EMPLOYEE MANAGEMENT INFORMATION SYSTEM

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EMPLOYEE MANAGEMENT INFORMATION SYSTEM

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This report is submitted in partial fulfilment of the requirement for the Bachelor of Computer Science (Software Development)

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
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2011
DECLARATION

I hereby declare that this project entitled

EMPLOYEE MANAGEMENT INFORMATION SYSTEM

Is written by me and is my own effort and that no part has been plagiarized without citations.

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DEDICATION

To my beloved parents, family, lecturers and friends.
ACKNOWLEDGEMENTS

I would like to thank Pn. Kasturi A/P Kanchymalay for giving support and assistant to complete this project successfully. I also would like to convey my deepest thanks to Mr and Mrs Sam, owner of DCC Data Computer Centre for their kindness cooperation.

Very special thanks to my family and parents which their support and understanding during my project development phases. Last but not least to all Faculty of Information and Communication Technology lecturers for their advices and thanks very much to my entire Bachelor of Computer Science (Software Development) colleague.
ABSTRACT

Employee Management Information System (EMIS) is the tool to help the administrator in the small organization to do their administration tasks. The EMIS consist of several modules which are Staff Information, Attendance Information, Leave Management, Payroll Calculation, and Reporting and last but not least is the Setup or Utility module.

EMIS minimize the double entry job which currently using manual payroll system calculation. All the employee data will be captured at Staff Information Module. This module allows the adding and updating staff personal information. All the attendance will be capture in attendance module, reason of lateness and accepting the late reason also can be recorded. The employee who takes annual leave or medical leave also can be recorded. The payroll calculation is including employee provident fund deduction and Inland Revenue tax deduction. EMIS also will print the pay slip.
ABSTRAK

Sistem Maklumat Pengurusan Staf (SMPS) adalah merupakan satu aplikasi yang dapat membantu pihak pengurusan di dalam melaksanakan tugas-tugas pentadbiran, terutama organisasi yang bersaiz kecil. Sistem Maklumat Pengurusan Staf di bangunkan dengan mempunyai 6 komponen utama iaitu, Modul Maklumat Staf, Modul Kehadiran, Modul Cuti, Modul Gaji, Modul Utiliti dan Modul Laporan.

SMPS dapat meningkatkan produktiviti dan meningkatkan kualiti dalam perkhidmatan, di mana dengan menggunakan SMPS tiada lagi tugas kemasukkan data berulang, pengiraan potongan Kumpulan Wang Simpanan Perkerja, Pertubuhan Keselamatan Sosial dan juga Potongan Cukai Berjadual untuk Jabatan Hasil Dalam Negeri juga dapat dilaksanakan dengan cepat dan mudah.

Penyata Gaji Bulanan dapat dicetak dengan mudah, ini merupakan objektif utama pembangunan SMPS. Modul Kehadiran dan Modul Cuti dapat membantu pihak pengurusan memantau kehadiran kakitangan.
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<tbody>
<tr>
<td>a. PSM</td>
<td>‘Projek Sarjana Muda’</td>
</tr>
<tr>
<td>b. EMIS</td>
<td>Employee Management Information System</td>
</tr>
<tr>
<td>c. SRS</td>
<td>Software Requirement Analysis</td>
</tr>
<tr>
<td>d. PC</td>
<td>Personal Computer</td>
</tr>
<tr>
<td>e. HR</td>
<td>Human Resource</td>
</tr>
<tr>
<td>f. HRMS</td>
<td>Human Resources Management System</td>
</tr>
<tr>
<td>g. HCM</td>
<td>Human Capital Management</td>
</tr>
<tr>
<td>h. ERD</td>
<td>Entity Relationship Diagram</td>
</tr>
<tr>
<td>i. SCM</td>
<td>Software Configuration Management</td>
</tr>
</tbody>
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CHAPTER I

INTRODUCTION

1.1 Project Background

Employee Management Information System (EMIS) solely develops for small business industry as a tool for the organization to do the administration of employees. Currently there is a lot of Human Resource Management Systems on the shelf where this company can choose one, but unfortunately all this system is not as their requirement and need to be customized which will increase the cost. Therefore EMIS will help the personnel who are in charged in the Human Resource Department or Administration Department to manage the employees.

