

## Utilization of the Aku Pintar Application as an Information Service Media in Determining Major Choices for Students of Al-Fityah IT High School, Pekanbaru

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### ABSTRACT

**Purpose of the study:** This study aims to analyze the implementation of information services through the Aku Pintar application in assisting students of SMA IT Al-Fityah Pekanbaru in determining appropriate major choices based on their interests, talents, and academic potential through digital-based guidance and counseling services.

**Methodology** This study employed a qualitative case study approach at SMA IT Al-Fityah Pekanbaru. Data were collected through semi-structured interviews, observations, and documentation. The participants consisted of one counseling teacher and five students. The study utilized the Aku Pintar application, smartphone devices, thematic analysis techniques, triangulation methods, and Holland's career theory as the analytical framework.

**Main Findings:** The findings revealed that the Aku Pintar application positively supported students in understanding their interests, talents, and educational pathways. The application improved students' confidence in determining majors through aptitude and interest assessments, interactive information services, and counseling guidance. Accessibility through smartphones, counseling teachers' support, student motivation, and parental involvement significantly contributed to the successful implementation of digital-based information services.

**Novelty/Originality of this study:** This study offers a qualitative exploration of the implementation of information services through the Aku Pintar application within an Islamic integrated school context. The research integrates Holland's career theory with digital counseling services and highlights students' experiences, counseling teachers' roles, and supporting factors in developing interactive and personalized educational technology-based guidance services.

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## 1. INTRODUCTION

The rapid development of digital technology has brought significant changes to the field of education, including the implementation of guidance and counseling services in schools. The use of digital media in information services has become an effective alternative to help students obtain educational and career

information more quickly and accurately [1]. Information services play an important role in helping students understand their potential, interests, talents, and appropriate educational pathways. In the context of major selection, students need comprehensive information in order to make proper and rational decisions. The presence of educational technology applications such as *Aku Pintar* has become a new innovation that supports the implementation of more interactive information services [2]. Therefore, the use of the *Aku Pintar* application in information services is an important effort to assist students in determining majors that are aligned with their abilities and interests.

In reality, many senior high school students still experience confusion in determining their future majors for higher education. Some students do not fully understand their interests, talents, and abilities, which increases the risk of choosing inappropriate majors. Information services provided in schools are still largely delivered through conventional methods such as lectures and simple presentations. This condition causes students to be less interested and limits their understanding of available majors and future career prospects. In addition, the utilization of digital technology in guidance and counseling services has not been maximized in several schools [3]. As a result, students often make decisions regarding major selection without careful consideration and proper guidance.

Several previous studies have shown that the *Aku Pintar* application contributes positively to guidance and counseling services in schools. A study conducted by Sukanto in 2024 revealed that the *Aku Pintar* application helps students understand their learning styles and determine suitable majors. Another study by Muchammad Bidin in 2023 found that the application was effective in supporting students' career planning at the senior high school level. Furthermore, research conducted by Dwi Wahyuningsih in 2024 indicated that the use of *Aku Pintar* improved interaction between students and counseling teachers. Another study by Elly Leo Fara in 2024 demonstrated that the application enhanced students' understanding of their interests and talents [4]. However, most previous studies mainly focused on the general effectiveness of the application and have not specifically explored the implementation of information services through a qualitative approach in Islamic integrated schools.

Based on the review of previous studies, there is still a research gap related to the implementation of information services using the *Aku Pintar* application. Earlier studies predominantly employed quantitative approaches to measure the effectiveness of the application on certain outcomes. Meanwhile, studies examining the implementation process of information services, the role of counseling teachers, and students' experiences in using the application remain limited [5]. In addition, only a few studies have investigated the use of *Aku Pintar* in Islamic integrated school settings. In fact, the characteristics of the school environment and the pattern of counseling services may influence the success of digital-based information services. Therefore, further research is needed to provide a deeper understanding of the implementation of information services through the *Aku Pintar* application in assisting students with major selection.

