

Development process

[Technology](#)



In the likely event of problems in this system development in UEL, the users do not have an option of reversing the process in order to find a solution to the problem. Most times than not, the problems that arise in a conventional approach system development process is often as a result of little or no participation of users in the system development process of this approach.

Therefore, this draws us to the attention of one of the principles of human-centred approach to systems development; it states that " humans (end users) should be seen as the most important facets of an information system, and they should be designed in helping to provide those qualities of correctness, robustness, and extendibility so sought after by software engineers" (Pain D et al 1993: 25). Individual methodologies have different stages in development process of a system. These stages will normally be in sequential pattern as follows: - feasibility study; system investigation; testing of the system; and then implementation of the system.

In the likely event of problems arising in the system, comes the maintenance and review stages. The feasibility study includes an initial study of an intended system to check for the most appropriate methodology to apply in the development process. The system investigation involves a detailed analysis of a project, if it is to go ahead, than comes a detailed system design. This is followed by testing of the system, and finally, implementing and handing over the system that has been developed to users (Rolland F 1998: 9-12).

There are different types of conventional approaches to system development, and this depends on the methodology applied by system

designers. In general terms methodology can be seen as an integrated set of procedures, methods and techniques for systems development (Flynn 1998: 412). But in terms of systems development, it is a harmonious collection of methods for the analysis and design of data processing system (Parkin A, 1991: 4). The SSADM is a method that attempts to use different stages to produce a meaningful solution to a systems design.

It is a top-down structured method, meant for implementing huge projects such as the proposed system development in the case study. Hence it can be used to check the appropriateness of a conventional approach to system development. According to Pain D et al (1993: 17), the formalised methods of systems development have attributes in common, meaning they adopt virtually the same principles, that " assumes a rational scientific paradigm" has " emerged from a very male dominated culture and work experience", and " technically based"-(mathematical) (Pain D.

et al 1993: 17). Structured Systems Analysis and Design (SSADM) is a methodology used in the analysis and design stages of systems development. SSADM is the approach in system development for all government software development projects. It has been adopted by private sectors firms and is currently the development standard in a significant number of public and private firms both in UK and world-wide (Middleton 1999).

SSADM adopts the waterfall models of systems development, where each phase has to be completed and signed off before subsequent phases can begin. It is also difficult to make modification in the previous instead you

have to go back to the step before (Avgerou and Cornford 1998: 145).

Logical Data Modelling, Data Flow Diagrams and Entity Modelling are involved in SSADM techniques of communication (Middleton, 1999) as far as developing a database system is concerned.

Organisations that used SSADM are living evidence that most of the assumptions in the methodology are untrue (Middleton, 1999: 478).

Middleton (1999) confirmed in a case study that all projects that used the conventional approach were failures, because the systems could not be delivered to users on time and did not meet the users' needs either. Looking back to the case study again, it provide information on what system is to be used for, in terms of what it can do, how it is planned to be used, whom the users are also the organisation.

Since the conventional approach is widely accepted by large government organisations and ideal for huge projects, it will likely be the most appropriate in the proposed information system for UEL. An issue that may be considered is the fact that the paradigm of conventional approach does not take into account external factors. Webster (1996: 149) stresses that conventional system development is conducted in the abstract, virtually disconnected from the real world.

Structured methodologies do not show that communication with the user groups is an important factor for the success of an information development system in UEL. Conventional approaches have got their positive side, for example a conventional approach will be a better alternative to the old file system of database system in many organisations. In relation to the case

study in University of East London, supposed there were no existing computerised system in place, and all that was needed by the information system was just simple functions, e. g.

students' first, last names, address, telephone and their date of birth, than probably the conventional approach would be ideal to be used. It is said that the conventional approach is ideal for developing huge information systems. Conventional approach also have negatives said, it is expensive and time consuming approach which can create problem for some organisation that does not have good financial history. The conventional approach isolates the user. It does not consider the effects of technology on users; neither considers the social and technical effects of technology on the users.

McLaughlin (1999: 6) stresses that, technology is not outside of society, but a carrier and mediator of social relation, meaning, and interests, this refer to social construction of technology (SCOT). The main focus of (SCOT) is to understand the links between social and technical process and the activity of individuals to wider social process Based on the case study, the conventional approach would not be an ideal approach to be implemented for UEL. An approach that will consider the female workers and address political issues of power relations in an organisation will be more appropriate for this proposed (UEL) information system.

Adams et al, (1994: 55-56) states that " non feminist approaches do not properly address issues of power and inequality within the work place, or how to help the least powerful system users to address power and inequality issues". Conventional approaches are geared to suit those that are

considered professionals, those that make decisions and are regarded as important, and can be given the power to decide what will be the requirements of hundreds, if not thousands users within an organisation. In other words safeguarding those considered as experts at the expense of users.