

# Use Of Website-Based School Management Information Systems In Improving The Quality Of Education Services

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#### **Abstract**

In this study, researchers used Research and Development (R&D). The problems in this research are 1. How to change the mindset and lifestyle of the community? Many conveniences and functions of the use of digital media, encourage educators and education staff to provide service, strive to be able to use and utilize information and communication technology in the use of digital media in every educational service activity. 2. How the function of using digital media includes: the process of education services and the division of tasks for educators and education staff in improving the quality of educational services. This research uses a descriptive qualitative-quantitative method. The use of a website-based school management information system in improving the quality of education services, in MTs. Miftahul Huda Tegalwaru, Karawang. The feasibility test for the use of a website-based school management information system in the form of application content design aspects and information data presentation, with a percentage of 87.85 % having "very feasible" criteria for field trials. The quality of education services with a percentage of 15.5%, is less than satisfactory, due to the limited time the practical material presented by the presenters is deemed inadequate. The tendency to behave actively with a percentage of 18.43% and an increase in final behavior with a percentage of 22.71%, an increase of 4.28%.

Keywords: System Use, Management Information, Quality of education services

#### **INTRODUCTION**

A Management Information System (MIS) is a computer-based system that provides information for users who have similar needs. Moekijat (2015), to improve education services, realize the goal of national education, namely "to educate the life of the nation" which can develop capabilities and shape the character and civilization of a dignified nation and can develop the potential of students to become human beings who believe and fear God Almighty, have a noble character, always healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens (Trianto, 2012). In realizing the goals of educational institutions/organizations in the process of improving the quality of services, and the quality of

education by expectations, which is marked by the functioning of management, both planning, organizing, leading/actuating, and controlling. Sonia (2019).

Then the linkage of management information systems with the quality of education services, namely the ability of schools to manage operationally and efficiently the components related to schools to produce added value to components based on norms/standards, Sastrawan (2019).

Based on the questionnaire that has been distributed in MTs. Miftahul Huda Tegal Waru, Pangkalan District, Karawang Regency on August 23, 2021, and filled with educators (teachers) and education staff, from 32 educators/teachers and 6 education staff who provide services to the educational process. Only a few educators and education staff can provide educational services, using the website. Based on the results of interviews with educators and education staff, most of them still have difficulty using website applications. From the questionnaire data that has been distributed and filled out by educators and education staff, MTs. Miftahul Huda Tegal Waru, Karawang, only 26.52% sometimes use the website in providing learning services, and only 12.31% have often used the website in providing learning services.

Based on the results of interviews with educators and education staff at MTs Miftahul Huda in August 2021, schools have not been able to use services and learning optimally using the Website. Researchers also do not know in depth how to provide services and learning using the website, therefore it is necessary for researchers to study a website-based school management information system.

Therefore, the researcher wants to develop the use of a website-based school management information system that will be designed systematically and attract the attention of information users, as well as assess the cognitive and behavior of information users. Subtari (2016), is a communication process where information as input, recorded, stored, and processed to produce more useful output in the form of decisions, planning, operations, and supervision.

### **METHOD**

Researchers used the Research and Development (R&D) method. The R&D method is a research method used to produce certain products and test the effectiveness of these products. The R&D method is an approach to produce new products or improve existing products, which consists of ten steps (Sugiyono, 2016). However, in this study, the steps for using the Research and Development (R&D) method were carried out only up to the sixth step, namely product testing on a small scale (potential problems, data collection, product design, design validation, design revision, and product testing).

This research was conducted, in MTs. Miftahul Huda Tegalwaru, Karawang. By involving 32 educators/teachers and 6 educational staff. The data collection technique was carried out using a questionnaire with the Google Form questionnaire instrument, to assess the behavior of educators and education staff. In providing the quality of service and quality of education using a written test with a google form test instrument in the form of a pretest and posttest. The use of the feasibility test of the instrument used is a validation sheet.

#### **RESULTS AND DISCUSSION**

#### 1. Test Results of the Use of School Management Information Systems by Validators

From the results of the feasibility test for the use of the school management information system, which was validated by 2 lecturers of Education Management and a lecturer of Information Management Communication System, as validators. Data regarding the feasibility test for the use of school management information systems can be seen in Table 1.

Table 1. The Results of The Calculation of The Feasibility Test for The Use of School Management Information Systems from The Validator

NO	Validation	Observed Aspects	Percentage	Criteria		
	Educators/Teachers	Information system	87 %	Worth It		
1		Application Content	07 70	VVOILIIIL		
1		Information data	81,3 %	Worth It		
		presentation	01,5 %	VVOICHTC		
		Information system	82,5 %	Worth It		
2	Educational Staff	Application Content	62,5 %	WOIGHT		
		Information data	80 %	Worth It		
		presentation	OU %	VVOICITIC		

The use of a website-based school Management Information System is compiled by containing the following elements: 1) Website appearance (cover). 2) the purpose of education services, 3) types of information/ content, which are relevant 4). service procedures (SOP) in the form of data on tools and learning materials and working methods, 5). the results of information data in the form of text, tables, images, or plots, which can be presented.

