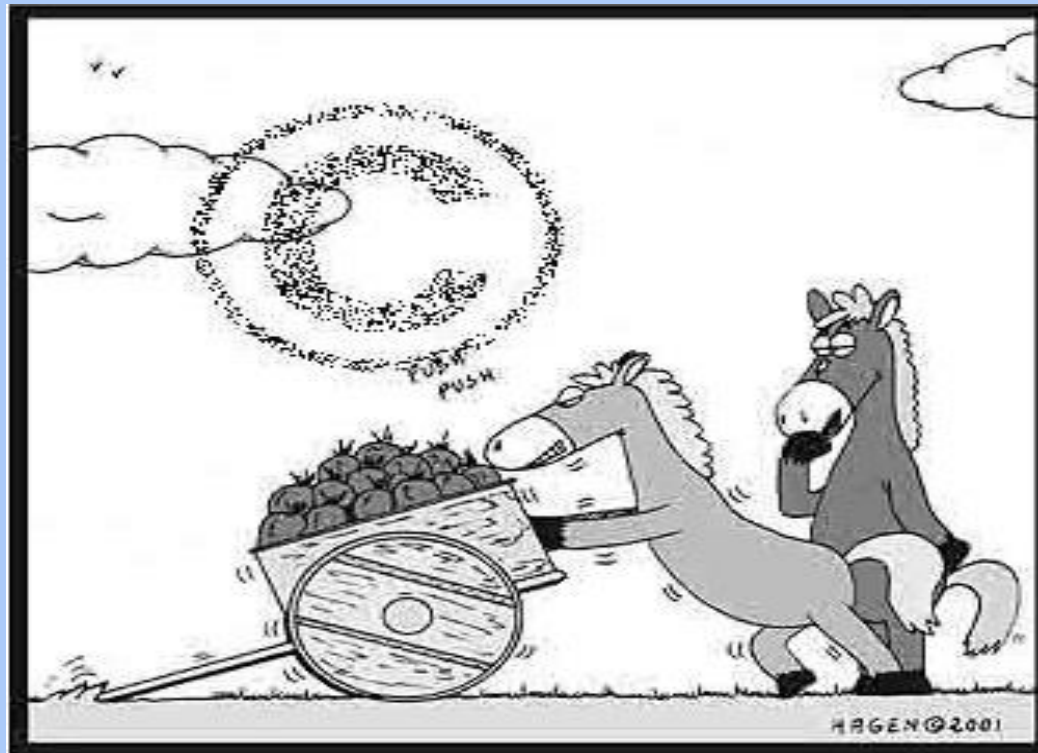


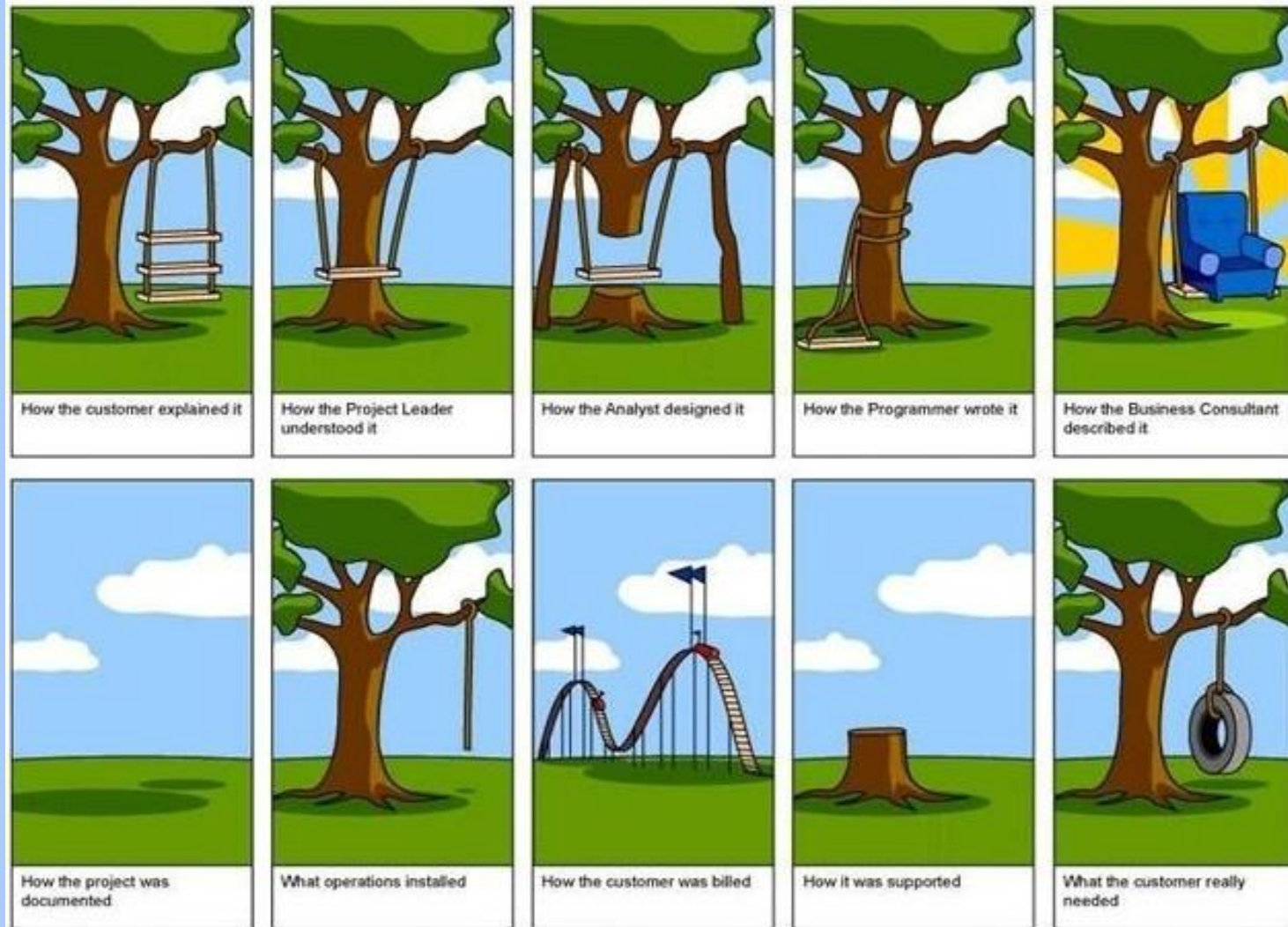
Project Lifecycle Management (PLM)

Process or Tool?



Hang on... We must be doing something wrong...
How does the saying go again?

Why PLM?





Project Management

NEW REQUEST/
INITIATIVES

ENHANCEMENTS

PROJECT
(Start → Finish)

ONGOING WORK
(Continuous)

SUPPORT
(Quick fixes)

