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Students' Perceptions of Internet Network Problems Facilities at A Public University Using a Qualitative Descriptive Method for Service Improvement

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Abstract-This study examines students' perceptions of internet network services used to support academic activities in higher education. The research was motivated by several issues frequently experienced by students, including unstable internet connections, limited coverage in certain campus areas, network congestion during peak usage periods, repeated login requirements, and limited information regarding technical support services. The objective of this study is to identify students' perceptions regarding the quality, accessibility, and reliability of campus internet services and to formulate recommendations for service improvement. A qualitative descriptive method was employed through semi structured interviews involving six Electrical Engineering students. The collected data were analyzed using thematic analysis to identify recurring experiences and issues encountered by students. The findings indicate that campus internet services play an important role in supporting access to learning materials, e learning platforms, assignment completion, and other academic activities. However, students reported several challenges related to connection stability, internet speed, roaming capability, and technical support availability. As a practical solution, this study recommends improving network infrastructure, optimizing bandwidth capacity, enhancing roaming functionality across campus areas, and providing clearer technical support information for users**.** The study provides valuable insights for improving campus internet services and supporting technology-based learning environments more effectively.

Keywords: Internet Network; Student Perceptions; Qualitative Descriptive Method; Service Quality; Academic Activities

1. INTRODUCTION

In order to support academic activities at higher educational institutions, the internet has become a fundamental part of the infrastructure. [1] state that the use of internet technology in education allows learners to have easy access to information, communicate well with their peers or instructors, and participate in digital learning environments. In addition, [2] states that accessible and reliable internet connectivity is crucial to improving students' learning experiences and increasing their academic performance. Consequently, serviceable and steady internet access will assist students in completing current academic requirements more efficiently, while poor connectivity will severely affect the learning experience. On the other hand, a lack of or unreliable internet service may produce student dissatisfaction and decreased academic productivity. Therefore, understanding how students perceive internet services on campus is needed to assess the effectiveness of those services.

Over the past several years, there have been numerous studies that have investigated the views of students on the provision of internet facilities for education. Many different factors influence how satisfied students are with their use of the internet; among these, network speed [3], accessibility [4], coverage area [5], and reliability of the connection [6] have been identified. In addition, the presence of complementary infrastructure, such as Wi-Fi, hotspots, and bandwidth capacity, has also contributed to students' positive experiences with using the internet [7]. On the contrary, some studies have highlighted some of the common problems that students face when using the internet, such as slow internet speeds, limited coverage in certain regions, frequent disconnections [8], [9], [10]. These issues negatively impact students' ability to access online learning environments, download course content, and communicate with their instructors.

Even though there are plenty of empirical studies related to providing internet access to students in universities, there is still very little empirical research regarding how students experience internet access at Indonesian polytechnic schools, specifically at Politeknik Negeri Sriwijaya (POLSRI). As different institutions have different levels of infrastructure and service quality, they will provide students with different experiences. This study will analyze qualitative and quantitative student perceptions regarding internet network resources currently available at POLSRI and will result in increased insight into the strengths and weaknesses of the current system. Findings from this research will lead to improved levels of internet service and support for academic work. The main question being researched in this study is: how do POLSRI students perceive the internet network resources available to them?

Previous studies have employed various approaches to evaluate internet service quality and student satisfaction in educational institutions. Many researchers have utilized questionnaire-based surveys combined with statistical analysis to measure students' perceptions of internet accessibility, reliability, speed, and overall service performance. Other studies have adopted service quality assessment frameworks to compare users' expectations with their actual experiences when using campus internet facilities. These approaches have provided valuable insights into the effectiveness of internet services in supporting academic activities. However, the results often vary depending on institutional characteristics, infrastructure availability, and student usage patterns, indicating the need for institution-specific investigations to obtain more accurate and relevant findings.

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Although previous research has extensively examined internet service quality in higher education environments, several limitations remain. Most existing studies have focused on general universities and have primarily emphasized technical performance indicators such as bandwidth, network speed, and connection stability. Comparatively fewer studies have explored students' overall perceptions by considering both technical aspects and service-related factors within vocational higher education institutions. Furthermore, limited evidence is available regarding how students at POLSRI evaluate the internet resources provided by the institution in supporting their academic activities. Therefore, this study seeks to fill this gap by providing a comprehensive analysis of students' perceptions of campus internet services, identifying both strengths and areas requiring improvement to support future institutional development.

