Evaluation of AS System Application for Management Information System (MIS) Financing at Ma'had Muhammad Saman Private Middle School

Firman Syahreza[1*], Wildansyah Lubis[2], Sriadhi[3]

[1,2,3]Universitas Negeri Medan, Indonesia

*hadianfirmansyahreza46@gmail.com

ABSTRACT

This study aimed to evaluate the effectiveness, efficiency, and accountability of the Management Information System (MIS) of financing using the AS System Application at SMP Swasta Ma'had Muhammad Saman. This evaluation was conducted to determine the extent to which the AS System application can support optimal school financial management in terms of quality and user satisfaction. The research method used was descriptive statistics. Data were collected through questionnaires distributed to application users, namely parents of students. Qualitative data were obtained through in-depth interviews with related parties and direct observation of application usage. The results of the study were expected to provide a comprehensive picture of the advantages and disadvantages of the AS System Application in managing school financing, as well as provide recommendations for system improvement and development. The benefits of this study are to contribute to the development of a better education management information system, especially in the aspect of financing, as well as increasing transparency, accountability, and efficiency of financial management at SMP Swasta Ma'had Muhammad Saman.

Keywords: *evaluation, system management information (MIS), financing, application, AS system*

1. INTRODUCTION

In the era of ever-growing digitalization, information technology has become the backbone of various sectors, including education. Financial management in educational institutions, especially in schools, is increasingly complex along with the growth in the number of students, activities, and resources involved. To overcome this complexity, the implementation of a Management Information System (MIS) for financing has become a solution that is widely adopted by schools, including SMP Swasta Ma'had Muhammad Saman. A Management Information System (MIS), as defined by Laudon & Laudon (2018), integrates people, hardware, software, communication networks, and data to gather (Romney & Steinbart, 2015), process (Turban et al., 2008), and distribute information within an organization. In the context of school finances, such a system aims to boost the efficiency and effectiveness of financial management.

SMP Swasta Ma'had Muhammad Saman has implemented the AS System application as part of their financing MIS. This application is expected to simplify the process of managing school finances, increase transparency, and accountability. However, the effectiveness and efficiency of implementing this application need to be evaluated thoroughly to ensure that these objectives are achieved. This evaluation is important considering that good financial management is one of the key factors in the success of school operations. Effective information practices are the core of a successful organization (Brown & Duguid, 2000). Therefore, this evaluation of the financing MIS is expected to provide in-depth insight into how the AS System application contributes to financial management at SMP Swasta Ma'had Muhammad Saman.

Evaluation of the financing MIS using the AS System application at SMP Swasta Ma'had Muhammad Saman is important for several reasons. First, this evaluation can provide an overview of the extent to which the application has succeeded in supporting optimal school financial management. Second, the evaluation results can be used to identify areas that require further improvement and development. Third, this evaluation can contribute to the development of better financing MIS in other schools. Information systems should be evaluated periodically to ensure that they meet the needs of the organization and users (O'Brien & Marakas, 2016). In this

context, this evaluation will help SMP Swasta Ma'had Muhammad Saman to ensure that the AS System application meets their financial management needs.

This study aims to evaluate the effectiveness, efficiency, and accountability of the financing MIS using the AS System application at SMP Swasta Ma'had Muhammad Saman. Through this study, it is expected to obtain a comprehensive understanding of the advantages and disadvantages of the application, as well as recommendations for system improvement and development. The results of this study are expected to provide a significant contribution to the development of a better education management information system, especially in the aspect of financing, as well as increasing transparency, accountability, and efficiency of financial management at SMP Swasta Ma'had Muhammad Saman. An effective information system can provide a competitive advantage for an organization (Davenport, 1993)." In the context of education, this advantage can be realized in the form of more transparent and accountable financial management.

2.   METHODS

This study used a quantitative research method with a descriptive statistical approach. The quantitative method was chosen because it aimed to measure and describe phenomena related to the evaluation of MIS financing using the AS System application. The descriptive statistical approach was used to provide a clear and detailed picture of the characteristics of the data collected. The research design used was a survey design. This design was chosen because it was effective for collecting data from a large number of respondents in a relatively short time. The survey allowed researchers to obtain information about user perceptions, attitudes, and experiences related to the use of the AS System application in managing school financing.

The population in this study were all users of the AS System application at SMP Swasta Ma'had Muhammad Saman. This population included administrative staff, teachers, and parents of students involved in the school financing process. The sampling technique used was *simple random sampling*. This technique was chosen to ensure that every member of the population had an equal chance of being selected as a sample. The sample size was determined using the Slovin formula adjusted to an acceptable 5% error rate. The population was 121 people with a 5% error significance of 93 respondents.

