

DEVELOPMENT OF A NEW STUDENT ADMISSION SERVICE INFORMATION SYSTEM

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ABSTRACT Dharma Wacana is the first tertiary institution in computer science in the Metro Indonesia area. The registration system is done by coming directly to the campus and has not used the website media. In development, research is carried out using the Waterfall model by building a system. Besides that, data collection is carried out using the method of observation and literature study. The implementation of the Waterfall model is explained using mapping diagrams, context diagrams, DFD, database table structures, relations between tables, and input-output design. This website-based information system aims to improve services to the public in the form of information and new student registration that can access online. And it is hoped that it will enhance Campus management to take advantage of this online registration data as a basis for Promotion.

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1. INTRODUCTION

Dharma Wacana Metro College of Informatics and Computer Management is the first computer college in the Metro area. In the implementation of education, STMIK Dharma Wacana Metro has system components. One of these components is the Public Relations Service System. This system provides services including the Promotion section, New Student Admissions Info, Job Vacancies Info, and Activity Info, but in its favor, it still has weaknesses. Many people do not know that there is a High School in Metro. To get information, people need to come directly to STMIK Metro Indonesia.

2. MATERIALS AND METHODS

Software engineering is carried out in this research, where the process is called systems engineering. Alan Dennis and Barbar H Wixom conveyed several steps for using one of the systems development research methods, namely the System Development Life Cycle (SDLC). To implement this system, the SDLC has four fundamental steps covered in the waterfall model, as shown in the following (Figure 1). Anal-

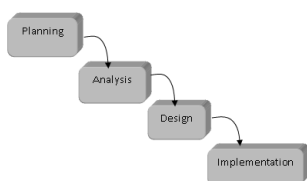


FIGURE 1. Waterfall Model Development Method. Source : Alan R. Dennis and Wixom (2003)

isys from the procedure for information on new student ad-

missions and the procedure for info on ongoing job vacancies, there are several weaknesses, including:

- A lot of time and money is wasted on the publication of STMIK Dharma Wacana outside the Metro area, so it cannot save the existing budget.
- Publications carried out are usually only in the Metro area and Lampung Indonesia in general. Design. The new system design is expected to overcome the weaknesses that occur in the old system, the design is displayed in the form of Context Diagrams and Data Flow Diagrams in the following (Figure 2).

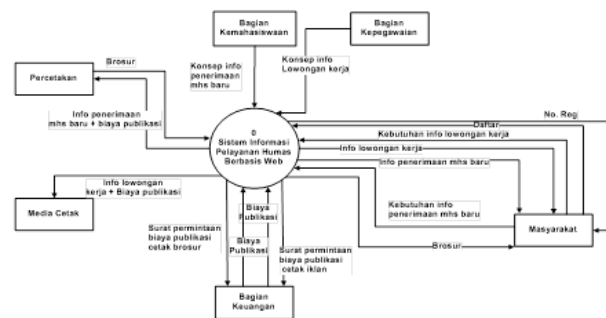


FIGURE 2. Context diagram of an already running process.

3. RESULTS AND DISCUSSION

In the design that produces level 0 diagrams (Figure 3), the Public Relations service system and new students from design analysis build a service website. STMIK Dharmawacana's marketing and promotion system, where this website is expected to replace the current process through brochures, newspapers, and direct promotions. (direct

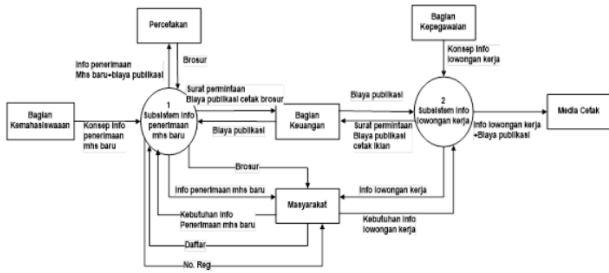


FIGURE 3. DFD Level 0 Public Relations Service Subsystem.

marketing). Furthermore, prospective students who usually come directly to STMIK Dharmawacana to get information on new student admissions no longer need to come to campus; just access it from the official website of the Dharmawacana College. (Figure 4) Meanwhile, data processing

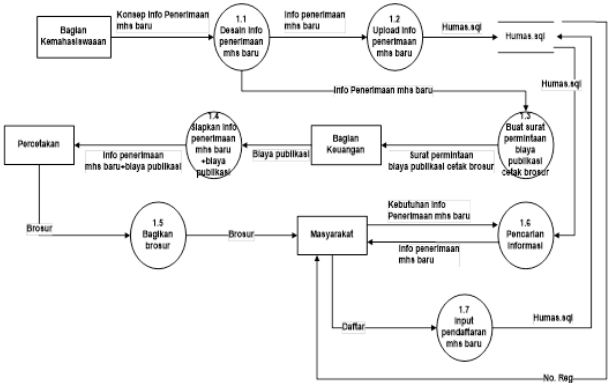


FIGURE 4. DFD Level 1.1 New Student Admission Information Procedure.

from promotion and new student registration does not currently use an online database system. (Figure 5) In the end,

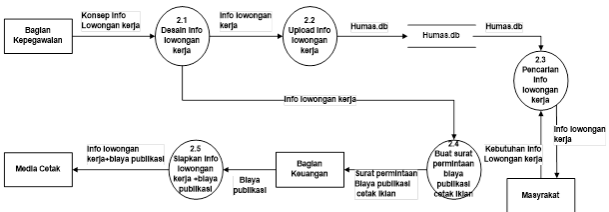


FIGURE 5. DFD Level 1.2 Job Vacancies Info Procedure.

this website-based information aims to improve services to the public in the form of information that can be accessed online. (Figure 6) Higher education management can take



FIGURE 6. Registration page display at Dharmawacana college.

advantage of this online media as a basis for introducing the green campus of STMIK Dharmawacana.

4. CONCLUSIONS

Based on the analysis, design and results, the following conclusions can be drawn. This website-based information system is expected to improve services to the community in the form of information that can be accessed online. Higher school management can take advantage of this online media as a basis for introducing STMIK Dharmawacana's green campus. Meanwhile, prospective new students can access information through the website without having to come directly to campus. Management of data processing from the promotion and registration of new students has not used the online database system. Later, it is hoped that it can be developed in further research.

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AUTHORS' CONTRIBUTIONS

They are those who have contributed to completing this research with responsibilities and abilities according to their respective fields. MRR S Designed this Research and wrote the initial manuscript. MRR Making improvements to manuscripts and matters related to publications, S Translating texts, and doing some designs. "All authors have agreed to the final version of the manuscript."

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