This study is important because choosing a major is one of the most significant decisions that can influence students' future education and careers [6]. Incorrect major selection may lead to low learning motivation, academic difficulties, and dissatisfaction with future educational choices. The utilization of the *Aku Pintar* application in information services is expected to help students recognize their potential more accurately through the available interest and aptitude tests [7]. In addition, the application can serve as an innovative tool for counseling teachers in delivering more engaging, effective, and technology-based services. This research is also important to provide insight into how digital-based information services can be implemented optimally in schools. Therefore, the results of this study are expected to become a reference for schools and counseling teachers in improving the quality of information services for major selection.

The novelty of this study lies in its focus on the implementation of information services through the *Aku Pintar* application using a qualitative approach at SMA IT Al-Fityah Pekanbaru. This study not only examines the effectiveness of the application but also explores students' experiences, counseling teachers' strategies, and factors supporting the success of digital-based information services. In addition, this research integrates the use of the *Aku Pintar* application with Holland's theory in understanding students' interests and personality tendencies toward major selection. The study also provides an overview of how information services can be developed through the use of more interactive and personalized educational technology [8]. The objective of this study is to analyze the implementation of information services using the *Aku Pintar* application in determining students' major choices at SMA IT Al-Fityah Pekanbaru. Furthermore, this study aims to identify the factors influencing the successful use of the *Aku Pintar* application in helping students make appropriate and rational decisions regarding major selection.

## 2. RESEARCH METHOD

This study employed a qualitative research design using a case study approach. The qualitative approach was selected because this research aimed to explore and understand the implementation of information services through the *Aku Pintar* application in assisting students with major selection at SMA IT Al-Fityah

Pekanbaru [9]. In addition, qualitative research enables researchers to examine the experiences, perceptions, and responses of both students and counseling teachers regarding the utilization of digital-based guidance and counseling services. The case study approach was considered appropriate because the research focused on a specific and bounded context, namely the implementation of the Aku Pintar application at SMA IT Al-Fityah Pekanbaru. Through this approach, the researcher was able to investigate the phenomenon comprehensively and contextually within the real educational environment [10]. Therefore, this method was expected to provide an in-depth understanding of how the Aku Pintar application functions as an information service medium in determining students' major choices.

The research was conducted at SMA IT Al-Fityah Pekanbaru, which is located on Swakarya Street, Tuah Karya, Pekanbaru, Riau, Indonesia. The school was selected because it has implemented the Aku Pintar application as part of its guidance and counseling services. The study was carried out during the June–July period of the 2024/2025 academic year [11]. The participants of this research consisted of one counseling teacher and five students from grades XI and XII who had experience using the Aku Pintar application in the major selection process. The counseling teacher served as the primary informant because of direct involvement in implementing information services using the application. Meanwhile, the students acted as supporting informants to provide insights into their experiences and perceptions regarding the use of the application.

The object of this research was the implementation of information services through the Aku Pintar application in assisting students with major selection [12]. The information services examined in this study included the provision of educational and career information, guidance during aptitude and interest assessments, consultation activities, and recommendation services related to future majors and career planning. In addition, this study focused on how the Aku Pintar application facilitated students in understanding their interests, talents, and academic potential through digital-based features. The research also examined the interaction between students and counseling teachers during the implementation of information services. Furthermore, attention was given to the accessibility and practicality of the application as an educational technology medium [13]. Through these aspects, the study sought to understand the effectiveness and implementation process of information services using the Aku Pintar application in schools.

Data collection techniques in this study consisted of interviews, observations, and documentation. Semi-structured interviews were conducted with the counseling teacher and students to obtain in-depth information regarding their experiences in using the Aku Pintar application [14]. The interviews focused on students' perceptions, the benefits of the application, obstacles encountered, and the role of counseling teachers during the implementation of information services. Observation techniques were also applied to examine students' interactions with the application during guidance and counseling sessions. The researcher observed how students accessed features, completed aptitude tests, and responded to recommendations generated by the application [15]. In addition, documentation techniques were used to collect supporting data such as school documents, screenshots of application features, guidance and counseling activity reports, and records related to the implementation of information services. The use of multiple data collection techniques was intended to strengthen the validity and credibility of the research findings.

