The Analysis of the Student Payment Information System at Madrasah Ibtidaiyah Mafaatikhul Huda Penarukan

Mohamad Bintang Jagad Raya [a,1,*], Wahyu Krishantoro [a,2]

[a] Universitas Teknologi Digital, Tegal and 52194, Indonesia
[1] mobintangjagadry@gmail.com *; [2] wahyukrishantoro@digitechuniversity.ac.id
* corresponding author

ARTICLE INFO

ABSTRACT

The student payment information system is an essential component in managing educational administration, particularly in primary-level institutions such as Madrasah Ibtidaiyah (MI) Mafaatikhul Huda Penarukan, located in Penarukan Village, Adiwerna District, Tegal Regency, Central Java Province. The purpose of this study is to examine the current payment information system and provide an overview of its strengths, weaknesses, opportunities, and threats through a SWOT analysis of the manual system currently in use. This research employs a qualitative method, with data collected through observation, interviews, and library research. The analysis follows a four-stage method: surveying the existing system, analyzing or evaluating the survey results, identifying the current system's needs, and specifying system requirements to support appropriate and relevant development. The findings indicate that the payment process is still carried out manually, which is considered less effective due to a high risk of data loss and delays in recordkeeping. Therefore, the development of an integrated digital payment information system is needed to improve speed, accuracy, and transparency in administrative processes. This study is expected to serve as a foundation for recommending the modernization of financial administration systems at MI Mafaatikhul Huda Penarukan.

1. Introduction

Payment is the act of giving something of value, such as money, goods, or services, to another individual to fulfill a previously agreed-upon obligation. It is no secret that every educational institution has problems related to student payments, and these problems often involve more than one or two people. If left unresolved for too long, this can have a serious impact on the school's financial condition. Educational institutions face obstacles in the payment and financial management processes, especially in the storage of data or ledgers that have been archived for a long time.

Research conducted by [1] shows that, "In terms of administration, one staff member or teacher is responsible for receiving money, recording the receipts, and entering the information into the ledger." Therefore, payment administration management is an important aspect in efforts to improve administrative services, enabling the learning process to run optimally without being disrupted by administrative problems.

Madrasah Ibtidaiyah (MI) Mafaatikhul Huda is one of the primary educational institutions that continues to strive to provide the best service to students and parents. Based on student data obtained over the last decade, the following is a breakdown of student data shown in the graph:
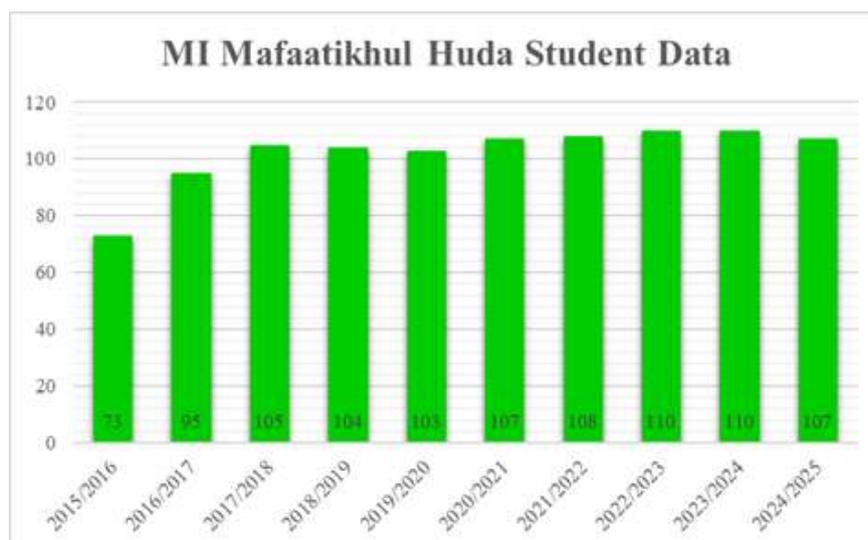
Fig. 1. Student data for MI Mafaatikul Huda over the past 10 years

In the education sector, the number of students is one of the important indicators that show the development and sustainability of an educational institution. The stability or change in the number of students from year to year can provide information about the attractiveness, quality, and challenges faced. Based on the information presented in Figure 1, the number of students over the last ten years shows fluctuations and an upward trend. The graph for the last ten years shows consistency in the number of students. With this consistency in student numbers, an effective information system is needed.

