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# The Relationship between Management Information Systems Based on *Rapor Digital Madrasah* (RDM) and the Quality of Madrasah Education

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**ABSTRACT**

This paper investigates the relationship between madrasah digital report card-based management information systems and madrasah education quality at Madrasah Aliyah Al-Masthuriyah Sukabumi. Education management information systems are essential in managing educational institutions, especially schools. It is for effectiveness, efficiency and accuracy to improve school quality. This research utilises a quantitative descriptive methodology in order to objectively describe the relationship between variables. The data were collected through questionnaires, observation, and documentation. The researchers found that the relationship between the management information system based on the *Rapor Digital Madrasah* (RDM) and the Quality of Madrasah Education has a significant relationship with a sig. correlation value of 0.497. The higher the management information system based on RDM, the higher the Madrasah Education Quality. Then, looking at the coefficient of determination means that the contribution of the variable management information system based on the RDM to the Quality of Madrasah Education is 24.7%; other factors influence the rest.

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## INTRODUCTION

Management Information Systems have become an essential component in the business world along with the development of information technology. Advances in computing, networking, mobile devices, and related technologies have enabled organizations to collect, store, process, and access data more efficiently. Mc. In his book "Management Information System: Managing with Computers," Keown states that information systems are a combination of computers and users that manage the transformation of data into information and store data and information.[1] Management information systems help educational institutions establish communication with various parties, control quality, and convey information more easily.[2]

The nature of technology is to help humans work to achieve goals effectively and efficiently. Management information systems that are comprehensive in the workings of information to be presented to managers contribute significantly to decision-making from objective data. MIS also allows managers/chairs to make more rational decisions based on reliable data.[3] From these characteristics, it can be concluded that management information systems can impact other factors in an organization or educational institution.

Laudon says there is a direct relationship between information systems and business performance. His book explains that the main business objectives that drive information systems and technology use in companies worldwide are operational excellence, new products and services, familiarity with customers and suppliers, better decision-making, competitive advantage, and survival.[4] Likewise, education requires media to accelerate the achievement of educational goals almost the same as business performance, management information systems encourage educational factors to pursue educational ideals. It helps them identify a problem, solve it, and evaluate their performance.[5] Information systems for the development of education with an overview of how education tries to utilize computer devices can be used as a means of communication to improve education performance significantly.[6]

The utilization of information systems for education can be said to improve the quality of education. Systems media technology is mobilized to escalate Education Quality as optimal as possible. According to Permendiknas number 63 of 2009, quality of education is the level of intelligence in the nation's life that can be achieved by implementing the National Education System.[7] Meanwhile, according to Mujamil, Quality of Education is "The ability of an educational institution to use educational resources to

[1] Patrick G. McKeown and Robert A. Leitch, *Management Information Systems: Managing with Computers* (New York: Dryden Press, 1993), 3-5.

[2] Eti Rochaety, Pontjorini Rahayuningsih, and Prima Gusti Yanti, *Sistem Informasi Manajemen Pendidikan* (Jakarta: Bumi Aksara, 2006), 27.

[3] Sungging Handoko and Tori Sutisna, "Manfaat Sistem Informasi Manajemen," *Jurnal Informatika (STMIK Tulus Cendekia)* 1, no. 1 (2021): 16–21.

[4] Kenneth C. Laudon and Jane P. Laudon, *Management Information Systems: Managing the Digital Firm* (New Jersey: Prentice Hall, 2010), 23.

[5] Slamet Hariyanto, "Sistem Informasi Manajemen," *Publiciana* 9, no. 1 (2016): 80–85.

[6] Arbangi, Dakir, and Umiarso, *Manajemen Mutu Pendidikan* (Jakarta: Prenada Media, 2016), 7.

[7] Mendiknas R.I, "Peraturan Menteri Pendidikan Nasional Nomor 63 Tahun 2009 Tentang Sistem Penjaminan Mutu Pendidikan Nasional" (Jakarta, 2009), 4.

increase learning capacity most optimally."[8]

One of the UN's SDGs on Quality Education is to improve school facilities to provide a safe and positive environment for all, increase the number of trained and qualified teachers, and promote education for sustainable development.[9] It can be seen that the quality or quality of education guarantees the availability of facilities and trained teachers. The role of educators in the quality of education is significant because the quality of educators is reflected in the services and assessments provided.[10] Quality Madrasah education can provide services that meet customer needs. All elements meet the requirements and conditions expected by consumers and generate satisfaction. Efforts to improve the quality of education, especially in madrasas, can be made by improving the quality of the final assessment.

