Original Article

Application New Employee Recruitment and Placement

Akhmad Multazam[1], Indra Wijaya[2], Akbar Noor Syahril Sidik[3], IngeHandriani[4]

[1,2,3,4] *Faculty of Computer Science, MercuBuana University*
Jl. Raya Meruya Selatan, Kembangan, Jakarta, 11650, Indonesia

Abstract *- Recruitment is an important thing in a company or institution. Still, problems often arise, such as requiring a process that is not fast, candidates who do not fit the needs and still often use a manual and integrated system. The solution that can be given is to create a recruitment application system that can manage the recruitment and placement process centrally with systematic standards and procedures and aims to improve the quality of the process of recruiting new employees and controlling centrally. This new employee recruitment and placement system application uses the RAD (Rapid Application Development) system development method, including needs planning, system design, and implementation.*

Keywords *- Recruitment, Employee Recruitment, Placement, RAD*

I.   INTRODUCTION

Recruitment is the process of finding new prospective candidates needed by companies either to fill new positions or replace resigned employees, and this recruitment activity requires a long process from the beginning of making job advertisements, selection for determining the decision that the applicant is indeed suitable to fill the vacancy requires a lot of time and little expense. This is also explained by research conducted by (Alpius, 2013), that although the recruitment objectives sound simple, the process turns out to be very complex, takes a long time and costs are not small, and very open opportunities to make mistakes in determining the right person [1].

This report is also supported by research conducted by (Tommy, 2013), explaining the e-recruitment process in three steps. First, candidates need to be drawn using organizational reputation, product image, online technology, and other methods to attract as many potential applicants as possible to the organization's website [2]. Organizations can strengthen human resource brands and provide information about work and working conditions. The second step in this process is sorting applicants. This is related to conducting tests online, looking at the probability of suitability of applicants' competencies with the company's needs from the personal data and resumes collected. Third, incoming electronic application letters need to be managed quickly. Because of the use on the internet, organizations can respond more quickly to the desired candidate.

In addition, the long recruitment method process has also been explained (Diyan, 2018) that employee recruitment has many methods in carrying out such activities, including disseminating information on job vacancies with pamphlet distribution, cooperation with universities, advertisements, job fairs, recommendations from employees, etc. [3].

On the other hand, the problem that often arises in hiring employees is the number of people applying for jobs, the type of person who applies, and the possibility of receiving various positions offered (M. Setiadi, 2016) that employment is increasingly difficult. The recruitment process of prospective employees held by companies is increasingly difficult and diverse. Recruitment of prospective employees is to get the right person to occupy or fill the position offered by the company [4].

As the development of science forces companies to adapt and innovate to survive in a competitive business, it is supported by human resources with great skills and capabilities. As stated by (MuhamadIrsan, 2014) And, in the end, the development of science can produce discoveries in the field of electronics known as technology; thus, humans are required to have the ability to work and compete with other humans. As a result, companies require skilled workers who can bring a particular company to develop and compete with the times [5].

One other obstacle in recruiting new employees is that many companies still use manual methods where the registration process is still done by mail or package delivery services. A selection process takes one to two weeks; tests still use paper and must go office. This is also supported by research (Wulan Ayu, 2014) using manual methods and paper. This raises several problems, such as applicants' data that is easily lost and damaged. It takes a long time to carry out employee recruitment and selection processes. There are also difficulties in procuring classes and supervisors for the selection process of new employees[6].

PT BFI Finance Indonesia Tbk is one of the largest finance companies in Indonesia and consists of more than 200 branch offices. The company's implementation of recruiting new employees is still separate from the recruitment process at the head office and the branch office. In addition, the provisions of the assessment of recruitment do not have standardization, resulting in an unequal assessment between branch offices and head office. The procedure for requesting and placing new employees and registering job vacancies by prospective employees also still uses e-mail media with a large number of applicant data that come in, making the HR division team have a problem selecting candidates that are suitable for user needs in a short time.

This paper discusses matters covering the recruitment process through the online website, which is only covered at the staff level. And the process of calculating the value carried out is the integration between academic potential test scores, interview test results, and health test results. In this case, the online test questions are in the form of multiple choices with time limits and the arrangement of the placement process, which is under the authority of the HC Regional.

