Foundation of Business Analysis

Course Scope

- Module #1 – Role of a Business Analyst
- **Module #2 – Supporting the Project Portfolio**
- Module #3 – Vision and Scope
- Module #4 – Requirements and Business rules
- Module #5 – Planning and Eliciting Requirements
- Module #6 – Analyzing and Documenting Requirements
- Module #7 – Modeling Requirements
- Module #8 – Assessing and Validating Requirements

Module #1

- In Module #1, we had covered
  - Phases in overall business analysis process
  - Role of the Business Analyst
  - Business Analyst vs. Project Manager
  - Business Analyst vs. System Analyst vs. Test Manager
  - Typical career path for a Business Analyst
  - Other roles in relation with Business Analyst

Module #2

Supporting the Project Portfolio

Objectives

- This module will help us understand
  - The purpose of strategic enterprise analysis
  - How does analysis contributes towards the IT strategy
  - Solution development life cycle [SDLC]
  - SDLC's relation with IT strategy
  - SDLC's relation with project life cycle

Project Portfolio

- Portfolio is a collection of projects, programs, and other initiatives grouped together for management and control purpose.
- As a whole is aimed to satisfy one or more organizational objectives.

Types of projects with in a project portfolio

- Discretionary
  - Not Mandatory
  - Motivation here is return on investment[ROI]
- Nondiscretionary
  - Mandatory
  - Motivation is compliance with law, litigation, audits or safety

Strategic Enterprise Analysis

- Study, modeling, and maintenance of relationship b/w strategic business plan and its important business support function.

When is Strategic Enterprise Analysis conducted?

- Undergoing business changes
  - Mergers
  - Acquisition
  - Divestiture
- Review of current business performances
- Investigating new business strategies/opportunities
- Examining current portfolio projects which are currently in process
  - IT
  - Non-IT

Role of BA in Strategic Enterprise Analysis

- Typically a senior member of organization
- Servers along with functional managers, division heads, and other organizational leaders
- Ensures that new solutions are traced back to the business strategy

Output of Strategic Enterprise Analysis 1/2

- A description of problem or opportunity
- Assessment of impacts of the proposal solution on –
  - Business area
  - On organization as a whole
- A description of solution options including each option's-
  - Feasibility
  - Costs
  - Benefits

Output of Strategic Enterprise Analysis 2/2

- Assessment of organization's ability to provide the requisite resources and expertise to deliver a viable business solution
- Selection and prioritization of project/projects. Determined by-
  - Return on Investment [ROI]
  - Risk
  - Other factors – Compliance with Law, Litigation, and Safety/Security

Benefits of Strategic Enterprise Analysis

- Prevention of duplicate and redundant projects
- Provides a blueprint for organization's future operation
- Helps in determining how to meet business strategy by prioritizing projects
- Maximizes return on investment[ROI]
- Helps understand if any individual project have a broader benefit to the organization

IT Strategy

IT Strategy

- Sets the direction for how IT supports an organization's business strategy.
- Ensures an aliment b/w business operations and IT systems
- Liaison b/w business and technical communities when implementing IT embedded solutions

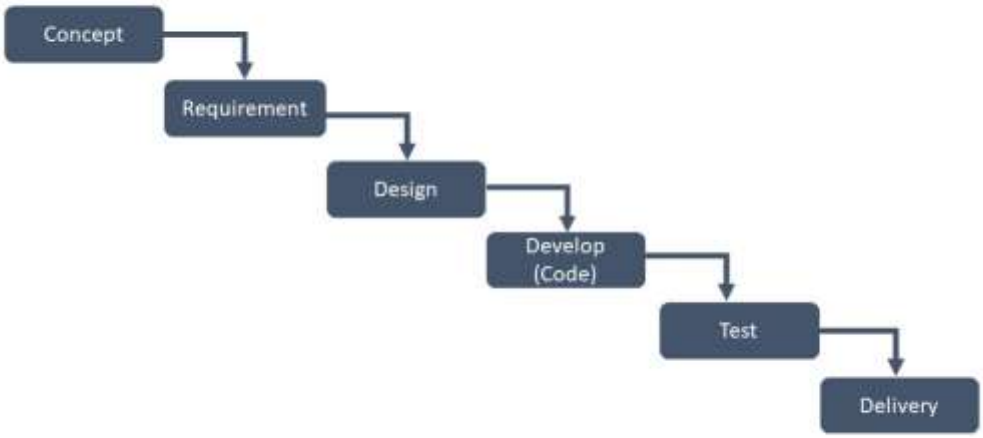
Solution Development Life Cycle [SDLC]

SDLC

- Model for developing or acquiring a solution
- Includes both developed or purchased solutions
- Operates with the project life cycle
- Specifies how IT community obtains IT solutions
- Specifies how IT community manages IT solution to support the organization's strategic direction

Waterfall SDLC

- Basic phased model of a development cycle
- It gets its name from the way each phase cascades into the next
- It provides a feedback loops which are activate when there is a need to revisit an earlier stage
- We can return to any previous stage as required
- Best for "mission critical" projects



Waterfall SDLC

- Requirements should be well defined
- It relies heavily on previous phase to more ahead
- Difficult to follow if we don't have defined requirements
- Operates best when we have no major changes to definition and design during development
- Best suite for medium-to large projects

