2024) stated that school administration personnel must have the ability to use technology for the smooth running of their work, such as managing student data, managing teacher and employee data, managing mail administration, and others. Increased accountability through digital filing not only improves efficiency, but also affects public trust and organizational performance. The importance of human resource support is emphasized to ensure effective administration, thus enabling schools to achieve higher educational goals.



## **Discussion**

### **The Concept of Digital Transformation in Education**

Transformation is a change or movement either intentionally or unintentionally. Digital transformation is a multi-stage process, where the initial stage involves the development of technological and information solutions to improve existing systems, culminating in a phase that includes the creation of entirely new processes and technologies (Gumaelius et al., 2024). In the era of digital transformation, the demands of information flow and globalization are getting higher. Various sectors must make changes and innovate in order to adapt to the development of the times, including in the education sector (Supriyanto et al., 2022). Digital transformation in education is the process of integrating digital technology into the learning and teaching experience, aiming to increase the effectiveness and engagement of students. This concept includes the use of tools such as online learning platforms, data analytics to monitor learners' progress, and personalized learning approaches that tailor the material to individual needs. In addition, this transformation also encourages innovation in teaching methods. By ensuring accessibility and supporting teachers' professional development, digital transformation has the potential to create a more inclusive and relevant learning environment, preparing learners to face the challenges of an increasingly digital world.

Digital transformation in education not only has an impact on the teaching and learning process, but also on the role of school administration personnel. By integrating digital technology, administrative personnel can improve operational efficiency and data management. For example, the use of cloud-based school management systems allows for the collection and analysis of student data in real-time, facilitating more informed decision-making. In addition, digital communication platforms facilitate interaction between staff, teachers, and parents. This will allow information to be conveyed quickly and accurately. Training and development of digital skills for administrative staff is also important, so that they can make optimal use of technology, support the smooth operation of schools, and contribute to the achievement of a more modern and responsive educational vision. Training in digital skills enables administrative personnel to adapt to changes and implement innovative solutions in school management. This not only increases productivity, but also supports a more responsive and connected learning environment, in line with today's educational needs.

### **Challenges and Needs of School Administration Management**

The challenges of school administration management are often related to adaptation to technological developments and changes in the education system. One of the main challenges is the lack of training and digital skills among school administrators, which can hinder the optimal use of new tools and systems. In addition, the increase in workload due to increasingly complex data management and the need to maintain efficient communication with various stakeholders is also an obstacle. In general, school administration personnel still manage the implementation of each of these affairs in a manual way and have not been managed based on digital technology. Research by Putri and Rusdinal (2024) stated that some of the obstacles experienced are: 1) It takes a long time to recover employee data because it still uses manual storage using physical folders and folders. 2) The management of personnel affairs such as departure, personnel reports, the preparation of personnel statistical data is carried out manually so that the employees or teachers concerned must come directly to the



administration department to deliver the necessary files so that administrative personnel are somewhat less overwhelmed in serving if many employees or teachers come directly, especially during the deadline or due date of these affairs. 3) The management of incoming and outgoing letters is carried out manually and the storage of archives is carried out manually. With the manual management of letters and archives, it is difficult to find the old papers that are needed again. 4) The management of student data has not been fully carried out digitally, which can be seen from the absence of exact data regarding the number of statistics of students every school year. 5) Guidance in student self-development has not been optimal, such as to prepare programs and document them. 6) School administration personnel have not mastered computer programs too much, such as not mastering the features in Microsoft Office programs.

Ratnasari, et al. (2018) stated that for the smooth implementation of their duties and functions, school administration personnel are required to have several competencies. The competency standards owned by school administration employees differ from one to another according to the needs of the educational institution concerned (Handoko et al., 2018). On the other hand, the management needs of administrative personnel include the development of comprehensive training programs to improve digital skills, as well as the implementation of an integrated information management system to facilitate data access. By meeting these needs, administrative personnel can function more effectively, support better school management, and contribute to the achievement of broader educational goals.

### **Application of Technology in School Administration Management**

The application of technology in the management of school administration personnel plays an important role in improving operational efficiency and effectiveness. Setriani and Irsyad (2024) stated that in order for school operations to run smoothly, school administration personnel must carry out their duties and functions properly by mastering the use of information and communication technology that can support the achievement of educational goals. A digital-based school management system allows for rapid collection and analysis of student data, making it easier to monitor academic progress and attendance. Additionally, the use of communication platforms such as email and instant messaging apps facilitates coordination between staff, teachers, and parents, speeding up the delivery of important information. Software applications for financial and human resource management also help in budget planning and staff management, reducing administrative burdens. By integrating this technology, administrative staff can focus on strategic tasks, improve service to students and parents, and create a more responsive and organized school environment.