However, in the current system, the information system related to payments implemented in the institution is still manual. The more students there are to manage, the more complex the process of recording, reporting, and monitoring payments becomes if it is still done manually. This is the main issue in this study, where the current payment system is considered ineffective and inefficient in supporting contemporary administrative needs in line with the growth in student numbers.

The fees charged to students at MI Mafaatikhul Huda Penarukan include several components, namely graduation, student books or worksheets (LKS), syahriah, school uniforms, and educational development contributions (SPP). Currently, the payment process at MI Mafaatikhul Huda is still done manually. The treasurer is responsible for informing or collecting payments from parents/guardians through letters or other means of communication.

The manual payment process at Madrasah Ibtidaiyah Mafaatikhul Huda Penarukan not only requires a considerable amount of time and energy, but also often causes delays in financial recording and reporting. In addition, manual methods tend to be less effective in ensuring data accuracy and carry a high risk of data loss or damage due to human error and other technical factors. This condition makes the financial administration process less efficient, which can hamper operational effectiveness and have a negative impact on the image and credibility of Madrasah Ibtidaiyah Mafaatikhul Huda as a whole.

The first step in analyzing the payment information system currently in use at MI Mafaatikhul Huda is based on an awareness of the important role of technology in supporting the process of serving parents/guardians. The use of information technology is expected to improve the effectiveness and efficiency of the payment process, which has been carried out manually until now. This effort is in line with the opinion [2] which states that, "Information systems play an important role in educational institutions designed as a means to process data more quickly and accurately".

2. Method

The methods applied in this study were information or data collection methods and analysis methods to examine student payment mechanisms.

2.1 Data Collection Techniques

Observation is the process of collecting data through the sense of sight and recording information about the object. The observation method is a procedure for collecting accurate data through direct

observation. In this study on the student payment information system at Madrasah Ibtidaiyah Mafaatikhul Huda, the aim is to obtain accurate and factual data. This observation aims to gain an in-depth understanding of the current payment information system and the parties involved.

2.2 Interview

An interview is a method of communication conducted directly to obtain information from the subject. The purpose of this interview is to obtain information directly from the parties involved, such as the treasurer and the head of the madrasah.

2.3 Library Research

Library research is a method of data collection by examining data related to issues from books, theories, and documents in the form of primary data. Library research is the process of searching for data sources from online literature studies in the form of e-books and e-journals. This study uses e-journals to obtain theoretical foundations, arguments, and insights regarding existing issues.

The following are the opinions expressed by experts and academics in this study as a theoretical basis and understanding of the existing problems.

- **Analysis**

  According to [6], analysis is defined as a way of thinking that breaks down a subject into its basic components and determines the relationships between those components and their connection to the overall structure or objective. It has three indicators, namely differentiation, organization, and attribution (labeling). Meanwhile, according to [7], analysis is defined as the stage at which issues are identified, and learning needs and objectives are determined. This step will provide guidance in the overall media development process in the following steps. And according to [8], analysis is an effort to investigate, observe, recognize, discover, understand, examine, classify, and review and articulate existing phenomena.

- **System**

  According to [9], a system is a set of interrelated and collaborating elements that receive input and produce output through a series of orderly change processes to achieve specific goals. Meanwhile, [10] defines a system as a collection of interconnected data that operates together to achieve specific results.

- **Analysis System**

  According to [11], system analysis is a step to understand the existing conditions in a system by examining users, stages, policies or regulations, existing constraints, as well as alternative solutions and strategies from companies involved in a system. Meanwhile, according to [12], system analysis is a process carried out on an information system as a whole to identify and assess problems, existing constraints, and the need for improvements in the system.

- **Information**

  In the Big Indonesian Dictionary, information is defined as news, notification, or explanation. Meanwhile, [12] argues that information consists of a collection of data that has been processed so that it has meaning for the recipient of the information. Information is a collection of messages that have been processed to convey news.

- **Information Systems**

  According to [13], an information system is a system within an organization that integrates the needs of daily transaction processing, supports activities, assists managerial functions and strategic activities of the organization, and provides reports to certain external parties. Meanwhile, [14] argues that an information system encompasses individuals, devices, and steps within and outside the organization to carry out transactions, manage important communication networks, and support decision-making processes. An information system is a system within an organization that can assist in transaction management, data management, information monitoring, operational support, and reporting to certain external parties.

