



Design and Development of a Website Crew E-Recruitment System in Improving Recruitment Chart at PT. Equinox Bahari Utama

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Abstract

The effectiveness of recruitment and selection is a benchmark for the company's success which lies in its quality if the availability of the number of Human Resources supports and is sufficiently qualified and professional. PT. Equinox Bahari Utama is one of the companies engaged in crew management. The importance of media as a means of recruitment that takes place at PT. Equinox Bahari Utama can be used as the basis of increasing the quality of the company in order to make the company a reference for shipping companies in Indonesia. In this study, the author uses research and development methods that include designing or building a system that supports research. In addition, at the analysis stage researchers use descriptive qualitative analysis that uses observation. The e-recruitment system that was built is a system that aims to find out how to develop crew management system applications to improve the efficiency and effectiveness of the recruitment process that takes place at PT. Equinox Bahari Utama. And also in order to be able to help the staff of PT. Equinox Bahari Utama in carrying out the recruitment process required from the shipowner. With various requirements and a series of recruitment processes, the existence of this system is expected to increase the efficiency of the ongoing recruitment process.

Keywords: *Crew Recruitment; Website E-recruitment; Recruitment System*

INTRODUCTION

Recruitment is the beginning stage in finding and getting prospective employees, which is aimed at meeting the needs of the company in terms of Human Resources (HR). Marwansyah (Aryadi & Gantari, 2020: 150) argues that recruitment is a series of processes used by a particular organization with the aim of attracting job applicants who have the abilities and attitudes needed to help the organization achieve its goals. The effectiveness of recruitment and selection is a benchmark for the company's success which lies in its quality if the availability of the number of Human Resources supports and is sufficiently qualified and professional. Recruitment is considered effective if you get a lot of applicants in accordance with the qualifications needed, so that you can get prospective employees who have the highest quality of the best (Budiantoro in Kumaladewi, 2018).

PT. Equinox Bahari Utama is one of the companies engaged in crew management. Which, this company takes responsibility as the management of the crew from the recruitment process until the crew completes the contract with the ship owner. With this responsibility, of course, PT. Equinox Bahari Utama requires candidates who can meet the criteria that have become the standards of each ship owner who has established cooperation with PT. Equinox Bahari Utama.

In the design of the application with the name Crew Management System is expected to increase effectiveness and efficiency in the process of recruiting crew at PT. Equinox Bahari Utama. The application in question is useful as a container and medium to carry out the recruitment process in a way that can be accessed by office employees when there are prospective crew members who volunteer for available vacancies.

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LITERATURE REVIEW

Meaning of Recruitment

Recruitment is a business related to finding and influencing the workforce, in order to want to apply for job vacancies contained in an organization.

Meaning of Website

Website is a collection of all web pages whose function is to display various information in the form of writing, images and sounds from a domain formed in an interrelated series.

ERP (Enterprise Resource Planning)

ERP is a software intended for companies or organizations in helping organizations to manage and make effective use of resources (materials, human resources, finance, and so on) by providing integrated solutions to process the information needed.

1. Web server

A specific form of server is used in order to store a website.

2. Bootstrap

A framework and also a framework that contains design templates based on HTML, CSS and Javascript.

3. Text Editor

Text editor is applied to write HTML, CSS, PHP and Javascript scripts, to create this system, the author uses the Visual Studio Code application.

4. XAMPP

- a. X stands for a plan that can basically be implemented with windows, Linux, Mac, OS, and Solaris
- b. A means Apache which is intended as a web application that has the obligation of creating an attractive and convenient web appearance for PHP that has been compiled by the web designer.
- c. M means MySQL which is one of the database application servers, in its development it is often used as Structured Query Language (SQL), which is one of the system languages, generally used as database processing.
- d. P represents PHP as a web programming language for designing a dynamic web, usually in processing databases using MySQL.
- e. P is coined as the term Perl, which is a language of programming with the purpose of all developed purposes, originally published by Larry Wall, UNIX machine, Perl was announced around the end of 1987 under the name Perl 1.

Database

A database is a collection of tables / data that are connected and made as needed, so that the stored data can be manipulated, retrieved and searched easily. The purpose of the database is basically to provide convenience and speed during the process of retrieving and storing data.