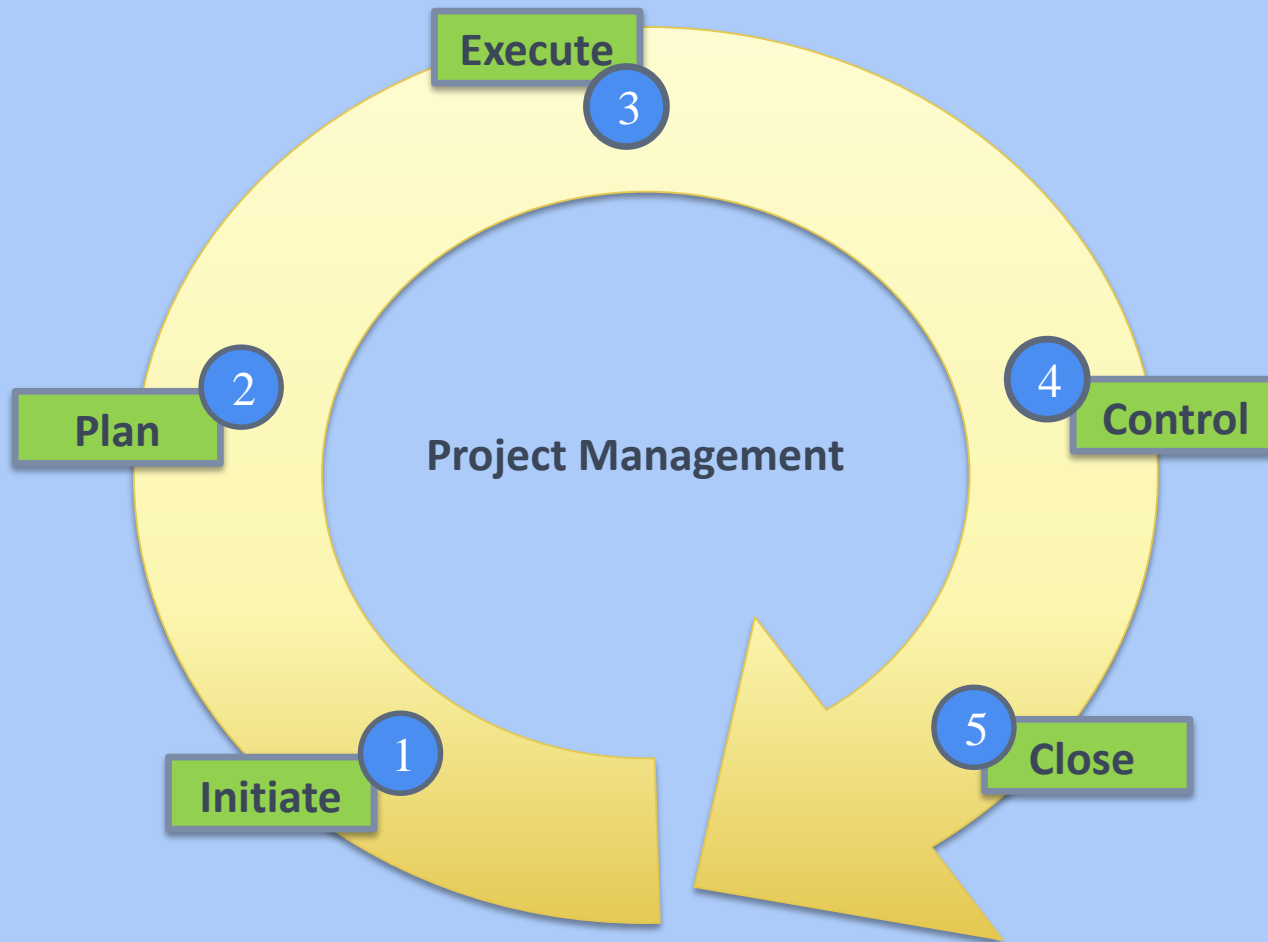
INFRASTRUCTURE
(Upgrades etc.)

Governance Process - TBD

Tier	Tier	Tier
<ul style="list-style-type: none"> ➤ Less than 4 weeks of work. ➤ Budget is less than 25k. ➤ Requires less than 5 resources. ➤ Scope is well defined and solution is readily available. (In some cases scope/solution are not known but project scale is small). ➤ Low risks. ➤ No/minor dependencies/impact on other applications. ➤ No/minor change in business processes. ➤ Project approval/governance process - TBD. ➤ <i>No political implications.</i> 	<ul style="list-style-type: none"> ➤ 4 - 24 weeks of work. ➤ Budget is between 25k - 250k. ➤ Requires between 5 - 10 resources. ➤ Scope is somewhat known and solution is somewhat available. (In some cases scope/solution are not known but project scale is medium). ➤ Medium risks. ➤ Some dependencies/impact on other applications. ➤ Some change in business processes. ➤ Project approval/governance process - TBD. ➤ <i>Some political implications.</i> 	<ul style="list-style-type: none"> ➤ 24+ weeks of work. ➤ Budget is over 250k. ➤ Requires 10+ resources. ➤ Scope is not defined and solution is not known (In some cases scope/solution are known but project scale is large). ➤ High risks. ➤ Huge dependencies/impact on other applications. ➤ Significant change in business processes. ➤ Project approval/governance process - TBD. ➤ <i>Major political implications.</i>

