



Support Software Development Lifecycle (SDLC) Processes

28 January 2020

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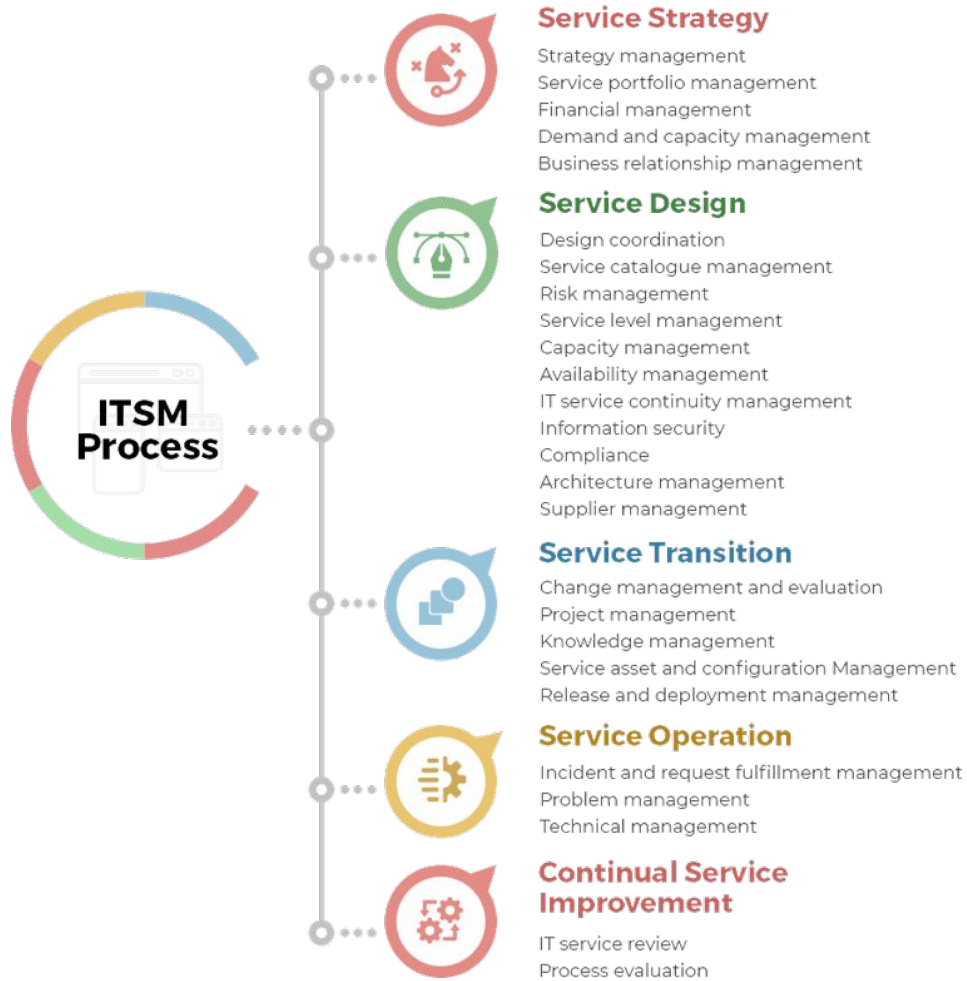
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Introduction