The contribution of this research lies in providing empirical evidence regarding students' perceptions of internet network resources at POLSRI, an area that has received limited attention in previous studies. Unlike studies that focus solely on technical network performance, this research considers students' experiences as direct users of the service in academic activities. The findings are expected to provide useful information for institutional decision-makers in planning network infrastructure improvements, optimizing internet service quality, and supporting the increasing demand for digital learning environments. In addition, the results may serve as a reference for future studies examining internet service quality in vocational higher education institutions.

The technical performance of a campus network is often the primary determinant of how students perceive the value of institutional resources. Recent studies suggest that latency and throughput are no longer just technical metrics but are perceived as essential "utilities" similar to electricity [11]. When network speed fluctuates, students experience "cognitive friction," where the delay in loading educational materials interrupts the flow of learning and reduces the likelihood of using digital repositories [12]. Furthermore, the ubiquity of mobile learning means that students expect a seamless transition between different access points. Research by M. Yan [13] indicates that a lack of roaming capabilities—where a connection drops when moving between buildings is a significant source of frustration that outweighs the benefits of high-speed access in a single fixed location.

Beyond hardware and bandwidth, the support services and administrative responsiveness of the IT department play a critical role in shaping student attitudes. Even in environments with moderate technical infrastructure, high levels of user satisfaction can be maintained if there is a transparent system for reporting issues and a rapid recovery time from outages [14]. This "functional quality" of the service helps build trust between the student body and the institution [15]. Conversely, when students feel that their technical grievances are ignored, they tend to develop a negative bias toward the university's overall digital transformation efforts, regardless of the actual data speeds provided [16], [17].

Finally, the socio-economic diversity of the student population at polytechnic institutions often dictates the reliance on campus-provided internet. Unlike students at private universities who may have high-speed personal data plans, many students at public vocational institutions rely solely on campus facilities to access heavy multimedia content and engineering software [18]. This creates "peak-demand" surges that can lead to network congestion, particularly during mid-term or final project periods [19]. Understanding these usage patterns is vital for institutional planning, as a "one-size-fits-all" bandwidth allocation often fails to account for the high-data demands of specific technical departments compared to general administrative areas [20].

2. RESEARCH METHOD

2.1 Research Stages

To ensure that the research was carried out systematically, several stages were implemented, beginning with problem identification and ending with report preparation. The sequence of these stages is presented in Figure 1.

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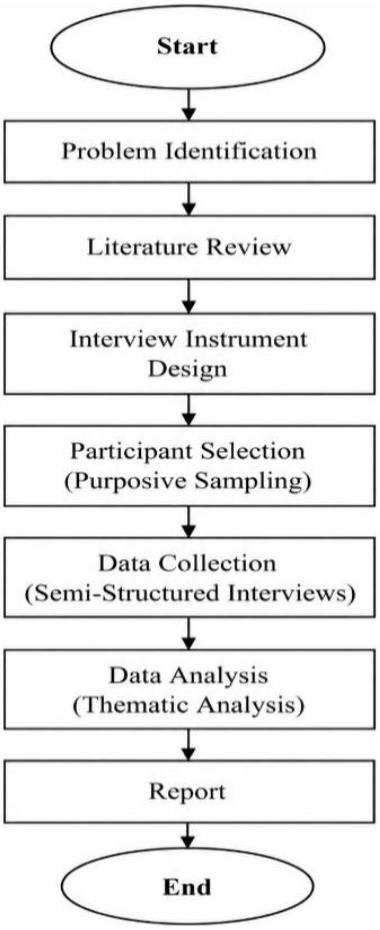

Figure 1. Research Stages

Figure 1 presents the research stages employed in this study. The purpose of including the figure is to provide readers with a visual representation of the research procedure from the beginning until the completion of the study. The flowchart demonstrates how the research was conducted systematically through several interconnected stages, including problem identification, literature review, interview design, participant selection, data collection, data analysis, and report preparation. Each stage is explained in detail below. As illustrated in Figure 1, the research process consisted of seven main stages. Each stage played an important role in ensuring the validity and reliability of the research findings. The stages are explained as follows.

a. Problem Identification
The first stage of the research was problem identification. At this stage, the researchers identified issues related to campus internet services experienced by students at Politeknik Negeri Sriwijaya (POLSRI). The identified problems included unstable internet connections, limited network coverage, reduced internet speed during peak hours, repeated login requirements, and limited information regarding technical support services. The identification of these issues served as the basis for formulating the research objectives and research questions.

