

DEVELOPMENT AND DESIGN OF INTERNSHIP SEARCH INFORMATION SYSTEM WEBSITE FOR MULTIMEDIA NUSANTARA UNIVERSITY STUDENTS

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Abstract

Customer relationship management is a business strategy in the organization intended to reduce costs and increase profits by increasing customer satisfaction. As the result, consumers will become more loyal to the organization. The good way to be applied by UMN in CRM area is to improve services in the student career development.

This research begins with collecting supporting data through interviews with UMN Career Development section and several companies. In addition, the questionnaires were also conducted to the students to know how big their expectations of the internship site search tool. Research is continuing by design the required diagrams and database. The final step is to make an internship search website by using PHP and MySQL database as the tools. Website creation is divided into 3 parts: for students, companies, and admin of UMN Career Development.

From the results of this research founded that companies are looking for students who have the ability skill to be accepted as internships staff at the companies. The questionnaire is intended for students from class 2009 and 2010 because the research only focused on students who will do the internship and had internships. The results of the questionnaire shown 95% of respondents stated that the UMN shall assist them in doing an internship search. For the internship medium, 28% of respondents said the announcement for internship through EUIS, 24% chose through campus wall magazine and social media, and 22% chose a special website for internship search.

Keywords: CRM, internship, interview, questionnaire, website, PHP, MySQL

Introduction.

CRM is used in almost all organizations with the same goal of enhancing their customer loyalty. At this time the development of CRM is also supported by existing technology development. With CRM, the relationship between organizations and consumers will become increasingly closer because of the interactions that occur with each other. In addition, the market needs data obtained by the company will be more complete analysis and more accurate.

The business environment performed by UMN is B2C where UMN act as a company and students as consumers. UMN provide educational services to students to prepare them work in the future.

Problem raised from the area of Customer Relationship Management is the absence of a connecting medium between students and career sections in finding internship places. This can be seen by the number of students who are still having trouble in finding internship places that prevents them from doing an internship.

There are two identified root causes, first is the absence of a system that can accommodate the search for an internship and the second is lack of information obtained by the students on the job for internships. From these causes, we can make conclusion there is no system that is able to accommodate the search for an internship.

With this research, researchers hope there is a solution that can improve the ability of CRM in UMN in terms of facilitating internships search for students so the students no longer having difficulties in finding an internship.

Literature Review.

Basic Concepts of Information Systems

Each organization must require information to support the needs of the organization, especially for management in making decisions. Information comes from data that has not been processed. Therefore, it takes divulging system that can process the data into information which is commonly known as the Information Systems.

According to (Gordon B. Davis, 1988), the information system is a system that connects users (individuals and organizations) with the integration of computers designed to provide information to support operational functions, management, analysis and decision-making functions in an organization.

Internship

Internship activities that are centrally managed and is a national program aimed at improving the ability of academic staff in Tridharma coordinated by the Directorate General of Higher Education, Ministry of National Education.

In general, an internship is a form of activity for final year students by directly experience the field of work and be able to apply the knowledge that have been obtained from attending lectures. Expectations of the internship are to give students early experience to the situation and conditions of the workplace. In addition, internships are also usually intended to allow students to obtain jobs before they graduate.

Questionnaire

According to (Bardosono, 2009), questionnaire is a collection of questions and statements that have been designed to be answered by the respondents in order to collect data according to specific research objectives.

There are several types of questionnaires based on the type of question, namely:

- Closed Question is the question that has been given the option to answer respondents' answers to be uniform and simplify the processing of data.
- Open Question is the question that allows respondents to provide their own answers to questions.
- Semi Closed Question is the question that has been given the option to respondent answers but still can give their own answer if there is no right answer.

Analysis System

According to (Hartono Jogiyanto, 1990) "Systems analysis is a decomposition of a complete information system into its component parts in order to classify and evaluate the problems, opportunities, barriers that occur and needs that are expected to propose the improvements."

Waterfall Model

Waterfall model is a sequence of design process typically used in the application development process where each process is described like a waterfall.

Waterfall model is used for the development of applications where no repeating process during development. There are several steps in the Waterfall Model: requirements, design, implementation, verification, and maintenance.

Flowchart

According to Chaudhuri, flowchart is a diagram that represents the algorithm steps. In the form of flowcharts each showing different boxes of different operation types and is associated with a line showing the process flow. Flowchart can be classified into two types: Program Flowchart and System Flowchart.

