

## Implementation of Community Satisfaction Index Application to Medan Police Service


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### ABSTRACT

As a public service provider, the Medan Polrestabes community service unit is faced with many things related to improving the quality of public services through good service performance. To measure the performance of public service units, elements / indicators are needed as a reference to provide an assessment of the performance results of public service units. To determine public satisfaction with services, the government issued several regulations related to the quality of public services, one of which is KEPMENPAN NO.25 / 2004 concerning general guidelines for compiling the community satisfaction index for service units of government agencies, which are general guidelines used as a reference for government agencies. There are 14 indicators related to the performance and services performed by service employees. The purpose of this research is to develop a service quality measurement application that can be accessed directly by the public. With the application of measuring the quality of public services that can be accessed directly by the public, the task of public service providers in evaluating the performance of public service delivery can be carried out easily. Based on the results of the research, the value of the community satisfaction index at the Medan Police Station with 50 respondents as a whole was 3.07572, the IKM value after being converted was 76.893 where the quality of service B and the performance of the service unit were in the good category, meaning that the community was satisfied with the service of the Medan Police.

**Keyword :** Application, Community Satisfaction Index, website.

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### 1. INTRODUCTION

Criticism or complaints against public services are an important basis for government officials to evaluate services. In addition, criticism / complaints on a large scale can also show how far the community needs these services. Complaints that are not handled properly will have a negative impact on the government, in this case the Medan Police. The government will get negative perceptions at the same time be judged to have failed in serving society. In the end, this condition can cause distrust from the community.

The community satisfaction survey is one of the efforts that must be made in an effort to improve public services. This survey can measure the extent to which the service quality of public service providers is available and can be used as a reference in determining service improvement priorities (Yusuf et al., 2017).

Community satisfaction is very important for the success of the service of an organization. The community certainly has an assessment of the services provided (Kurniawan & Setiyawati, 2017). Public services are all forms of services, both in the form of public goods and public services, which in principle are the responsibility and implementation of government agencies (Sulistiyorini et al., 2017). Considering that the main function of the government is to serve the community, the government needs to continue to strive to improve the quality of servants (Sukanti & Utomo, 2015).

Web is an application that contains multimedia documents that use the HTTP protocol to access them using software called a browser (Firmansyah & Udi, 2018). An application is a program containing commands that are transformed to a computer to perform data processing (Pada & Rajawali, 2018).

### 2. RESEARCH METHOD

This research is a survey and applied research (Applied Research). Survey research with a quantitative approach, namely research that takes samples directly from the sample (respondents). Applied research means that the results of research can be directly applied to solve problems that solve problems. The following are the stages of data and data analysis to support research :

1. Data Collection Method
  - a) Observasi

Observation is used to collect data through direct observation conducted at the Medan Police. The observation technique is carried out with structured observation by preparing a list of data requirements and data sources.

- b) Interview  
In this study, the interview is part of the primary data collection process for research. Interview activities were carried out to Medan Police Officers in order to find out the problems faced, as well as the application requirements required by Medan Police Officers.
- c) Literature study  
Data collection through this method is obtained by browsing on the internet, reading various literature, the results of studies from previous research, lecture notes, and other sources relevant to the subject matter in this study.

2. Data Analysis

In this study, the data analysis technique was carried out using the Community Satisfaction Index (IKM) value calculated using the Weighted Average Value method for each service element. In calculating the IKM, there are 14 elements or indicators studied.



Figure 1. Research Framework

3. RESULTS AND DISCUSSION

In this study, there are several stages for making the implementation of the community satisfaction index application, namely from system design and system interface implementation

A. System Design

This stage is the design stage using the Unified Modeling Language (UML) to model the system. The type of system modeling using UML is use case diagrams and sequence diagrams (Musthafa et al., 2016).

