

E-Recruitment Information System

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Abstract— System design determines how a system will accomplish what must be done. This stage involves the configuration of the software and hardware components of a system so that after installation the system will completely satisfy the design that has been set at the end of the system analysis stage. Good management includes data management of prospective employees who have participated in the recruitment process as well as monitoring demand for labor needs from partners. As a solution, the creation of an information system was appointed to facilitate the process. Based on the problems above, it is necessary to design a web-based e-recruitment information system.

Keywords— E-recruitment, system, monitoring, web.

I. PRELIMINARY

1.1. Background

Facing free competition is not something that is easy to do, as well as in a company with a human resource management business model that implements its business concept by fulfilling the workforce needs of partners. Where when the demand is increasing, with more partners and varying conditions, the recruitment process will have an impact on two things, resources and time, both of which if managed properly will be able to generate greater revenue and of course support success. a company.

E-recruitment is the process of recruiting employees using the internet or other electronic sources, by using e-recruitment services, job seekers get a better opportunity to increase their prospective job opportunities. This service provides time flexibility and more opportunities to attract passive job seekers and results in a better chance of getting the best fit for hiring needs. In the years to come, digital recruiting and recruiting are expected to continue their explosive growth. Today, e-recruitment has been adopted in many organizations around the world from large organizations to small size companies. Most organizations already use e-recruitment to post jobs, receive resumes of applicants by e-mail,

Good management includes data management of prospective employees who have participated in the recruitment process as well as monitoring demand for labor needs from partners. Research conducted by Anggita discusses e-recruitment applications that prioritize the implementation of knowledge management in the form of training and coaching in order to prepare a quality organization and be ready for management change. The existence of e-recruitment has helped speed up the administrative process and reduce costs so that the recruitment process becomes more effective.

As a solution, the creation of an information system was appointed to facilitate the process. Based on the problems above, it is necessary to design a web-based e-recruitment information system.

1.2. Research Problem Formulation

Based on the above background, we identify and formulate the problem, namely how to design a recruitment information system at PT. Sigma Pro is web based.

1.3. Research Objectives and Benefits

The aim of this research is to help speed up the administrative process and reduce costs so that the recruitment process becomes more effective.

The expected benefits of this research are expected to facilitate stakeholders in recruiting employees and efficiency in terms of costs and administrative.

1.4. Literature Review

a) Basic Concepts of Information Systems

Understanding information systems according to Budi Sutedjo Dharma Oetomo (2002:11): "Information systems are a collection of interrelated elements that form a single unit to integrate data, process and store and distribute information.

b) Information Systems Project Methodology

According to Indrajit (2000), in general, information system projects within a company or organization can be grouped into three major groups, namely:

- a. Projects that are information technology infrastructure network development, involve matters ranging from the procurement and installation of computers to the planning and development of network infrastructure.
- b. Projects that are implementation of application program packages purchased in the market and implemented in the company.
- c. Projects that are planning and developing applications that are made specifically (customized software), both by internal companies and in collaboration with external parties such as consultants and software houses.

c) Definition of Recruitment and Selection

According to Afandi (2018), the quality of human resources in an organization/company begins with determining the quality of prospective workers or applicants. It is a reality that in an organization/company there is always the possibility for vacancies to occur with various causes. For example, due to the expansion of organizational/company activities, new jobs and activities have never been done before

Recruitment is the process of attracting people or applicants who have the right interests and qualifications to fill certain positions or positions.

The recruitment process begins with an effort to find prospective employees who have the skills and attitudes

required by the organization/company and match them with the tasks that must be carried out.

If a group of applicants has been obtained through recruitment, the selection process starts from receiving the application and ends with a decision on the application. The employee selection process is one of the most important parts of the entire HR management process.

The purpose of each selection program is to identify applicants who score highly in the measured aspects in order to assess the knowledge, skills, abilities or other important characteristics required to perform a job well.

II. RESEARCH METHODOLOGY

1.1. Method of collecting data

V Wiratna Sujarweni defines the data collection method as the technique used by researchers to unearth or gather information from respondents or informants in line with the data chosen for the study (Sujarweni, 2019). Tests, interviews, observations, questionnaires, surveys, and document analysis are a few regularly used methods for gathering research data. However, the researcher employed the next data gathering methods:

1. Observation

Observation is the process of formally observing and documenting the symptoms that emerge on the research subject (Sujarweni, 2019). Researchers value observations because they enable them to assess the veracity of a problem under investigation.