In the assessment carried out in Madrasah, teachers are required to be skillful and thorough. Because the assessment measures the achievement of basic competencies in the core competencies, school assessments must meet educational assessment standards and related assessment regulations in the Government Regulation of the Republic of Indonesia Number 32 of 2013 concerning National Education Standards.[11] These evaluation standards contain criteria regarding mechanisms, procedures, and tools for evaluating student learning outcomes. A good assessment system will help educators identify good teaching strategies and motivate students to learn better by improving their learning. Assessing learning outcomes is one of the tasks that teachers must do. Many teachers encounter obstacles and difficulties when conducting assessments according to predetermined standards.[12] This complexity is because teachers must carry out many aspects of assessment.

In the millennium era, formatting and processing report cards that used manual methods are now becoming more modern thanks to advances in information technology. These institutions will benefit significantly from an accurate and reliable information system to meet the operational needs of Madrasah staff, especially teachers, in implementing student learning outcomes. Therefore, policymakers made regulations regarding the report card for madrasahs to be done online, known as *Rapor Digital Madrasah* (RDM). RDM, or *Rapor Digital Madrasah*, is an application for processing and reporting student learning outcomes developed by the Directorate of Islamic Education of the Ministry of Religious Affairs. RDM can be used for free by all Madrasahs throughout Indonesia. RDM is also a refinement of a similar application, the Rapor Digital (ARD) application used previously. Of course, with various improvements and refinements made directly by the Ministry of Religious Affairs technical team.

Since 2018, the digital report card policy has been established for all public and

[8] Mujamil Qomar, *Manajemen Pendidikan Islam* (Jakarta: Erlangga, 2007), 203.

[9] UNESCO, *Education for Sustainable Development Goals: Learning Objectives. Education for Sustainable Development Goals: Learning Objectives* (Paris: the United Nations Educational, Scientific and Cultural Organization, 2017), 8.

[10] Qomar, *Manajemen Pendidikan Islam*, 10.

[11] Kemendiknas, "Peraturan Pemerintah Republik Indonesia Nomor 32 Tahun 2013 Tentang Standar Nasional Pendidikan" (Jakarta, 2013), 2.

[12] Miftahur Rohman, "Problematika Guru Dan Dosen Dalam Sistem Pendidikan Di Indonesia," *Cendekia: Jurnal Kependidikan Dan Kemasyarakatan* 14, no. 1 (2016): 49–71.

private madrasahs throughout Indonesia through circular letter Number 1594/DJ.I/DT.II.I/KS.00/10/ 2018 relating to the use of website-based online *Rapor Digital Madrasah* cards.[13] So that using this report card can facilitate the entire assessment process carried out by educators.[14] A policy product's effectiveness level is indeed measured from various aspects. This RDM has been implemented for more than 5 years, so at least it can be measured whether the objectives of this RDM are achieved or not. As said by the Director of Madrasah Curriculum, Facilities, Institutions, and Student Affairs (KSKK), Moh Isom;

> RDM is not just an application for printing report cards. Through RDM, madrasah principals, teachers, and parents can monitor the development of student competency achievements in real-time. We are determined to improve the quality and competitiveness of madrasahs, realizing independent and outstanding madrasahs through breakthroughs in fast and accurate digital services in madrasah.[15]

Judging from this statement, RDM is expected to improve the quality of education. But the problem is that in using this RDM for several years, is it effective in improving the Quality of Education? To what extent is the relationship between RDM and the Quality of Education?.

Previous research conducted by Amira Munaya in 2021 with the title "The Relationship between Management Information System Digital Report Card Application (ARD) with Madrasah Education Quality: Research on Madrasah Aliyah in Sukabumi District" concluded that the management information system of the Digital Report Card Application (ARD) with Madrasah Education Quality correlates with a significant value of 0.000> 0.05.[16] It was then, based on the results of the calculation of the correlation coefficient analysis of 0.747. Furthermore, the coefficient of determination (R square) of 0.558 means that the contribution of the management information system variable of the Digital Report Card Application (ARD) to the Quality of Madrasah Education is 55.8%. There is a strong level of strength because it is in the interval range of 0.60-0.799 = strong. The research was conducted when the digital report card was still with the old version.