Waterfall SDLC

- It relies heavily on testing for quality assurance
- Defects identified in testing are often issues from the requirement phase

Waterfall SDLC - Advantages

- Simple to use and understand
- Management simplicity thanks to its rigidity: every phase has a defined result and process review
- Stages go one by one
- Easy to determine the key points in the development cycle

Waterfall SDLC - Disadvantages

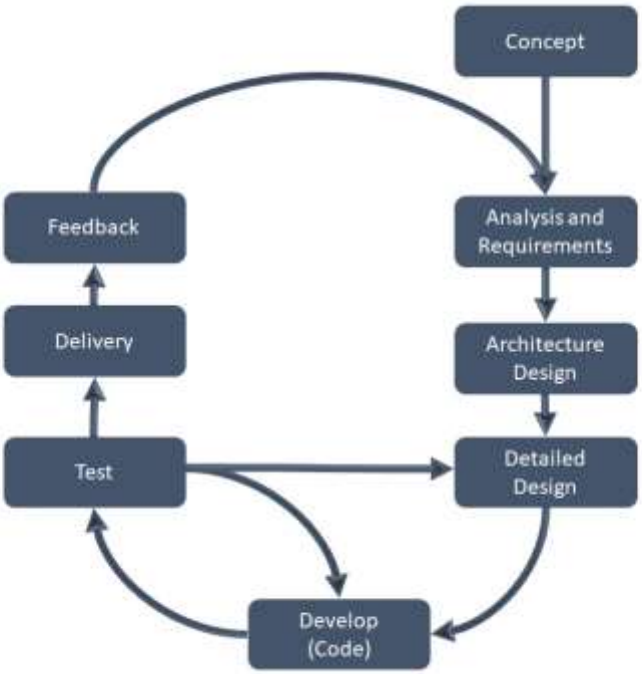
- The software is ready only after the last stage is over
- High risks and uncertainty
- Not the best choice for complex and object-oriented projects
- The progress of the stage is hard to measure while it is still in the development
- Integration is done at the very end, which does not give the option of identifying the problem in advance

Types of projects best suited for Waterfall

- Best for "mission critical" projects like-
  - Payment gateways
  - Stock trading solutions
  - Examination portals
  - Anti-virus software
  - Flight controls
- These projects have extremely little tolerance for any bug or failure

Iterative SDLC Model

- Typically used when the solution is not fully designed
- Developed and tested in repeated iteration till requirements are met
- Early versions can help customer identify and fine-tune requirements
- Every iteration is a gradual closeness to the planned final product shape



Iterative SDLC Model - Advantages

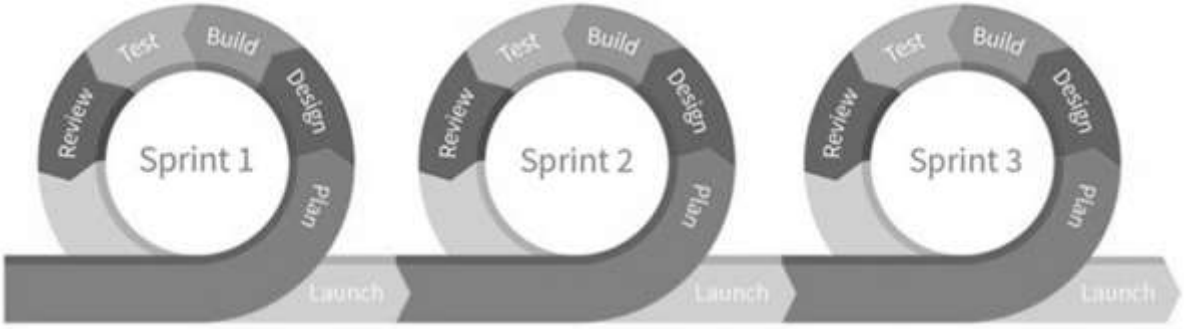
- Some functions can be quickly developed at the beginning of the development lifecycle
- The paralleled development can be applied
- The progress is easy measurable
- The shorter iteration is - the easier testing and debugging stages are
- It is easier to control the risks as high-risk tasks are completed first
- Problems and risks defined within one iteration can be prevented in the next sprints
- Flexibility and readiness to the changes in the requirements

Iterative SDLC Model - Disadvantages

- Iterative model requires more resources than the waterfall model
- Constant management is required
- Issues with architecture or design may occur because not all the requirements are foreseen during the short planning stage
- The process is difficult to manage
- The risks may not be completely determined even at the final stage of the project
- Risks analysis requires involvement of the highly-qualified specialists

Agile SDLC Model

- The agile model is one form of iterative SDLC
- The customer is able to see the result and understand if they is satisfied with it or they is not
- With the absence of defined requirements it is difficult to estimate the resources and development cost
- Frameworks:
  - Scrum
  - Kanban
  - Scrumban
- The basis of such model consists of short weekly meetings – Sprints



Module Summary(1/2)

- Portfolio is a collection of projects, programs, and other initiatives grouped together for management and control purpose.
- As a whole is aimed to satisfy one or more organizational objectives.
- Project Categories-
  - Discretionary
  - Nondiscretionary

Module Summary(2/2)

- Strategic enterprise analysis is a study, modeling, and maintenance of relationship b/w strategic business plan and its important business support function
- SDLC specify how IT obtains and manages IT solutions in support of organizations IT strategy
- Different SDLC models