b. Literature Review
The second stage involved conducting a literature review. Relevant studies and scientific references related to internet service quality, student perceptions, digital learning environments, and qualitative research methods were examined. The literature review helped establish the theoretical foundation of the study and assisted the researchers in developing the interview instrument and research framework.

c. Interview Instrument Design
At this stage, the interview instrument was designed based on the objectives of the study and previous literature. The researchers employed semi-structured interview questions to obtain in-depth information regarding students' experiences in using campus internet services. According to Maher and Bedwei-Majdoub [21], semi-structured interviews provide flexibility for researchers to explore participants' responses while maintaining consistency with the research objectives. Therefore, this method was considered suitable for investigating students' perceptions of internet network services at POLSRI.

d. Participant Selection (Purposive Sampling)
Participants were selected using a purposive sampling technique. The selection criteria included active Electrical Engineering students who regularly used campus internet services for academic activities. Purposive sampling was applied to ensure that the selected participants possessed direct experience relevant to the phenomenon being

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investigated. According to Creswell [19], participant selection in qualitative research should focus on individuals who can provide rich and meaningful information regarding the research topic.

Table 1. Background of the participants

No	Pseudonym	Departemen & years of study
1	OS1 (MALE)	ELECTRO, 2025
2	OS2 (MALE)	ELECTRO, 2025
3	OS3 (MALE)	ELECTRO, 2025
4	OS4 (FEMALE)	ELECTRO, 2024
5	OS5 (FEMALE)	ELECTRO, 2024
6	OS6 (FEMALE)	ELECTRO, 2024

Table 1 presents the demographic background of the participants involved in this study. The study consisted of six Electrical Engineering students who were selected as research participants. Three participants were male students (OS1, OS2, and OS3) from the 2025 academic cohort, while the remaining three participants were female students (OS4, OS5, and OS6) from the 2024 academic cohort. The use of pseudonyms was intended to maintain participant confidentiality and privacy throughout the research process. The participant composition was designed to provide diverse perspectives regarding the use of campus internet services and to ensure that experiences from different academic levels could be represented in the findings.

a. Data Collection (Semi-Structured Interviews)
   Data were collected through individual semi-structured interviews. The interviews were conducted in the local language to enable participants to express their experiences and perceptions comfortably. This technique allowed the researchers to gather detailed information regarding internet accessibility, connection stability, network speed, roaming capability, and technical support services. Semi-structured interviews are widely used in qualitative studies because they facilitate deeper exploration of participants' experiences while maintaining focus on the research objectives [21].
b. Data Analysis (Thematic Analysis)
   After the interviews were completed, the collected data were transcribed, organized, and analyzed using thematic analysis. Braun [20] explains that thematic analysis is a systematic approach for identifying, analyzing, and reporting patterns within qualitative data. Furthermore, Terry and Hayfield [22] state that thematic analysis enables researchers to classify recurring responses into meaningful themes and categories. Therefore, this technique was used to identify positive and negative perceptions regarding campus internet services.
c. Report
   The final stage involved compiling the research findings into a research report. The analyzed data were interpreted and presented systematically to provide a comprehensive understanding of students' perceptions regarding internet network services at POLSRI. The report also included recommendations for improving internet service quality based on the findings obtained during the study.

3. RESULT AND DISCUSSION

3.1 Result

This study is about students at Sriwijaya National Polytechnic Institute or (POLSRI), The study focuses on engineering students, these students use the campus Wi-Fi a lot for their school work, students have thoughts about the Wi-Fi. Most students think the Wi-Fi is very helpful they use it to study do homework and browse online. Some students have problems with the Wi-Fi the connection is weak in some areas the speed is slow when many people are using it students have to log in again because the connection is not stable there is not technical help. The study looked at what students think about the Wi-Fi.