The main data collection technique in this study was a survey using a questionnaire. The questionnaire was designed to collect data on the effectiveness, efficiency, and accountability of the financing MIS using the AS System application. The questionnaire contained closed questions with a Likert scale to measure respondents' perceptions. In addition to the questionnaire, in-depth interviews were conducted to obtain qualitative data that supports and deepens understanding of the survey results. Interviews were conducted with several key informants, such as the principal, administrative staff in charge of finance, and representatives of students' parents. Direct observation was also conducted to observe the use of the AS System application in daily practice.

The main research instrument was a questionnaire. The questionnaire was developed based on the literature review and the conceptual framework of the study. The validity and reliability of the questionnaire were tested before being used for data collection. Content validity was tested by experts (expert judgment), while reliability was tested using the technique *Cronbach's Alpha*. Interview guidelines were prepared as a guide in conducting in-depth interviews. This guideline contained open-ended questions that were relevant to the research topic. Observation sheets were used to record the results of direct observations of the use of the AS System application.

Quantitative data obtained from the questionnaire was analyzed using descriptive statistics. This analysis included the calculation of frequency, percentage, mean, median, mode, and standard deviation. This analysis helped in describing the characteristics of the data and provided an overview of user perceptions of the financing MIS using the AS System application. Qualitative data obtained from interviews and observations was analyzed using content analysis techniques. This analysis involved coding, categorizing, and interpreting data to identify important themes relevant to the study.

This research method was designed to provide a comprehensive understanding of the evaluation of financing MIS using the AS System application at SMP Swasta Ma'had Muhammad Saman. By combining quantitative and qualitative approaches, this study was expected to provide valid and reliable results, as well as provide useful recommendations for system improvement and development.

In measuring the quality of Management Information Systems (MIS) from the perspective of students' parents, the questionnaire covered several main dimensions. *Security* refers to the extent to which data and financial transactions processed by the MIS are protected from unauthorized access. *Convenience* measures how intuitive and easy to use the MIS application interface is, including navigation and understanding of its features. *Speed* relates to the responsiveness of the system in processing requests and providing information. *Accuracy* assess the accuracy and truth of financial information produced by MIS. *Service* refers to the quality of technical support and assistance provided to parents of students in using MIS. Finally, *Empathy* measure the extent to which MIS and management understand and respond to the needs and concerns of students' parents regarding school financial management.

To measure user satisfaction, the questionnaire would explore the level of satisfaction of parents of students with various aspects of the MIS. This included satisfaction with the quality of information provided, ease of access, speed of response, and service support. In addition, the questionnaire also explored parents' perceptions of the benefits of MIS in increasing transparency and accountability in school financial management. Questions were designed to measure the extent to which MIS meets parents' expectations and increases their trust in school financial management.

3. RESULTS AND DISCUSSION

The following are the results of descriptive statistics based on the results of the questionnaire using *Google Form.*

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Dev.
System Quality	93	14	25	21.69	3.811
Customer Satisfaction	37	13	25	19.65	3.931
N Valid (listwise)	37				

The data presented in Table 1 illustrates two main variables, namely System Quality and User Satisfaction. For System Quality, there were 93 respondents with values ranging from 14 to 25. The average value was 21.69 with a standard deviation of 3.811, indicating moderate data variation. The median of 24.00 was higher than the mean, indicating negative skewness, where most of the data was concentrated at high values. Meanwhile, for User Satisfaction, there were only 37 valid respondents with 56 missing data. The values ranged from 13 to 25 with an average of 19.65 and a standard deviation of 3.931. The median of 20.00 was slightly higher than the mean, indicating a relatively balanced distribution with slight negative skewness.

Table 2. Frequency Statistics

	System Quality	Customer Satisfaction
N Valid	93	37
Missing	0	56
Mean	21.69	19.65
Median	24.00	20.00

The data presented in Figure 2 illustrates two main variables, namely System Quality and User Satisfaction. For System Quality, there are 93 respondents with values ranging from 14 to 25. The average value is 21.69 with a standard deviation of 3.811, indicating moderate data variation. The median of 24.00 is higher than the mean, indicating negative skewness, where most of the data is concentrated in high values. Meanwhile, for User Satisfaction, there are only 37 valid respondents with 56 missing data. The values range from 13 to 25 with an average of 19.65 and a standard deviation of 3.931. The median of 20.00 is slightly higher than the mean, indicating a relatively balanced distribution with slight negative skewness.

Based on the analysis of the descriptive statistical table, it can be concluded that in general, users (parents of students) gave a positive assessment of the quality and their satisfaction with the MIS. This is reflected in the small distance between the two aspects, indicating a strong positive correlation between the perception of MIS quality and the level of user satisfaction. In other words, the better the perceived MIS quality, the higher the level of satisfaction felt by the parents of students.

One of the most prominent aspects is the ease of filling in the personal data in the MIS, which received a very high rating with a score of 65.67%. This shows that parents of students generally feel that the process of filling in personal data via MIS runs smoothly and does not experience significant obstacles. This convenience is certainly an important factor in increasing the efficiency and effectiveness of MIS use.