- **SWOT Analysis**

  According to [15], SWOT analysis is a process of systematically identifying various elements to develop a company plan. In SWOT analysis, the system utilizes elements that originate from within and outside the organization. Internal elements consist of strengths and weaknesses, while external elements include opportunities and threats. [16] explains these factors as follows:

  a. **Strengths**

Strengths are internal conditions that are advantageous and provide an edge in competition for educational institutions. These strengths come from existing resources and measures that have been taken, which are superior to those of competitors. These strengths form the basis for differentiation between one educational institution and another.

b. Weaknesses

Weaknesses are internal situations that are detrimental and can lower the evaluation of educational institutions. These weaknesses can include low-quality human resources, unsatisfactory products, a weak image, ineffective leadership, and various other factors. Thus, weaknesses are shortcomings possessed by an educational institution, so it is important for the institution to understand how to establish policies to reduce weaknesses, turn weaknesses into strengths, and not allow them to become obstacles in the future.

c. Opportunities

Opportunities are current or future situations that provide benefits for educational institutions. Opportunities are external factors that can offer opportunities for institutional development, such as changes in regulations or laws, a reduction in competitors, and an increase in the number of new students. If the ability to accurately recognize opportunities can be achieved, it will benefit educational institutions in terms of sustainability and a better future.

d. Threats

Threats are external circumstances faced by schools or madrasahs, both currently and in the future, which are detrimental and have the potential to have a major impact on the future of educational institutions. These threats can include the emergence of new competitors, a decline in student numbers, and other factors. Threats are external environmental conditions that have the potential to jeopardize the achievements and continuity of educational institutions.

- **Administration**

  According to [17], administration is a branch of science that studies what society wants through the role of government, as well as the methods they use to achieve it. Meanwhile, [18] argues that administration consists of a series of activities that function as a process of regulating the collaboration of a group of individuals in order to achieve predetermined collective goals. Administration is a series of activities that regulate and harmonize interactions between individuals within a group to achieve predetermined common goals.

- **Payment**

  According to [19], payment is a mechanism related to the transfer of a sum of money from one party to another. Meanwhile, [20] argues that payment is a process involving the transfer of ownership rights over a sum of money from the payer to the recipient, either directly or through banking services. Payment is an activity that involves the transfer of ownership rights over a sum of money from the individual or entity making the payment to the receiving party.

- **Payment Administration**

  According to [21], payment administration is the act of ensuring that all payments made by educational institutions, both formal and non-formal, are carried out effectively and efficiently and achieve their objectives. Meanwhile, [22] argues that payment administration is a process that supports financial transaction services in administrative activities. Payment administration is the process of recording, managing, and controlling all financial transactions that take place within an organization.

- **Students**

  According to [23], students are defined as the future generation of the nation who should have self-confidence so that they dare to express their hopes and desires. Meanwhile, [24] argues that students are academically reflected through exams and assigned work, as well as their involvement in asking and answering questions that strengthen the learning process. Students are individuals who seek knowledge in educational institutions.

- **Parents/Guardians**

  According to [25], parents are defined as the first adults in a child's home, the main source of support for the child, and the place where the child expects to receive support in the process of growth and development towards adulthood. Meanwhile, [26] argues that parents are the most important part of a

child's education. Parents/guardians are individuals who play an important role in caring for and educating their children.

- **Flow of Document**
  According to [27], document flow is defined as a diagram that illustrates the flow of reports and forms, including copies. Meanwhile, [28] argues that document flow is a diagram used to design a document process system that is interconnected with data flows using manual or computer-assisted methods.

2.4 Analysis Method

The analysis method is a systematic procedure for examining and evaluating problems to obtain solutions and strategies based on existing data. According to [29], there are four systematic stages in system analysis, as follows:

- Survey of the current system
  In this phase, research was conducted using observation and interviews with relevant parties, such as the Head of the Madrasah and the treasurer of MI Mafaatikhul Huda, to understand how the payment information system works.

- Analysis of survey findings
  Next, this study conducted interviews with the head of the madrasah and the treasurer regarding the existing payment information system at MI Mafaatikhul Huda. The information obtained will be analyzed to find problems and solutions.

- Identification of needs
  Based on the survey findings, the system to be developed at MI Mafaatikhul Huda is expected to improve service quality by facilitating record keeping and financial reporting.

- Identification of system requirements
  Following the survey results, analysis results, and identification of needs, the next step is to identify the system requirements necessary for the payment information system at MI Mafaatikhul Huda Penarukan to be developed appropriately and in line with needs.