The findings presented in this section were obtained through the application of a qualitative descriptive approach and thematic analysis of the interview data. After the interview sessions were completed, all responses from the participants were transcribed and reviewed carefully. The researchers repeatedly examined the interview data to identify recurring patterns, common experiences, and issues frequently mentioned by the participants. This process enabled the researchers to gain a deeper understanding of students' perceptions regarding the quality and effectiveness of internet network resources available at POLSRI. Through this systematic procedure, meaningful information was extracted from the interview data and organized for further analysis.

a. Interview Process
   The interview stage involved six Electrical Engineering students at Politeknik Negeri Sriwijaya (POLSRI). During the interviews, participants were asked to share their experiences regarding the accessibility, reliability, and effectiveness of campus internet services. The interviews focused on several aspects, including internet accessibility, connection stability, internet speed, roaming capability, login procedures, and technical support services. The

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responses provided detailed information regarding both positive and negative experiences encountered while using campus internet facilities.

b. Data Transcription
After the interviews were completed, all responses were transcribed into written form. The transcription process allowed the researchers to review participants' statements in detail and organize the collected data systematically. Through this process, important information related to students' experiences and perceptions was identified and prepared for further analysis.

c. Thematic Analysis
The transcribed data were analyzed to identify recurring ideas and patterns found across participants' responses. Statements with similar meanings were grouped together and organized into categories. This process enabled the researchers to simplify and structure the qualitative data while maintaining the original meaning of participants' responses.

d. Theme Identification
The analysis process resulted in several categories that were subsequently grouped into broader themes representing students' perceptions of campus internet services. The identified themes were classified into two major groups, namely positive perceptions and negative perceptions. These themes summarize the main experiences expressed by participants during the interviews and provide an overview of the strengths and weaknesses of campus internet services.

As shown in Table 2, the interview results were categorized into two major themes, namely positive perceptions and negative perceptions regarding campus internet services. Positive perceptions included the role of internet facilities in supporting academic activities, providing access to learning resources, facilitating assignment completion, and improving learning efficiency. On the other hand, negative perceptions were associated with unstable internet connections, slow network performance during peak usage periods, frequent disconnections when moving between campus buildings, repeated login requirements, and limited information regarding technical support services. These themes emerged from the thematic analysis of interview data and served as the basis for the detailed discussion presented in the following sections.

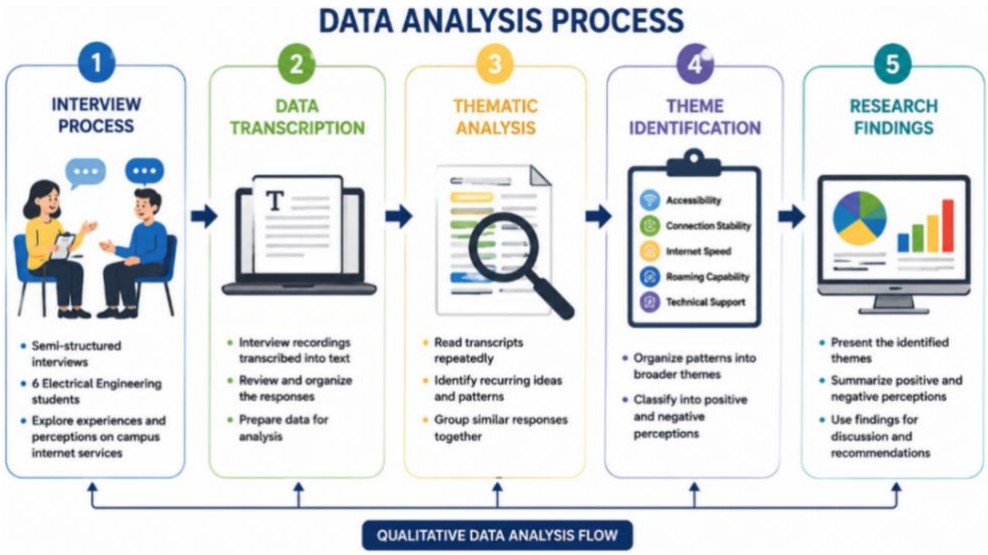

Figure 2. Data Analysis Process

Figure 2 illustrates the process used to analyze the interview data. The collected responses were transcribed and analyzed using thematic analysis to identify recurring themes representing students' perceptions of campus internet services at POLSRI

Table 2. Interview findings on students' perceptions of campus internet services

Positive Perceptions	Negative Perceptions
Internet supports academic activities	Unstable connection in several campus areas
Easy access in classrooms and library	Slow network during peak hours
Helpful for downloading materials and online learning	Frequent disconnection while moving between buildings
Supports assignment completion	Repeated login requirements
Improves learning efficiency when stable	Lack of information regarding technical support

The themes presented in Table 2 serve as the basis for the discussion of students' perceptions regarding campus internet services. The findings indicate that students generally perceive the internet as an important resource for supporting

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academic activities. However, several issues related to network performance and service quality remain challenges that affect students' overall experiences.