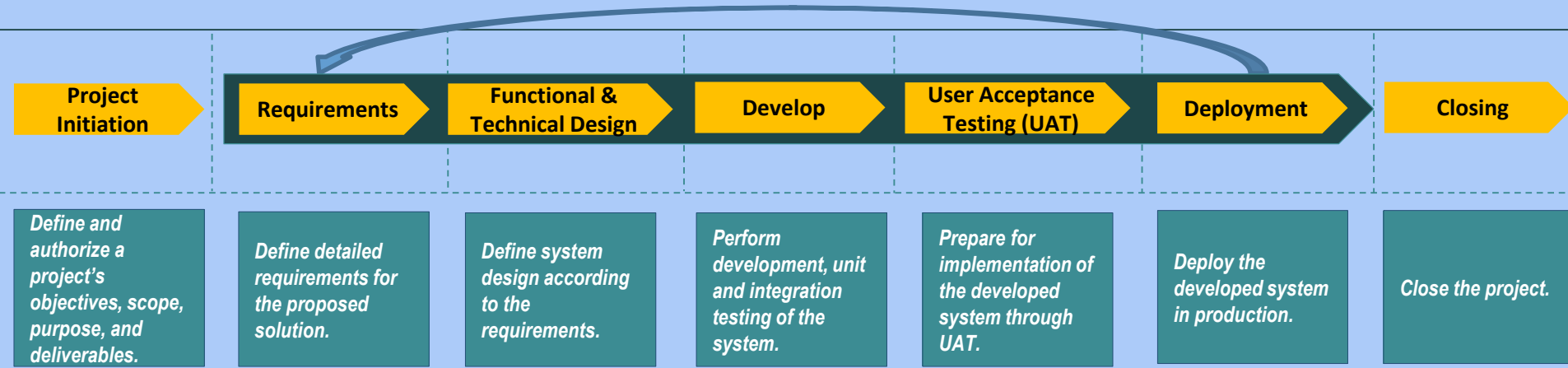


Sounds familiar...





Project Lifecycle Management (PLM)



- It is proposed that SF State projects go through 7 common iterative phases depicted above, with project management processes being executed throughout the lifecycle in support of the 7 phases.
- PLM applies for managing Projects not day to day support/maintenance functions.
- After each phase, a specific criteria (deliverables, activity, etc.) must be satisfied by the project team.
- Required deliverables will be scaled to fit project type and size.
- A Roles and Responsibilities matrix will also be developed at the outset of the project to identify specific SF State individuals required to review and provide sign-off on various deliverables throughout the lifecycle.
- Using a common approach and terminology will enable standardization and streamline project management process, that will help manage projects and user expectations better.