II. RESEARCH METHOD

This research takes data sources using field research methods. The results of the data obtained are analyzed using qualitative methods, and the results of the research will be presented using descriptive methods.

Methods of data collection carried out when collecting data in the field by doing:

- *Observation*
    Observations are carried out by looking directly at the recruitment process at the head office and branch offices, starting from the registration process to the receipt of new employees at the company.

- *Interview*
    Interviews were conducted with several company employees at the branch office, Regional HC office, and head office responsible for the recruitment and placement of new employees.

- *Study of literature*
    References used include business process documents containing standard operational procedures running at headquarters and branch offices.

The development of this application system uses the method of developing RAD (Rapid Application Development) systems or a linear sequential software development process that emphasizes the development cycle in a short time[7]. Another definition states that RAD is an object-oriented approach to developing a system that includes a method of the development of the device and the software [8]. RAD uses an iterative

method (repetitive) in developing a system where the working model (model works) is constructed at the beginning of the development stage to determine the user's requirements and then removed. The development of a normal information system requires a minimum of 180 days, but by using the RAD method, the system can be completed within 30-90 days. The RAD model has 3 stages as follows:
1. Requirement Planning
2. Design System
3. Implementation

System development with this method was chosen because it requires a relatively fast time. As explained by (Tenia, 2014), developing a system using RAD only takes around 60 days.

The stages carried out in this study are as follows:
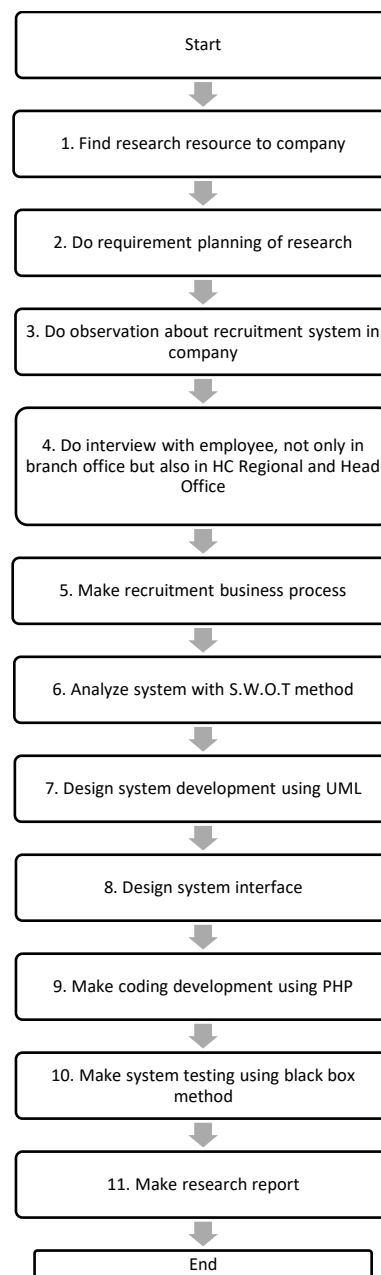
Fig. 1 Research Flow Diagram

III. RESULT & DISCUSSION

A. System Requirement Planning Phase

This research began by visiting the company to observe the recruitment and placement of new employees running in the company and conducting interviews with company employees in branch offices, Regional HC offices, and headquarters to collect data and determine the background of the problem.

To analyze systems that have been running using the SWOT method (Strengths, Weaknesses, Opportunities, Threats) to see the strengths, weaknesses, opportunities, and threats of the system that has been implemented.

- Strengths(S)
1. Able to assist the HC Regional in obtaining and collecting recruitment data from each branch office under the area
2. Supporting documentation is available in the recruitment process
- Weakness(W)
1. The head office cannot control the recruitment and placement process in the HC Regional.

2. Reporting of recruitment data from HC Regional to head office is often inappropriate.
3. Unable to control labor costs
- Opportunities(O)
1. The company's future mission is to be able to control the recruitment and placement process centrally.
2. The need for new employees at the branch office that is always increasing every year
- Threats(T)
1. Other competing companies have implemented systems that can better control the recruitment process.