3.1.1 Positive Perceptions

3.1.1.1 Internet supports academic activities

Most participants stated that campus Wi-Fi was accessible and relatively stable in important academic areas such as classrooms and libraries. These locations helped students carry out academic activities more effectively.

"If it's in the main building and library, the connection is quite easy and stable." (OS1)
"The best areas are in certain classrooms and the library because the signal is quite stable." (OS2)
"In some classrooms the connection is quite smooth." (OS3)

Senior participants also explained similar positive experiences regarding internet accessibility in learning areas.

"I quite often use campus Wi-Fi to search for materials, open e-learning, and do assignments." (OS4)
"The easiest areas to get a connection are usually around classrooms and libraries." (OS5)
"The best connections are in classrooms and libraries because they are more stable." (OS6)

These findings indicate that campus internet facilities positively supported students' learning activities in several academic environments.

3.1.1.2 Easy access in classrooms and library

Several participants explained that stable internet connections helped them focus better and complete assignments more efficiently. Fast internet access supported students when downloading software, opening online materials, and accessing educational videos.

"If the internet is smooth, I can focus more on doing my assignments." (OS1)
"If you are fast, the work can be finished faster too." (OS2)
"If the connection is fast, tasks become easier to do." (OS6)

In addition, students believed that smooth internet access improved their productivity and reduced delays during academic activities.

3.1.1.3 Helpful for downloading materials and online learning

Most participants admitted that campus Wi-Fi had become an essential part of their academic activities. Students regularly depended on internet facilities for searching learning materials, accessing e-learning systems, and submitting assignments online.

"It really depends, especially if you have an assignment or project." (OS1)
"I rely on campus Wi-Fi quite often." (OS2)
"I'm pretty dependent on campus Wi-Fi.." (OS3)

Senior students also emphasized the importance of campus internet in supporting their academic responsibilities.

"I rely quite heavily on campus Wi-Fi." (OS4)
"I use campus Wi-Fi quite often because it is more helpful for assignment needs." (OS5)
"I rely quite heavily on campus Wi-Fi." (OS6)

These findings demonstrate that internet facilities are considered essential resources for students' academic productivity at POLSRI.

3.1.1.4 Supports assignment completion

Although several participants were uncertain about technical support procedures, some students acknowledged that there were occasional improvements and repair efforts from the institution after internet problems occurred.

"Sometimes there are improvements." (OS1)
"For handling, sometimes there are changes." (OS5)

These responses indicate that students recognized several attempts by the institution to improve the quality of internet services.

3.1.1.5 Improves learning efficiency when stable

Some participants explained that they usually attempted to reconnect independently whenever the internet connection was interrupted. Although the system still required reconnection in several situations, students continued using the campus network to support their activities across different campus locations.

"Usually just try to reconnect yourself." (OS1)
"I'm just trying to reconnect." (OS5)

These findings suggest that students adapted to the limitations of the campus network while continuing to utilize internet facilities for academic purposes.

3.1.2 Negative Perceptions

3.1.2.1 Unstable connection in several campus areas

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Despite the positive experiences, many participants reported unstable internet connections in several campus areas. Weak signals and difficulty connecting to the network were commonly experienced in hallways, isolated areas, and buildings located farther from the campus center.

"If in some corridors or buildings that are quite far away, the signal is often weak." (OS1)
"If you are in an outdoor area or some old buildings, it is often difficult to get a connection." (OS2)
"If you move to another area or a certain corner of the campus, the signal is often weak." (OS3)

Senior participants also experienced unstable connectivity in several locations.

"In some areas of campus the connection is still unstable." (OS4)
"In some parts of campus that are quieter or further from the center of the building, the network is often less stable.." (OS5)
"In some corners of the campus or more remote buildings, the signal is sometimes difficult to get and often breaks up.." (OS6)

These findings indicate that internet coverage across campus areas has not yet been evenly distributed.

3.1.2.2 Slow network during peak hours

Many participants explained that unstable internet connections negatively affected their focus and disrupted their academic activities. Problems such as buffering videos, failed downloads, and interrupted access to learning materials often caused delays and reduced concentration.

"While watching lecture material, it keeps buffering." (OS1)
"Downloading an application for an assignment gets stuck in the middle of the process because the connection is intermittent.." (OS2)
"I also failed to download an assignment because the connection was bad." (OS3)

Senior participants also described similar learning disruptions caused by poor internet quality.