Delone and Mclean in Mariana suggest indicators in management information systems: System Quality, Information Quality, and User Satisfaction.[17] Management information systems are related to organizational activities for decision-making to achieve organizational goals. Then, the indicators of the quality of education made by the Ministry

[13] Nidaul Fajrin and Imam Machali, "Implementasi Penggunaan Rapor Digital Madrasah (RDM) Berbasis Online Dalam Menyusun Administrasi Penilaian Hasil Belajar Peserta Didik," *Idaarah: Jurnal Manajemen Pendidikan* 7, no. 1 (2023): 177–89.

[14] Enco Mulyasa, *Manajemen Berbasis Sekolah: Konsep, Strategi Dan Implementasi* (Jakarta: Remaja Rosdakarya, 2007), 4.

[15] Kemenag, "Kemenag Luncurkan Rapor Digital Untuk 87.000 Madrasah," Kemenag, 2021, https://kemenag.go.id/nasional/kemenag-luncurkan-rapor-digital-untuk-87000-madrasah-fvlthr.

[16] Amira Munaya, "Hubungan Sistem Informasi Manajemen Aplikasi Rapor Digital (ARD) Dengan Mutu Pendidikan Madrasah (Penelitian Pada Madrasah Aliyah Se-Kabupaten Sukabumi)" (Bandung, UIN Sunan Gunung Djati, 2021), 73-74.

[17] Novita Mariana, "Pengukur-Pengukur Kesuksesan Sistem Informasi Eksekutif," *Dinamik* 11, no. 1 (2006): 30–37.

of Education and Culture are aspects of assessment according to the realm of competence, objective and accountable assessment techniques, and assessments carried out following procedures.[18] Educational assessment standards to ensure the quality of education become an assessment standard for educators (teachers) in educational institutions and the government. One of the teacher's duties in learning is to evaluate according to educational assessment standards to ensure the quality of education following applicable regulations, and teachers are a key factor in learning development.[19]

It is so important that we know about the correlation between information systems and the quality of education. So many information systems and their outputs in applications become a benchmark for the performance of organizations, government institutions, and the quality of education. Therefore, seeing the problems described above and seeing the latest developments in existing regulations, the researchers are interested in investigating the relationship between RDM-based management information systems and madrasah education quality at Madrasah Aliyah Al-Masthuriyah Sukabumi.

## RESEARCH METHOD

This research used a quantitative approach, which is a research approach that sees reality as something that is observed and can be broken down so that the problems faced can be generalized based on the number of variables estimated. Research methods based on the philosophy of positivism are used to study specific populations or samples, collect data using research tools, and analyze quantitative/statistical data with the aim of testing predetermined hypotheses.[20] This type of associative research questions the relationship between two variables or is autonomous research. This associative is used to determine two variables, namely the management information system based on the RDM and the Quality of Madrasah Education, as well as the relationship between the two variables. The research method used is the survey research method, which is research conducted by collecting data using questionnaires and structured interviews as research tools to obtain data from some location's specific points.[21]

The population in this study was 39 teachers at Madrasah Aliyah Al-Masthuriyah Sukabumi. Sampling was carried out using saturated sampling techniques. According to Sugiyono, saturated sampling is a sampling technique when population members are used as samples. It is done when the population is relatively small.[22] The sample used was all 39 people. This sampling represents users with full access to the RDM application. In the data collection technique, researchers used a closed questionnaire, which is a questionnaire that provides answers and is collected via Google Forms. This questionnaire used a Likert scale such as VP = Very Precise, P = Precise, LP = Less Precise I = Imprecise. The data analysis

[18] Kemendikbud, "Peraturan Menteri Pendidikan Dan Kebudayaan Nomor 3 Tahun 2017 Tentang Penilaian Hasil Belajar Oleh Pemerintah Dan Penilaian Hasil Belajar Oleh Satuan Pendidikan" (Jakarta, 2017), 4-5.