1. Use Case System Diagram

Saxena & Shrivastava (2009) Use case diagrams are the functionality of a system, so that users can understand the application being made. The design of the use case diagram of this system is used to determine the existing use cases involved in the system to be created. There are two actors used, namely admin and user. The design of the use case diagram of the system in this research can be seen in Figure 2 Below:

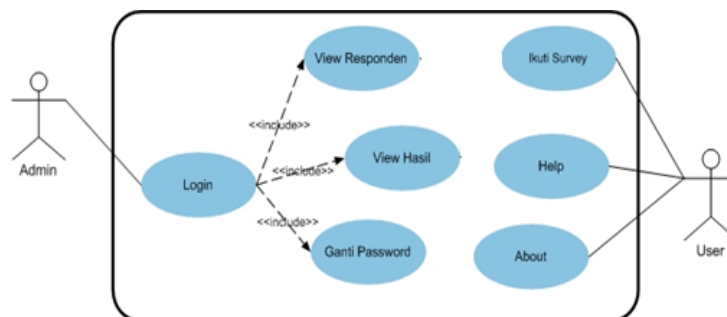


Figure 2. Use Case System Diagram

## 2. Class System Diagram

Class diagram is a diagram that is used to display several classes in the software system to be developed. Class diagrams show the relationships between classes in the system being built and how they collaborate with each other to achieve a goal. Figure 3. will display the class diagram layout of the public satisfaction system for public services at the Medan Police.

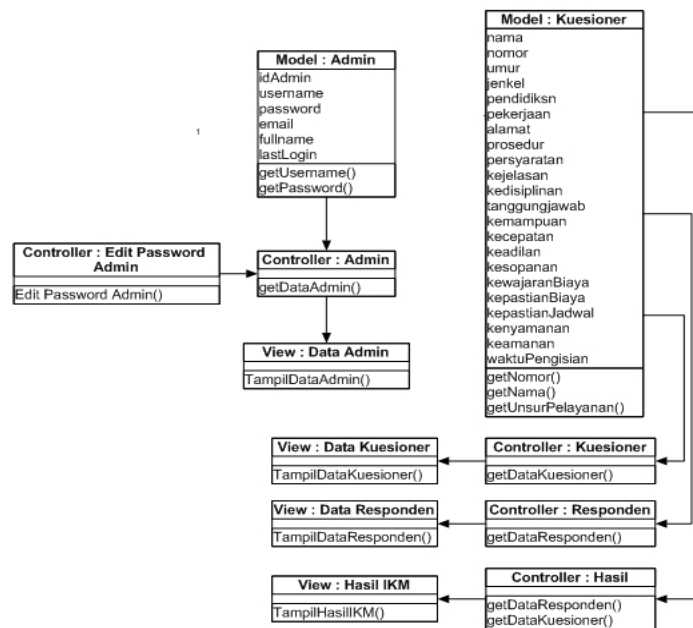


Figure 3. Class Diagram System

## B. System Implementation

In the implementation of this system, it will be explained how the community satisfaction index system program works, by providing display forms that are made and in accordance with the process requirements analysis and design described in the previous chapter. The programming language used in this application is PHP using the CodeIgniter framework and MySQL as its database

### 1. Implementation of the Home Page

The home page is used to integrate all menus into one. This page will be displayed for the first time when the user opens the application. The results of the implementation of the home page are as shown in Figure 4. below.



Figure 4.1 Home Page Views

On the home page there are several menus that can be accessed by the user, namely the home menu to display the main page, the survey follow menu is used to access the questionnaire page, the help menu to display information about guides on how to use the application, and the about menu which is used to display information about application

## 2. Implementation of the About page

The about page can be accessed by selecting the about menu on the main page of the system. On the about system page will display information about the meaning of the community satisfaction index and display information about the purpose of making this application. The results of the implementation of the about page can be seen in Figure 5. below.



Figure 5. About page display

## 3. Implementation of Respondent Data Pages

This page is a form that is used to input user personal data who wants to take a survey on the community satisfaction index at the Medan Police. This page is located on the main page of the system. The results of implementing the display of the respondent data page are as shown in Figure 6. below.

Figure 6. Views of Respondents Data Page

In Figure 6. above shows the results of the implementation of the respondent data page, where on this page the user is asked to enter personal data by filling in the name, age, gender, last education, main occupation, and address. Then select and click the next button to continue filling out the questionnaire that has been provided.

## 4. Implementation of the Questionnaire Pages

The questionnaire page will be displayed if the user has successfully entered personal data on the respondent data form. The results of the implementation of the questionnaire page are shown in Figure 7. below.

