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WIDENING OUR HORIZONS

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Abstracts

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Systems development life cycle

Systems analysis is conducted for the purpose of studying a system or its parts in order to identify its objectives. It is a problem-solving technique that improves the system and ensures that all the components of the system work efficiently to accomplish their purpose. So, systems analysis can be defined as a process of collecting and interpreting facts, identifying the problems, and decomposition of a system into its components. This analysis specifies what the system should do. A good instrument for solving a problem could be the systems development life cycle (SDLC) which is focus on this paper.

SDLC is a conceptual model that is designed to help in solving problems. In this process, the aim is to plan, create and ultimately test the proposed information system to assess its usability.

To develop this lifecycle, several different people have to get involved to give their input. This would include software engineers, system engineers, and a project manager, along with an established development team. Key steps of SDLC are given below.

Although the cycle can be molded to be used in different ways depending on the needs of the business. The key steps involved in the SDLC are as following:

1. Investigation and Analysis: here, the problem we have discussed is identified and analyzed to know how far it goes and what it needs to be fixed.
2. Requirements Identification: here, the purpose is to identify the short fallings of the current systems or lack of systems to know what is actually required.
3. System Design: now, people get to work on designing the proposed system. All the work needed in terms of construction, communication, operating systems, security, hardware, software, etc., is mapped out.
4. Development: the system is finally developed and then handed over to end users.
5. System Testing: the end users, as well as the creators, test the system repeatedly to identify potential bugs, glitches, and crashes.
6. Evaluation: once the system clears the tests, it is evaluated to know whether or not it should be fully integrated.
7. Maintenance: the system is regularly checked and updated as it is used.

The first two steps are extremely critical because they lay the foundation for what is to be built and used. As every organization has selected resources that can be exhausted at one point in time, it is only possible to fix the biggest problems that will benefit the most overall.

Moreover, knowing exactly what the plan will be like to achieve this is also critical. Being cautious in the first two steps is going to reduce the amount of waste both in terms of resources and time.

Extensive feasibility reports are also made for every system or change that is proposed. After all, it is always better to be safe than sorry, especially when it comes to business. This cycle can be widely used by business systems analysts, who must thoroughly understand the industry practices as well as market dynamics that the organization exists on, so that they have a grip on what they are working on. One of their main tasks is to identify all primary and secondary stakeholders, to understand the internal and external environment of the organization, and to realize the capabilities and talents of the people working there.

Business systems analyst can be hired to recommend changes for a specific project, or they may want the specialist expertise for a much larger scale that spans multiple departments. This is why the worker of such area also need to work on strong communication skills because, in many instances, they will have to coordinate between several different people and departments.

The systems analyst's work would be to understand their vision and identify all the hindrances and hurdles that exist which stop them from achieving their goals.

To conclude, SDLC is appropriate and important for various businesses and relevant fields of work. There is no shortage of opportunities to fix existing or emerging businesses by implementing the right changes. The described development life cycle makes it possible to save resources, time, and effort, making it an especially important need for every organization.

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