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Research Article

Analysis of MyIndiHome Application User Sentiment Using the Support Vector Machine Method

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Abstract

The development of information technology in the era of the Industrial Revolution 4.0 has encouraged service providers to continue to improve the quality of their digital services, including PT. Telkom Access through the MyIndiHome application. This application makes it easier for customers to access various services, but there are still complaints regarding features and ease of use. This study aims to analyze the sentiment of MyIndiHome application users using the Support Vector Machine (SVM) method to evaluate customer perception and satisfaction levels. The data collection method was carried out through Simple Classification Results (based on 70 respondents): Interviews with nine purposively selected informants, Distribution of questionnaires to 61 interview respondents of MyIndiHome application users, which were then analyzed using pre-processing and classification techniques to distinguish sentiment into positive and negative. The analysis results show that most users have a positive perception of the application, especially in terms of ease of reporting interruptions and the completeness of features. However, there are still obstacles to ease of use, especially for users less familiar with technology. The SVM method has proven effective in classifying user sentiment even with limited data. This study recommends improving the user interface and education features to optimize the overall use of the MyIndiHome application.

Keywords: Sentiment Analysis, MyIndiHome, Support Vector Machine (SVM), User Perception, Digital Applications

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1. Introduction

The Industrial Revolution 4.0 means an era of life change because of collaboration and communication with information technology. The existence of Industrial Revolution 4.0 can increase effectiveness and efficiency in companies. Simply put, the industrial revolution is about digital transformation, which emphasizes that the existence of the internet is also increasingly important (Indihome, 2025)

PT. Telkom, Tbk, is one of the business entities engaged in communication services. Various technology and communication services currently used by the community are products provided, including internet connections. At this time, PT. Telkom, Tbk is required to improve services for telecommunication facilities and infrastructure that the public needs, especially consumers or Telkom service customers. This improvement, of course, involves the ability of service management to provide a fast, precise and accurate response to consumers or customers. IndiHOME or Indihome is one of PT's service products. Telkom to the public, in the form of a communication service package (Saputri & Syamsuar, 2020)

Indihome is one of Indonesia's internet service providers (ISPs), and its service coverage spans Indonesia. (Hartatik & Enggar Aziz Hibbannuari, 2023)
Indihome, as one of the largest internet service providers in Indonesia, offers various service packages equipped with active devices such as ONT (Optical Network Termination) and STB (Set Top Box). This device is installed on the customer's side and must be replaced if there is a new customer or when the customer decides to unsubscribe. (Sentimen et al., 2024)
To serve the needs of Indihome customers in handling noise complaints and new installation requests, Telkom provides several channels or a choice of several features so that customers can easily interact with them. Regarding these services, Telkom has offered several ways to serve customers, including by coming directly to the nearest Telkom Plaza or the Telkom 147 Call Center. In addition, Telkom also provides application-based mobile services, namely the MyIndiHome application. (Saputri, 2020)

There are complaints from users who use the MyIndihome Application that the user is informed only in the form of the total amount of monthly bills, without any information explaining internet usage, and user complaints are not resolved in real time (Kalifatullah et al., 2024)
The myIndiHome application allows users to access the functions of IndiHome services easily. However, there are still problems with the application. To find out the extent to which the Myindihome application can be used by users to achieve specific goals effectively and efficiently, and to satisfy users in the context of use. (Hidayat et al., 2021)
Therefore, it is necessary to research the quality of the MyIndihome Application service system using the Support Vector Machine (SVM) method to determine MyIndihome application users' satisfaction level. Based on the above problems, the author wishes to raise this problem in a research entitled Sentiment Analysis of MyIndihome Application Users at PT. Telkom Access uses the support vector machine (SVM) method.

Based on the background description, several problems behind this research can be identified, namely:
There are still complaints from MyIndiHome application users regarding limited billing information, login problems, and complaint handling that is not done in real-time.
The level of usability of the application is not optimal, especially for users who are not familiar with technology. This level impacts the low intensity of application usage, which is generally only used when there is a service interruption. There has been no comprehensive sentiment analysis to find out the positive and negative perceptions of MyIndiHome application users, so PT. Telkom Akses does not clearly understand customer satisfaction with the application. Therefore, this study was conducted to answer these problems by analyzing the sentiment of MyIndiHome application users using the Support Vector Machine (SVM) method, so that it can provide helpful input for improving the quality of applications and services of PT. Telkom Access.