The results of the study indicate that the use of a website-based school management information system has met the criteria and deserves to be tested. For the sake of improving the use of the school management information system, there are a few revisions that have been suggested by validators, suggestions from validators are attached in Table 2.

The use of a good management information system, namely website-based information, is a good system that can provide information for users who have similar needs. Moekijat, (2015) the use of a website-based school management information system can convey the message/content of the image effectively and efficiently to information users. Appearance is very important in the use of a website-based school management information system. So, users feel interested in the appearance of using the information system, not just the content.

If the use of an information system is displayed with information data in the form of words and there are no clear features and instructions, it will cause confusion and unclear information. If it is displayed with images only, it is not possible because the message/content will not arrive. So, the use of a good management information system is to have a combination of attractive images and clear writing and has a reliable level of accuracy for data sources.

Table 2. Validation Suggestions for Improvements to Information System Data

NO	Validation	Improvement Suggestions		
1	Educators/Teachers	<ol> <li>Every information data that is entered must be in the system and the source of the information data must be included and codified.</li> <li>The features contained in the system must be clear and understandable by all users.</li> <li>The graphic design and image display on the website pages are made as attractive as possible.</li> <li>The presentation of information must always be updated with</li> </ol>		
-		the latest.		
2	Educational Staff	<ol> <li>Each presentation of information data must be in accordance with the expectations of users of fast, precise, and accurate information.</li> <li>Review each information and pay attention to the information limit/time limit.</li> </ol>		

## 1. Behavioral Outcomes of Educational Service quality

The results of the readability questionnaire on the use of a website-based school management information system in improving the quality of education services were distributed to 32 educators and 6 education staff, which are divided into three aspects of assessment in Table 3.

**Table 3. Behavior of Education Services** 

No	Observed Aspect	Score	Criteria	
1	Behavior of educators and education staff in providing educational		\\/orth  +	
1	services.	12,9	Worth It	
2	Competency in operating applications using website-based school		Worth It	
	management information systems.	13,2	VVOICITIC	
3	Presentation of website-based school management information	87	Worth It	
3	system information data.	67	VVOICHIC	

## 1. Behavioral Outcomes of Educational Service Quality

From the results of the validation data analysis, as well as the readability questionnaire of respondents, educators, and education staff, in the use of a website-based school management information system, it is very feasible to implement it in an effort to improve the quality of education services, especially in the learning process.

After the use of a website-based school management information system was declared very feasible for field trials by validators, researchers conducted research to assess the behavior and skills of educators and education staff in providing educational services, offline and online. Activities are carried out in the

Administration Room and Classroom and online services are carried out in the Computer Lab room using a website-based application.

In offline service activities, educators and education staff are given a pretest in the form of a written test in the form of a questionnaire to measure the initial competence of educators and education staff. Educators and education staff are given an initial briefing on the use/operation of the website and online service activities that will be carried out the next day.

Pada kegiatan layanan Daring (online) pendidik dan tenaga pendidik di ajak keruang lab Komputer untuk mempraktekan dan mengoperasikan aplikasi berbasis website untuk masuk pada system (login), input data, menyimpan data dan menyajikan data/ informasi serta keluar pada system (logout) pada aplikasi yang disediakan di sekolah. Pada kegiatan Daring 2 yang dilakukan mereview kegiatan luring dan juga Daring. Pendidik dan tenaga kependidikan diberikan posttest dan juga angket perilaku guna mengukur tingkat pemahaman Pendidik dan tenaga kependidikan. Prilaku merupakan mutu pelayanan dalam betuk jasa (Service Quality) adalah bentuk sikap yang diperoleh dengan cara membandingkan persepsi pelanggan atas jasa yang nyatanyata mereka terima (Performance/Perceivet service) dengan layanan yang mereka harapkan (expectation/expected service). Apabila kenyataan (performance) lebih besar dari yang diharapkan (expectation) maka jasa dapat dikatakan bermutu. Fitzsimmons & Fitzsimmons (1994). Data mengenai pengetahuan dan prilaku dapat dilihat pada Tabel 4.

In online service activities, educators and educational staff are invited to the computer lab to practice and operate website-based applications to enter the system (login), input data, store data, and present data/information, and exit the system (logout) on applications provided in schools. In the 2nd online activity, they reviewed offline and online activities. Educators and education staff are given a posttest and behavioral questionnaires to measure the level of understanding of educators and education staff. Behavior is the quality of service in the form of service (Service Quality) is a form of attitude obtained by comparing customer perceptions of the services they receive (Performance/Perceived service) with the service they expect (expectation/expected service). If the reality (performance) is greater than expected (expectation) then the service can be said to be of quality, Fitzsimmons (1994). Data regarding knowledge and behavior can be seen in Table 4.

