



## Development of an Android-Based Guidance and Counseling Information System (SIM-BK) at SMA Negeri 2 Tasikmalaya City

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### **Abstract**

The amount of data that must be managed by BK practitioners is very large and unadministered. The purpose of making this Android-based Guidance and Counseling Information System (SIM BK) is so that it can make it easy for students to access it anywhere and anytime and is administrated as a whole and can be accessed at any time. Products that have been developed, validated and revised, are then subjected to preliminary tests or limited trials involving 191 class X students of SMA Negeri 2 Tasikmalaya City as respondents. Trials were conducted to determine the feasibility of the product being developed and user feedback. Questionnaires are used as a data collection tool in limited trials. There are two aspects that are seen, namely the quality of the content and objectives as well as the quality of the technique. The results of the due diligence conducted by student respondents were 92.37% with feasible criteria. Based on the results obtained, the SIM BK product at the SMA/MA level is feasible to use.

**Keywords:** *Media; Information System; Guidance and Counseling; Android*

### **Introduction**

Information technology is a form of progress in the field of technology that is growing very rapidly at this time, so the need for information is increasing and needed. Information systems can be useful in various aspects, especially in the field of guidance and counseling in schools. Hasus technology is utilized as well and optimally as possible by guidance teachers and counseling and counselors so that the services provided can provide optimal results. Mastery and use of technology and information in guidance and counseling is a must for a counselor to create an effective guidance and counseling service and according to needs. In other words, information technology is an important part of guidance and counseling, this is evidenced in the comprehensive BK which explains that the position of information technology supports all guidance and counseling services.

Information systems refer to a coordinated collection of hardware, software, data, people, and procedures designed to collect, process, store, and distribute information within an organization or across multiple organizations. It involves the use of technology and data management practices to support the operational, managerial and strategic needs of an organization. Information systems play an important role in facilitating decision making, increasing efficiency, and enabling effective communication and

collaboration within and outside the organization. And the existence of information systems helps humans a lot. One of the benefits of the system is that it makes all work more effective and efficient, because it can get information faster.

The reality on the ground shows that the implementation of guidance and counseling activities in some schools has not been able to run optimally. Supporting data in the form of guidance and counseling administration has also not been carried out in an orderly manner so that it seems that the implementation of guidance and counseling programs cannot be carried out in a structured manner.

Previous research has found schools where archiving student data is still paper documents, which creates difficulties when needed. All processes are still carried out manually with a lot of student data which sometimes becomes an obstacle for BK such as the difficulty of finding student data which is quite time-consuming and sometimes there can be data loss such as training data, data breaches. The process of making reports also seems slow and quite a waste of time. (Harfiana & Said, 2019; Khasanah et al., 2022; Muchlis et al., 2019; Primasari & Putri, 2019; Putra & Munawrah, 2019)

The new challenge of counseling guidance in these years requires time, energy and technology that can help the task of counselors in schools. One of the obstacles to the performance of counselors in schools today is the absence of system support that can ease the task of the counselor. The demands of administrative work take up quite a lot of time so that counselors have limitations to provide optimal services (Radite Nur Maynawati, 2021).

Information technology is a tool or means that can help in managing information, namely receiving, managing, and conveying information both conventionally and digitally. The tools or facilities in question are everything based on computing or electronic technology. So that if it is associated with guidance and counseling, information technology is a supporting capacity in an effort to improve the effectiveness of guidance and counseling services, both in infrastructure and the process (Radite Nur Maynawati, 2021).

A computerized information system is needed to assist the guidance and counseling department in managing guidance and counseling administrative data so that problems that occur in the running system can be resolved immediately, especially in terms of making guidance and counseling reports and in terms of calculating violation points committed by students can be done quickly and easily and does not take long because all data is neatly stored inside Database. Database is a large database storage where later the data can be used by many users (Anisah 2019).

This research aims to create a guidance and counseling information system called SIM-BK. The application, which will be named SIM-BK "Guidance and Counseling Information System", aims to provide changes in guidance and counseling innovation at SMA Negeri 2 Kota Tasikmalaya, which will be presented with student access which will be divided into 5 main points in the first application, namely the vision which is presented into two parts, namely the vision of the school and the vision of BK teachers. The second access, namely mission as well as vision, will be divided into two points that explain the mission of the school and the mission of the guidance and counseling teacher. The third access is counseling services which are divided into three services, namely individual counseling, group counseling and career counseling. Access to four personal data that can be accessed by students to fill in student personal data. The last access is the information center which includes BK.

## **Method**

The purpose of this research is to produce a product that is suitable for research methods using the Research and Development approach, also known as RnD. Because this research produces products and tests the effectiveness of the products produced.

The research participants who will be taken in this study are seen from the large population. Based on the results of calculating the sample size using the Issac and Michael formula, the total population is 428 students in class X with an error rate of 5%, the total sample is 191 students.

Instruments used to collect data in the field include interview sheets, student response questionnaires. The scale used in this study is the Guttman scale with Yes and No options to determine the effectiveness of the product produced.