"When the internet connection is slow, learning focus is disturbed." (OS4)
"The video keeps stopping, making me lose focus on studying." (OS5)
"The network suddenly slows down so the process takes a long time and disturbs concentration." (OS6)

These findings demonstrate that unstable internet speed negatively affects students' learning effectiveness and academic concentration.

3.1.2.3 Frequent disconnection while moving between buildings

Although students depended heavily on campus Wi-Fi, many participants stated that internet performance significantly decreased during busy periods such as examinations and assignment deadlines.

"During peak hours, like approaching UTS/UAS, the network becomes slower." (OS1)
"When a lot of people are using it, it usually becomes really slow." (OS2)
"When it's busy, the connection often becomes slow." (OS3)

Senior students also experienced similar problems during peak internet usage periods.

"When many students use the internet at the same time, the connection usually becomes slower." (OS5)
"During busy times like exam week or when there are lots of assignments, the network usually feels slower." (OS6)

These responses suggest that the increasing number of internet users during peak periods affects network stability and internet speed.

3.1.2.4 Repeated login requirements

Most participants admitted that they did not clearly know who should be contacted when internet problems occurred. As a result, students usually attempted to solve the problems independently.

"Honestly, I'm still a bit confused about who to contact." (OS1)
"I don't really know who to report this to." (OS2)
"I don't know who to contact if there's a problem." (OS3)

Senior participants also expressed uncertainty regarding technical support services.

"I still don't know who to contact." (OS4)
"I don't know which department to contact." (OS5)
"I don't really know who to report this to yet." (OS6)

These findings indicate that information regarding technical support procedures and complaint services may still be limited among students.

3.1.2.5 Lack of information regarding technical support

Most participants complained that they frequently experienced disconnections and repeated login requirements when moving between campus buildings or locations.

"If I move buildings, I have to reconnect and even log in again." (OS1)
"I often have to reconnect when I move." (OS2)
"I have to relogin quite often when I move places or buildings." (OS3)

Senior students also experienced similar difficulties.

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"I often have to log back in when I move." (OS4)
"When I move buildings, the connection often drops automatically and I have to log back in." (OS5)
"Sometimes I also have to log back into the Wi-Fi network." (OS6)

These findings indicate that repeated authentication and unstable roaming systems still interfere with students' learning efficiency and digital activities across campus areas.

3.2 Discussion

3.2.1 Positive Perceptions

a. Internet Supports Academic Activities
One of the most frequently discussed themes during the interviews was the role of campus internet services in supporting students' academic activities. All participants emphasized that internet access has become an essential component of modern learning, particularly in accessing educational resources, completing coursework, and participating in online learning activities. The availability of campus internet services enables students to remain connected to academic information and supports various learning processes conducted both inside and outside the classroom. The findings indicate that campus internet services play an important role in supporting students' academic activities. Most participants stated that the campus Wi-Fi helps them access learning materials, complete assignments, participate in online learning activities, and communicate with lecturers and classmates. The availability of internet access allows students to obtain academic information more efficiently and supports digital learning practices. These findings are consistent with previous studies which emphasize the importance of internet technology in supporting teaching and learning activities in higher education institutions [1], [2].

b. Easy Access in Classrooms and Library
Another positive perception identified from the interviews relates to the accessibility of internet services in academic areas. Most participants reported that internet access is generally available in classrooms and library facilities, allowing them to carry out learning activities more effectively. Another positive theme identified in this study is the accessibility of internet services in classrooms and library areas. Participants reported that internet connections in these locations were generally stable and adequate for academic activities. The availability of reliable internet access in learning environments contributes positively to students' learning experiences and supports the effective use of digital educational resources [5], [6].

c. Helpful for Downloading Materials and Online Learning
The participants also emphasized the importance of campus internet services for accessing digital learning resources. The availability of internet access allows students to download course materials, software, and other educational resources required for their studies. Participants also explained that campus internet services facilitate downloading learning materials, software, and online educational resources. Internet access enables students to participate in online learning activities without relying entirely on personal mobile data. This finding demonstrates the important role of campus internet services in supporting technology-based learning environments [3], [7].