[19] Sumarto Pohan, "Manajemen Sekolah: Wujudkan Guru Profesional," *Tarbawi : Jurnal Ilmu Pendidikan* 14, no. 2 (2018): 51–62.

[20] Sugiyono, *Metode Penelitian Bisnis : Pendekatan Kuantitatif, Kualitatif, Kombinasi Dan R&D* (Bandung: Alfabeta, 2018), 17.

[21] Sugiyono, 127.

[22] Sugiyono, *Metode Penelitian Kombinasi (Mixed Methods)* (Bandung: Alfabeta, 2016), 85.

technique used in this research is inferential statistical analysis. Before distributing the questionnaire to the entire sample, the questionnaire was analyzed with the Cronbach alpha value (reliability) to test the reliability of the questionnaire. The questionnaire was distributed to the same 20 respondents. It resulted in a Cronbach alpha value of 0.803 and, more significant than the r table of 0.444,[23] or generally acceptable if the value is more than 0.7, it can be concluded that the questionnaire is reliable. The following is a table of the Cronbach alpha value.

**Table 1.** Reliability Test

| **Reliability Statistics** | |
|---|---|
| **Cronbach's Alpha** | **N of Items** |
| .803 | 37 |

After the data is collected, the researcher analyzes or processes the data obtained to answer the existing problems. The types of analysis use prerequisite analysis tests (normality test and linearity test). The normality test aims to test whether confounding or residual variables have a normal distribution in the regression model.[24] Statistical analysis and final data test/hypothesis testing are correlation analysis and tests. Then, the test in this study used the SPSS version 26 program, namely the Pearson correlation test, which is seen in the correlation coefficient. According to Sugiyono, correlation is a number that shows the direction and strength of the relationship between two or more concurrent variables and other variables. The following is a table regarding correlation analysis.

**Table 2.** Correlation Coefficient

| **Coefficient Interval** | **Correlation Level** |
|---|---|
| 00,00-0,19 | Very Low |
| 0,20-0,39 | Low |
| 0,40-0,59 | Medium |
| 0,60-0,79 | Strong |
| 0,80-1,00 | Very Strong |

## RESULT AND DISCUSSION

The research results obtained from Madrasah Aliyah Al-Masthuriyah Sukabumi are as follows.

### Data Description

The relationship between the management information system based on the RDM and the Quality of Education of Madrasah Aliyah Al-Masthuriyah Sukabumi can be seen by distributing questionnaires. Furthermore, researchers involved teachers at Madrasah Aliyah who had met the criteria, then carried out through distributing questionnaires of as many as

[23] Nilda Miftahul Janna and Herianto, "Konsep Uji Validitas Dan Reliabilitas Dengan Menggunakan SPSS," *OSF*, 2021, 1–12.

[24] Syofian Siregar, *Statistik Parametrik Untuk Penelitian Kuantitatif Dilengkapi Dengan Perhitungan Manual Dan Aplikasi SPSS Versi 17* (Jakarta: Bumi Aksara, 2015), 49.

32 question items divided by 2 on each variable. In variable X, there are 14 statements. In variable Y, there are 18 statement items to 32 items in the form of questionnaire questions with four alternative structured answers, namely Not Exact (NE) = 1, Less Exact (LE) = 2, Exact (E) = 3, Very Exact (VE) = 4. The assessment leads to the lowest value range of 1, while the highest is 4. The questionnaire was distributed to 39 teachers. The interpretation is as follows.

**1. Data Interpretation**

In analyzing variable X, namely the management information system based on the RDM, there are 3 indicators, namely: 1) System quality, 2) Information quality 3) User satisfaction. The three indicators will be determined on average with the formula X = $\frac{\Sigma fx}{N}$ . Then, the results of the calculation are interpreted into the interval, namely: [25]

0,5 - 1,5 = Very Low
1,6 - 2,5 = Low
2,6 – 3,5 = Medium
3,6 – 4,5 = High
4,6 – 5,5 = Very High

The analysis is as follows.