3. Results and Discussion

This system analysis was conducted to identify the current state of the system and formulate the requirements for the designed system. This analysis is important so that the designed system is able to overcome the problems that exist in the current system.

This study aims to analyze the student payment information system, which is currently still carried out manually at Madrasah Ibtidaiyah (MI) Mafaatikhul Huda Penarukan. The results of the study show that although this madrasah has an organizational structure and a high spirit of dedication from its teaching staff, the payment system used does not yet support optimal financial administration effectiveness and efficiency. Based on observations and in-depth interviews with the head of the madrasah and the treasurer, it was found that the payment process still relies on manual communication such as letters and short messages via WhatsApp, and records are made by hand in a ledger. Each transaction must be recorded manually, then reported to the madrasah principal as a form of accountability. This results in delays in reporting, a high potential for human error, and the risk of data loss due to the absence of digital backups.

3.1 Analisis SWOT

SWOT analysis, which refers to Strengths, Weaknesses, Opportunities, and Threats, is a method used to assess the positive and negative factors faced by an institution. In this study, SWOT analysis was applied to Madrasah Ibtidaiyah Mafaatikhul Huda Penarukan to determine the internal and external situations of the school in implementing its academic administration system, especially in relation to the payment system, which is still carried out manually.

1. **Strengths**
   The following are the strengths of MI Mafaatikhul Huda:

   a. **Commitment and dedication of teaching staff**
      One of the main strengths of this madrasah lies in its human resources. Teachers and administrative staff show high loyalty and commitment in carrying out their duties despite limited

facilities. Their spirit of service ensures that learning and administrative activities continue to run smoothly.

b. Religious environment and Islamic values

As an Islamic-based educational institution, this madrasah has a strong religious atmosphere. The practice of worship, good character, and other spiritual values form the foundation of education. This religious environment provides moral excellence, which is a special attraction for the community.

c. Close and harmonious relationship with parents

A good relationship between the madrasah and parents creates a healthy atmosphere of cooperation. This helps in the smooth running of school activities, including the collection of payments and direct financial reporting.

d. Strategic geographical location

This madrasah is located in an area that is easily accessible to the surrounding community, making it the first choice for parents who want to enroll their children in an Islamic environment that is not too far from their homes.

2. **Weaknesses**

The following are the weaknesses of MI Mafaatikhul Huda:

a. Manual administrative system

The processes of recording payments, financial reporting, and tracking student financial data at MI Mafaatikhul Huda are still manual. This causes several problems, such as delays in information, the risk of data loss, and difficulties in quickly and accurately recapitulating data.

b. Lack of information technology resources

The availability of hardware such as computers and printers is still limited. In addition, the absence of an academic information system or software to support administrative activities poses a challenge to the modernization of school management.

c. Lack of digitalization SOPs

The absence of standard operating procedures (SOPs) governing the digitalization of administration means that efforts to transition to a computer-based system are not yet structured and focused.

3. **Opportunities**

The following are opportunities for MI Mafaatikhul Huda:

a. Support from parents and the foundation

Moral and material support from parents and educational foundations is a great opportunity for developing facilities and systems in madrasahs. Their openness to system improvements can be the foundation for modernizing administration.

b. Advances in easily accessible information technology

With many free or low-cost applications that can help with school administration, madrasahs have a great opportunity to utilize technology according to their capabilities and needs.

c. Availability of student/intern resources

Collaboration with students, such as in field work practice (PKL) programs, can assist madrasahs in conducting system analysis and designing information technology-based solutions. This creates a mutually beneficial synergy between higher education institutions and madrasahs.

4. **Threats**

The following are threats from MI Mafaatikhul Huda, namely:

a. Dependence on manual systems that have become habitual

Years of working with manual systems have made some staff members feel comfortable and reluctant to change. This resistance to change can hinder the process of innovation and digitization of administrative systems.

b. Competition with other more modern schools

Other schools that have implemented digital systems, such as online payment systems or online learning platforms, are becoming serious competitors. This can affect the public's perception of the quality of madrasah services.