### **Operational Efficiency through Digital Transformation**

Operational efficiency through digital transformation refers to increasing productivity and reducing costs in an organization by utilizing digital technology. In the context of education, this transformation allows schools to automate administrative processes such as student enrollment, schedule management, and attendance reporting, which were previously done conventionally and time-consuming. This is in line with the opinion of Kusuma, et al. (2023) which states that the transformation of conventional administration to digital has a great influence on the effectiveness of school administration staff and administrative life in the education office. With a cloud-based management system, data can be accessed and managed in real-time, speeding up decision-making and minimizing the risk of errors. In addition, the use of digital communication tools reduces information delays and improves collaboration between



staff, teachers, and parents. Thus, digital transformation not only reduces administrative workload, but also creates a more efficient workflow, allowing all parties to focus on the larger goals of education.

### **Accountability in School Administration Management**

Accountability in school administration management is an important aspect that ensures transparency, responsibility, and integrity in every managerial process. This includes budget management, financial reporting, and efficient use of resources. School accountability is an effort to account for all school activities, to internal and external parties (Oktarina et al., 2023). Furthermore, Oktarina, et al. (2023) states that there are 5 dimensions of accountability, including: 1) Accountability for probity and legality, 2) Managerial accountability, 3) Program accountability, 4) Policy accountability, 5) Financial accountability. The accountability carried out by the school to internal and external parties must be supported by authentic, valid, accurate, and complete evidence to ensure the validity of the data (Tengku et al., 2024). With a good accountability system, every action and decision taken by administrative staff can be accounted for to stakeholders, including students, parents, and other related parties. High public trust in schools can also encourage high participation in school management management (Sholikah & Hermanto, 2021). In addition, the application of digital technology in data and information management also increases accountability, as it allows for easier tracking and auditing. Thus, accountability not only increases public trust in schools, but also fosters a culture of transparency and accountability among administrative personnel, which in turn contributes to improving the overall quality of education.

### **Obstacles in Digital Transformation in School Administration**

Obstacles to digital transformation in school administration often arise from several factors, ranging from limited resources to resistance to change. One of the main challenges is the lack of training and digital skills among administrative personnel, which makes it difficult for them to adapt to new technologies. In addition, limited budgets often hinder investment in the tools and infrastructure necessary for the implementation of digital systems. Ummah, et al. (2018) stated that in addition to the learning process in the educational institution itself, there are also many other complex problems that must be addressed, such as budget problems and an education system that is not supportive for improving the quality of education. Resistance to change can also be a significant obstacle, where staff may become comfortable with traditional ways of working and be reluctant to switch to new methods. Plus, data security and privacy issues are a concern, especially with the increasing use of online platforms. All of these obstacles require the right attention and strategies to ensure that digital transformation can run smoothly and effectively in improving the efficiency and quality of school administration.

### **The Role of Training and Development of Digital Competencies of School Administration Personnel**

Training and development of digital competencies for school administration personnel plays an important role in supporting the success of digital transformation. Pramudya, et al. (2018) states that professional management is supported by the implementation of professional school administration as well, which is handled by competent administrative personnel in their fields. By providing appropriate training, administrative personnel can understand and master various digital tools and systems used in school management, such as data management software, communication applications, and accounting systems. This competency development not only improves



operational efficiency, but also equips staff with the necessary skills to adapt to rapid technological changes. This is in line with the statement of Pramudya, et al. (2018) which states that the competence of school administration personnel here is the ability to carry out tasks, roles, and the ability to integrate knowledge based on experience and learning carried out in the implementation of their work which is required in operational or administrative technical skills in schools. Salim and Rochaendi (2020) stated that empowerment will have a positive influence on the improvement of main tasks and functions which in turn can improve the quality of service and productivity of school administration staff or support employees and catch people doing things right. Additionally, ongoing training helps create a culture of learning within the organization, encourages innovation, and improves collaboration between teams. Thus, investing in digital competency training and development not only improves individual performance, but also contributes to the overall progress of the school in creating a more effective and responsive learning environment.

## Conclusion

Digital transformation in the management of school administration personnel plays an important role in improving operational efficiency and accountability. By utilizing digital technology, schools can automate administrative processes that were previously carried out conventionally to digital. The existence of technology improves data management and decision-making processes. The digital system will increase accountability in school management. So that it can reduce workload and increase productivity. However, the success of the implementation of this transformation is highly dependent on the readiness of human resources and adequate technological infrastructure. Training is very important for school administration personnel to adapt to digital tools. Training and competency development of administrative staff is a crucial step to ensure that school administrative personnel can make optimal use of technology, thereby creating a better learning environment and supporting larger educational goals.

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