Introduction

IT Service Management Model

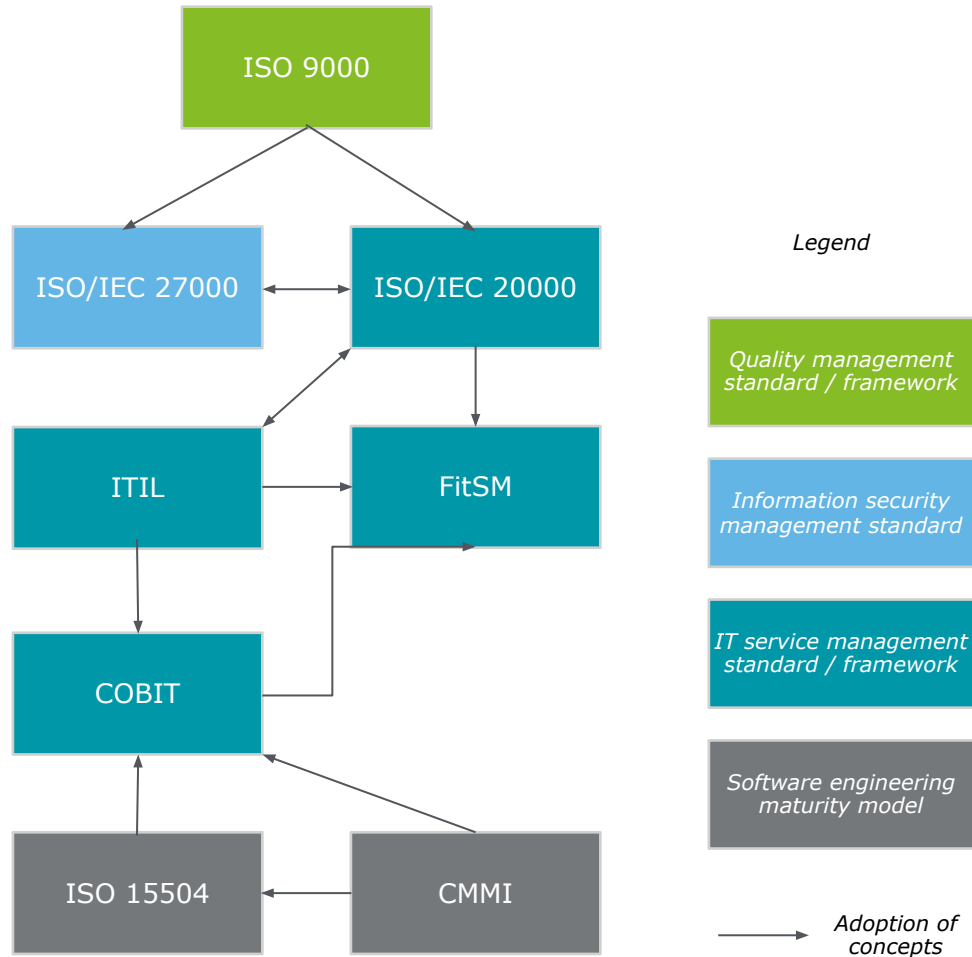


Here are the 10 key benefits of ITSM:

- Lower costs for IT operations
- Higher returns on IT investments
- Minimal service outages
- Ability to establish well-defined, repeatable, and manageable IT processes
- Efficient analysis of IT problems to reduce repeat incidents
- Improved efficiency of IT help desk teams
- Well-defined roles and responsibilities
- Clear expectations on service levels and service availability
- Risk-free implementation of IT changes
- Better transparency into IT processes and services

Introduction

ITSM frameworks and other management standards



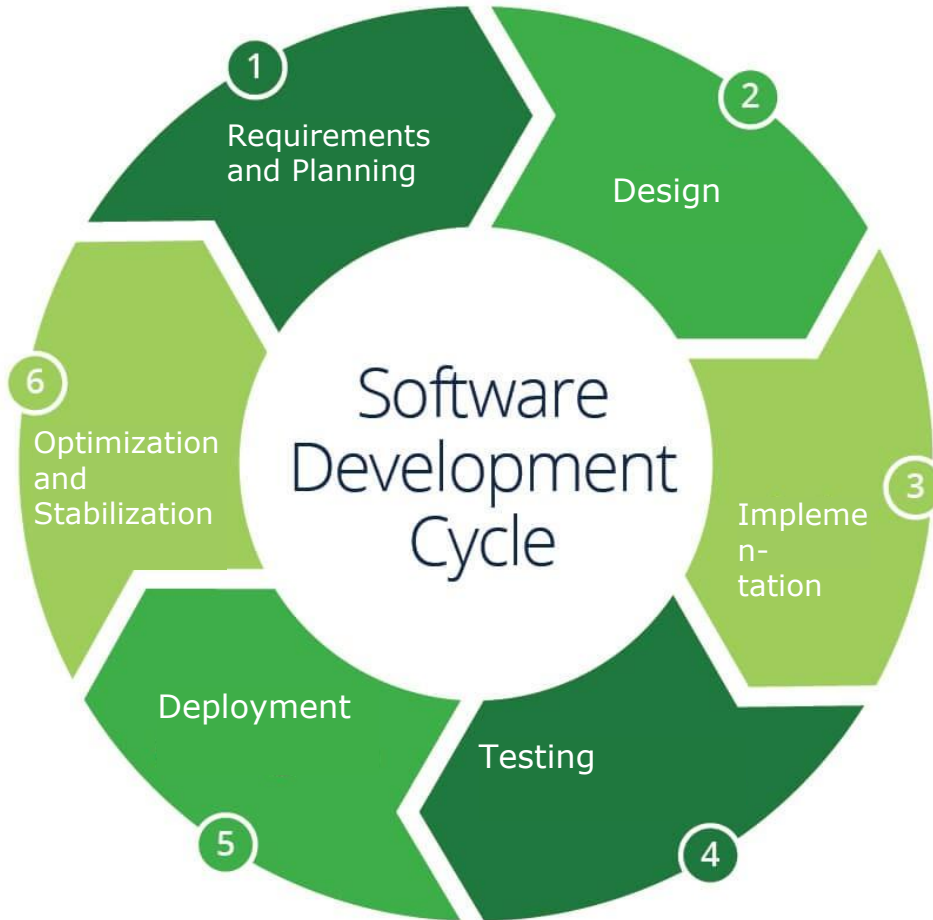
ITSM processes, when built based on the ITIL, Cobit framework, pave the way for better IT services.