2. Interview

One technique for collecting the results orally is the interview. This is done to gather comprehensive data relevant to the object under study (Sujarweni, 2019).

3. Documentation

Information about the past is contained in documents. In addition to writing and painting, documents can also take the shape of large-scale artwork. The conclusions of the study and interviews will be more reliable if they are supported by relevant documentation (Sujarweni, 2019). Data for the problem under study are gathered through documentation.

1.2. Problem analysis

a. Procedure Description

1) Labor Demand Fulfillment Process

First of all, applicants from PT. Sigma Pro fills out the manpower request form then sends the file to the Liaison Officer (LO) PT. Sigma Pro. Then LO PT. Sigma Pro will submit the request to the recruitment department. Recruitment staff will conduct a review of the request.

If a similar manpower request has been submitted, the recruitment staff will look for data on ready on stock applicants who have passed the psychological test stage whose criteria are in accordance with the request on the manpower request form. Then contact prospective workers to confirm the willingness of prospective workers to take part in the user interview process, informing the jobdesk, salary and facilities that will be received.

After obtaining prospective labor candidates who are willing to take part in the user interview process, the

recruitment staff prepares a data recap on the fulfillment of work functions, makes an interview attendance list and makes interview minutes.

Data recap of job function fulfillment, interview attendance list and interview minutes are then sent to the selection department. The selection staff then replies to the email by completing the candidate's psychological test results listed.

After that, the recruitment staff will send a recap of job function fulfillment data, interview attendance lists, interview minutes and candidate psychological test results to the LO. LO will print the four documents and attach the CV of the candidate listed to be brought at the interview.

However, if a similar manpower request has never been submitted, the recruitment staff will seek to open a process for recruiting prospective workers by making job vacancies or holding / participating in job fairs.

2) Employment Candidate Admission Process

a) Administration File Selection Process

Job applicants send job applications to the recruitment department. After the application file is received, the recruitment staff will contact qualified applicants to take part in the next selection process, namely the walk-in interview process. Meanwhile, applicants who do not meet the qualifications will not be included in the next selection process

b) Walk In Interview Process

Applicants who attend the walk in interview will fill out the attendance list for the walk in interview at the reception. Then the receptionist will provide a job application form to be filled out by applicants. The completed job application form is then returned to the receptionist. Then the receptionist invites applicants to enter the interview room.

In the interview room, applicants will meet recruitment staff who will then ask questions about the skills, interests and background of the applicant. The recruitment staff will fill out the interview form. After the walk-in interview is completed, the recruitment staff will make a psychological test attendance list and then print it out. The printed results are submitted to the selection staff before the psychological test begins.

c) Psychological Test Process

In the psychological test process, the selection staff will distribute the psychological test attendance list and provide initial socialization at the time of recruitment to applicants. Applicants who have passed the walk in interview stage, will sign the attendance list, while applicants who are references from partners, will fill in the blank attendance list. After that, the applicant returns the attendance list to the selection staff.

After making sure the attendance list has been filled out and signed, the selection staff distributes answer sheets to applicants and then gives instructions on how to administer the test. Applicants then fill in the answer sheet with the identity and answers to the questions. After that, the applicant returns the answer sheet to the selection staff.

The selection staff then corrected the participants' answer sheets and made the results of the psychological test in the form of a psychogram.