## Results

The product produced in this study was in the form of a guidance and counseling information media application called SIM BK, but this research only reached six steps in RnD, namely: potentials and problems, data collection, product design, design validation, design revision, product testing.

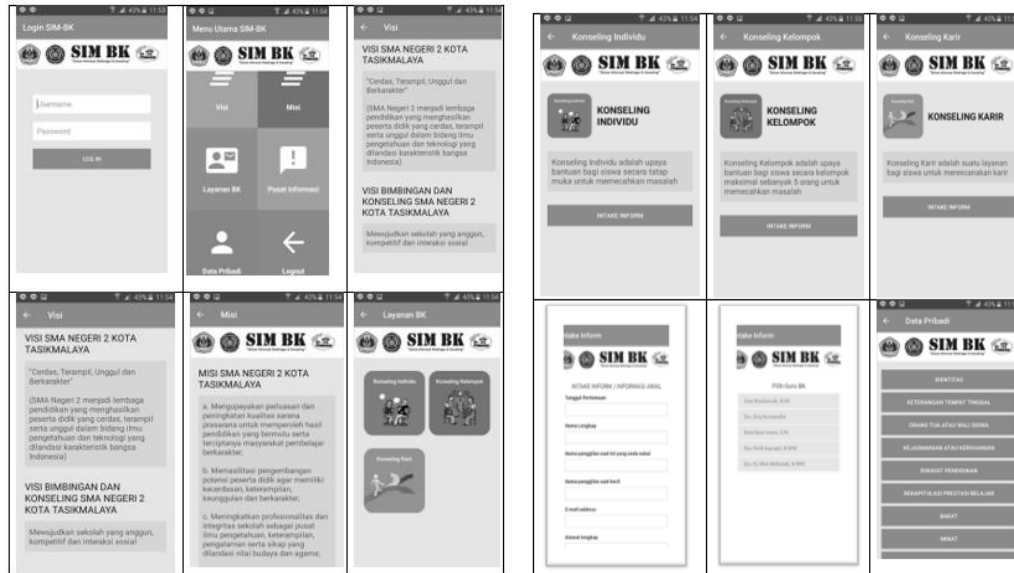
The potentials and problems that arise are the lack of interest of students to visit the counseling room and the use of smartphones for the most part are still not used in the process of providing guidance and counseling services. Smartphones are only used to play and access social media and messaging applications.

Data collection was carried out by means of open interviews with students with the results described above.



*Gambar 1: SIM BK Initial Design*

The final design in this application is discussed with media experts to produce a final design that will be made by experts.

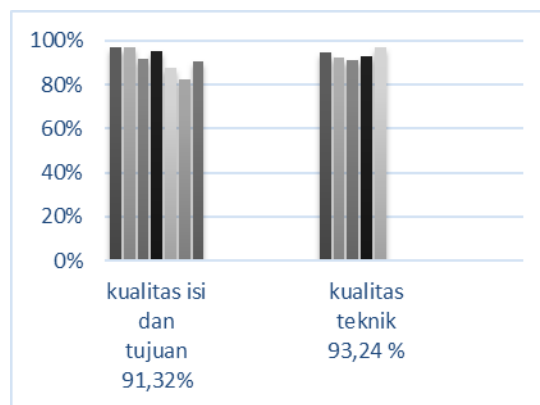


Gambar 2: SIM BK Final Design

After conducting trials in stages with students, the researchers conducted an effectiveness test by distributing questionnaires to all respondents with the results of the due diligence conducted by the respondents with the results obtained at 92.37% with feasible criteria. Based on the results obtained, the SIM BK product at the SMA/MA level is feasible to use.

Table 1: Distribution of SIM BK Feasibility Test

Katagori	Presentase Skor	Frekuensi	Presentase	
				Rata -rata aktual
Layak	>50%	189	98,95 %	92,37%
Tidak Layak	<50%	2	1,04%	
Jumlah (N)		191	100 %	



Grafik 1: Aspects and Indicators of Due Diligence

The results of the calculation of the aspects and indicators of the student feasibility test using percentage calculations yielded a figure of 91.32% for the content quality and objectives of the BK SIM

and 93.24% for the BK SIM programming technique. These numbers or results will strengthen the eligibility of the BK SIM for use in SMA Negeri 2 Tasikmalaya City.

### Conclusion

The beginning of the interview found that the Guidance and Counseling Information System used by SMA Negeri 2 Kota Tasikmalaya was still manually. As in searching for student personal data, looking for student problems so that they cannot estimate the expected time and performance. Efforts to optimize the performance of BK practitioners can be developed through SIM BK which assists in the BK service process in the form of system support for guidance and counseling practitioners of SMA Negeri 2 Tasikmalaya City. The development of SIM BK with the help of people who are competent in this field can be realized in the development of SIM BK products that are developed which are android-based for student access. The results of the feasibility test conducted by student respondents amounted to 92.37% with feasible criteria.

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