

You may pick one to  
use

[Technology](#), [Information Technology](#)



Developing an information system Introduction A system is made up of components that interact in order to achieve a desired objective. These components should work collectively and in a controlled way to achieve the purpose of the system. The development process of a system should therefore be well planned, organized and procedural. Most organizations will undertake the development of a new system as a project that will involve a number of phases.

The first development phase of a system is the inception phase. In this stage the organization seeks to determine the scope of the project. The extent to which the project goes into will largely depend on a number of factors such as finances and technical feasibility. The financial position of the organization will dictate whether it is capable of handling the implementation of the given project or if not. It may also find sponsors to grant finances towards the project. Technical feasibility is defined by the organization's ability to hire proper technology and experienced human labor for the development process.

The analysis phase of the project helps establish the reasons as to why a new system is needed. It involves specifying what kind of system is to be built. This can be done by identifying the problems facing the organization and then coming up with a system to solve them. (Stuart, 1994). An example is a school that has observed increased demand for its library services from its students. The school may decide to create an online system which will ease the congestion at the library and consequently reduce the librarian's workload. It may decide to put up an online virtual library where students can read soft copy library materials, reserve library books to borrow

later and also extend the loan period of a book.

The design phase helps determine how the system is to be built and what technology will be used. For an online system, server technology is employed; this will enable users' access through a network. A database will also come in handy to save user records and the materials they can access online. For a virtual online library, the database may store the library users' login and usage information. In addition softcopy materials such as pdf books and magazines can be downloaded from it.

System modeling is also done during design. A system model helps the designer visualize the system in a simplified manner. It acts as a template of the system and helps to bring out the specifications of the system. The model will be used to ensure all the sub-systems are interconnected in a logical manner.

The system is now designed and ready for construction. The construction phase relies majorly on the analysis and design phase in order to be successful. The required hardware is purchased for use. The hardware must be able to meet the requirements of the system in matter of speed of access, storage size, and portability. Software to be used alongside the hardware can be acquired through off-shelf methods or custom made to suit the specific requirements of the organization.

The new system has to be tested before it can be declared fit for use.

Testing is done to remove bugs and ensure the system gives the expected results. It can be done to each system unit to ensure it works properly and integrates properly with the other units or the whole system to determine whether the system meets given requirements in terms of performance,

security and usability. Testing can be carried out using test data or real data.

The users are also trained on how to operate the new system. The performance of the system improves as the users become aware of how it is to be used.

#### Conclusion

The development of a new system will be tedious if the proper procedures are not followed. This is because a system involves multiple components that interact at different levels in order to function properly.

#### Reference

Yourdon, E. 1989. Modern Structured Systems Analysis. Englewood Cliffs, NJ: Prentice Hall.

Stuart Umpleby, 1994. The cybernetics of conceptual systems. Vienna: Advanced Studies Institute.