**Table 3.** Variable Data Description "x"

| Indicator | Answers | | | | N | Score | Mean |
|---|---|---|---|---|---|---|---|
| | NE (1) | LE (2) | E (3) | VE (4) | | | |
| 1 | 0 | 6 | 120 | 186 | 39 | 312 | 3,6 |
| 2 | 0 | 3 | 60 | 93 | | 156 | 3,6 |
| 3 | 17 | 19 | 68 | 91 | | 195 | 3,2 |
| Total & Mean | | | | | | 663 | 3,4 |

Based on the results of distributing 14 statement items/questionnaires to 39 teachers as a sample. The x variable category can be interpreted with the formula, fx : (n x number of question items) 2297/663 = 3.4, or seen in the mean table above. This value includes the qualification "Moderate" because it is in the interval range 2.6 - 3.5 (see Arikunto's table).

[25] Suharsimi Arikunto, *Prosedur Penelitian Suatu Pendekatan Praktik* (Jakarta: Rineka Cipta, 2006), 39.

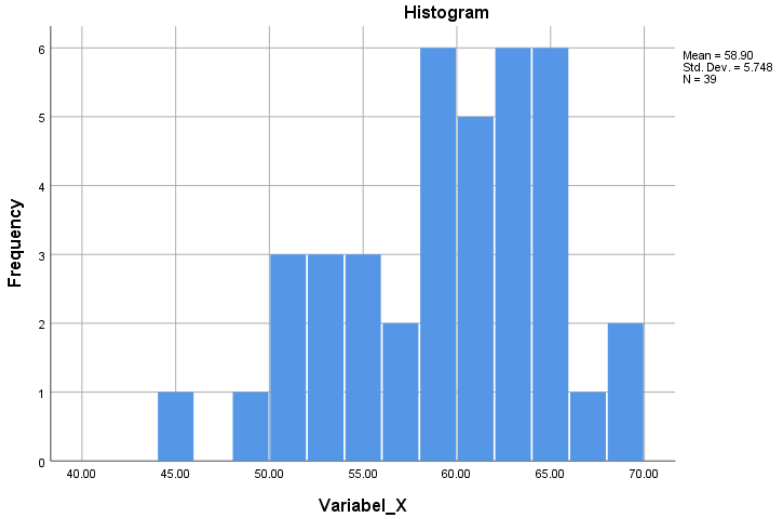


**Figure 1**. Frequency Distribution Chart of Variable X

In the analysis of variable Y, the Quality of Madrasah Education, there are 3 indicators: 1) Aspects of assessment following the domain, 2) Objective and accountable assessment techniques 3) The assessment is carried out following the procedure. The three indicators will be determined on average with the formula X. $\frac{\Sigma fx}{N}$ . Then, the calculation results are translated into intervals according to Arikunto (2006), as described above. The analysis is as follows.

**Table 4.** Data Description of Variable "y"

| Indicator | Answers | | | | N | Score | Mean |
|---|---|---|---|---|---|---|---|
| | NE(1) | LE (2) | E (3) | VE (4) | | | |
| 1 | 0 | 4 | 73 | 196 | 39 | 273 | 3,7 |
| 2 | 9 | 5 | 75 | 145 | | 234 | 3,5 |
| 3 | 1 | 4 | 80 | 188 | | 273 | 3,7 |
| Total & Mean | | | | | | **780** | **3,6** |

Based on the results of distributing 18 statement items/questionnaires to 39 teachers as a sample. The category of variable y can be interpreted with the formula fx : (n x number of question items) 2836/780 = 3.6. This value includes the qualification "High" because it is in the interval range 3.6 - 4.5 (see Arikunto's table).