Research Framework

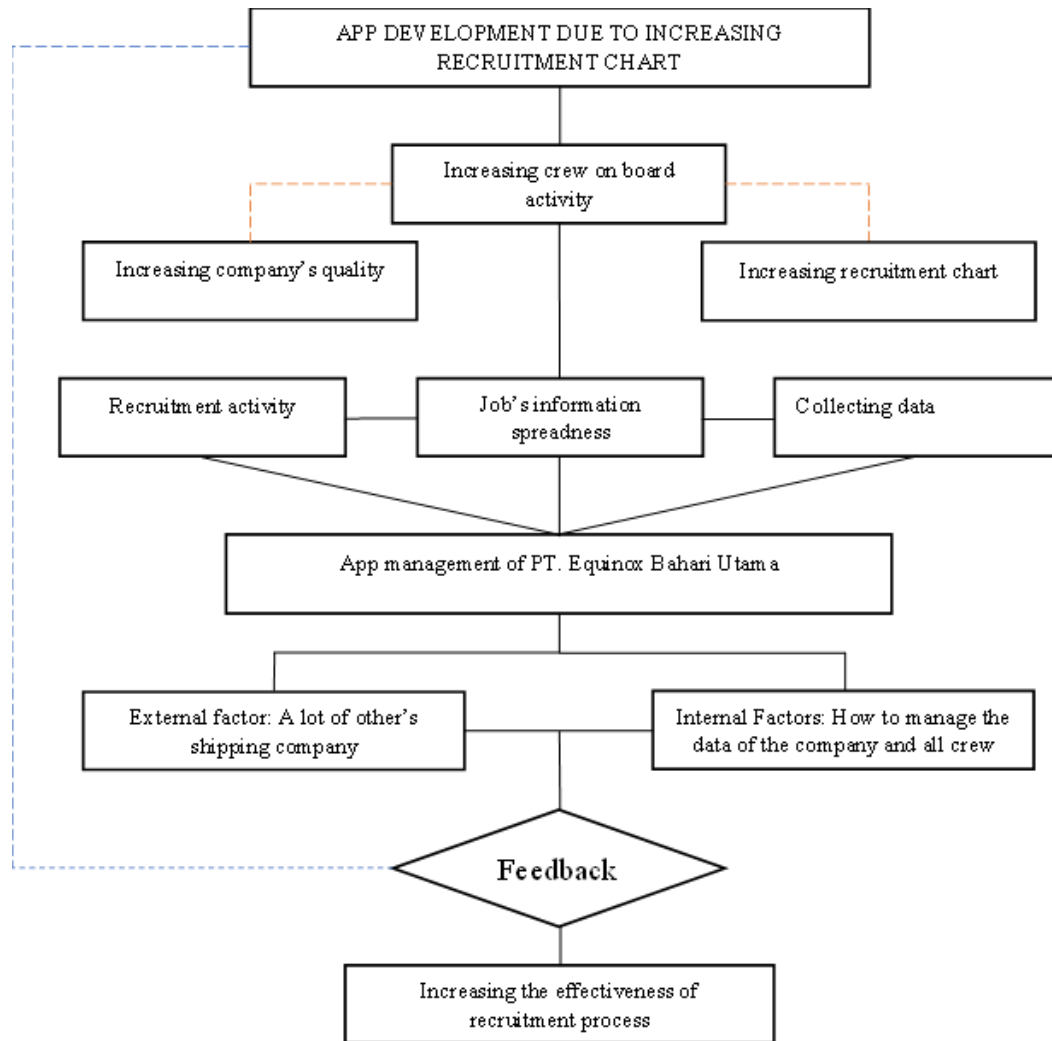


Figure 1. Research Framework

RESEARCH METHOD

According to Sugiyono (2022: 38), Robert Maribe Brach developed Instructional Design with the ADDIE approach, which is an extension of Analysis, Design, Development, Implementation, and Evaluation. In the research process on the design of the crew management system application to improve the recruitment chart at PT Equinox Bahari Utama, the author carried out observations in the process of conducting research which has become a requirement in carrying out education at the Semarang Shipping Science Polytechnic. This research was carried out by the author from July 29, 2021 to August 3, 2022 at a company engaged in crew management, namely PT Equinox Bahari Utama

Analysis Stage

The analysis stage is usually used to identify a problem first. Therefore, analysis is carried out to examine performance, information, economy, control, efficiency, and service. In this case, the author makes observations in the activities that occur in the author's daily life when doing Internship at PT. Equinox Bahari Utama. More precisely, the Analysis performed by the author is the analysis of PIECES, which stands for Performance, Information, Economy, Control, Efficiency, Service.