The provided recommendations are mainly based on the ITIL, Cobit, ISO 9000, ISO 20000 standards and frameworks

Software Development Lifecycle

SDLC

Key Phases and Processes



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- Requirements management
 - Release management
 - Change management
 - Quality management
 - Deployment management/Continuous delivery/Continuous integration
 - Business continuity management
 - Knowledge and documentation management
 - Project and stakeholder management

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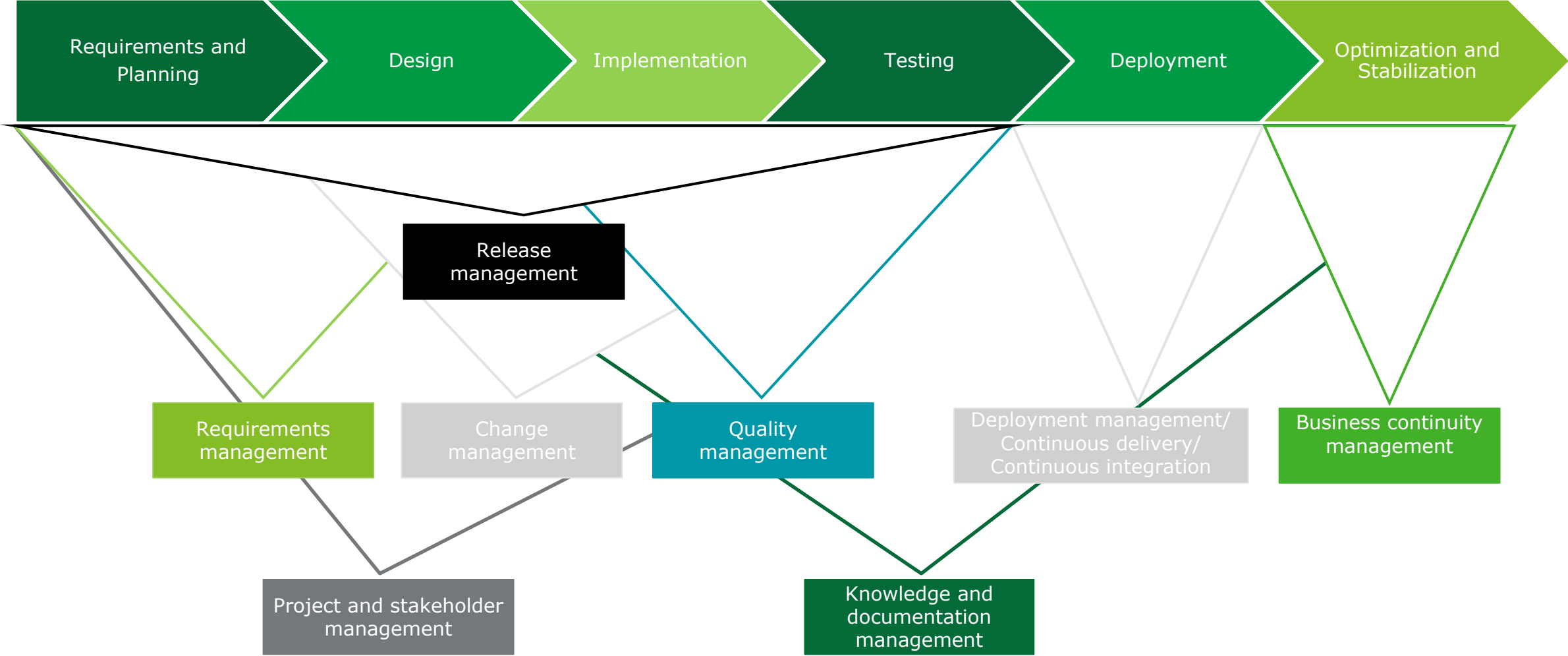
Key Phase Deliverables