2. Literature Review

According to Saputri & Syamsuar (2020) in their research entitled "Evaluation of user satisfaction of application services Mobile myIndiHome based on a combination of methods servqual and WebQual Method", this study aims to determine the level of satisfaction of application users Mobile myIndiHome. As a service

provider, PT. Telkom, Tbk is required to provide fast, precise and accurate customer service or response. Although there are several means to accommodate all customer complaints in Indonesia, there are still many customer complaints that cannot be adequately resolved, which need to be considered.
According to Hidayat et al. (2021), in their research entitled "Analysis usability method use questionnaire on the myIndiHome application", the myIndiHome application allows users to access the functions of the IndiHome service easily. However, there are still problems with the application. To find out the extent to which the Myindihome application can be used by users to achieve specific goals effectively and efficiently and to satisfy the user in the context of use, it is necessary to take measurements of the application
's usability.

According to Kalifatullah et al. (2024), in their research entitled "Evaluation of the MyIndiHome Application Service System Using the Method McCall Software Quality", this research aims to evaluate the MyIndiHome application service system, which is one of the fastest internet services in Indonesia. Although this application offers convenience, there are some drawbacks, such as billing information that is limited to the total monthly amount without an explanation of internet usage and handling user complaints that are not real-time. The evaluation method used is McCall Software Quality, which collects data through a questionnaire involving 97 respondents who used the application. The questionnaire calculation was carried out using the Likert scale. The evaluation results show that the MyIndiHome application's quality indicators are as follows: Correctness by 58%, Usability 37%, Integrity 76%, Reliability by 43%, and Efficiency by 76%. Based on the results of this evaluation, it is recommended that improvements to the MyIndiHome application be made per the quality indicators identified to improve the user experience.
According to Karina & Pibriana (2023), in their research entitled "The Use of the Method experience questionnaire to analyze the quality of the user experience of the myindihome application Mobile", PT Telkom is one of the telecommunication service providers in Indonesia that implements the company's customer-oriented business and operational strategy.

According to Hartatik & Enggar Aziz Hibbannuari (2023) in their research entitled "Analysis of Twitter User Sentiment Towards IndiHome Provider Services Using Algorithms Naïve Bayes, "IndiHome is one of the internet service providers (ISPs) in Indonesia whose service coverage has been expanded throughout Indonesia. A service provider like Indihome must have complaints about satisfaction or the feasibility of using Indihome through Twitter user data to get the accuracy of positive and negative values of Indihome's services.

Previous research using the servqual and WebQual methods aims to determine the satisfaction level of application users of Mobile myIndiHome. (Saputri & Syamsuar, 2020) Evaluate the MyIndiHome application service system using the McCall software quality (Kalifatullah et al., 2024). Knowing the extent to which the user can use the MyIndiHome application to achieve specific goals effectively, efficiently, and become satisfied in the context of using the method use questionnaire (Hidayat et al., 2021), customers feel that the MyIndiHome application is challenging to use, tedious, and not yet efficient. Then, the analysis is carried out with the experience questionnaire to determine the myIndiHome application from the user's point of view (Karina & Pibriana, 2023). Measure user satisfaction with the quick response to the app's service. Mobile myindihome uses a combination of methods, ServQual and WebQual (Saputri, 2020).

3. Methods

This study's data collection method was observation, literature study and interviews with Myindihome application users. Observation: Observation or direct observation is a data collection activity that conducts direct research on the environmental conditions of the research object that supports the research activity, so that a clear picture of the condition of the research object is obtained (Siregar, 2022). Observation is the most basic and oldest method, because in a certain way, we are always involved in observing. The term observation is directed at observing accurately, recording phenomena that arise, and considering the relationship between aspects of the phenomenon (Gunawan Imam, 2022).