The collected data were analyzed using thematic analysis techniques. The first step involved transcribing interview recordings into written text to facilitate the analysis process. After transcription, the researcher conducted data reduction by selecting and focusing on information relevant to the research objectives [16]. The reduced data were then organized into thematic categories related to the implementation of information services, students' experiences, supporting factors, and challenges in using the Aku Pintar application. Furthermore, the researcher interpreted the findings by identifying patterns, relationships, and meanings emerging from the data. To ensure data validity, triangulation techniques were applied by comparing information obtained from interviews, observations, and documentation [17]. Through this systematic analysis process, the study was expected to produce comprehensive findings regarding the utilization of the Aku Pintar application as a medium for information services in determining students' major choices.

Table 1. Research Themes and Indicators

Main Theme	Sub-Theme	Indicators
Implementation of Information Services	Application Socialization	Introduction of the Aku Pintar application by the counseling teacher
Implementation of Information Services	Guidance During Assessment	Assistance during aptitude and interest tests
Implementation of Information Services	Follow-up Counseling	Discussion of test results and major recommendations
Supporting Factors	Accessibility	Ease of access through students' smartphones
Supporting Factors	Role of Counseling Teacher	Guidance, supervision, and evaluation provided by the teacher
Supporting Factors	Student Motivation	Personal interest, peer influence, and parental

### 3. RESULTS AND DISCUSSION

The findings of this study indicate that the utilization of the Aku Pintar application as a medium for information services at SMA IT Al-Fityah Pekanbaru contributed positively to students' understanding in determining appropriate major choices. Based on interviews conducted with the counseling teacher and students, the implementation of the application helped students access educational and career information more easily and interactively [18]. The information services were carried out through several stages, including application socialization, aptitude and interest testing, interpretation of results, and follow-up counseling sessions. Students stated that the application provided clear descriptions regarding majors, career prospects, and recommendations aligned with their abilities and interests. In addition, the counseling teacher explained that the application simplified the process of delivering information services because students could independently access the required information through their smartphones [19]. These findings demonstrate that the integration of digital technology into guidance and counseling services supports more effective and student-centered educational services.

#### 3.1. Implementation of Information Services through the Aku Pintar Application

The implementation of information services using the Aku Pintar application began with the introduction and socialization process conducted by the counseling teacher during guidance and counseling sessions. Students were guided to download the application, register accounts, and complete personal profile information before accessing the available features. Afterward, students participated in aptitude and interest assessments provided by the application to identify their potential and personality tendencies related to future majors and careers [20]. The counseling teacher then provided further explanations regarding the results generated by the application and discussed suitable major recommendations with students individually. Based on observation results, students appeared enthusiastic during the implementation process because the application was considered practical, interactive, and easy to use. Moreover, the digital-based service created a more flexible learning environment since students could access the application anytime and anywhere without depending entirely on face-to-face counseling sessions.

Table 2. Stages of Information Service Implementation

Stage	Activities	Outcomes
Application Socialization	Introduction to Aku Pintar features by counseling teacher	Students understood the purpose and function of the application
Aptitude and Interest Assessment	Students completed personality and aptitude tests	Students identified interests, talents, and potential majors
Counseling and Guidance	Discussion of assessment results with counseling teacher	Students received major recommendations
Follow-up Evaluation	Monitoring students' responses and decisions	Students showed greater confidence in choosing majors

#### 3.2. Students' Perceptions toward the Aku Pintar Application

The results revealed that students had positive perceptions regarding the use of the Aku Pintar application in information services. Most students stated that the application helped them better understand their interests, talents, and career preferences through interactive assessment features. Students also mentioned that the major recommendations provided by the application were relevant to their academic abilities and personal interests [21]. Furthermore, the application enabled students to obtain updated information regarding universities, study programs, and future career opportunities. Several students explained that before using the application, they experienced confusion and uncertainty when determining future majors. However, after completing the assessments and consultation sessions, they became more confident in making educational decisions. Therefore, the Aku Pintar application not only functioned as an information provider but also as a medium that strengthened students' self-awareness and decision-making abilities.