Furthermore, the SWOT analysis conducted revealed various important aspects of the current student payment system. In terms of strengths, MI Mafaatikhul Huda has the dedication and commitment of all educators and administrative staff. The religious educational environment, proximity to parents, and strategic location of the madrasah are also added values. However, the prominent weaknesses are the dependence on manual processes, limited information technology infrastructure, and the absence of standard operating procedures (SOPs) related to the digitization of administration. In terms of opportunities, this madrasah has great potential to develop through the support of parents and foundations, as well as collaboration with interns who have information technology skills. The main threats stem from a long-established culture of manual work and resistance to change. In addition, competition with other schools that have already implemented digital systems is putting additional pressure on the madrasah to make immediate improvements.

3.2 Output Analysis

The Student Payment Ledger is a summary of payments made by parents or guardians at MI Mafaatikhul Huda each month. This book records or reports payment data made by parents or guardians for their children's needs, and contains a history of payments that have been made. Based on the results of the analysis, this output is still not optimal because it still relies on manual recording. This causes the reporting process to be slow and prone to errors. In addition, the potential for data loss is very high, especially if the book is damaged or lost, given that there are no backup copies.

3.3 Input Analysis

The Student Payment Ledger also functions as an input document that shows every payment made by parents or guardians at MI Mafaatikhul Huda, either daily or monthly, depending on when the payment was made. In Figure 2, this book is an important input in the process of compiling the student payment ledger, which is done routinely. However, based on the analysis results, this input is considered suboptimal because it still relies on manual recording. This causes the process to be slow and prone to errors. In addition, the potential for data loss is very high, especially if the book is damaged or lost, because there are no backup copies.

3.4 Process Analysis

The student payment procedure at MI Mafaatikhul Huda Penarukan is carried out in several stages. First, the treasurer conveys information or collects payments from parents or guardians through students, letters, or other means of communication. Next, parents or guardians come directly to MI Mafaatikhul Huda Penarukan to make payments according to the specified amount. After receiving the payment, the treasurer records the transaction in the Student Payment Ledger. Then, the Head of the Madrasah checks the Student Payment Ledger to ensure that the payment has been made correctly. After the checking process is complete, the payment records are archived by the madrasah treasurer as part of the administration and accountability reports.
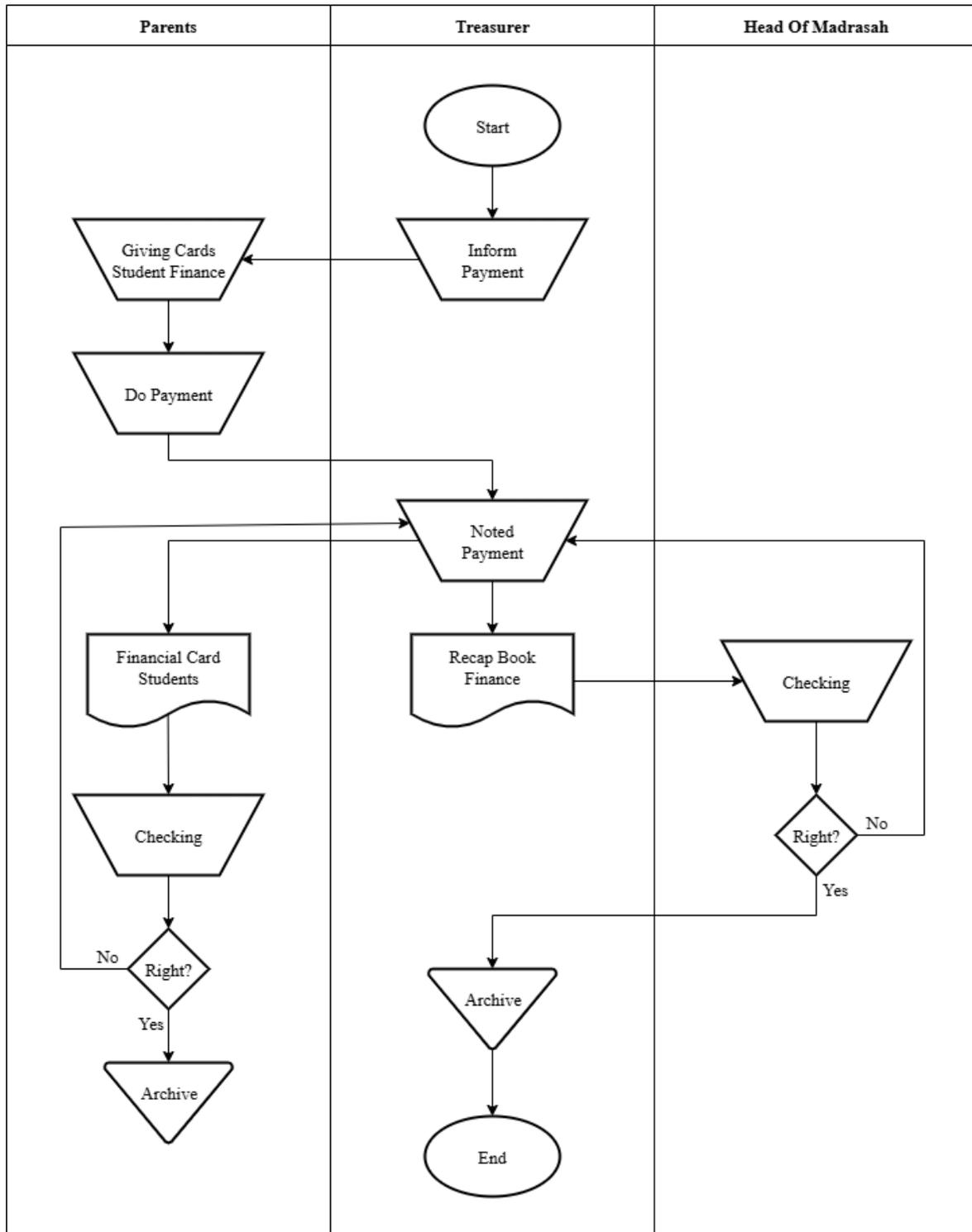
Fig. 2. Flow of Document