**Table 4. Knowledge Results of Educators and Education Staff** 

NO	Description	Analysis Result
1	Total of respondent	32
2	Total of Respondents who took the pretest	29
3	Total of respondents who took the posttest	26
4	Total of completed respondents	4
5	Respondent score range	0 - 100
6	Perfect score for each question item	20
7	Pretest average score	43,97
8	Posttest average score	52,5

9	Behavior Standard Value	75
10	Knowledge of usage About Website	15,3 %
	Conclusion	Low

The behavioral values for the quality of education services in the group of educators and education personnel are in Table 5.

Table 5. Behavioral Values of Educators and Education Staff in Offline and Online Services

No	:	1	2	2	3	3	4	1	ţ	5
Activity	Off	On	Off	On	Off	On	Off	On	Off	On
Score	55	58	50	59	75	69	50	50	53	85
Average	56	5,5	54	1,5	7	2	5	0	6	9
Average					60	),4				

After implementing the use of a website-based school management information system, the behavior of the quality of education services has not increased overall, only 8.8%, the behavior of offline services is low. A respondent stated that the quality of service is high, the score exceeds 75 from a maximum score of 100. only 4 respondents or 15.3% whose value is above 75. The problems that affect behavior include the use of information technology, technology is a system used to support an activity or program achievement (Kurniawati, 2018) Information relates to the delivery of information and ease of access to the required information. Information is supported by the completeness of the media used and updated regularly. So, it can reduce the misrepresentation of information caused (human error) so that the information data submitted is more precise and accurate.

Assessment of the quality of education services for the respondent group, through offline and online activities, with an average score of 60.4 from 5 groups of respondents. The value of the quality of education services for the low group is adequate from the predetermined standard value category (75). Gasperz (2002), in the conventional definition, states that quality usually describes the direct characteristics of a product such as 1). Display (performance), 2). Reliability 3). Easy to use 4). Aesthetics.

The behavior of educators and education staff towards the quality of education services has increased from 18.43% to 22.71%, which can be seen in Table 6.

Table 6. Behavioral tendencies of educators and education staff in education services

Behavioral Tendency Questionnaire				
Number of Respondents	29			
Initial Presentation	18.43			
The average of the initial questionnaire (1-2)	1,47			

Final number of respondents	26
End	22,71
Final Questionnaire Average (1-2)	1,82
Conclusion	Increase
	0,35

In addition to assessing competence, researchers also assess the service quality of educators and education personnel. The quality of education services has increased by 4.28%. At the time of giving the questionnaire at the beginning before the implementation of the use of a website-based school management information system, the percentage of service quality behavior was only 18.43% because the questionnaire was given before the use of a website-based school management information system was used through offline and online service activities, but after the implementation of the use of a management information system website-based schools, student competency behavior has increased, to 22.71%, meaning that through offline and online service activities, the use of website-based school management information systems tends to be effective, efficient and can improve the quality of educational services.

Attitude is an appreciation and awareness as a response to certain environmental conditions in the form of social and/or physical stimuli, Ruyani (2009). In general, the competence of an individual is an important factor for developing various competencies that will be internalized in certain behaviors. Appreciation and awareness of the environment is a psychological internalization process that is carried out continuously and continuously.

## **CLOSING**

**Conclusion** Based on the research objectives, the following conclusions were obtained:

- 1. From the calculation results of the validation of the use of a website-based school management information system, the behavior of educational services is very feasible to be tested with a percentage of 80-88%.
- 2. The results of the pretest and posttest calculations that have been carried out by students, through offline/offline and online/online education service activities, the use of a website-based school management information system is not effective for improving the quality of education services, with a standard behavior value of only 15.3% (Low Offline).
- 3. The results of filling out the questionnaire have an increasing tendency, through LD activities, the use of a website-based school management information system is effective to improve the quality of education services from 18.43% to 22.71% with the average range of the questionnaire from 1.47 to 1.82.

Suggestion The suggestions based on the weaknesses and shortcomings at the time of the research are:

1. For further researchers, they must be trained in the use of websites, for example, they can involve themselves in the practice of providing educational services using website-based internet applications. In

- the research that has been carried out, competence in offline services is low due to the absence of practical activities using website-based applications, and researchers only observe, do not require to provide online service practices.
- 2. The use of this website-based school management information system can be used for school action research to improve the quality, professionalism of educators and education personnel in increasing the quantity and quality of education.
- 3. The use of this website-based school management information system can be further developed for the research and development of different models and systems.

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