#### 3.3. Supporting Factors in the Implementation Process

The success of implementing information services through the Aku Pintar application was influenced by several supporting factors. One important factor was the accessibility of the application, as students could easily access the platform through their smartphones with internet connectivity. Another supporting factor was the active role of the counseling teacher in guiding students during the testing and consultation process [22]. The counseling teacher continuously provided explanations and motivation to ensure students understood the results and recommendations generated by the application. In addition, parental support and students' personal

motivation also contributed significantly to the successful use of the application. Students who had strong motivation regarding future educational planning tended to engage more actively during the information service sessions. These findings indicate that the effectiveness of digital-based information services is influenced not only by technology itself but also by human support and environmental factors.

Table 3. Supporting Factors in the Use of Aku Pintar

Supporting Factors	Description
Accessibility	The application can be accessed easily through smartphones
Counseling Teacher's Role	Teachers provide guidance, interpretation, and evaluation
Student Motivation	Students actively explore majors and career information
Parental Support	Parents encourage students in educational planning

### 3.4. Challenges in the Utilization of the Application

Although the implementation of the Aku Pintar application showed positive outcomes, several challenges were still identified during the research process. One of the primary obstacles was unstable internet connectivity experienced by some students during the assessment sessions. In addition, several students initially faced difficulties in understanding the interpretation of personality test results provided by the application. The counseling teacher also stated that limited time allocation for counseling sessions occasionally reduced opportunities for deeper discussions regarding students' career planning. Another challenge involved differences in students' digital literacy levels, as not all students were equally familiar with educational technology applications [23]. Despite these limitations, the counseling teacher attempted to overcome such obstacles by providing additional guidance and assistance during the implementation process. Therefore, continuous support and technological adaptation are necessary to optimize the utilization of digital-based information services in schools.

The findings of this study confirm that the Aku Pintar application can function effectively as a digital-based information service medium in supporting students' major selection decisions. The implementation of aptitude and interest assessments through the application is aligned with Holland's career theory, which emphasizes the relationship between personality characteristics and career environments [24]. Through the application, students were able to identify their dominant personality tendencies and connect them with relevant educational pathways and career opportunities. The findings also support previous studies stating that digital guidance and counseling services increase students' engagement and understanding in educational planning. Furthermore, the role of the counseling teacher remained essential despite the use of digital technology, as students still required guidance in interpreting assessment results and making final decisions [25]. The integration of educational technology and counseling guidance therefore creates a more interactive, flexible, and student-oriented information service model. Consequently, the Aku Pintar application can be considered an innovative medium that supports the modernization of guidance and counseling services in Indonesian schools.

### 3.5. Discussion

The findings of this study indicate that the utilization of the Aku Pintar application as a medium for information services positively supported students in determining appropriate major choices at SMA IT Al-Fityah Pekanbaru. Students were able to access educational and career information more easily through digital-based features provided by the application [26]. The aptitude and interest tests available in the application also helped students recognize their abilities, interests, and personality tendencies related to future educational pathways. In addition, students reported feeling more confident in making decisions regarding major selection after using the application. These findings demonstrate that digital information services can facilitate more effective and interactive decision-making processes among senior high school students.

The implementation process of information services through the Aku Pintar application was carried out systematically through application socialization, assessment activities, counseling sessions, and follow-up guidance. The counseling teacher played an important role in assisting students in understanding the assessment results and interpreting the recommendations generated by the application. Observation results showed that students actively participated during counseling sessions and demonstrated enthusiasm in exploring information related to universities and career opportunities [27]. Furthermore, the accessibility of the application through smartphones enabled students to access information anytime and anywhere without limitations of place and time. Therefore, the integration of digital technology and counseling services created a more flexible and student-centered learning environment.