B. System Design Phase

The description of the management business process running so far involves many parties from the Regional HC, Branch Users, and HCBP Managers to BUH /BUM. The system design determines the new actors, such as Applicants, Branches, Regional HC, and HC HO, described in the following scheme.
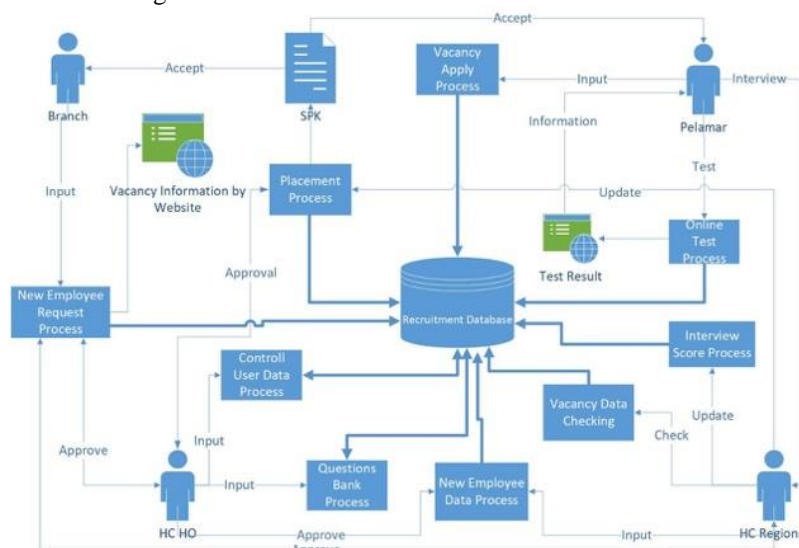

Fig. 2 System scheme

In theschematicimageTherearefour (4) actors, namely the Pelamar, HC Regional, Branch, and HC HO, with detail specifications as follows:

- *Pelamar (Applicants)*
Are prospective employees who will apply for jobs in companies with the following activities:
a. Job Vacancies Apply Process: a process that can be carried out by applicants such as looking at available job openings, applying for jobs, filling out personal data
b. Conducting online tests and seeing test results

- *HC Regional*

Is a system user who is in the Regional HC office who can log into the system, carry out the recruitment process and manage placements with the following details:
a. New Employee Request Process: a process that HC Regional can do, such as approval to the request of new employees from the Branch at the branch office.
b. Vacancy Data Checking: a process that HC Regional can carry out to check vacancy data are meet the requirement such as conducting administrative assessments,
c. Interview Score Process: a process that HC Regional could do for submitting interview scores

d. Placements Process: the process of placing employees who have passed the selection to the branch office in need

- **Branch**

Is a system user who is a user at the company's branch office who can log in to the system and carry out the recruitment process with the following details

   a.   New Employee Request: a process that can be carried out by the Branch, such as filling out an MRF form to request new employees and seeing the results of employee reports received to be able to print a work agreement (SPK).

- **HC HO**

Is a system user who is at the company's headquarters that can log in, manage test data, and manage user data with the following details

a. Questions Bank Process: a process that can be done by HC HO, such as managing question data.

b. Control User Data Process: processes that can be carried out by HC HO, such as adding, changing, and deleting user data for HC Regional and Branch.

c. New Employee Request Process: a process that can be carried out by HC HO, such as approving new employee requests from the Branch at the branch office through the HC Regional and adding available job openings