One of the important findings in this study is that limitations in the information system result in low transparency for parents. In the context of public trust and professionalism in educational institution management, this is a serious concern. Parents do not have direct access to verify their children's payment status unless they come directly to the madrasah or ask the treasurer. If payment data is lost or there are errors in recording, the correction process will be difficult and may cause dissatisfaction. This condition has the potential to damage the image of madrasahs as trusted educational institutions, especially if the manual system is not updated immediately.

Researchers also found that madrasahs do not yet have a digital system, either web-based or application-based, that can record, store, and display payment data in real time. This is exacerbated by hardware limitations, such as computers and printers, which are only available in limited quantities. The absence of specialized software or platforms capable of supporting payment system automation means that administrative processes are still time-consuming and labor-intensive. In fact, with the number of students continuing to increase over the last ten years, the need for an effective and efficient information system has become a necessity. Not only to improve financial administration services, but also as part of the digital transformation process in the educational environment.

Based on the results of the needs assessment, the ideal payment information system for MI Mafaatikhul Huda must be able to automatically record transactions, generate digital payment receipts, and provide daily, monthly, and annual payment reports. This system should also be accessible to the school principal, treasurer, and parents via an Android app or website. Features such as payment notifications, digital receipt printing, and downloadable reporting systems will be a great added value. Through this system, parents no longer need to come directly to the school to find out the payment status, and the treasurer does not need to make double entries that are prone to errors. In the long term, this system can improve the professionalism of school financial management and build greater trust from the community.

The analysis process also shows that madrasahs have great potential to involve PKL (Field Work Practice) students in developing prototypes of this information system. With the right collaboration, system development can be carried out at low cost while still producing functional software that meets requirements. This is in line with the madrasah's mission to improve the quality of technology-based education.

On the other hand, it must be acknowledged that the challenges in digital transformation are not only technical, but also cultural and structural. Many administrative staff are still unfamiliar with information technology, and most staff feel more comfortable using manual methods because they have been doing so for years. Therefore, the transition to a digital information system must be carried out gradually through intensive training, mentoring, and socialization. The implementation of the new system must also be accompanied by the creation of clear and structured SOPs so that all processes can run consistently and be accountable.

4. Conclusion

This study successfully identified the main problem in the student payment information system at MI Mafaatikhul Huda Penarukan, namely the continued use of manual methods in recording and managing financial administration. The current system is unable to meet the needs for efficiency, accuracy, and transparency, especially in dealing with the increasing number of students.

Through SWOT analysis, it was found that the madrasah has great potential for improvement through internal and external support. Strengths in terms of human resources and good relationships with parents can serve as a strong foundation for transformation. On the other hand, opportunities arising from developments in information technology and the availability of experts, such as student interns, can be utilized to design and implement a more modern payment information system.

Based on the analysis of outputs, inputs, and processes, the current system is not yet optimal in supporting financial data management. Therefore, it can be concluded that the development of an integrated digital payment information system is needed to improve operational efficiency and enhance the quality of administrative services.