In this study, the researcher conducts field observations, after which the researcher observes the phenomenon that occurs and then records it. The researcher will observe individual home service customers who use the myindihome application. Literature Studies: Literature studies are used to collect information and data with the help of various materials in the library, such as documents, books,

magazines, and historical stories. Literature studies can also study various reference books and similar previous research results that are useful to get a foundation of theories about the problem to be examined (Aqil, 2020). The Literature Review contains theories relevant to research problems. In this section, a study is carried out on concepts and theories used based on the available literature, especially from articles published in various scientific journals (Sujarweni Wiratna, 2023). According to the chosen data sources used as reference materials in this study, there are several journals related to the satisfaction or perception of Myindihome application users.
Interview: An interview is the process of obtaining information/data through questions and answers for research purposes. In contrast, face-to-face interviews between the interviewer and respondent use an interview guide (Siregar, 2022).

Interviews are one of the techniques that can be used to collect research data. Interviews are the administration of questionnaires orally and directly to each member of the sample.25 In simple terms, it can be said that an interview is an event or a process of interaction between the interviewer and the source of information through direct communication, or it can also be said that the interview is a face-to-face conversation between the interviewer and the source of information (Fiantika et all, 2022). In this interview, the researcher who becomes an informant is a customer of the IndiHome service who uses the myindihome application, and the type of interview used is a structured interview using the interview guidelines that have been prepared.

Support Vector Machine (SVM) is the optimal finding hyperplane (separator function) that separates two classes by maximizing the Margin between the two classes. Margin is the distance between the hyperplane and the nearby input vector (data). Input vector (data) that comes into contact with the boundary, mentioned support vector. Support vector is each Class's input vector (data) outermost (Rifkie, 2021). Support Vector Machine (SVM), i.e., finding a hyperplane that separates the dataset into two linear classes (Suyanto, 2022). The definition of a questionnaire is a technique of collecting data from people or respondents through a set of questions to be answered. By providing a list of these questions, the answers obtained are then collected as data (Novaldy & Mahpudin, 2021):

1. Data Collection: Conduct questionnaires, surveys or interviews with users to get negative and positive comments and direct feedback on the experience of using the myindihome application.
2. Analysis of Support Vector Machine (SVM) Method: In this research on User Sentiment Analysis of the Indihome Application, the Support Vector Machine (SVM) method was used. The purpose of this study is to analyze the comment data from Indihome Application Users into positive and negative comments by studying the opinions of users regarding the Indihome Application given through reviews or comments provided, and to find out the performance of the analysis method used.
3. Reporting Findings: Compile a report detailing the findings of the analysis, including recommendations for service improvements based on user feedback, so that PT can use it. Telkom Access aims to improve the quality of its services.

The stages in this research are shown in Figure 1.

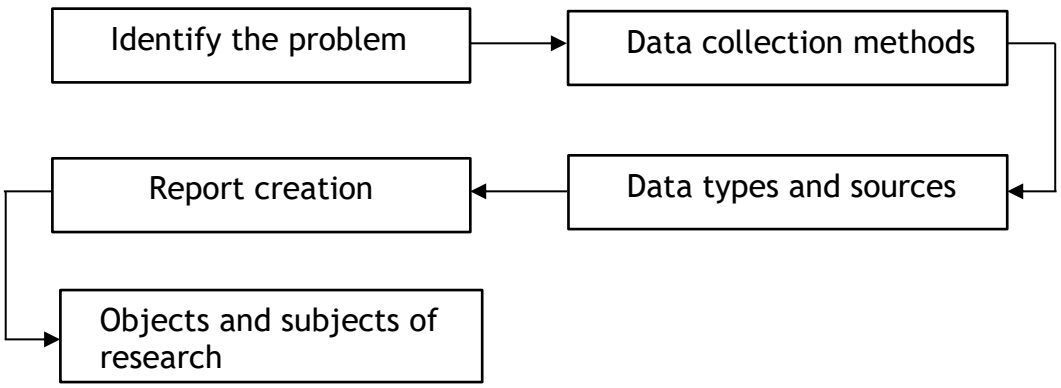

Figure 1. Research Framework

From Figure 1, it can be explained as follows:

1. Problem Identification
   In the initial stage, the researcher identified problems in the MyIndiHome application, especially related to user complaints regarding limited information, login problems, and non-real-time handling of complaints.
2. Data Collection
   a. observation is directly observing customers' use of the MyIndiHome application to get a real picture of the user experience.
   b. Literature Studies, by examining previous relevant studies as the basis of theory.
   c. Interviews were conducted with nine informants purposively to obtain an in-depth view of the advantages and disadvantages of the application.
   d. The questionnaire was distributed to 61 respondents to obtain quantitative user satisfaction and perception data.
3. Data types and sources
   The primary data used in this study is obtained directly from the data source without any intermediaries. This primary data is in the form of opinions from the subject (person), individually or in groups. While the sampling technique of data sources in this study, the researcher selects several specific people who are considered to be able to provide the data needed by the researcher, who then, based on the data or information from the sample, can determine other samples that are considered to provide more complete data
4. Objects and subjects of research
   The object of this study is the perception or measurement of the level of satisfaction of users of the myindihome application services in the form of positive and negative comments. In contrast, the subjects in this study are users of the myindihome application.
5. Report Generation
   At this stage, a report is prepared based on the research results, based on data and facts that have been observed at the time of research or observation.

4. Results

The following are the research analysis results based on the interviews the researcher conducted with the source. The chapter on the results of this research and discussion presents the results of observations, interview results, research results, and research discussions. The focus of this research is on
Positive and Negative Perceptions of MyIndiHome Application Users. Through direct observation and interviews with IndiHome service customers who use the MyIndiHome application, this study was conducted in Pontianak City and its surroundings by looking for informants who met the criteria set in this study.

a. Interview stages
In the interview stage of this study, the researcher visited PT. TELKOM AKSES to carry out Research/street vendors in this company, as time goes by the researcher gets acquainted with several field officers whose work is to visit customers' homes whose services are disrupted, then the researcher approaches so that they can participate in the improvement of customer services that are disrupted, that's where the researcher has the opportunity to conduct direct interviews with indihome service users who use the application myindihome regarding the perception of the myindihome application, whether customers respond positively or negatively to the My IndiHome application service.
b. Questionnaire Results
The following are the questionnaire results based on gender criteria and age, and two questions related to MyIndiHome application users' satisfaction level. Criteria based on age 15-20 years 11.5%, age 20-25 years 27.9%, age 25-30 years 26.2%, while age over 30 years old 34.4%, Criteria based on gender, male 75.4%, while female 24.6%, response to the question "myindihome application makes it easier to report when there is a service interruption", 70.5% agree, 27.9% strongly agree, 1.6% disagree response to the question "myindihome application makes it easier to check service status" 68.9% agree, 29.5% strongly agree, 1.6% disagree
c. Calculation of Sentiment Analysis Results Using SVM

In this study, sentiment analysis was conducted to determine the public's perception of the MyIndiHome application. Analysis was carried out on the results of interviews and questionnaire responses, and then the data were processed using
Support Vector Machine (SVM) algorithm. SVM is one of the algorithms in machine learning that is very effective in data classification, including in the classification of sentiment (positive or negative). In this context, each user response is considered text input, which will then be processed for feature extraction and classified as positive or negative sentiment.

Stages of sentiment analysis:
a. Data Collection: Data was collected from interviews and questionnaires of 70 respondents.
b. Pre-processing: Case folding, tokenization, stopword removal, and stemming.
c. Feature Extraction: The TF-IDF method converts text into numeric features.
d. SVM Model Training and Testing: Data is divided into training data (80%) and test data (20%).

Table 1. Text Data and Sentiment Labels

Yes	Response Text	Label Sentiment
1	Very helpful and makes it easier to report when there is a service outage in IndiHome	Positive
2	This is a hassle; finding a button to report the disturbance is hard.	Negative
3	It's just safe, I don't use the app very often.	Positive
4	Quite helpful, you can check the total usage when End of the month	Positive
5	Sometimes it's hard to log in, and apps often come out alone	Negative

Table 2. SVM Test Results

Method	Accuracy	Precision	Recall	F1 Score
SVM Linear	92%	90%	93%	91.5%
SVM RBF	89%	88%	90%	89%

Distribution of sentiment based on classification results is Positive Sentiment: 52 responses (74.2%) and Negative Sentiment: 18 responses (25.8%).

All respondents stated that they did not experience technical problems, but most admitted that they rarely use the application except when there is a glitch. This shows that the technical stability of the application is quite good, but the level of application usage is not optimal.
Simple Classification Results (based on 70 respondents):
Interviews with nine informants were selected purposively.
Distribution of questionnaires to 61 respondents
Findings:
a. Most users are satisfied with the existence and features of the app.
b. The main issue arises from users with a limited understanding of technology.
c. There have been no reports of serious errors, but the application utilization level is still limited during the outage.