DFD (Data Flow Diagram)

According to (Hartono Jogiyanto, 1990), Data Flow Diagram is a model system used to describe the flow of a system in greater detail by describing an existing system or a new system that will be developed without having to consider the physical environment in which the data flows and where the data will be saved later.

EER (Extended Entity Relationship)

According to (Carlos Coronel, 2012), Extended Entity Relationship is often referred to as Enhanced Entity Relationship is the result of the addition of semantic construction compared with the Entity Relationship Model.

Methodology.

The method used in this study is the Waterfall Model. Waterfall model is a sequence of design process typically used in the application development process where each process is described like a waterfall. The researcher will use this method to solve the root of existing problems ranging from data analysis to prototyping.

Research Variables

Variables examined differentiated into two types:

- The independent variable (Independent Variable)

The independent variable in this study is the Internship Search Sites which consists of 3 sub-variables: how the search is conducted student internships as an independent variable (X1), UMN effort in helping students find internships as the second independent variables (X2), and medium provided in the search for an internship (X3).

- The dependent variable (Dependent Variable)

The dependent variable in this study is the success rate of students in finding internship places (Y). Can be symbolized mathematically as $Y = X1 + X2 + X3$ where the value of the variable X1, X2, X3 will affect the value of Y.

Data Collection Techniques

- Questionnaire

The questionnaire is given to students from class 2009 and 2010 because the research only focused on students who will do the internship and the one who had done the internships. Outcome from this questionnaire are to find out what are student preferences medium in finding internship vacancy.

- Interviews

Interviews conducted to the career development of Multimedia Nusantara University and some companies that have worked with UMN in providing internships for students. Outcome from this interview are to determine what company's need for the internship student are.

- Sampling Techniques

The sampling technique used Convenience Sampling. The samples used are the students who have done internships and student who will do the internship (class of 2009 and 2010). The samples will be collected without consider selecting subjects that are representative of the entire population (based on Convenience Sampling Theory).

- Data Analysis Techniques

Techniques of data analysis performed by the researchers are calculating the discrete data obtained from the questionnaire and descriptive analysis. The data is plotted on the graph with the percentage of the data obtained. Then, the graph will be described descriptively.

Data from the interviews will be described in narrative form. After that, the researcher will make a conclusion.

Analysis and Result.

Current Business Process

Business processes that occur in the career development of Multimedia Nusantara University can be separated into two types. For companies that have been working with UMN can directly provide list of available job positions for internship along with the criteria and the number of positions required to career development section by email, phone, or mail. And for companies that do not have a relationship with UMN, they must submit a company profile first and after that they can send the available internship information.

Career development section will follow up the job information by giving the information to the students who are looking for internships and also attach the vacancy information in campus wall magazine. Based on the information provided, the students then apply directly to the companies via the contact given.

Interview Results

The researcher was conducted interviews with several companies about admission to internship. The result from these interviews can be summarized as follows:

- The number of respondents was 4 companies from 20 companies listed by UMN Career Development.
- Criteria for students who are considered eligible for the internship are the ability of hard skills, soft skills, organizational experience, and GPA.
- The most important criteria according to companies is a skill possessed by students.

Questionnaire results

Data from questionnaires were collected by the researchers from November 19, 2012 to December 6, 2012. Data collection from the questionnaire was conducted online using the application form of Google

Drive. The chart below is the analysis of the questionnaire data that were successfully collected in the form of tables, graphs and descriptive explanation. Results of the questionnaire used as supporting data for designing the internship search website.

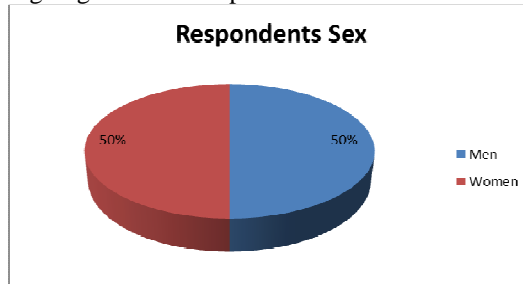


Figure 1. Respondents Sex

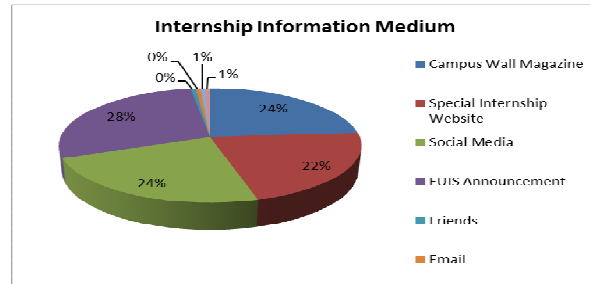


Figure 2. Internship Information Medium

Total respondents knew 72 people where 36 respondents (50 %) were female and 36 respondents (50 %) male gender.