1.2 Problem Statement

DCC Computer Centre Sdn. Bhd. is established since 1990. This company main activity is selling computer hardware, software and the computers gadgets. This organization also do the after sales services and computer maintenance and services. DCC Computer Centre Sdn. Bhd. located at Taman Melaka Raya, Melaka, and currently running operation with 5 staffs.
Although DCC Computer Centre already operated over 20 years, but this organization still doing the management of employees’ manually. This organization currently is using manual time attendance, leave application and payroll processing.

Therefore the work which has been done is not efficient and effective. The double entry jobs occurs, the human errors are easily to be created. The administration personnel also have a problem in monitoring the staff annual leave balance. Furthermore, this organization does not have a standard format for payroll slip.

The administration personnel also need to maintain the payroll report such as Employee Provident Fund deduction, Inland Revenue Department deduction, letter of appointment for new staff, verification letter of being employed and others report that related to the employees.

Currently, there also no standard format for pay slip and others related employee’s documentation; the employee will face the difficulty in dealing with financial institution

1.3 Objective

- It can reduce overhead cost in maintaining the employees’ information such as personal information, time attendance, leave application and payroll processing.
- To print out standard format of pay slip.
- To reduce human error and double entry job.
- To shorten the payroll processing time.
- To monitor staff attendance and leave.
1.4 Scope

The owner of EMIS is DCC Computer Center Sdn. Bhd. EMIS requires the user to log in using user identification (User Id) and password to use the system. EMIS covers for DCC Computer Center employee management.

1.4.1 Users

There will be several types of users' level who will use the EMIS as follow:

- **Admin**
  The administrator is as Power User of EMIS, who can has unlimited access to system module. The Admin will approve the transaction processing done by the Officer Level User. Normally the top management or Director will use it.

- **Officer**
  This user level will in charge on the transaction processing. This user level will be use by the middle management staff such as Admin Assistant and Financial Assistant.

- **Staff**
  All staff will use the EMIS, Attendance Keeper Module and can preview the attendance, leave and payroll summary with limited access.

1.4.2 EMIS Components

- **Staff Information Module**
  - Personal Information
- Employment Information
- Spouse Information
- Defendant Information

- Attendance Module
  - Time Keeper
  - View Attendance Record
  - Attendance Information Update (Reason of Lateness)

- Leave Module
  - Record Leave Application
  - Annual Leave Year End Processing

- Payroll Processing Module
  - Overtime Calculation
  - Payroll Processing
  - Bonus Processing
  - Annual Increment Processing

- Utility (Setup) Module
  - Reference Table Maintenance

- Reporting Module
  - Print Pay slip
  - View Report

1.5 Project Significance

EMIS is a tool to help the organization to manage their human resources information properly. This will help the company to reduce the overhead cost in handling data and information which is a lot of filling, documentation, spaces and also can shorten the payroll processing time. EMIS will reduce the
double entry job and minimize the human error in processing the information. The employees also can have a standard formatted pay slip.

1.6 Expected Output

EMIS will be a success as a tool which can be used in small size organization. So that all these type of organization or business can manage their employees’ information accordingly. The goal of this system is to calculate monthly salary and printout the pay slip. The administration personnel will admire using the EMIS because this software is very helpful, simple and easy to use. EMIS also has a scalability and flexibility to add more human recourses management facilities which is not covered in the project scope.

1.7 Conclusion

As a conclusion, EMIS will help the small size organization in administering their employees. This system is a useful tool in conducting employee information. By using EMIS all these organization is growing up with computer technology, therefore nobody will be left behind the technology.

From this chapter, all the problem statement, objective, scope, significance and expected output of EMIS being identified in order to develop the system that can be used by the target users.
CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1. Introduction

Literature review is very important to all the system analysts in order to have the clear picture or clear understanding about the system they want to develop. The objective of this chapter is to collect relevant and required information from reliable sources to form up the most suitable solution for the implementation of EMIS.