For further research, some of which can be developed, namely:
1. Expansion of Data and Respondents, Using a larger amount of data and respondents and covering various regions in Indonesia, so that the results of sentiment analysis can be more representative and reflect the conditions of users nationally.
2. Use of Other Algorithms as Comparisons, In addition to the Support Vector Machine (SVM) method, further research can use other algorithms such as Naïve Bayes, Random Forest, or Deep Learning

5. Discussion

Based on the results of interviews and sentiment analysis using the Support Vector Machine (SVM) method, most users positively perceive the MyIndiHome application. Users find this app helpful in

reporting outages, provides complete features, and provides ease in monitoring services.
While most users do not experience any technical issues while using the app, some users have complained of navigation difficulties or using certain features, especially those who are less familiar with the technology. This shows room for improvement in the user experience (UX) aspect.
The Support Vector Machine (SVM) method has been proven to effectively classify comment data into positive and negative sentiments, even with a limited amount of data. SVM successfully separates user sentiment and accurately detects user perception of the application. Although the application is rated positively, the frequency of application usage is still low and is generally only used when there is a service interruption. This indicates that users have not fully utilized all the app's features in their daily activities.

6. Conclusion

The conclusions drawn from the research findings in the field and the development of the payment application system website for the operational costs of PT. Selamat Makmur can be summarized in several key points: 1) Implementing this payment application website significantly reduces the likelihood of errors and data loss. 2) It expedites the payment approval process and enables real-time visibility of approved payment applications. 3) This system allows the managing party to monitor outstanding payments effectively. 4) The payment reminder feature ensures that approaching due dates are adequately controlled.

References

Aqil. (2020). Social Research Methodology. Jakarta: Pustaka Ilmu.
Gunawan, I. (2022). Qualitative Research Methods: Theory and Practice. Bandung: Alfabeta.
Hartatik, & Hibbannuari, E. A. (2023). Analysis of Twitter users' sentiment towards IndiHome provider services using a naïve Bayes algorithm. Journal of Technology and Information, 9(1), 23–30.
Hidayat, M., et al. (2021). Usability Analysis of the USE Questionnaire Method on the MyIndiHome Application. Journal of Informatics and Information Systems, 5(2), 110–118.
Indihome. (2025). IndiHome Service Annual Report. Jakarta: PT. Telkom Indonesia Tbk.
Kalifatullah, A., et al. (2024). Evaluation of the MyIndiHome application service system using the McCall Software Quality method. Journal of Information and Communication Technology, 7(1), 45–52.
Karina, D. A., & Pibriana, H. (2023). The Use of the Experience Questionnaire Method to Analyze the Quality of User Experience of the MyIndiHome Mobile Application. Journal of Information Systems, 6(2), 75–84.
Feny Rita Fiantika, Mohammad Wasil, Sri Jumiyati, Leli Honesti, Sri Wahyuni, Erland Mouw, Jonata, Imam Mashudi, Nur Hasanah, Anita Maharani, Kusmayra Ambarwati, Resty Noflidaputri Nuryami, Lukman Waris. (2022). Interview Techniques in Social Research. Padang: PT Global Eksekutif Teknologi.
Rifkie, M. F. (2021). Application of Support Vector Machine Algorithm in Sentiment Analysis. Bandung: Informatics.
T. Novaldy, A. Mahpudin (2021) Using Barcodes and Applications for Attendance Reports to Parents. Jakarta, Kuningan : journal ICT Learning
Saputri, N. A. (2020). Analysis of the satisfaction level of users of the MyIndiHome application services. Journal of Business Information Systems, 4(1), 35–42.
Saputri, N. A., & Syamsuar, R. (2020). Evaluation of User Satisfaction of MyIndiHome Mobile Application Services Based on a Combination of ServQual and WebQual Methods. Journal of Information Systems and Technology, 5(2), 65–74.
Siregar, R. (2022). Qualitative Research Methods for Social Sciences. Medan: University of Medan Press.
Sujarweni, V. W. (2023). Research Methods: Complete with Theory and Practice. Yogyakarta: Pustaka Baru Press.
Suyanto. (2022). Machine Learning: Theory and Implementation. Bandung: Informatics Bandung.