Based on the above activities, we need a data structure and class in the application that can be seen in the picture.
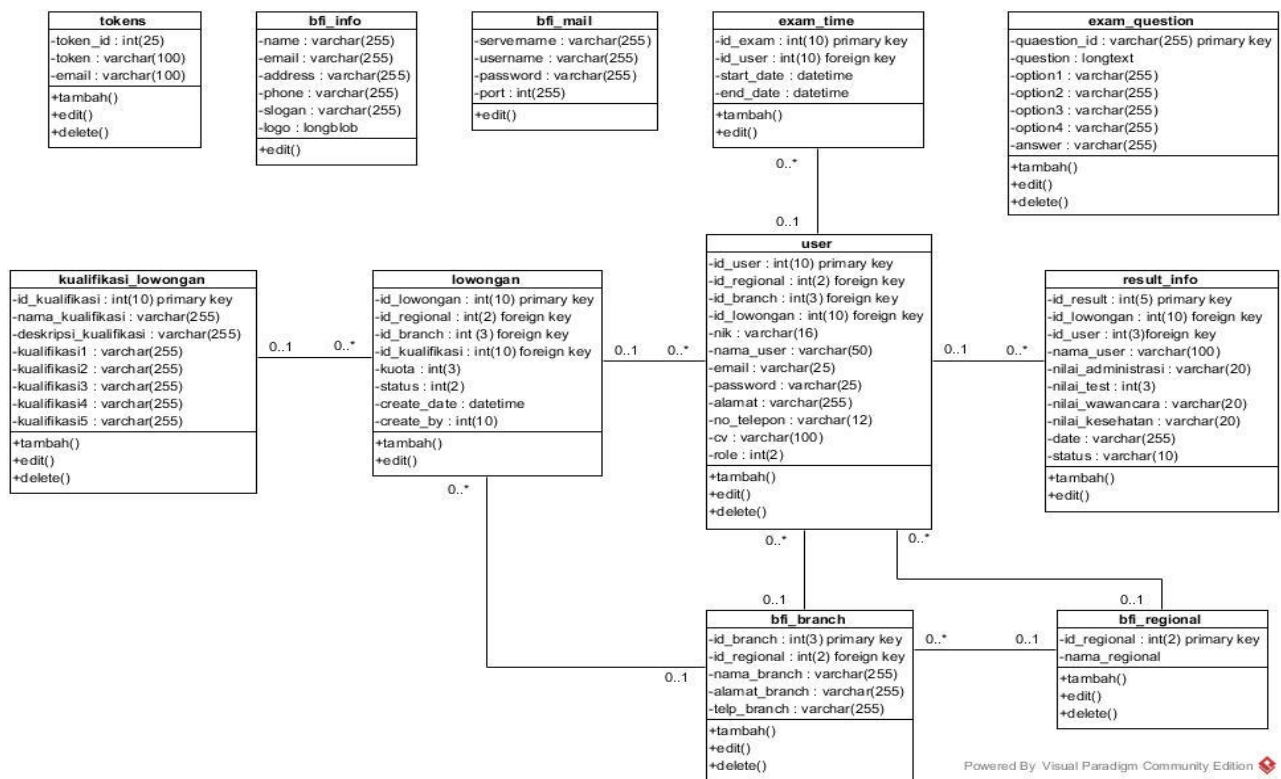

Fig. 3 Class Diagram

C. Implementation Phase

After analyzing the system and designing a system design, this application can connect data between branch offices, Regional HC offices to headquarters. The head office can control the needs and recruitment process of new employees at branch offices and improve the quality of employees received with integration selection by the Regional HC office and head office. In the implementation process, this application uses the PHP programming language with the support of the MySql database.
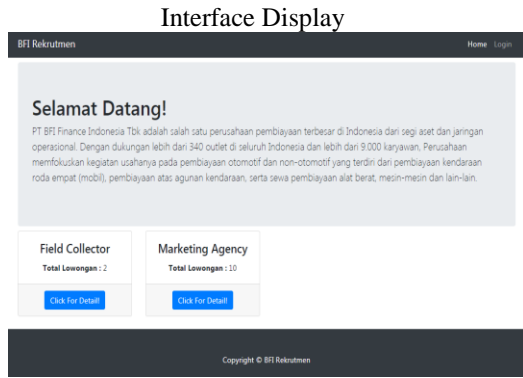
Interface Display