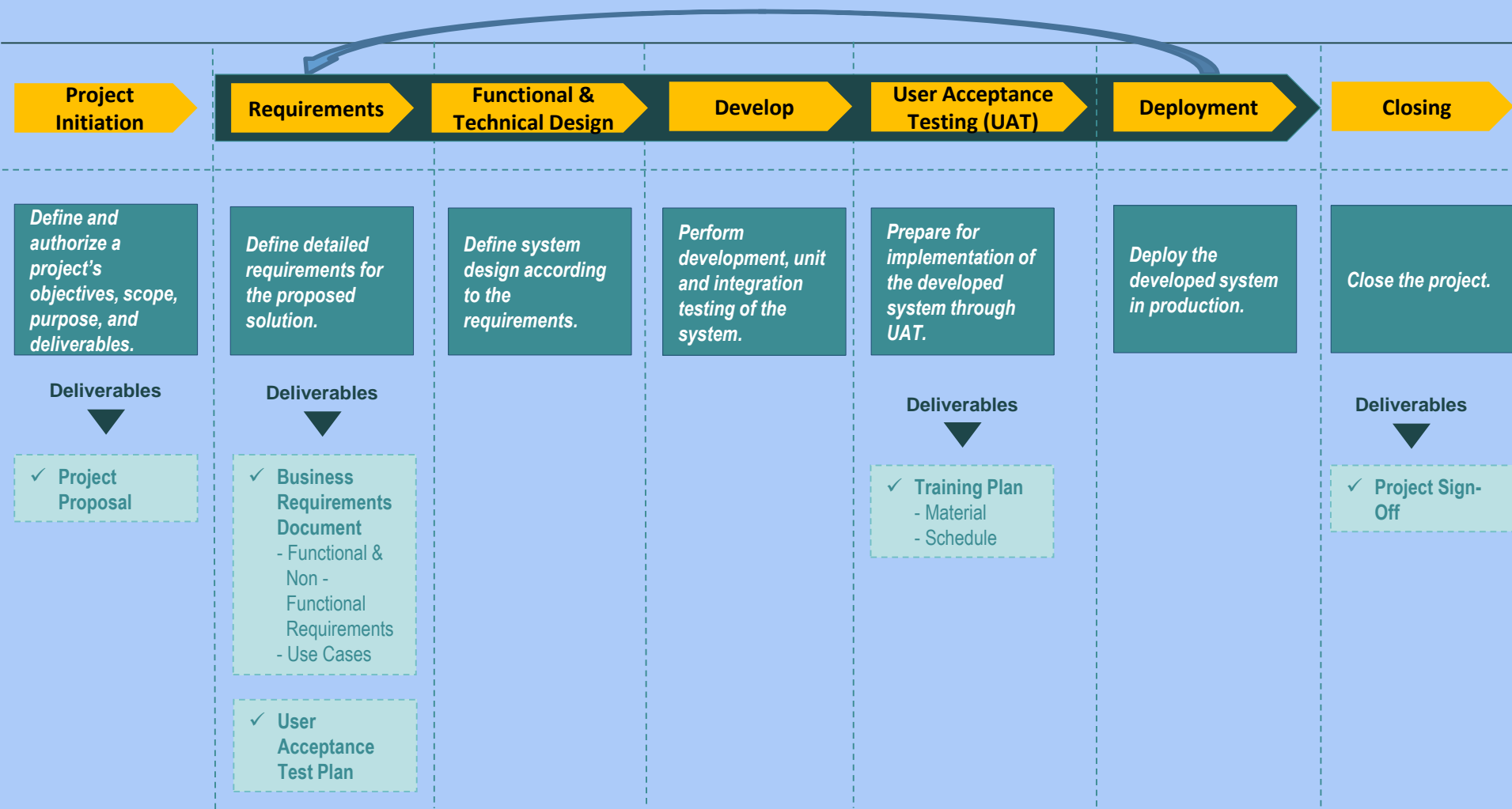
- Templates URL:

<https://share.sfsu.edu/doi/itpp/SitePages/Home.aspx?RootFolder=%2Fdoi%2Fitpp%2FShared%20Documents%2FPLM&FolderCTID=0x012000DB0F56BF5A513341B50F5120E374D166&View={4B036963-CC5E-4D80-898B-CE39495B6947}>