Performance Analysis

What is meant by performance is the ability of a system to process data and complete the tasks of the system. In performance analysis, a system is considered successful if it can complete tasks with efficiency (throughout) and the time needed to coordinate a data transfer or work (response time).

Information Analysis

Valid information is an important aspect in the development of a system because information is certainly very useful for both users and accessors of the system being built. Precise and accurate information will certainly provide information in accordance with user requests.

Economy Analysis

The use of cost is also a very important consideration in building a system. A system is said to be a good system if it can use minimal costs, but can bring benefits that are commensurate or even exceed the expected. Of course, in this case the company expects that by building an online recruitment system, it will support the online recruitment process that no longer uses paper and can reduce the company's operational costs.

Control Analysis

In the control analysis, the author analyses the comparison of data obtained by the system. All data processed as information in terms of timeliness, availability, and accuracy in processing the data in question.

Efficiency Analysis

In the efficiency analysis section, the author supervises the work system carried out every day. Of course, this includes the level of recruitment efficiency that runs on the company. The development of this system is also driven by the level of efficiency of the recruitment process that runs in the company and of course the author expects to continue to improve the level of efficiency.

Service Analysis

In service analysis, the author analyses how a system can improve the services implemented by a company. Of course, this will make it easier for both users and system accessors in the company. With the objectives made for the system, it is expected to improve existing services in the company so that of course it can also increase the quality of the Company.

Design Stage

This stage is applied to plan the information system to be prepared. The design stages used in this study include database and interface design. Database is a storage that will include all information related to the website built, while the interface is the design of the appearance of the website that will later be seen on all website pages.

Development Stage

The development of an online recruitment system on the web-based recruitment system feature is carried out in order to continue to observe various possibilities that can maximize the performance of the recruitment process of a company that collaborates with ship owners to find workers who match the criteria of ship owners.

Implementation Stage

At the implementation stage, the author uses programming languages such as PHP, HTML as the interface. Then use CSS and Javascript and MySQL as management for the database of the system built. For implementation in building or designing the system in question, the author uses visual studio code, xampp, and web browser.

Testing Stage

To ensure that the system built by the author has run in accordance with its purpose, it is necessary to carry out application testing to ensure that the system compiled has run.

FINDINGS AND DISCUSSION

As explained by the author earlier, the e-recruitment system that was built is a system that aims to help PT. Equinox Bahari Utama in carrying out the recruitment process required from the shipowner. With various requirements and a series of recruitment processes, the existence of this system is expected to increase the efficiency of the ongoing recruitment process. Therefore, in this section the author tries to improve the system in order to increase the benefits obtained as much as possible to the staff of PT. Equinox Bahari Utama.

Applicant Page

On the applicant page, applicants can find the initial page that already has a PT. Equinox Bahari Utama. Then applicants can see the position sought at the bottom according to the job category and vacancy position that is currently open. Applicants only need to choose from the available job categories or choose directly the targeted position.

Admin Page

Admin page is a page that can be used by recruiters at PT. Equinox Bahari Utama. On this page, recruiters are asked to fill in all information in the company regarding vacancies that are being opened so that they can be accessed by applicants. Of course, on the admin opening page, it is necessary to enter the email and password for the recruiter's account so that it is not easily accessed by other than office staff

The initial design of the product made by the author requires several tools and support systems as initial preparation, so that the system built can run well in accordance with its purpose. The initial preparations include:

1. Software
 - a. Visual Studio Code
 - b. Microsoft edge (Browser)
 - c. XAMPP
 - d. Bootstrap
 - e. Windows 11 Operating System

2. Hardware
 - a. Laptop ASUS
 - b. Windows 11 (64-bit)
 - c. RAM
 - d. Disc Space
 - e. Screen Resolution

The initial preparation mentioned by the author certainly greatly affects the smooth performance of the system built, therefore, of course, the author really needs a supporting device, both software and hardware, so that it can run according to the author's wishes.