Based on Figure 2, respondents who want more information on internship opportunities through announcements in EUIS 48 respondents (28 %), who want more information on internship opportunities through the campus wall magazine by 40 respondents (24 %), who want more information on internship opportunities through social media as much as 40 respondents (24 %), who want more information on apprenticeship vacancies through a special website by 37 respondents (22 %), and who want more information on internship opportunities through friends, email, company website, and faculty as one respondent each.

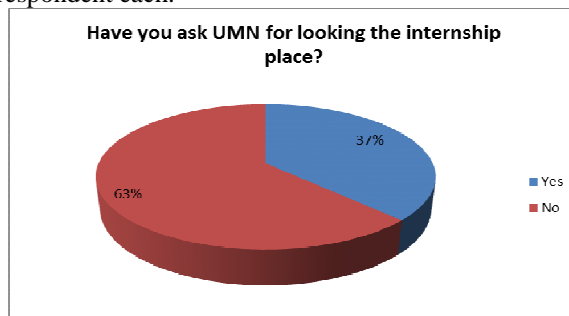


Figure 3. Looking Internship Place

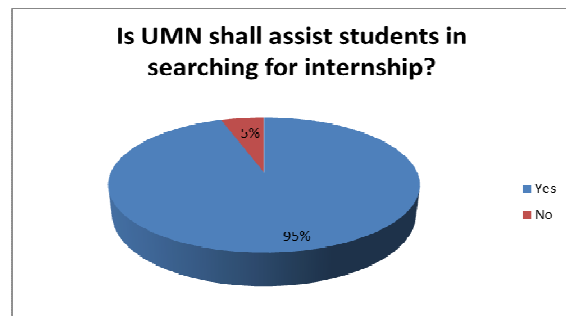


Figure 4. Assist for Searching Internship

On Figure 3, 6 respondents (37 %) who had ever asked for UMN help in doing an internship search. While as many as 10 respondents (63 %) have never asked for help UMN in doing an internship search.

We can see in figure 4, 53 respondents (95 %) stated that UMN shall assist students in searching for internship and the remaining 3 respondents (5 %) stated that UMN is not obliged to assist students in doing an internship search.

Interface Design Result.

As a solution to the problems at UMN Career Development in delivering internship information to the student, the researcher try to make a website that can accommodate the students while searching internship vacancies info. This website consists of 3 main parts: student's area (Figure 6, 7, 8), company's area (Figure 9, 10, 11), and UMN Career Development Area (admin). Here is some screenshot from the website.

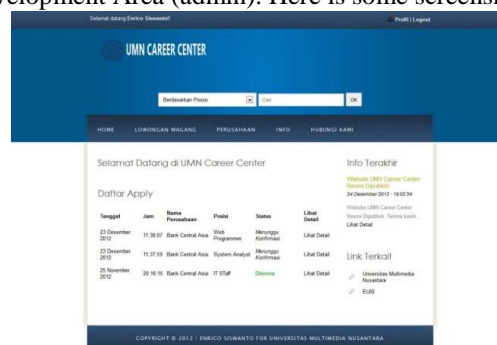


Figure 5. Student Home Site

Bank Central Asia



BCA Semakin Tangguh di Usia 55 Dengan etos kerja yang pantang menyerah dari segenap karyawan dan dukungan seluruh nasabah, BCA terus berkembang dan waktu ke waktu.

Bank Central Asia (BCA) telah mengambil langkah pertama sejak 55 tahun silam. Sepanjang perjalanan yang telah ditempuh, tentu banyak tantangan dan kenikmatan yang dihadapi. Akan tetapi, berkat beragam rintangan itulah BCA mampu menancapkan keberadaannya dengan kuat di setiap jenjang jalan yang dilalui hingga eksistensi BCA sebagai salah satu bank swasta terbesar, terdepan, dan terpercaya memperoleh pengakuan dari berbagai pihak, terutama nasabah setianya. Dengan kedewasaan, kematangan, dan kestabilan ini BCA akan terus melangkah menjadi lebih baik dan lebih maju lagi.

