CHAPTER ONE

INTRODUCTION

1.0 Background of the study

Employee appraisal and assessment or performance appraisal can be seen as the systematic description of individual job-relevant strengths and weaknesses for the purposes of making a decision about the individual. In another term, performance appraisal is a process of evaluating the behaviour of the employees in the workplace, or can also be referred to as a process of giving feedback on employees' performance.

Employee's appraisal and assessment is a subject of great interest in any organization. In every organization, employees play a vital role in determining their survival. In line with that, an employee is perceived as an important or valuable asset to an organization and is the key or prerequisite factor to make sure the operation of the organization or factory runs as planned. Employees become the heart and pulse of the organization and really important to determine the needs and expectancies of the client or customers. This is aligned with the purpose of performance appraisal in the contemporary approach which

emphasizes an employee who has full potentials that can be explored and expanded. Employees can be used positively to sustain the quality of service or product of the organization. This is associated with the roles and responsibilities of the employees to perform at the highest level of their work competencies. Performance appraisal becomes more constructive and therefore the progress of the employees are improved. With the achievement of the organization's vision and mission, employees can work together collaboratively with the organization itself based on a win-win basis. In this context, performance appraisal can turn out to be a good device to plan a better career path for the employees. The term performance appraisal is sometimes called a performance review, employee appraisal, performance evaluation, employee evaluation, employee rating, merit evaluation, or personnel rating.

In this information technology era, employee appraisal and assessment can be evaluated using software systems. This will enable information about the performance of employees to be easily evaluated and saved to a database for future retrieval.

In this research, we are proposing the application of decision tree algorithm in employee appraisal and assessment, The decision tree is commonly used for gaining information for the purpose of decision making and it is effective in

scenarios similar to the subject of this research were desired attributes for appraisal and assessments are clearly defined.

1.1 Problem Statement

Organizations still utilize the manual method of evaluating employee performance.

It is difficult and time-consuming to retrieve employee performance information.

The absence of a database system to manage employee performance records and a mechanism for traversing the employee performance information stored for automated decision making is a problem that this research work intends to solve.

1.2 Aim and Objectives of the study

The aim of the study is to develop an automated employee appraisal and assessment system. The following are the objectives of the study:

- To develop a computerized system to aid in the evaluation of employee performance.

- To design a system that will make the finding of employee performance information easy.

- To implement a database system that will maintain records of employee performance.

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1.3 Significance of the study

The study is significant to the high-performance organizations because it will provide an automated system that will aid in maintaining an accurate record of employee performance, it will provide a system that will enable information related to employee performance to be easily retrieved. The study will also serve as useful reference material to other researchers seeking similar information.

1.4 Scope of the study

This study covers the Development of employee appraisal and assessment system, the proposed system can:

- Store staff performance information in the database.

- Can process staff data to determine performance level.

- Can make a decision and recommend actions to be taken based on the conclusion reached

1.5 Limitations of the study

The proposed system has the following limitations:

- The proposed system does not enforce the auditing of performance information of the employee and hence does not totally eliminate bias in the data.

- Very limited access to employee dataset to use as training data.

- The time frame for start to completion of the research work is very limited and hence we could not go into some depth of the study.

1.6 Definition of terms

Appraisal: evaluation or a judgment or opinion of something or somebody, especially one that assesses effectiveness or usefulness

Performance Appraisal: Performance appraisal is a review and discussion of an employee's performance of assigned duties and responsibilities.

Training: The process of teaching or learning a skill or job to become more effective or productive in the execution of one or more task.

Employees: Refers to a paid worker in a private organization or public parastatal.

Performance: Pertains to working effectiveness, the way in which somebody does a job, judged by its effectiveness

Assessment Evaluation: a judgment about something based on an understanding of the situation.

Decision tree: a decision support tool that uses a tree-like-model of decisions and their possible consequences, including chance event outcomes, resource costs, and utility. It is one way to display an algorithm that only contains conditional control statements.

Decision support system: an information system that supports business or organizational decision-making activities.

Algorithm: a process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer.

Decision: a conclusion or resolution reached after consideration.

Clustering: the process of identification of similar classes of objects

Database: a structured set of data held in a computer, especially one that is accessible in various ways.

Knowledge-Base: the underlying set of facts, assumptions, and rules which a computer system has available to solve a problem.

Classification: in machine learning and statistics, classification is the problem of identifying to which of a set of categories a new observation belongs, on the basis of a training set of data containing observations whose category membership is known.