1. Product's Concept

In this sub-chapter, the author tries to build the initial concept first to make it easier for the author to build the flow of the website that will be created later. Of course, the concept made by the author is not far from the concept of online recruitment websites in general which include admin pages and applicant pages. The author also certainly determines the purpose of each web page that will later appear according to the flow created.

2. Database Build

In addition to making the initial concept of the website, the author is also looking for information about the basics of website creation that you need to know. Of course, the author also learned how to create a database which will later become a storage website that is being created. All the initial preparations made by the author in the initial design of the product are also intended so that the author can more easily understand the language used by programmers, which the author makes a reference as learning from the early stages of making a website.

3. Source Code Implementation

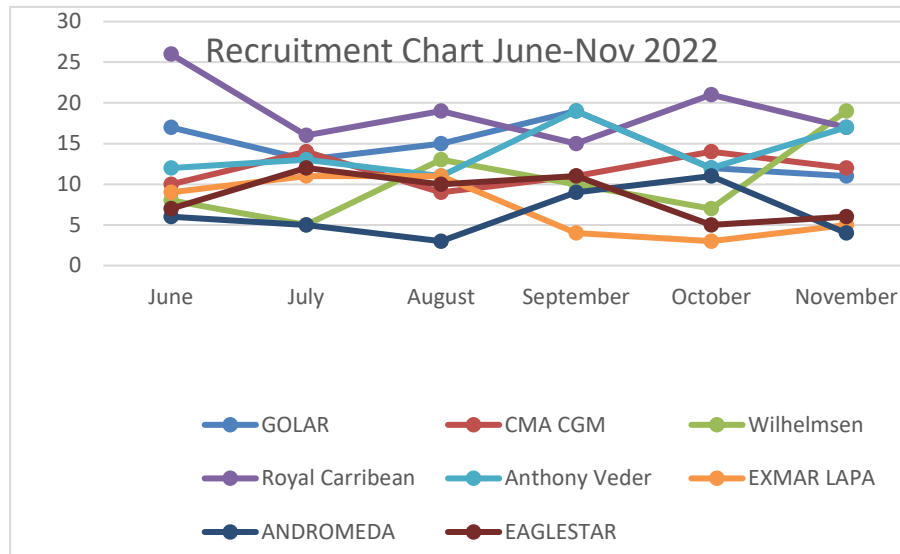
In the source code implementation stage, the author runs the source code using Visual Studio Code. All pages in the application certainly have different source code, and if there is a difference in source code with the data that should be, it does not rule out the possibility of an error in the system that is built. Therefore, the implementation of the source code must be carried out carefully so that errors are not found.

After going through various product trial processes, revisions and product feasibility tests, an e-recruitment system was formed which can be called the Crew Recruitment System (CRS). The Crew Recruitment System (CRS) system built by the author is a system that includes an online recruitment process aimed at the recruitment process at PT. Equinox Bahari Utama. With the aim of improving the efficiency of the crew recruitment process PT. Equinox Bahari Utama, it is expected that this system can also indirectly improve the recruitment chart at PT. Equinox Bahari Utama. In the product discussion section, the author will explain the various benefits of the system built for PT. Equinox Bahari Utama as well as for applicants.

1. For PT. Equinox Bahari Utama

In the daily recruitment process at PT. Equinox Bahari Utama, recruitment staff need to fill in the form manually regarding applicants' personal information, skills and competencies, and other supporting information on the excel file template that is already owned by the company. Of course, if you have to fill in this information one by one in the flow of the recruitment process, it will take a lot of time when sorting adequate candidates for all ships and shipowners at PT. Equinox Bahari Utama. With the recruitment process that takes time, it will reduce the level of efficiency of the recruitment process, and will also hinder the increase in the recruitment chart at PT. Equinox Bahari Utama.