Diposting Tanggal: 14 Desember 2012 - 04:47:51

System Analyst

Analysis User Requirement

Program Studi:

- Sistem Informasi
- Teknik Informatika

Kebutuhan Skill:

- Analisis dan Perancangan Sistem
- SQL
- VB.NET
- Java

Jumlah Posisi yang dibutuhkan: 5 orang

Syarat IPK: 3.56

Status Apply

Status: -


Figure 6. Internship Opportunity Info

Profil Skill & Pengalaman Daftar Apply

Profil

NIM: 09110310106

Foto Profil:



Browse...

* Kosongkan jika foto profil tidak diubah

Nama: Enrico Siswanto

Email: enrico@siswanto.me

Telepon: 081806015360

Program Studi: Sistem Informasi

Semester: 7

IPK: 3.63

Ubah Clear

Ganti Password

Figure 7. Student Profile Site

Profil Skill & Pengalaman Daftar Apply

Daftar Apply

No.	Tanggal	Jam	Nama Perusahaan	Posisi	Status	Lihat Detail
1	23 Desember 2012	11:38:07	Bank Central Asia	Web Programmer	Menunggu Konfirmasi	Lihat Detail
2	23 Desember 2012	11:37:59	Bank Central Asia	System Analyst	Menunggu Konfirmasi	Lihat Detail
3	25 November 2012	20:16:15	Bank Central Asia	IT Staff	Diterima	Lihat Detail

Figure 8. Internships Apply List

Post Lowongan

Posisi:

Deskripsi Pekerjaan:

Terbuka untuk Jurusan:

- ☐ Sistem Informasi
- ☐ Teknik Informatika
- ☐ Sistem Komputer
- ☐ Manajemen
- ☐ Akuntansi
- ☐ Ilmu Komunikasi
- ☐ Design Komunikasi Visual

Jumlah Posisi:

Next Clear

* Info lowongan hanya akan tersedia untuk 30 hari sejak tanggal posting.

Figure 9. Internship Info Submission

Profil Daftar Lowongan Daftar Apply Mahasiswa

Daftar Lowongan

No.	Tanggal	Jam	Posisi	Jumlah Apply	Status	Lihat Detail
1	26 Desember 2012	16:07:08	IT Staff	1 orang	Expired	Lihat Detail
2	14 Desember 2012	04:47:51	System Analyst	1 orang	Aktif	Lihat Detail
3	27 November 2012	15:17:16	Web Programmer	1 orang	Expired	Lihat Detail

Figure 10. Internship Info List

Daftar Apply Mahasiswa

No.	Tanggal	Jam	Posisi	Nama	Status	Lihat Detail
1	23 Desember 2012	11:37:59	System Analyst	Enrico Siswanto	-	Lihat Detail
2	23 Desember 2012	11:38:07	Web Programmer	Enrico Siswanto	-	
3	25 November 2012	20:16:15	IT Staff	Enrico Siswanto	Diterima	
4	24 November 2012	11:26:59	Design Grafis	Enrico Siswanto	Sedang Diproses	
5	21 November 2012	03:03:54	IT Staff	Enrico Siswanto	Sedang Diproses	

Figure 11. Students Apply List

Conclusion

This research is based on problem at Career Development UMN in delivering available internship information to students. Usually students must directly ask to the Career Development section UMN to find the available internship.

Therefore, the researcher tries to do the analysis, design, and creation of website for internship information searching. With this website, the researcher hopes that:

- The website can reduce some recurring tasks from Career Development of Multimedia Nusantara University in providing internship information from companies
- Facilitate the students in finding internship information
- Companies can directly post internship vacancies to the website. The student will see the internship information and can directly apply to the available position. As the result, Career Development Section of Multimedia Nusantara University only acts as mediator between companies and student
- Improve the quality of service from Career Development section to students in terms of internship search

For further researcher, we hope they can improve the website functionality not only for the internship search but also for the job opportunities search. Beside that, the website can help companies in making decision while selecting the best internship candidate (decision making functionality).

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Authors' Bibliography



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