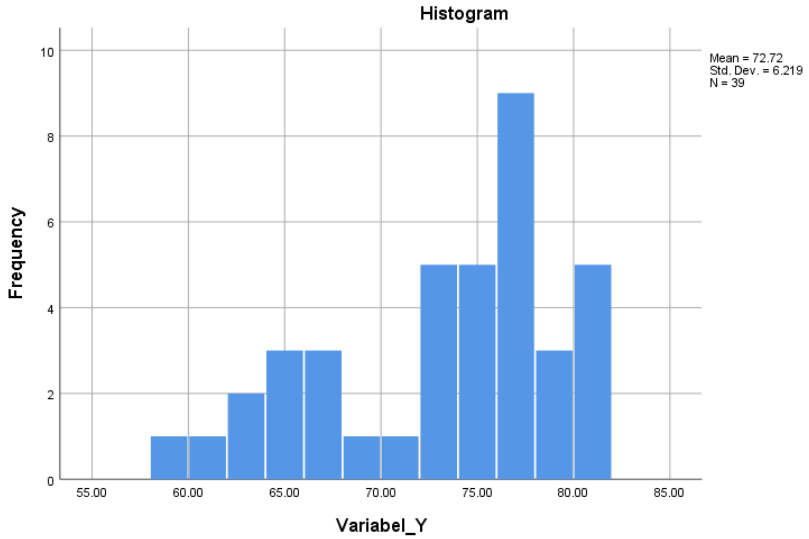


**Figure 2.** "Y" Variable Frequency Distribution Chart

## 2. Prerequisite Test Results

### a. Normality Test

Based on the results of calculations using the SPSS 26 program for the Kolmogorov-Smirnov normality test value. It is known that the results of the calculation of the RDM Based Management Information System variables and the Quality of Madrasah Education can be explained in the following table:

**Table 5.** Normality of Variable Data

| | | **Unstandardized Residual** |
|---|---|---|
| N | | 33 |
| Normal Parameters[b] | Mean | .0000000 |
| | Std. Deviation | .31164770 |
| Most Extreme Differences | Absolute | .143 |
| | Positive | .078 |
| | Negative | -.143 |
| Test Statistic | | .143 |
| Asymp. Sig. (2-tailed) | | **.086**[c] |

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

As seen from the table, variable X management information system based on RDM and variable Y Madrasah Education Quality significance value of 0.086> 0.05 shows that the residual value is normally distributed.

**b. Linearity Test**

The linearity test aims to determine whether there is a linear relationship between the dependent variable and each independent variable tested. If the model does not meet the linearity requirement, the linear regression model cannot be used. The calculation results using SPSS 26 are as follows.

**Table 6.** Data Linearity Variable

| | | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|---|
| Variabel _Y * Variabel _X | Between Groups | (Combined) | 842.314 | 16 | 52.645 | 1.845 | .091 |
| | | Linearity | 222.768 | 1 | 222.768 | 7.809 | .011 |
| | | Deviation from Linearity | 619.546 | 15 | 41.303 | 1.448 | **.210** |
| | Within Groups | | 627.583 | 22 | 28.527 | | |
| | Total | | 1469.897 | 38 | | | |

From the table, the relationship between variable X (Management Information System based on *Rapor Digital Madrasah/RDM*) and Y (Madrasah Education Quality) has a sig (Deviation from Linearity) value of 0.210 greater than 0.05, meaning that there is a significant linear relationship between the variables.

**3. Correlation Test Results**

**a. Correlation Coefficient Test**

The next step in this research is to answer the formulation of the problem of the relationship between the management information system based on the RDM and the Quality of Madrasah Education at MA Al-Masthuriyah Sukabumi. Therefore, a correlation test analysis was conducted using SPPS 26, namely the Pearson correlation test, expressed as a correlation coefficient. The relationship between variables X and Y can be positive or negative. If the significance value is <0.05, it is correlated, and if the significance value is >0.05, it is not correlated.

**Table 7.** Correlation Coefficient Test Results

| | | Variabel X | Variabel Y |
|---|---|---|---|
| Variabel X | Pearson Correlation | 1 | **.497**** |
| | Sig. (2-tailed) | | **.003** |
| | N | 37 | 33 |
| Variable Y | Pearson Correlation | **.497**** | 1 |
| | Sig. (2-tailed) | **.003** | |
| | N | 33 | 34 |

**. Correlation is significant at the 0.01 level (2-tailed).

Based on the correlation coefficient test results in the table above, the significance value of the relationship between the management information system based on the RDM and the Quality of Madrasah Education is 0.003. So, a correlation or relationship of 0.003 <0.05 between the management information system based on the RDM and the Quality of Madrasah Education. In addition, the correlation coefficient determined based on the results is 0.497. The level of strength is included as "moderate" because it is in the range of 0.40 - 0.59 = Moderate (see the correlation coefficient table), which means that there is a reasonably close relationship between the management information system based on the RDM and the Quality of Madrasah Education.

The relationship between the variable management information system based on the RDM and the Quality of Madrasah Education is positive from the Pearson correlation number of 0.497 without a sign (-), so the relationship between the two variables is unidirectional. The higher the management information system based on the RDM, the higher the madrasah Education Quality.