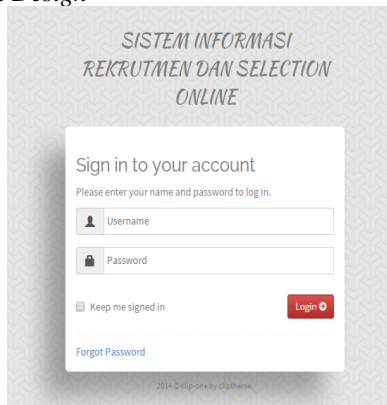
III. RESULTS AND DISCUSSION

3.1. Identification of Needs

- a. Needs : Information about applicant data
Problem : data applicants are sometimes not recorded
Suggestion : Data_applicant table creation
- b. Needs : Information about partners
Problem : Requires partner data
Suggestion : providing information and a partner entry form
- c. Needs : psychological test result data information
Problem : Psychological test results are required for interview
Suggestion : providing sources of information in the form of psychological test tables and psychological test data entry forms
- d. Needs : Detailed information of psychological test takers
Problem : Accurate recording of psychological test history is required
Suggestion : providing sources of information in the form of a detailed_psychotes table
- e. Needs : implementing staff information
Problem : job execution log is needed
Suggestion : providing information sources in the form of login tables and new user entry forms
- f. Needs : interview agenda data information
Problem : the need for recording the interview agenda
Suggestion : providing information sources in the form of an agenda_interview table and an interview agenda entry form
- g. Needs : Detailed information of interview participants
Problem : the need for accurate recording of the interview
Suggestion : providing sources of information in the form of a detailed_table_interview
- h. Needs : Fill in the Job Application Form
Problem : Required CV of prospective applicants
Suggestion : Provided FLP table and FLP entry form
- i. Needs : area of interest
Problem : Required data on the field of interest of prospective applicants
Suggestion : Information is provided in the form of table_applicant_fields
- j. Needs : applicant's ability information
Problem : Information about computer skills, language, etc. is needed
Suggestion : Information is provided in the form of a table of applicants' abilities
- k. Needs : formal education information
Problem : Required data on the applicant's educational history
Suggestion : The provision of the formal_education table
- l. Needs : non-formal education information

- m. Needs : work history information
Problem : Required data on the candidate's previous work history
Suggestion : Information is provided in the form of a job_history table
- n. Needs : organizational experience information
Problem : Candidate organization experience is required
Suggestion : Information provided in the form of an organizational_experience table
- o. Needs : portfolio information
Problem : It takes data on project portfolios that have been carried out by prospective applicants
Suggestion : Information provided in the form of a portfolio table
- p. Needs : health test agenda data information
Problem : the need for recording the results of the health test agenda
Suggestion : providing information sources in the form of agenda_mcu tables and health test agenda entry forms
- q. Needs : Detailed information of health test participants
Problem : the need for accurate recording of medical tests
Suggestion : providing information sources in the form of table_detail_mcu
- r. Needs : Fill in Employee Info
Problem : the need for recording incoming employee info
Suggestion : providing sources of information in the form of an employee_enter table and an entry form for employee info
- s. Needs : information on socialization and training agenda data
Problem : the need for a process of socialization and training
Suggestion : providing information sources in the form of agenda_st tables and entry forms for socialization and training
- t. Needs : Detailed information on socialization and training participants
Problem : the need for accurate recording of socialization and training
Suggestion : providing information sources in the form of table_detail_st
- u. Needs : Monthly Report Printing
Problem : Monthly report generation
Suggestion : the availability of a printed monthly report form
- v. Needs : Incoming Employee Report Print
Problem : Making Employee Report Login
Suggestion : the provision of a printed form of incoming employee reports

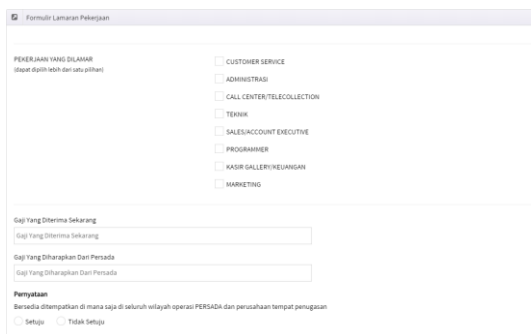
Screen Design
Login Screen Design



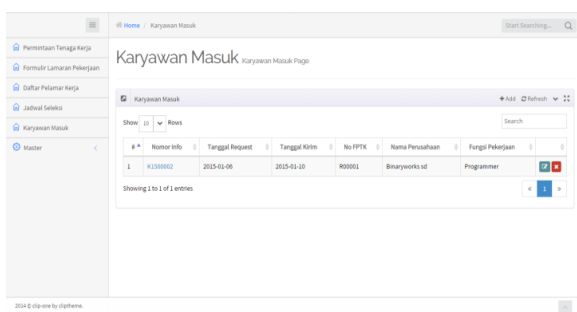
Position Screen Design



FLP Screen Design



Employee Login Screen Design



IV. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusion

The conclusions of this study are:

1. The information system that can be built covers the entire scope of recruitment and selection activities
2. Package diagram is divided into master, transaction and report
3. In the master package, it consists of proposals from 3 menus, in the transaction it is proposed as many as 7 menus and in the report as many as 2 menus are proposed
4. System analysis makes it easier to map development needs

B. Suggestion

With all the conveniences offered by the information system, it is hoped that this analysis process can be continued into the design stage in order to get maximum results.

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