2.2. Fact and Findings

Fact and finding is the process of collecting information with the various way such as interviews, questionnaire, others system review and research. It also can be define as information gathering or data collection process. Fact findings techniques interview, observation and documentation review are used in EMIS.

2.2.1 Domain

EMIS provide a link between employee management and information technology. EMIS cover many aspects of employee
management, with the dual benefits of reducing the workload of the Administration Department or Human Resource (HR) Department as well as increasing the efficiency of the department by standardizing administration processes. Efficient and effective management of the human resource become an increasingly imperative and complex activity to all HR professionals. The HR function consists of tracking innumerable data points on each employee, from personal histories, data, skills, capabilities, experiences to payroll records. To reduce the manual workload of these administrative activities, organizations began to electronically automate many of these processes by introducing innovative HRMS/HCM technology. HR executives rely on internal or external IT professionals to develop and maintain their Human Resource Management Systems (HRMS).

(http://www.wordiq.com/definition/Human_Resource_Management_Systems)

Before the client-server architecture evolved in the late 1980s, every single HR automation process came largely in form of mainframe computers that could handle large amounts of data transactions. In consequence of the high capital investment necessary to purchase or program proprietary software, these internally developed HRMS were limited to medium to large organisations being able to afford internal IT capabilities.

While using the internet or corporate intranet as a communication and workflow vehicle, the HRMS/HCM technology can convert these into web-based HRMS components of the ERP system and permit to reduce transaction costs, leading to greater HR and organisational efficiency. HR activities will shift away from paper based processes to using self-service functionalities that benefit employees, managers and HR professionals alike. Costly and time consuming HR administrative tasks, such as travel reimbursement, personnel data change, benefits enrolment, enrolment in training classes (employee side) and to instruct a personnel action, authorise access to a section for employees (manager's side) are being
individually handled and permit to reduce HR transaction time, leading to HR and organisational effectiveness. Consequently, HR professionals can spend fewer resources in managing administrative HR activities and can apply freed time and resources to concentrate on strategic HR issues, which lead to business innovation.

2.2.2 Existing System

These client-server HRMS are characteristically developed around four principal areas of HR functionalities:

- Payroll
  Payroll is one of a series of accounting transactions dealing with the process of paying employees for services rendered, after processing of the various requirements for withholding of money from the employee for payment of payroll taxes, insurance premiums, employee benefits, garnishments and other deductions. Payroll involves the calculation of amounts due the employee, such as hourly wages, a salary consisting of a certain amount per calendar period, or pay to salespersons on commission, as well as reimbursement for employee-paid expenses such as travel (calculated either based on actual amount paid by the employee or utilizing a per diem rate) (http://www.investorwords.com/3643/payroll.htm).

Payroll Management System will help the users or business owner to do the salary processing more efficient. The payroll system will help the organization to be more effective in administering their human resources. Currently there are many Payroll Systems on the shelf such as UBS Payroll System, but it is expensive and the business owner did not effort to purchase it and do the customization, in order to follow their requirement. As technologies grow up and sky without limit the payroli package could be dow© Universiti Teknikal Malaysia Melaka

Best Free Online
Web Based Payroll Service Solutions (http://www.suite101.com), but this still has a limitation because it is standard and do not match with their requirement.

- Time And Labour Management
  The time and labour management module applies new technology and methods (time collection devices) to cost effectively gather and evaluate employee time/work information. The most advanced modules provide broad flexibility in data collection methods, as well as labour distribution capabilities and data analysis features. This module is a key ingredient to establish organisational cost accounting capabilities.

- HR Management.
  The HR management module is a component covering all other HR aspects from application to retirement. The system records basic demographic and address data, selection, training and development, capabilities and skills management, compensation planning records and other related activities. Leading edge systems provide the ability to "read" applications and enter relevant data to applicable database fields, notify employers and provide position management and position control.

2.2.3 Technique

The techniques which is to collect all the facts and information that related in the development of EMIS are interview questions, observation and documentation review to administration process of DCC Computer Centre. The questions are answered by the Admin Assistant with the verification from the manager. All these techniques is selected because it is very useful way in data collection, the organization can prepare the