CHAPTER FOUR

4.0 SYSTEM IMPLEMENTATION AND PERFORMANCE EVALUTION

4.1 SYSTEM IMPLEMENTATION

System implementation is this case can be seen as the idea in which dictates the user experience with the new system and its differences and benefits as compare with the old or previous channel of requests. This tells us how effi cient the newly introduced system is, whether it is going to completely eliminate the old system or they will still need to be placed side by side the conviction is clear that the new system can be satisfactorily used without error; or the new system replaced completely the old system. Hence we are going to consider two kinds of system implementations here namely;

1. Pilot implementation
2. Parallel implementation

4.2 PILOT IMPLEMENTATION

This type of implementation eliminates the old system and it’s used as a sample or test in order to be sure the system is meeting its requirement and can serve the purpose in which it is been created for, and if the new system fails to address the needs of the campus entirely then it can be said to be eliminated or the system should be redesign in order meet the information need of the people on the campus. If it fails then we consider using the parallel implementation.

4.3 PARALELL IMPLEMENTATION

This kind of system implementation doesn’t eliminates the old system completely but both new and old system are used side by side should in case the newly developed fails to address the problems encounter during the use of the old system, and in a case where the new system is expensive to implement then part of the system may be run manually in order to cut cost accumulated by the new system. Therefore both the new and the old system are used simultaneously.

4.4 PERFORMANCE EVALUATION

The performance evaluation of the new system will be consider under the following headings’

1. Operational feasibility
2. Technical feasibility
3. Economic feasibility

4.4.1 OPERATIONAL FEASIBILITY

This investigates factors such as the likely reaction of employees and union representatives to job and other proposed organisational changes. The main aim is to assess whether the solution will operate and be used after installation. For example, if users are happy with the current system and see no reason to change then there may be a high degree of resistance to the new proposal. Relevant factors here concern whether the solution has general management support and whether or not the users have been involved in the development of the proposal.

4.4.2 TECHNICAL FEASUBILITY

This is concerned with whether the solution can be implemented using existing technology. If it can then existing technology may require upgrading or adding to. If it can be done then the solution may require the integration of equipment or software that has not been combined before. Non-functional requirements such as batch or on-line processing, maximum response time for user-computer interaction, estimated frequency of transactions, maximum record and file sizes, networking loads and typical number of users are considered here. In addition, requirements of system expansion, security, data archiving and reliability are considered.

4.4.3 ECONOMIC FEASIBLITY

The aim here is to assess the costs required for alternative systems and set them against the expected benefits. The types of alternatives that are frequently considered are the manual/computer boundaries as some tasks may benefit more than others from computerization and non-functional characteristics such as the time delay between the real world and the different parts of the system: should we be looking at batch, on-line or real- time or a combination? The system costs should also be estimated in terms of basic resources of money, people and time. For example, the following must be costed:

1. Systems development, for example in-house or management consultancy;

2. User time for requirements acquisition, testing and training;

3. Hardware & software costs.

Set against the costs should be a quantifiable assessment of the expected benefits, for example reduced labour costs, improved customer service or predicted increase in orders. Economic feasibility is a bit of a *'black art'*, it's difficult to predict with any degree of certainty whether a system will in fact benefit an organisation. The most frequently missed cost is the cost of maintaining the system once it is installed.

4.5 SYSTEM REQUIREMENT

4.5.1 SOFTWARE REQUIREMENT

The following software is needed for adequate implementation of the design.

1. Window xp/Window 7/Window 8

2. XAMMP

3. Adobe Dreamweaver cs6

4. Internet Explorer, Mozilla Firefox, Google chrome

4.5.2 HARDWARE REQUIREMENT

The following hardware is required for the efficient work of the system:

1. At least 100 gigabyte of hard disk

2. At least 512MB of RAM

3. At least 1.0GHZ of speed processor

4. Mobile Phone, Tablets and computer system

4.6 CHOICE OF PROGRAM LANGUAGE

To ensure a standardized object oriented program in its entire ramification, I used the following programming languages and structured query language.

1. PHP (Hypertext Pre-processor)
2. MySQL
3. JQuery
4. JavaScript

4.7 DOCUMENTATION

4.7.1 SYSTEM DOCUMENTATION

The software was designed to be user friendly. It can be operated by anyone irrespective of their education level provided that the instruction is followed. This also the familiarity of the user with the use of the new system, the documentation provides the users with the details of every pages and links on the campus help desk and how they are related with one another, and the user experience so far considered during the design of the online campus helpdesk. The below screenshots introduced the users to the pages on the web application and the user Interface the description of each screenshot is displayed under each of the images displayed.