The results of this study are consistent with several previous studies discussing the effectiveness of the Aku Pintar application in educational and counseling services [28]. Research conducted by Sukamto (2024) revealed that the application assisted students in understanding their learning styles and selecting suitable majors. Similarly, Muchammad Bidin (2023) found that the application effectively supported students' career planning processes at the senior high school level. In addition, Dwi Wahyuningsih (2024) emphasized that the use of Aku

Pintar improved communication and interaction between students and counseling teachers [29]. However, this study expands previous findings by providing a deeper qualitative explanation regarding the implementation process of digital-based information services within the context of an Islamic integrated school.

The novelty of this research lies in its focus on the implementation of information services through the Aku Pintar application using a qualitative case study approach. Unlike previous studies that mainly emphasized application effectiveness quantitatively, this study explored students' experiences, counseling teachers' roles, and the implementation process comprehensively. In addition, this research integrated Holland's career theory in understanding students' interests and personality tendencies toward major selection. The findings also highlighted how educational technology applications can be adapted within Islamic integrated school environments to support guidance and counseling services [30]. Therefore, this study contributes new insights into the development of digital-based information services that are more interactive, personalized, and contextually relevant in Indonesian schools.

The implications of this study indicate that digital-based information services can become an innovative strategy for improving the quality of guidance and counseling services in schools. The Aku Pintar application can assist counseling teachers in delivering more engaging, practical, and efficient services related to educational and career planning. Furthermore, the application encourages students to become more independent in exploring information regarding majors, universities, and future career opportunities. The findings also imply that schools need to strengthen digital literacy and technological support to maximize the implementation of educational technology in counseling services. Consequently, the integration of digital applications in information services may contribute to better decision-making quality and more effective educational planning among students.

Despite its positive findings, this study has several limitations that should be considered in future research. First, the study involved a limited number of participants consisting of only one counseling teacher and five students, which may restrict the generalization of findings. Second, the research was conducted within a single educational institution, namely SMA IT Al-Fityah Pekanbaru, so the results may differ in other school contexts. Third, this study focused primarily on qualitative experiences and perceptions without measuring students' academic outcomes quantitatively after using the application. In addition, technical issues such as internet connectivity and differences in students' digital literacy levels also influenced the implementation process during the study. Therefore, future studies are recommended to involve broader participants, apply mixed-method approaches, and examine the long-term impact of the Aku Pintar application on students' educational and career development.

#### 4. CONCLUSION

The findings of this study indicate that the utilization of the Aku Pintar application as a medium for information services successfully supported students in determining appropriate major choices at SMA IT Al-Fityah Pekanbaru. As stated in the introduction, students often experience difficulties in understanding their interests, talents, and educational pathways, and the results of this research confirmed that the application helped students gain better self-understanding through aptitude and interest assessments. The implementation of digital-based information services also increased students' engagement and confidence in making educational decisions. In addition, the role of counseling teachers remained essential in guiding students during the interpretation of assessment results and counseling sessions. Therefore, the integration of educational technology and counseling services created a more interactive, flexible, and student-centered information service model. The findings of this study are expected to contribute to the development of digital-based guidance and counseling services in schools, particularly in improving educational planning and career guidance for students.

Furthermore, this study provides prospects for future research related to the development of digital guidance and counseling services using educational technology applications. Future studies are recommended to involve broader participants and different school settings to obtain more comprehensive findings. Researchers may also apply mixed-method or quantitative approaches to measure the long-term effectiveness of the Aku Pintar application on students' academic achievement and career readiness. In addition, future research can explore the integration of artificial intelligence, personalized recommendation systems, and digital literacy development in counseling services. The findings of this study may also serve as a reference for schools and policymakers in designing technology-based information services that are more adaptive to students' needs. Consequently, the utilization of educational technology applications has strong potential to support the modernization and improvement of guidance and counseling services in Indonesian education.

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