<ul style="list-style-type: none"> • Business Requirement Documentation (BRD) • Software Requirements Specification (SRS) • Technical Requirements Specification 	<ul style="list-style-type: none"> • High-level design (HLD) including target conceptual architecture • Low-level design (LLD) including target logical architecture, and where applicable physical architecture Where applicable: • Use case Diagram • Class Diagram • Entity-Relationship Diagram (ERD) • Dataflow Diagram • Component Diagram • Workflow diagram • Activity Diagram • Sequence Diagram 	<ul style="list-style-type: none"> • Burndown chart • Source code • Release notes • Supplementary technical documentation • Prepared documentation for IP rights transfer 	<ul style="list-style-type: none"> • Test Strategy • Test Plan • Test Summary Report (including metrics such as coverage and success rate) • Test results with comments • Revised bugs list • Acceptance test report 	<ul style="list-style-type: none"> • Deployment scripts • Deployment report and/or logs 	<ul style="list-style-type: none"> • Incident report (regular) • Incident list (tracker) • Technical Documentation • Bugfixes, patches, system updates with supplementary technical notes
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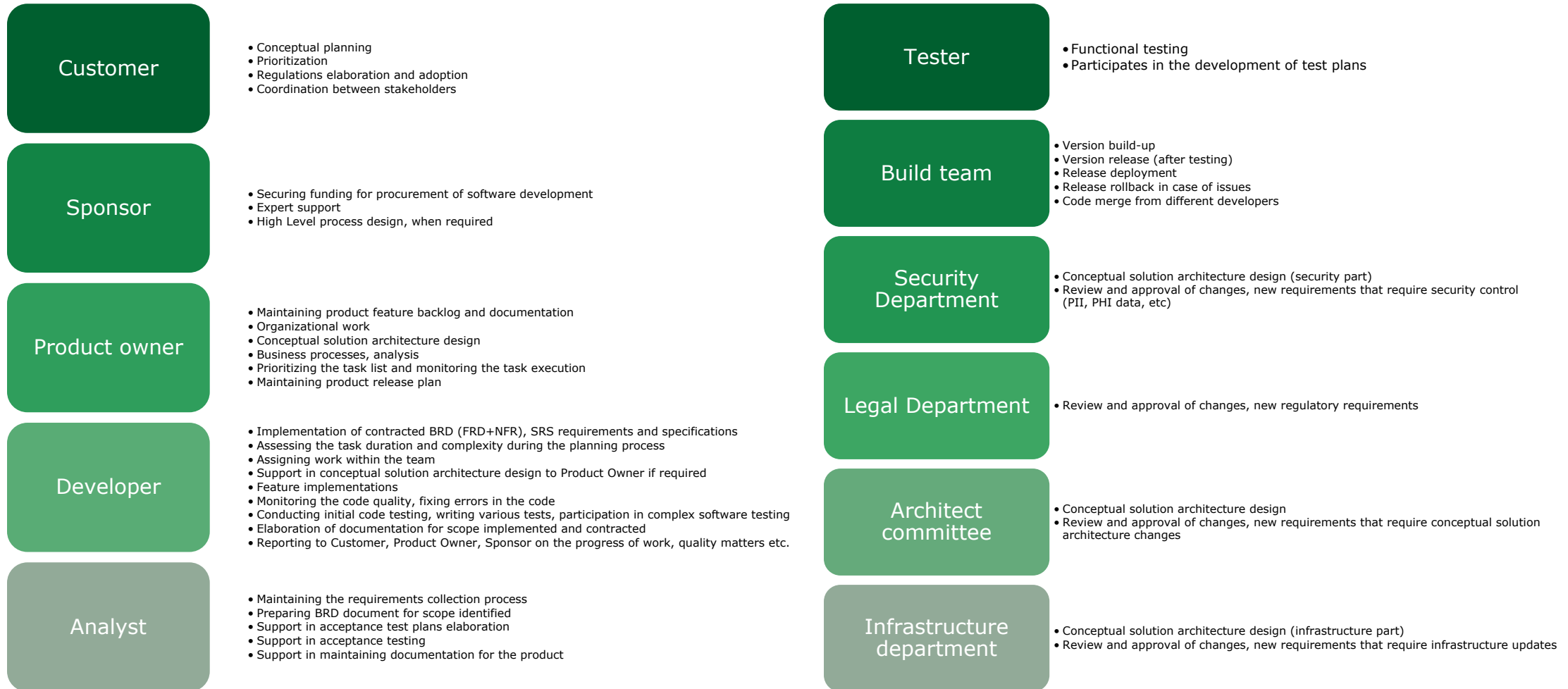
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Mapping Phase-Process