Thus, the purpose of this study is to analyze or identify the current system and formulate requirements for developing a better system. This study can serve as a starting point in the effort to modernize the financial administration system at MI Mafaatikhul Huda Penarukan.

References

[1]   G. Wibisono, V. K. Subroto, and D. Danang, Analisa dan Perancangan Sistem Aplikasi Pembayaran Administrasi Menggunakan RFID Berbasis Client Server, vol. 13, no. 1. Semarang: Universitas Sains dan Teknologi Komputer (STEKOM), 2020.

[2]   S. Shodiq, Peran Sistem Informasi dan Teknologi Informasi Terhadap Proses Pembelajaran di Masa Pandemi Covid-19, vol. 8, no. 1. Kabupaten Ciamis: Program Studi Pendidikan Akuntansi, FKIP Universitas Galuh, 2021.

[3]   M. B. J. Raya and A. S. W. Prasetyawati, Implementasi Media Pembelajaran Berbasis Digital Menggunakan Quizizz di PKBM Al-Ittihad Penarukan, vol. 3, no. 1. Tegal: Program Studi Bisnis Digital, Universitas Pancasakti Tegal, 2025.

[4]   S. Dadi Riskiono, F. Hamidy, and T. Ulfia, Sistem Informasi Manajemen Dana Donatur Berbasis Web Pada Panti Asuhan Yatim Madani, vol. 1, no. 1. Bandarlampung: Universitas Teknokrat Indonesia, 2020.

[5]   M. Huda, Ach. Fawaid, and Slamet, Implementasi Teori Belajar Behavioristik Dalam Proses Pembelajaran, vol. 1, no. 4. Mataram: Universitas Muhammadiyah Mataram, 2023.

[6]   S. B. Sartika, N. Efendi, and F. E. Wulandari, Efektivitas Pembelajaran IPA Berbasis Etno-STEM Dalam Melatihkan Keterampilan Berpikir Analisis, vol. 10, no. 1. Kabupaten Ponorogo: Fakultas Keguruan dan Ilmu Pendidikan, Universitas Muhammadiyah Ponorogo, 2022.

[7]   A. Siregar and D. I. Siregar, Analisis Evaluasi Pengembangan Media Komik Digital Pada Mata Pelajaran IPA Sekolah Dasar, vol. 2, no. 1. Palembang: Jurusan Manajemen Informatika, Politeknik Negeri Sriwijaya, 2021.

[8]   J. Wahyuni, Y. W. Paranthy, and A. Wanto, Analisis Jaringan Saraf Dalam Estimasi Tingkat Pengangguran Terbuka Penduduk Sumatera Utara, vol. 3, no. 1. Lhokseumawe: Politeknik Negeri Lhokseumawe (PNL), 2018.

[9]   J. S. Pasaribu, Perancangan Sistem Informasi Pengelolaan Inventaris Aset Kantor di PT. MPM Finance Bandung, vol. 7, no. 3. Bandung: Universitas Widyatama, 2021.

[10] A. F. Sallaby and I. Kanedi, Perancangan Sistem Informasi Jadwal Dokter Menggunakan Framework Codeigniter, vol. 16, no. 1. Bengkulu: Fakultas Ilmu Komputer, Universitas Dehasen Bengkulu, 2020.

[11] K. S. Kartini, I. N. A. Putra, K. J. Atmaja, and N. P. S. Widiani, Sistem Informasi Penjualan Pada Salad Yoo, vol. 1, no. 2. Denpasar Barat: Yayasan Sinergi Widya Nusantara (SIDYANUSA), 2022.

[12] A. Pratama, S. Fachrurrazi, S. Munawaroh, and M. Ula, Perancangan dan Aplikasi Model Sistem Informasi Sekolah, vol. 5, no. 1. Aceh: Departemen Sistem Informasi, Fakultas Teknik, Universitas Malikussaleh, 2021.

[13] M. Cendani, D. Ardian Pramana, and E. Sudrajat, Sistem Informasi Kearsipan Menggunakan Framework Laravel (Studi Kasus: Prodi Sistem Informasi Universitas Peradaban), vol. 4, no. 1. Kabupaten Brebes: Program Studi Sistem Informasi, Fakultas Sains dan Teknologi, Universitas Peradaban, 2023.

