

System Development Life Cycle

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The system development life cycle is a way an organization develops its information system to aid in its business plan. SDLC in healthcare includes an assessment of the organizational needs of the entire healthcare organization, meaning it will include physicians and ancillary professional assessment. The six phases of the SDLC include the feasibility, analysis, design, implementation, testing and maintenance.

Feasibility

This refers to the study conducted to determine whether the project should be implemented. To do this, the legal, economic, operational and schedule feasibility strategy is used. This helps in building a clear picture regarding the feasibility of the project. Ramifications of not using nurses during this stage include developing a new Health Information Technology (HIT). This is because nurses spend most of their time beside the patient beds, making them the most effective in determining what will actually be effective. In cases where nurses are not included at this stage, the organization will move forward with a system that may not improve the healthcare system (Sabale & Dani, 2012).

Analysis

In this stage, the new system is looked into while taking into consideration the requirements and the workflows. Nurses are given the opportunity to do this part as they have experience in the workflow during patient care. The ramifications of not using nurses during this phase will mean that the organization will not have the actual workflow as they will not be able to have access to information during practice. The only place where workflow can be seen is when you are at the bedside and not on the floor with the patient (McGonigle & Mastrian, 2015). Having a nurse present will give the information of their direct input into the system, and this will help guide the effectiveness of the new system. It is crucial, therefore, to have all the parties in the healthcare organization contribute to this phase.

Design

This phase has a number of processes. This includes the high-design phase, the low-level phase, and the interface design. The high design phase determines which programs are needed and how they will transmit information to each other. The low-level phase will then figure out how each of these programs will work. The interface design visualizes the program, and finally, the data design is used to determine the kind of data required to develop the program. This phase requires the nurse's

contribution as they are the ones going to use it anyway (Kelley, Brandon & Docherty, 2011). Therefore, they are the ones who should set up a user-friendly system. Ramifications of not using nurses at this stage will lead to the omission of very important information that could lead to system failure.

Implementation

At this point, the design is ready, and the programming language to be used is chosen depending on the requirements of the program. This phase also requires that nurses be involved as they are responsible for everything in the system and, therefore, should be given the opportunity to implement it. Ramifications for not involving nurses at this stage will lead to the development of a HIT program that is not helpful to nurses and also a system that nurses are not familiar with (El Mahalli, 2015). Nurses have to be satisfied with the implementation process for the program to work as expected and help in improving the quality of healthcare offered to clients.

Testing

This is there to ensure that the program runs well and meets the organization's expectations. This includes the individual programming module, beta testing, and integration. The beta testing involves making sure that the system does what it is meant to do correctly. It is important, therefore, to involve nurses in this phase as they will be using the system and thus know exactly what they expect. Ramifications to not involve nurses will lead to the system passing testing even when it does not meet the desired standards. Nurses can help in pinpointing what needs to be changed to help the system run well.

Maintenance

This is the final phase, and it includes modifications to the system that could help improve it. Ramifications to not including the nurses in this stage could lead to nurses not being updated, thus not being able to work effectively with the system. Involving nurses in this stage will ensure that nurses are equipped with the latest changes and thus able to avoid mistakes in their challenging day-to-day work.

References

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