With the increase and decrease of the recruitment chart for one month to the month after, it can be concluded that the recruitment process must be improved in order to increase the recruitment chart at PT. Equinox Bahari Utama. The construction of the e-recruitment system certainly aims to increase the efficiency of the recruitment process which will also improve the recruitment chart at PT. Equinox Bahari Utama.



Graph 1. Recruitment Chart

2. For Applicant

Getting clear and reliable information is certainly an advantage that can be accepted by applicants. When properly informed, applicants will not experience confusion in finding job vacancies and undergoing the recruitment process. Applicants also do not need to manually submit a CV directly to PT. Equinox Bahari Utama because the system is equipped with a CV submission.

CONCLUSIONS

Conclusion

Based on the results of the research and the results of the construction of the Crew E-Recruitment System website, which always refers to the problem formulation and research objectives, the author concludes that:

1. Obstacles faced by PT. Equinox Bahari Utama in increasing the recruitment chart is that the recruitment process is still carried out manually, so it still requires more time and costs from the applicants and staff of PT. Equinox Bahari Utama in running the recruitment process.
2. Efforts to develop a web-based Crew E-Recruitment System application in improving recruitment charts are to run the recruitment process more effectively, especially in the use of the web-based Crew E-Recruitment System application, which directly also supports the smooth running of the recruitment process. Therefore, the smooth recruitment process will affect the increase in recruitment charts at PT. Equinox Bahari Utama.

Suggestions

The usage suggestion that can be conveyed by the author is, of course, the system built is a system that is still in the development stage in order to achieve more positive benefits to support the smooth recruitment process at PT. Equinox Bahari Utama. Therefore, the advice of the author is:

1. Using the web-based Crew E-Recruitment System application, in the recruitment process that takes place at PT. Equinox Bahari Utama to reduce obstacles in the recruitment process.
2. Improve and continue to build a web-based Crew E-Recruitment System application so that the recruitment process can be more effective so that it affects the smooth recruitment chart at PT. Equinox Bahari Utama.

REFERENCES

- Aryadi, H. & Gantari A. D. (2020). *Analysis of the Recruitment and Selection Process of Prospective Outsourced Workers at the Head Office of PT Trikarya Cemerlang Jakarta*. *Jurnal Akrab Juara*, 5(4), 151.
- Apriyanto, D. E. & Nuraminuddin, M. (2022). *Analysis and Website Development as an Information System for Recording and Synchronizing Transaction Reports of Various Jogjabika Marketplaces*. *Universitas Amikom Jakarta*, 12(1)
- Meiyer, Saella. (2020). *The Effect of Recruitment, Selection and Placement of Employees on Frontliner Performance at Bank BNI Salatiga Branch Office*. *Business Economic Entrepreneurship*. 3(2)
- Gode, Habtannesh (2019). *Effect of Recruitment and Selection Practices on Organizational Performance in the Case of United Bank S.C*. *Journal of Addis Ababa University School Of Commerce*.
- Hasibuan, Malayu S.P, 2015. *Basic Management, Definition, and Problems, Revised Edition*, Bumi Aksara:Jakarta.
- Hasugian, P. S. (2018). *Website Design as a Media for Promotion and Information*. *Journal Of Informatic Pelita Nusantara*, 3(1)
- JH, Abdur Rauf & Prastowo, A. T. (2021) *Design a Web-Based Application Information System Student Pkl Report Repository (Studi Kasus Smk N 1 Terbanggi Besar)*. *Jurnal Teknologi dan Sistem Informasi*, 2(3), 26-31
- Kiswara dkk. (2019). *Design a Website-Based Inventory Application in Bantengan Village*. *Humanist Technology in the Era of Society 5.0*.
- Pusparani, D. (2023) *Analisis Proses Pelaksanaan Rekrutmen, Seleksi, dan Penempatan Kerja Karyawan*. (Ujian Sarjana, Universitas Brawijaya, 2018). Diakses dari : <http://repository.ub.ac.id/id/eprint/165676/1>
- Peter, Lira (2018). *The Impact of Training on Employees' Performance: The Case of Banking Sector in Lesotho*. *International Journal Of Human Resource Studies*. 8(2)