However, there are some specific findings that need to be considered by the school. Although overall the quality and user satisfaction are good, there are still 1% of users who report difficulties in using MIS. In addition, aspects of data confidentiality and service speed are considered relatively unsatisfactory. This indicates that there is still room for improvement in terms of system security and service responsiveness. Overall, it can be concluded that the quality of MIS AS service is in the middle phase. Although there are aspects that are considered very good, such as the ease of filling in biodata, there are still areas that need improvement, especially related to ease of use, data confidentiality, and speed of service. Improvements in these areas are expected to further improve the quality of MIS and overall user satisfaction.

The two indicators of MIS AS satisfaction based on the analysis of descriptive statistical tables, it can be concluded that in general, users (parents of students) gave a positive assessment of the quality and their satisfaction with the Application Financing Management Information System (MIS) (AS). This is reflected in the small distance between the two aspects, indicating a strong positive correlation between the perception of MIS quality and the level of user satisfaction. In other words, the better the perceived MIS quality, the higher the level of satisfaction felt by the parents of students. On average, the level of user satisfaction with the MIS AS service is 50% agreeing that users are very satisfied. One of the most prominent aspects is the ease of filling in the personal data in the MIS, which received a very high rating with a score of 65.67%. This shows that parents of students generally feel that the process of filling in personal data via MIS runs smoothly and does not experience significant obstacles. This convenience is certainly an important factor in increasing the efficiency and effectiveness of MIS use.

However, there are some specific findings that need to be considered by the school. Although overall the quality and user satisfaction are good, there are still 1% of users who report difficulties in using MIS. In addition, aspects of data confidentiality and speed of service are considered relatively unsatisfactory. Furthermore, although an average of 50% of users are very satisfied, there are 10% of users who are less satisfied with the MIS AS service.

This dissatisfaction is partly due to differences in the background of students' parents, such as age, economic conditions, and education levels. These differences can affect the ability of students' parents to use and access the MIS AS System services effectively. Therefore, schools need to consider these factors in an effort to improve the quality and overall user satisfaction.

4.   CONCLUSION

In general, users (parents of students) gave a positive assessment of the quality and their satisfaction with the Application Financing Management Information System (MIS) (AS). This is reflected in the small distance between the two aspects, which indicates a strong positive correlation between the perception of MIS quality and the level of user satisfaction.

However, there are some specific findings that need to be considered. The aspect of filling in the biodata in the MIS is considered very good. On the other hand, the ease of use of the MIS is still a concern, with a small number of users reporting difficulties. In addition, the confidentiality of data in the MIS and the speed of service are considered relatively less than satisfactory. These findings indicate that although overall quality and user satisfaction are good, there are certain areas that need improvement.

Based on these conclusions, the suggestions that can be given are:

1.   The school needs to follow up on the results of this study to identify specific areas that require further improvement and development in the AS System Application.

2.   System development should focus on increasing the effectiveness, efficiency, and accountability of school financing management.

3.   Improving the quality of MIS Financing Application (AS) services needs to be focused on improving ease of use, data confidentiality, and speed of service.

4.   Schools need to consider differences in the backgrounds of students' parents, such as age, economic conditions, and education levels, in an effort to improve overall user quality and satisfaction.

5.   Further research can be conducted to explore other factors that influence the success of implementing MIS financing in schools.

6.   The results of this study can be used as input for other schools that want to develop or improve their financial management information systems.

This study has several limitations that need to be acknowledged. First, the uneven number of samples between the System Quality (93 respondents) and User Satisfaction (37 respondents) variables, as well as the presence of 56 missing data on User Satisfaction, can affect the generalization of the results. The data collection method used (Google Form) has the potential to contain errors in filling out by respondents. The scope of the study is limited to two main variables (System Quality and User Satisfaction) without considering other external factors (such as environmental or competitor influences) which may reduce the depth of the analysis. Then, limited research time and resources also limit further exploration, such as causality testing or longitudinal analysis. However, these limitations can be the basis for further research with methodological improvements, sample expansion, and the addition of supporting variables.

5.   ACKNOWLEDGMENTS

REFERENCES

Brown, J. S., & Duguid, P. (2000). *The Social Life of Information*. Harvard Business School Press.

Davenport, T. H. (1993). *Process Innovation: Reengineering Work through Information Technology*. Harvard Business Press.

Laudon, K. C., & Laudon, J. P. (2018). *Management Information Systems: Managing the Digital Firm* (15th ed.). Pearson.

O'Brien, J. A., & Marakas, G. M. (2016). *Management Information Systems* (10th ed.). McGraw-Hill.

Romney, M. B., & Steinbart, P. J. (2015). *Accounting Information Systems* . Pearson Education Limited.

Turban, E., Leidner, D., McLean, E., & Wetherbe, J. (2008). *Information Technology for Management: Transforming Organizations in the Digital Economy*. John Wiley & Sons.