



Employee Acceptance Decision Support System with AHP Method

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Article Info

Article history:

Received Apr 13, 2020

Revised May 01, 2020

Accepted May 22, 2020

Keywords:

Decision Support System (DSS);

Employee Recruitment;

AHP method.

ABSTRACT

The process of hiring Kanisius Printing Publisher Yogyakarta is the process of getting the best prospective employees from all existing applicants. In the process, applicants must go through several stages of selection, namely administrative tests, written tests, interview tests and medical tests. However, all processes are still done manually. This resulted in the recruitment process takes a long time in determining qualified applicants and in accordance with company criteria. In this research, a software decision-making support system for recruitment of employees is created which functions to help the company make the right decisions in a relatively faster time using the Analytical Hierarchy Process (AHP) method. The AHP method is a superior method for selecting competitive activities or many alternatives based on certain criteria. The main function of this software is to help the company, in this case the HRD section, to get prospective employees who match the criteria needed by the company. This software is implemented using the PHP MySQL programming language.

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1. INTRODUCTION

In the computer era, the role of computers is very important in helping humans to do their jobs because computers can store and process large amounts of data with high accuracy. The use of computers is also used in various fields including in the field of employment [1] [2].

As a developing country, of course, Indonesia needs a potential workforce and meets the criteria for the field of work to support the development and progress of the Indonesian state [3] [4]. Therefore, as a company in Indonesia, Kanisius Printing Publisher is required to be more competitive in recruiting employees so that the company can continue to compete and meet consumer needs. The several stages in recruiting employees carried out by Kanisius Printing Publisher Yogyakarta are as follows: administrative selection, written test, interview test, and medical test. However, in making the decision to accept an employee, it is still done manually, so that if there are large numbers of applicants, the process of recruiting employees will take a long time. Seeing from the problems above, the role of computers will be very helpful in dealing with these problems. Therefore,

the authors are interested in developing a web-based decision support system to assist the Planning and Human Resource Development (HRD) department in terms of recruiting employees according to the criteria needed by the company in a relatively shorter time than the process. manually.

2. RESEARCH METHODS

2.1 Analytical Hierarchy Process

AHP or Analytical Hierarchy Process is one method in a decision support system. AHP is a flexible model that provides an opportunity for individuals or groups to build ideas and define problems by making their own assumptions and obtaining the desired solution from them [5] [6] [7].

In this AHP method, it is necessary to logically include the considerations and values of the private public. The considerations that exist are a situation that is interconnected. This is because humans in general have different feelings towards the same situation, but can change due to interactions with other people who are more experienced. In reality, when we make decisions, personal preferences and persuasion play a role more than simple and clear logic.

To define complex problems and develop sound judgment, AHP must be tried and retry, or repeated all the time [8] [9]. Decision makers can multiply the elements of a hierarchical problem and change some of the judgments of decision makers. Decision makers can also examine the sensitivity of the results to various anticipated changes..

2.2 Databases

Database or database is a collection of data that is organized and organized in a systematic way, to reduce duplication of data and provide facilities to a number of users in several applications [10] [11] [12]. While DBMS (Database Management System) is the most efficient way to manage or process databases [13] [14].

2.3 Data Modeling

Data modeling is a technique for organizing and documenting data from systems. The data modeling process is divided into three main stages, namely: the conceptual design stage, the logical design stage and the physical design stage [15].

3. RESULTS AND DISCUSSION

The system has been tested with a new employee acceptance case. In this trial case, a vacancy was opened as an Editor and there were 5 (five) applicants who registered. Prior to testing the system, manual AHP calculations were carried out. Then the calculations are carried out using a system that is also guided by the AHP method and the results are in accordance with the results of manual calculations that have been carried out.

In this system there are criteria and also requirements made by the user, namely the Kanisius Yogyakarta Publishing-Printing HRD (attached). In determining the value of the appeal, it is also guided by the conditions contained in the Data on the Qualification Requirements of Prospective Employees of Kanisius Printing Publisher (attached).

For more details on how the SPPK process with the AHP method is, the calculation process is shown below. Applicants' test scores, which are then compared with applicants' scores on logical criteria.

4. CONCLUSION

Based on the results of research, analysis and design of Decision Support Systems (SPPK) for employee acceptance, it can be concluded that:

Decision Support System (DSS) for hiring employees at Kanisius Publisher-Printing Yogyakarta using the Analytical Hierarchy Process (AHP) method can function properly to assist the recruitment process.

This DSS can function properly, it is proven that the computer calculation process is in accordance with the manual method.

From the test results on HRD, it shows that DSS can help the recruitment process, easy to use, but the user interface is less attractive.

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