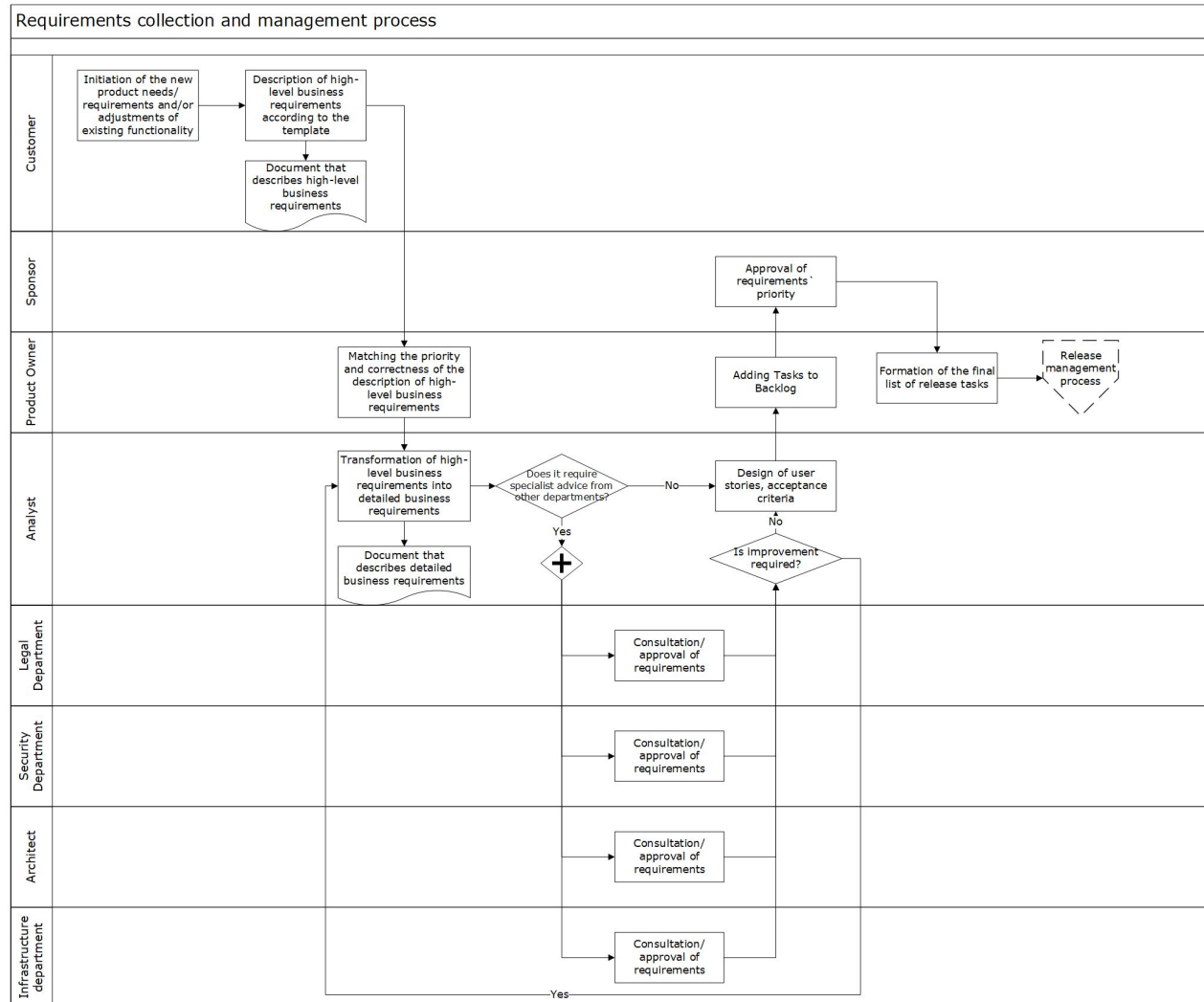
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Conceptual roles within the framework