**b. Determination Coefficient Test**

According to Widarjono, the coefficient of determination (R-squared) test is a test that explains the proportion of variation in the independent variable on the dependent variable.[26] In addition, the determination test can also be used to measure how good the regression line is. Suppose the estimate's coefficient of determination (R-squared) is close to one (1). In that case, it can be said that the independent variable can explain the dependent variable well. Vice versa, if the coefficient of determination (R-squared) is far from one (1) or close to zero (0), then the independent variable will explain the dependent variable worse. The amount of contribution of variable X to variable Y by looking for the coefficient of determination, the calculation through the help of the SPSS 26 program is as follows:

**Table 8.** Test Results of the Coefficient of Determination

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .497[a] | **.247** | .222 | .31663 |

a. Predictors: (Constant), Variabel_X

b. Dependent Variable: Variabel_Y

Based on the table above results, the coefficient of determination (R square) of 0.247 means that the contribution of the RDM-based management information system variable to Madrasah Education Quality is 24.7%. So it can be said that other factors influence the rest. In addition, it can be seen in the coefficient of determination graph below.

[26] Agus Widarjono, *Ekonometrika: Pengantar Dan Aplikasinya Disertai Panduan EViews* (Yogyakarta: UPP STIM YKPN, 2013), 26.

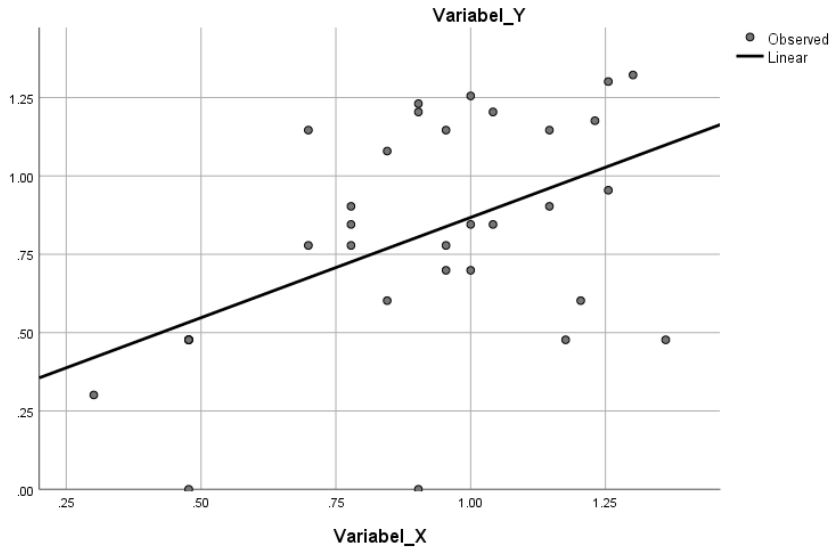


**Figure 3.** Coefficient of Determination Graph

The figure above is a linear regression graph for the madrasa Education Quality Variable case based on the RDM-based Management Information System. The observation graph pattern is symbolized by o, and the linear model with a straight line. Seeing that the observation graph is close to the linear line, the model can be used as an estimation model to forecast the amount of Madrasah Education Quality based on the RDM-based management information system (RDM) variable.

**Data Result**

Statistical data is interpreted to explain in detail the formulation of research problems. Based on the results of statistical interpretation, further research can be presented in the following discussion:

**1. Management Information System Based on *Rapor Digital Madrasah* (RDM)**

Management information systems, especially in educational institutions, must be carefully managed. Management information systems and information technology are tools to improve the effectiveness and efficiency of the operations of educational institutions. The tool will be effective if the user understands and can process the information resulting from the tool to be used as a decision consideration. Being the choice of today's society, educational institutions must have complete IT equipment.[27] One of the IT tools is an application. An application that can be applied in educational institutions is the RDM Application, which aims to help educators easily report student performance assessments.

Then, the statistical test results show that the management information system based on the RDM at MA Al-Masthuriyah is classified as "Moderate" because it is in the range of 2.6 to 3.5 with an average value of 3.4. It means that the use of the RDM in the madrasah is still classified as usual, not too high, and not too low.

