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ILS System Development Methodology - Incremental SDLC Model

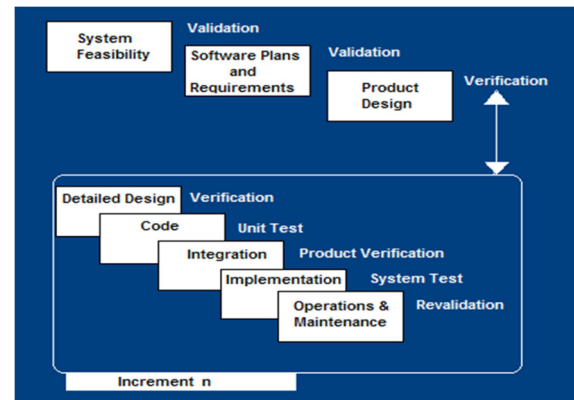
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Since ILS has developed product we use the effective Incremental SDLC Model for enhancement, customization or customer specific requirement development. The model works as follows: Measuring the actual impact of learning in performance and monetary terms, however, is well within reach. There are two ways to positively impact ROI:

1. Constructing a partial implementation of a system.
2. Slowly adding increased functionality.
3. The incremental model prioritizes requirements of the system and then implements them in groups.
4. Each subsequent release of the system adds function to the previous release, until all designed functionality has been implemented.



ILS System Development Methodology - Incremental SDLC Model Strengths:

Some of inherent strengths ILS's Incremental SDLC Model offers are as follows:

- Development of high-risk or major functions first
- Delivering an operational product on each release
- Provision for customer response to each build
- Uses "divide and conquer" breakdown of tasks
- Lowering initial delivery cost
- Faster initial product delivery
- Providing customers the important functionality early
- Reduced risk of changing requirements

ILS System Testing Methodology:

System testing methodology followed by ILS has four levels which take place at unit, system integration, system, and user acceptance levels. They four key levels fall in between product development and product release stages. These testing levels are as follows:

Unit Testing (UT) is done at the lowest level on smallest testable piece (s) of software.

System Integration Testing (SIT) is performed when two or more tested units are combined into a larger structure.

System Testing (ST) tends to affirm the end-to-end quality of the entire system. System test is based on the functional/requirement specification of the system. Non-functional quality attributes, such as reliability, security, and maintainability, are checked at this stage.

User Acceptance Testing is done when the completed system is handed over from the developers to the customers or users. This testing step ensures the customer confidence that the system is working than to find errors.

All these four testing levels fall in between static analysis and dynamic analysis.

Static analysis covers the following:

- Code inspection
- Program analysis
- Symbolic analysis
- Model checking

Dynamic analysis covers the following:

- Synthesis of inputs
- Use of structurally dictated testing procedures
- The automation of testing environment generation

ILS Quality Management Methodology:

Project quality management methodology followed by ILS has three interrelated aspects i.e. Quality Planning, Quality Assurance, and Quality Control.

Quality Planning: It includes the following plans for managing quality-

- Quality Management Plan
- Organization and Management Plan
- Communications and Project Reporting Plan
- Issue and Action Management Plan
- Risk Management Plan
- Change Management Plan
- Procurement Management Plan

Quality Assurance: It includes the following plans for managing quality-

- Project reviews and approval of deliverables to meet project schedule and Quality Management Plan
- Schedule Control – tracking progress
- Risk control and mitigation actively managed
- Issue and action management with issue resolution plans and action plan tracking
- Change control and tracking of all changes and change approvals

It is also worth noting that each organization has noted down wider business benefits including better management of resources, faster implementation of projects and better information to help meet business critical regulatory requirements. It is therefore worth considering some of these in more detail.

Quality Control:

It includes the following plans for managing quality-

- Independent evaluation of project's
- Performance to provide confidence that the project will achieve its expected outcomes with quality results
- Assess the project to determine the problem and recommend steps to handle the problem to correct it
- Get back on track to a successful completion

Overall project performance is evaluated on a regular basis to provide confidence that the project satisfies the relevant quality standards.