d. Supports Assignment Completion
The findings revealed that campus internet services play a significant role in supporting assignment completion among students. Participants explained that they frequently use campus Wi-Fi to search for academic references, access e-learning platforms, download course materials, and submit assignments online. The availability of internet access enables students to complete academic tasks more efficiently and reduces their dependence on personal mobile data. In addition, internet connectivity facilitates access to various digital resources required for coursework and project activities. These findings are consistent with previous studies that emphasize the importance of internet-based learning environments in supporting academic performance and student engagement. E-learning systems allow students to access learning materials anytime and support the completion of academic activities through digital platforms [5], [6]. Similarly, Shah et al. [1] reported that the adoption of digital learning technologies contributes positively to students' learning experiences and academic productivity. Therefore, the availability of reliable campus internet services can be considered an important factor in supporting assignment completion and enhancing students' academic performance.

e. Improves Learning Efficiency When Stable
Another important finding of this study is that stable internet connectivity contributes to improved learning efficiency. Participants stated that when the internet connection is stable, they can access online materials more quickly, participate in digital learning activities without interruption, and complete academic tasks more effectively. Stable internet services also help students maintain concentration during learning activities and reduce time wasted due to buffering, failed downloads, or connection interruptions. This finding supports previous studies highlighting the relationship between internet quality and learning effectiveness in higher education. Xiao and Su [13] found that the quality of online learning experiences is influenced by technological factors, including internet accessibility and connection stability. Similarly, Maujud et al. [16] reported that students tend to perceive digital learning environments more positively when technological infrastructure functions reliably. Furthermore, Idkhan and Idris [18] emphasized that user satisfaction with digital learning systems is strongly associated with system performance and service quality.

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Therefore, maintaining stable internet connectivity is essential for improving learning efficiency and supporting successful technology-based education at POLSRI.

3.2.2 Negative Perceptions

a. Unstable Connection in Several Campus Areas
One of the main challenges identified during the interviews was the inconsistency of internet connectivity across different campus locations. Several participants reported experiencing unstable connections in certain areas, particularly in locations that were farther from the main academic buildings. This issue affected their ability to access online learning resources and complete academic activities efficiently. Despite the positive perceptions, participants reported that internet connectivity remains inconsistent in several campus locations. Areas located outside classrooms and libraries often experience weak signals and unstable connections. These findings indicate that internet infrastructure and network coverage may not yet be evenly distributed across the campus environment. Similar issues have been reported in previous studies concerning internet accessibility and network quality in educational institutions [5], [12].

b. Slow Network During Peak Hours
Another frequently reported issue relates to internet speed during periods of high network usage. Participants explained that internet performance tends to decrease when many students access the network simultaneously, particularly during examination periods and assignment submission deadlines. Many participants stated that internet speed decreases significantly during periods of high network usage, particularly during examinations and assignment submission periods. Increased numbers of simultaneous users may contribute to network congestion and reduced service performance. This finding is consistent with studies discussing digital transformation and increasing internet demand in higher education environments [9].

c. Frequent Disconnection While Moving Between Buildings
The interviews also revealed that maintaining a stable internet connection while moving between campus locations remains a challenge for many students. Participants indicated that internet access was often interrupted when transitioning from one building to another, affecting the continuity of their online activities. Participants also reported frequent connection interruptions when moving between campus buildings. In many cases, students were required to reconnect to the network or repeat the login process after changing locations. This issue affected the continuity of online learning activities and reduced overall user convenience. The findings suggest that roaming functionality between access points may not yet operate optimally throughout the campus network [13].

d. Repeated Login Requirements
In addition to connection interruptions, participants frequently mentioned the inconvenience caused by repeated authentication procedures. The need to log in multiple times during daily academic activities was perceived as reducing efficiency and disrupting access to online resources. Repeated login procedures were identified as another source of dissatisfaction among students. Participants explained that frequent authentication requirements interrupted their activities and reduced efficiency when accessing online resources. Simplifying authentication procedures may improve the user experience and increase satisfaction with campus internet services.

e. Lack of Information Regarding Technical Support
Besides technical performance issues, several participants expressed uncertainty regarding the availability of technical assistance when internet-related problems occurred. The interviews indicated that many students were unfamiliar with the appropriate procedures for reporting network issues or obtaining support from campus administrators. The study also found that many students were unaware of the appropriate procedures for reporting internet-related problems. Most participants preferred solving connection issues independently rather than contacting technical support services. This finding suggests that communication regarding support services may still be limited. Previous studies indicate that service quality and user satisfaction are influenced not only by technical performance but also by effective support and communication systems [14], [16], [17].