[27] Sayidin Hilal, *Ensiklopedia Sejarah Penemuan Dunia Penemuan Tentang Teknologi*, 1st ed. (Bandung: Graha Bandung Kencana, 2007), 5.

**2. Quality of Madrasah Education**

Quality education can produce graduates with skills and competencies based on personality, social, noble, and ethical values and meet the National Education Standards (SPN), one of which is the fulfillment of assessment standards that schools apply to achieve quality education. The quality of education also describes all goods or services that demonstrate their ability to meet customer expectations.[28]

Then, the statistical test results show that the Quality of Education at MA Al-Masthuriyah is classified as "High" because it is in the range of 3.6 to 4.5 with an average value of 3.6, which means that the Quality of Madrasah Education in the school is highly qualified.

**3. The Relationship between Management Information System Based on RDM and Quality of Madrasah Education**

In quality madrasah education, the role of management information systems is crucial because educational activities require fast, accurate, and precise information technology. One of the things that affects the Quality of Education in Madrasah is the standard of final student assessment that implements a management information system based on the RDM. Implementing this will help educators (teachers) complete student performance reports (tickets) effectively, effectively, and efficiently, help measure student achievement, and help improve the quality of education in madrasahs due to the fulfillment of assessment standards according to established national education standards. It reflects the teacher's commitment to controlling their professional values, attitudes, and behaviors in contributing to improving the quality of education.[29]

The statistical test results show that the overall management information system based on RDM has a significant relationship with Madrasah Education Quality with a significant value of 0.003. So 0.003 <0.05 is a correlation or relationship between the management information system based on RDM and Madrasah Education Quality. The result of the calculation of the correlation coefficient analysis obtained is 0.497. There is a significant strength (moderate) because it is in the category 0.40 - 0.59, which means that the relationship between the management information system based on RDM and Madrasah Education Quality is normal (moderate). The type of relationship between the variable management information system based on the RDM with Madrasah Education Quality leads to a positive nature by looking at the Pearson correlation lift of 0.497 by not having a negative sign (-) in the figure so that the relationship between the two variables is unidirectional. The higher the management information system based on RDM, the higher the Madrasah Education Quality.

They then obtained the coefficient of determination (R Square) of 0.247. means that the contribution of the variable management information system based on RDM to Madrasah Education Quality is 24.7%. So it can be said that other factors influence the rest. Seeing the strength of the variable relationship with the "normal" category,

[28] Nanang and Rusman, "Analisis Kebutuhan Pelatihan Standar Penilaian Berbasis Data Pemetaan Mutu Pendidikan (PMP) Pada Jenjang Sekolah Dasar (SD) Di Kota Makassar," *Jurnal Penelitian Ilmu Pendidikan* 12, no. 1 (2019): 24–37.

[29] Mokh. Fakhruddin Siswopranoto, "Standar Mutu Pendidikan," *Al-Idaroh: Jurnal Studi Manajemen Pendidikan Islam* 6, no. 1 (2022): 17–29.

researchers recommend continuing to strengthen the use of the RDM application for decision consideration so that it can contribute more to school progress, such as viewing student progress charts, evaluating students together with the principal, evaluating curriculum, learning methods, learning media. By monitoring this application, they can recommend facilities and infrastructure that suit student needs. Then, by looking at the coefficient of determination of 24.7%, it shows that the management information system has a share of almost a quarter to improve the quality of education. Other factors influence three-quarters of the part, or 75.3%, indicating that schools must explore these factors to maximize their efficiency in improving the quality of education.

## CONCLUSION

Based on the results of the research and discussion previously described, using quantitative descriptive research on questionnaire techniques and documents conducted at Madrasah Aliyah Al-Masthuriyah Sukabumi regarding the relationship between management information systems based on RDM with Madrasah Education Quality, it can be concluded that it has a significant relationship. The correlation coefficient analysis calculation results also illustrate that the two variables have a moderate relationship. Then, looking at the coefficient of determination means that the contribution of the RDM-based management information system variable to the Quality of Madrasah Education is 24.7%. Other factors influence the rest. Researchers recommend continuing to strengthen the use of the RDM application for decision considerations so that it can contribute more to school progress, such as viewing student progress graphs, evaluating students together with the principal, evaluating curriculum, learning methods, and learning media. By monitoring this application, they can recommend facilities and infrastructure that suit student needs.

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