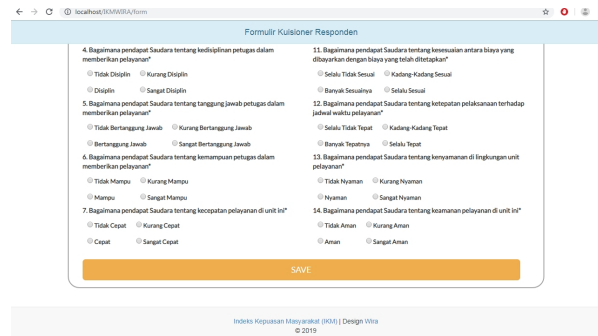


Figure 7. Views of the Questionnaire

Figure 7 shows the results of the implementation of the questionnaire page, where on this page the user is asked to choose the desired answer. There are 14 elements of questions posed related to the elements of assessment of the community satisfaction index to the services provided by the Medan Police. All questions must be answered and cannot be left blank, because the system will not save the results of the questionnaire if the answers to the questions are incomplete. Finally, select and click the save button to save the questionnaire results into the database, if successful, the system will display the information as shown in Figure 8 below.

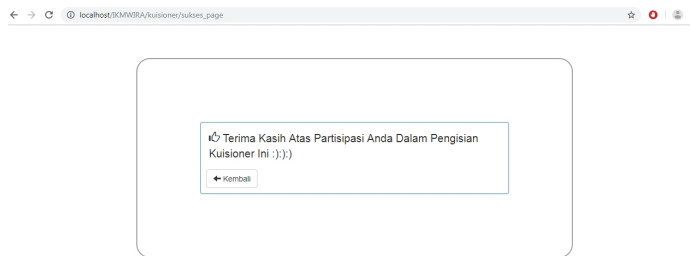


Figure 8. Information Display of Successfully Done Questionnaire Filling

Figure 8. above is a page that displays information on successful completion of the questionnaire. To return to the main page, select and click the back button or leave it alone because the system will automatically redirect back to the main page.

5. Implementation of the Admin Home Page

The admin home page functions to manage menus or other forms contained in the application. The home page will be displayed after the admin has successfully logged into the system. The implementation of the admin home page can be presented in mace in Figure 9. Below

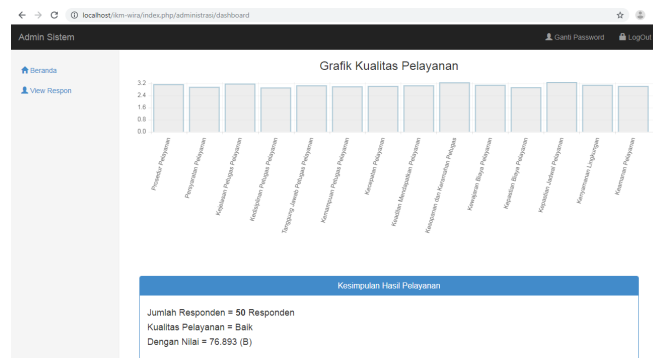


Figure 9. Implementation of the Admin Home Page

In Figure 9. displays the implementation results of the admin home page. On this page there are four menus that can be accessed by the admin, namely the home menu to display the main page where on this page the system will display a service quality graphic and a conclusion to the questionnaire results. In the picture above, it can be seen from the 50 respondents who have taken the questionnaire, it is concluded that the service quality is at a poor rating with a community satisfaction index value of 62.32

6. Implementation of the View Respondents Page

This page serves to display information about the respondent's data along with the weight of each question indicator filled in by the respondent. This page can be displayed by selecting the response view menu on the admin home page. The display of implementation results from the respondent's view page is as shown in Figure 10. below.

No.	Umur	Jenis Kelamin	Pendidikan	Pekerjaan	Prosedur	Persyaratan	Kejelasan	Kedisiplinan
RSP-0001	21	Laki-Laki	S1	Wiraswasta	1	2	2	4
RSP-0002	21	Laki-Laki	Diploma	Pegawai Swasta	1	2	1	2
RSP-0003	21	Laki-Laki	Diploma	Pelajar/Mahasiswa	1	2	3	2
RSP-0004	21	Laki-Laki	S2 Keatas	Pegawai Swasta	1	2	2	1
RSP-0005	30	Laki-Laki	S2 Keatas	PNS/TNI/Polri	1	1	1	1
RSP-0006	21	Perempuan	SMP	Pegawai Swasta	2	2	3	2
RSP-0007	25	Perempuan	Diploma	Pelajar/Mahasiswa	4	2	2	1