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Key processes: Requirements management

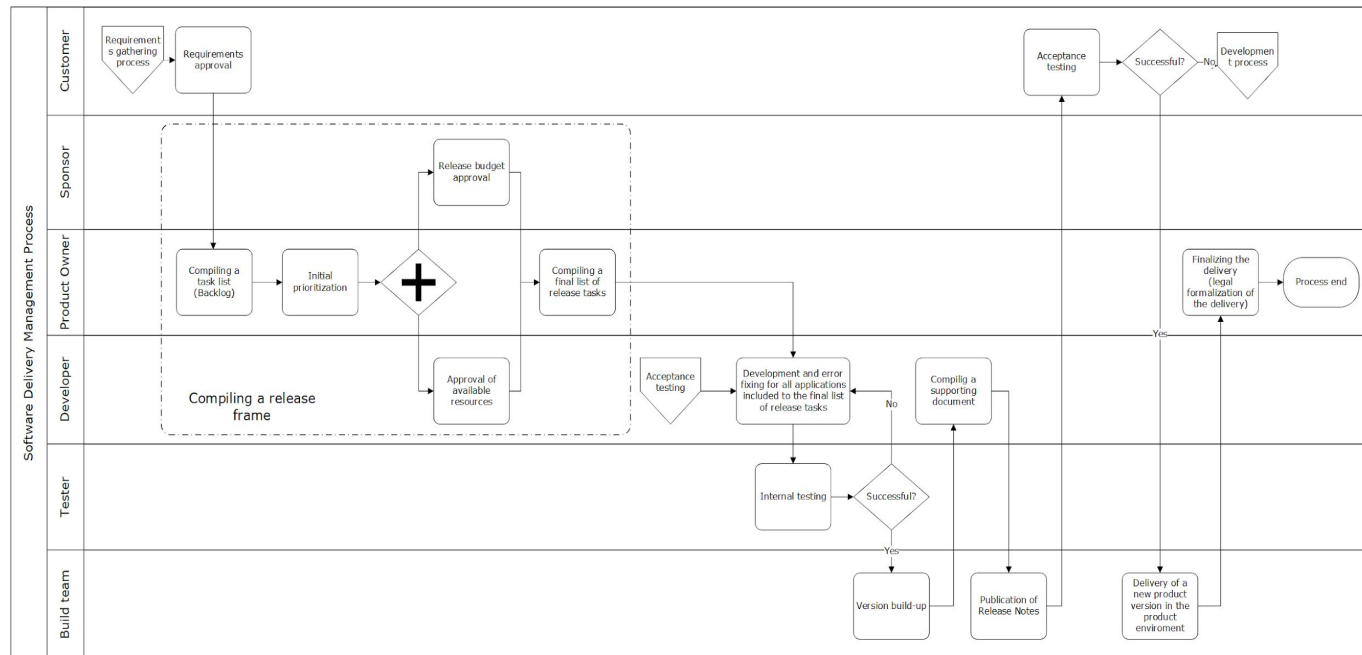


Key documents and deliverables:

- Business Requirement Document (BRD)
- User Stories (US)
- Use Case Specification Document (USC)
- Functional Requirement Document (FRD)
- Non-functional Requirements (NFR)
- Requirements Traceability Matrix (RTM)

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Key processes: Release management



Key documents and deliverables:

- Product task list (Backlog)
- Release task list (Backlog)
- Release notes
- Supplementary technical documentation

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Key processes: Quality management

Test Case			
Test case code:			
Test scenario name:			
Test case name:			
Test type:			
Feature <System>:			
Responsible for execution:			
Responsible for verification:			
Feature severity level			
Creation date:			
Modification date:			
Execution Protocol			
Date	Result (Pass/Failure/Other)	If Failure or Other, provide error description	
Procedure Description			
Step #	Description		
	Input data/Preconditions		
	Test case steps		
1			
2			
3			
4			
	Expected result		
	Actual result		
Comments for Developer:			
Comments for <Customer>:			
Responsible for execution:		Date/ signature	
Responsible for verification from <Customer>		Date/ signature	

Key documents and deliverables:

- Test Strategy
- Test Plan
- Test Summary Report
- Test results with comments
- Revised bugs list
- Acceptance test report

Next steps

Next steps

Continue elaboration of the framework and drafting the processes within it

Update structure and content upon receiving comments from SOE, NHSU and MOH



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