3.2.3 Service Improvement Recommendations

Based on the findings of this study, several service improvement strategies can be proposed to enhance the effectiveness of internet network services at Politeknik Negeri Sriwijaya (POLSRI). These recommendations are derived from students' experiences and supported by previous studies concerning internet service quality, digital learning environments, and user satisfaction in higher education institutions.

a. Infrastructure and Coverage Improvement
The findings revealed that students frequently experienced unstable internet connections in several campus locations. This issue suggests that network infrastructure and signal coverage have not yet been distributed evenly throughout the campus environment. To address this problem, the institution should consider expanding network coverage by installing additional access points and upgrading existing infrastructure. Reliable internet accessibility is an important factor supporting digital learning activities and improving students' overall learning experiences [2]. Improving infrastructure quality would also contribute to better service reliability and greater student satisfaction.

b. Bandwidth Capacity Optimization

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Participants reported that internet performance often declined during peak usage periods, especially during examinations and assignment submission deadlines. This finding indicates the need for bandwidth optimization and better network traffic management. Previous studies have shown that increasing internet usage in higher education environments requires institutions to continuously adjust network capacity to meet students' academic needs [10]. Adequate bandwidth allocation can help reduce network congestion, improve connection speed, and support uninterrupted access to online learning platforms and educational resources.

c. Enhancement of Roaming Functionality
Another issue identified in this study was the frequent disconnection experienced when students moved between campus buildings. The findings suggest that the existing roaming system may not operate optimally across different access points. Improving roaming functionality would enable seamless connectivity and minimize interruptions during online activities. According to Yan and Pourdavood [13], continuous network accessibility is an important aspect of students' perceptions of service quality in digital learning environments. Therefore, strengthening roaming capabilities can improve user convenience and support mobile learning practices across campus.

d. Improvement of Authentication Systems
Students also expressed dissatisfaction regarding repeated login requirements when reconnecting to the campus network. Frequent authentication procedures may reduce efficiency and interrupt learning activities. To improve user experience, POLSRI could implement a more integrated authentication mechanism that allows users to remain connected across multiple campus locations. Studies concerning technology acceptance and e-learning adoption emphasize that ease of access and system usability are important factors influencing users' satisfaction and willingness to utilize digital services [6].

e. Strengthening Technical Support Services
The study further revealed that many students were unfamiliar with procedures for reporting internet-related problems. This finding indicates the need for better communication regarding technical support services. Institutions should provide clear reporting channels, helpdesk information, and faster response mechanisms to address network issues. Previous research has demonstrated that service quality is influenced not only by technical performance but also by the effectiveness of support systems and communication between service providers and users [16]. Providing accessible technical support can strengthen students' trust in institutional services and improve overall user satisfaction.

f. Continuous Service Evaluation
Finally, regular evaluation of internet services should be conducted to monitor performance and identify emerging issues. Student feedback can serve as a valuable source of information for assessing service effectiveness and determining future improvements. Continuous evaluation aligns with recommendations from studies on digital transformation and higher education technology management, which emphasize the importance of adapting services to changing user needs and technological developments [15], [18]. Overall, these recommendations are expected to improve the quality, accessibility, reliability, and effectiveness of campus internet services. Implementing these service improvement strategies would support technology-based learning activities and contribute to a more positive academic experience for students at POLSRI.

4. CONCLUSION

This study concludes that students' perceptions of internet network resources at Politeknik Negeri Sriwijaya (POLSRI) are influenced not only by the availability of internet access but also by the consistency of service quality across different campus environments. Through the application of a qualitative descriptive approach and semi-structured interviews, the study successfully identified several factors that shape students' experiences when using campus internet services. The findings indicate that internet resources have become an essential component of academic activities, supporting access to learning materials, digital platforms, project completion, and communication related to educational tasks. However, the study also reveals that variations in network performance across locations, increased demand during peak usage periods, limitations in roaming capability, and insufficient awareness of technical support procedures continue to affect the overall user experience. These findings demonstrate that students evaluate internet services not only based on technical performance but also on how effectively the services support their academic needs and daily learning activities. Therefore, continuous improvement of network management, infrastructure distribution, user support systems, and service accessibility is necessary to ensure that campus internet resources can effectively accommodate the growing demands of technology-based learning. Furthermore, the results of this study provide useful insights for institutional decision-makers in developing more reliable and student-oriented internet services while also contributing to future research concerning digital infrastructure and service quality in vocational higher education institutions.

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