Figure 10. Respondents View Page Views

Figure 10 shows information on the data of respondents who have participated in the survey. In addition, this page will also display the total weight for each element of the assessment. To perform data search, it can be done by filling in the search word and the system will automatically display the results if the data is found in the database. Meanwhile, to export data can be done by selecting and clicking the export data button and the system will display the data from the community satisfaction index questionnaire in the form of a file with the extension .xls. The output results from the export data from the questionnaire are as shown in Figure 11 below.

Nomor	Umur	Jenis Kelamin	Pendidikan	Pekerjaan	Prosedur	Persyaratan	Kejelasan	Kedisiplinan	Tanggung Jawab	Kemampuan	Kecepatan	Keadilan	Keseluruhan
RSP-0001	21	Laki-Laki	S1	Wiraswasta	1	2	2	4	2	1	2	3	1
RSP-0002	21	Laki-Laki	Diploma	Pegawai Swasta	1	2	1	2	1	2	1	1	3
RSP-0003	21	Laki-Laki	Diploma	Pelajar/Mahasiswa	1	2	3	2	2	2	2	3	3
RSP-0004	21	Laki-Laki	S2 Keatas	Pegawai Swasta	1	2	2	1	4	2	3	3	3
RSP-0005	30	Laki-Laki	S2 Keatas	PNS/TNI/Polri	1	1	1	1	1	1	1	1	1
RSP-0006	21	Perempuan	SMP	Pegawai Swasta	2	2	2	1	1	2	2	1	1
RSP-0007	25	Perempuan	Diploma	Pelajar/Mahasiswa	4	2	2	1	3	4	4	1	3
RSP-0008	23	Laki-Laki	S1	Pegawai Swasta	4	3	4	4	4	4	4	4	4
RSP-0009	28	Perempuan	S1	PNS/TNI/Polri	4	4	4	4	4	4	4	4	4
RSP-0010	25	Laki-Laki	SMA	PNS/TNI/Polri	3	2	3	2	3	2	2	3	4
RSP-0011	24	Perempuan	SMA	Pegawai Swasta	3	2	2	1	2	1	2	3	4
RSP-0012	43	Laki-Laki	SMA	Wiraswasta	4	4	4	4	4	4	4	4	4
RSP-0013	24	Laki-Laki	SMA	Pelajar/Mahasiswa	3	3	3	3	3	3	3	3	3
RSP-0014	34	Perempuan	Diploma	Lainnya	2	2	3	2	3	2	4	3	3
RSP-0015	54	Laki-Laki	S1	Pegawai Swasta	4	3	4	3	4	3	4	4	3
RSP-0016	52	Perempuan	Diploma	Lainnya	1	1	4	2	2	2	3	4	3
RSP-0017	26	Laki-Laki	SMA	Wiraswasta	3	3	3	3	3	3	3	3	3
RSP-0018	24	Laki-Laki	S1	PNS/TNI/Polri	4	4	4	4	4	4	4	4	4
RSP-0019	60	Laki-Laki	S1	Wiraswasta	3	4	3	4	3	4	3	4	3
RSP-0020	52	Perempuan	SMA	Lainnya	1	3	1	3	1	3	1	3	3

Figure 11. Display of Questionnaire Results

Figure 11 shows the data from the respondents' questionnaire on the community satisfaction index, where the conclusion of the questionnaire on service quality is less than 50 respondents.

4. CONCLUSION

Based on the results of research from the stages that have been carried out in the system requirements analysis, design, implementation, and system testing, the conclusions that can be obtained are as follows:

1. The quality of service at Polrestabes Medan can be measured using 14 indicators of community satisfaction index by submitting a questionnaire to the public. The results of the survey on the level



of community satisfaction with the quality of public services at the Polrestabes Medan can be an important basis for government officials to evaluate services.

- The application to measure the level of community satisfaction with the quality of service can help Medan Police to determine the extent of community satisfaction with the quality of services provided. Web-based applications are made so that the public can provide a direct assessment of the quality of service provided by the Medan Police.

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