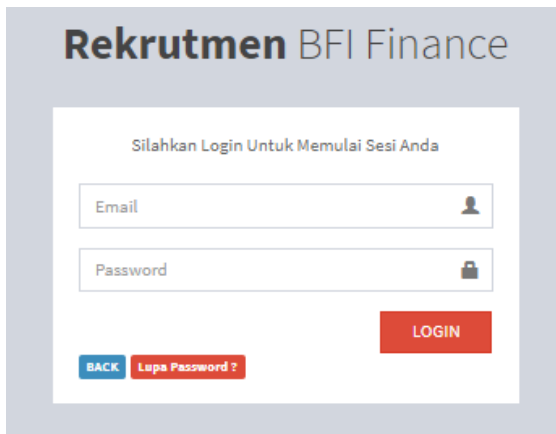**Fig. 4 Vacancy Interface**

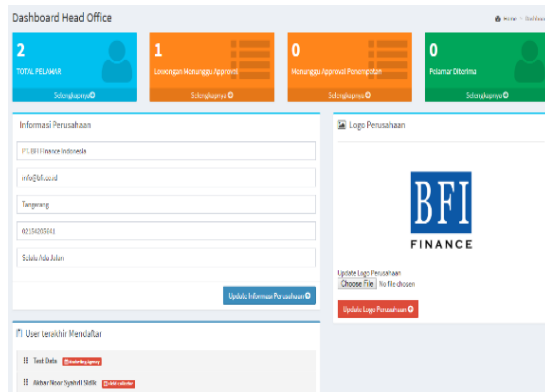

Fig. 5 Login Interface

Fig. 6 HC HO Dashboard Interface

D. Application Testing Result

Before the application is implemented to the user, this application must be tested first to avoidprogramerrorsthat make users experience difficulties. The method used in testing the application of the recruitment system and employee placement uses the black box method.

IV. CONCLUSION

After studying the problems described previously and conducting research on the process of new employees recruiting and placing at PT.BFI Finance Indonesia, with the New Employee Recruitment and Placement System Application, conclusions can be drawn as follows:

1. This web-based employee recruitment and placement application system can assist the head office in controlling the recruitment and placement of new employees in branch offices, with the approval process being carried out in stages from the Regional HC office to the head office.

2. This application system can help improve the quality of employees received with the Regional HC office's selection and assessment process based on applicants' abilities and skills.

3. This application system can help minimize errors in the placement of new employees in branch offices by controlling the placement process carried out by the HC Regional office.

The suggestions that need to be added for further application development are:

1. This application system can be integrated with HRIS applications in the company to help check Man Power Planning effectively.

2. This application system is not only used for the recruitment and placement process but can be developed to manage employee attendance and compensation data.

3. This application system can be developed in the form of a mobile application.

REFERENCE

[1] Alpius Rama Kusuma Bellionardi, Model Analisis Perekrutan Dan Seleksi Karyawan Di PT. Semarang Autocomp Manufacturing Indonesia (Sami),JurnalIlmiah Dinamika Ekonomi Dan Bisnis Vol. 1 No. 1 April 2013

[2] Tommy SeptianP urnomo, REKRUTMENT ONLINE (E-RECRUITMENT) sebagaisuatuinovasidalamperekrutanperusahaan, Jurnal JIBEKA Volume 7 No 3,pp. 54-59,Aug.2013.

[3] DiyanAgusPermana, AnalisisdanPerancanganSistemInformasiPerekrutanKaryawanBerbasis Web, JurnalAdministrasiBisnis (JAB) vol. 56 No. 1 Mar. 2018.

[4] M. Setiadi. Hartoko,

[5] RekrutmenCalonKaryawanTetap,JurnalAkutansi, EkonomidanManajemenBisnis Vol.4 No.2, Dec. 2016.

[6] MuhamadIrsan, RancanganAplikasi E-Recruitment PadaPT.Kalila Indonesia, Seminar NasionalTeknologidanKomunikasi 2014 (SENTIKA 2014) Yogyakarta, Indonesia. Mar. 2014.

[7] Wulan Ayu, PerancanganSistemInformasiRekrutmen Dan SeleksiKaryawanBerbasis Web, JurnalManajemen Indonesia Vol. 14 No.3 Dec. 2014.

[8] Wahyuningrum, Tenia and Januarita, Dwi, Perancangan web e-commerce denganmetode rapid application development (rad) untukprodukunggulandesa, in Seminar NasionalTeknologiInformasi&KomunikasiTerapan 2014 (Semantik 2014), pp.81-88, Mar. 2014.

[9] GinanjarWiroSasmito and SlametWiyono, Implementation of Rapid ApplicationDevelopment Method on Academic StaffSystem of HarapanBersama Polytechnic, International Journal of Computer Trends and Technology (IJCTT) Vol. 50 No.1 Aug. 2017.