[14] A. S. Riski, A. W. S. Prasetyawati, and M. Fadlullah, Perancangan Sistem Informasi Pembayaran SPP di SMK Dinamika Kota Tegal Berbasis Web, vol. 9, no. 1. Malang: Institut Teknologi Nasional Malang (ITN Malang), 2025.

[15] Mashuri and D. Nurjannah, Analisis SWOT Sebagai Strategi Meningkatkan Daya Saing (Studi Pada PT. Bank Riau Kepri Unit Usaha Syariah Pekanbaru), vol. 1, no. 1. Mataram: Universitas Islam Negeri Mataram (UIN Mataram), 2020.

[16] Z. Suriono, Analisis SWOT Dalam Identifikasi Mutu Pendidikan, vol. 1, no. 3. Medan: Lembaga Peduli Pengembangan Pendidikan Indonesia (LPPPI), 2021.

[17] L. Marliani, Definisi Administrasi Dalam Berbagai Sudut Pandang, vol. 5, no. 4. Ciamis: Universitas Galuh, 2019.

[18] R. Pamungkas, "Perancangan Sistem Informasi Pembayaran Administrasi SMK Negeri 1 Jiwan," INTENSIF: Jurnal Ilmiah Penelitian dan Penerapan Teknologi Sistem Informasi, vol. 1, no. 2, pp. 129–136, 2017.

[19] N. L. P. Handayani and P. F. Soeparan, Peran Sistem Pembayaran Digital Dalam Revitalisasi UMKM, vol. 4, no. 3. Semarang: Universitas Sains dan Teknologi Komputer (UNIVERSITAS STEKOM), 2022.

[20] Denih, R. G. Wendasmoro, and S. Ramos, Rancang Bangun Aplikasi Pembayaran SPP Berbasis Web, vol. 2, no. 1. Jakarta Pusat: Sekolah Tinggi Manajemen Informatika dan Komputer Jayakarta (STMIK Jayakarta), 2022.

[21] O. Saputra and W. Safitri, Sistem Informasi Administrasi Pembayaran Sumbangan Pembinaan Pendidikan (SPP) Berbasis Whatsapp Gateway, vol. 4, no. 1. Lhokseumawe: Seulanga System Publisher, 2022.

[22] I. R. Dewi and R. Malfiany, Perancangan Sistem Informasi Administrasi Pembayaran Pada SDIT Lampu Iman Karawang Berbasis Visual Basic 6.0, vol. 12, no. 2. Karawang: LPPM Sekolah Tinggi Manajemen Informatika dan Komputer (STMIK) ROSMA, 2017.

[23] Z. Tanjung and S. H. Amelia, Menumbuhkan Kepercayaan Diri Siswa, vol. 2, no. 2. Padang: Indonesian Institute for Counseling, Education and Therapy (IICET), 2017.

[24] A. S. Dakhi, Peningkatan Hasil Belajar Siswa, vol. 8, no. 2. Kabupaten Tapanuli Selatan: Institut Pendidikan Tapanuli Selatan (IPTS), 2020.

[25] N. Anggraini, Peranan Orang Tua Dalam Perkembangan Bahasa Anak Usia Dini, vol. 7, no. 1. Purwokerto: Program Studi S-1 Pendidikan Bahasa dan Sastra Indonesia serta Program Studi S-2 Pendidikan Bahasa Indonesia Universitas Muhammadiyah Purwokerto, 2020.

[26] H. Zakia, Pemanfaatan Sistem Informasi Manajemen Sebagai Strategi Dalam Menjalin Kerjasama Sekolah Dengan Wali Murid Di Sekolah Menengah Pertama Negeri 1 Talamau, vol. 8, no. 1. Padang: Universitas Negeri Padang (UNP), 2019.

[27] Y. Rostiani and R. Juliana, Perancangan Aplikasi Akuntansi Penerimaan dan Pengeluaran Kas Berbasis Web (Studi Kasus Pada STMIK Rosma), vol. 17, no. 1. Kabupaten Karawang: Politeknik Rosma, 2022.

[28] Siswanto and A. Wardiansyah, Perancangan dan Pengembangan Aplikasi E-commerce Pada Catering Anugrah, vol. 14, no. 2. Semarang: Universitas Sains dan Teknologi Komputer (STEKOM), 2021.

[29] P. Rahmadani and Riyanto, Perancangan Sistem Informasi Pengelolaan Data Surat C Di Balai Desa Trayeman Berbasis Web, vol. 9, no. 1. Malang: Institut Teknologi Nasional Malang (ITN Malang), 2025.