PLM - Iterative

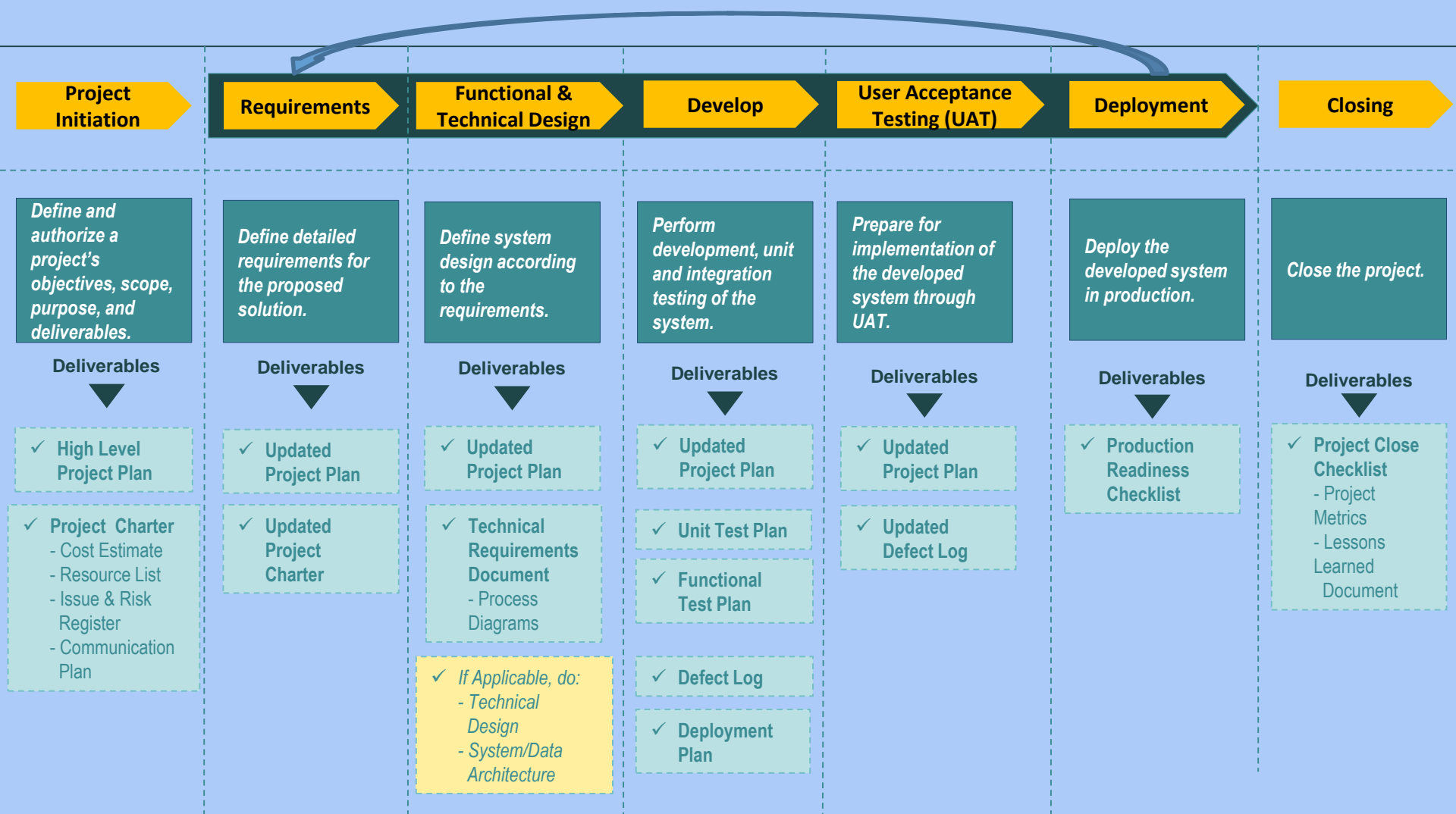
Deliverables - Customers





PLM - Iterative

Deliverables - Information Technology



Deliverables

Accountable

Applies to Projects

Applies to Change Requests

Notes

Project Proposal	Project Sponsor/Customer	Required	None	Project proposal is not required for Change Requests. Justification for change should be include in the Change Request form
Business Requirements - Functional & Non-Functional Requirements - Use Cases	Customer/Business Analyst	Required	Optional	Business Requirements maybe required for Change Request based on the scope of change requested (large). Change Request form must state the functional and if applicable, non-functional requirements
User Acceptance Test Plan	Customer	Required	Required	
Training Plan	Customer/QA Analyst	Required	Optional	Training Plan maybe required for Change Request based on the scope of change requested (large)
Project Sign-Off	Project Manager	Required	Required	
Project Plan	Project Manager	Required	Optional	Project Plan maybe required for Change Request based on the scope of change requested (large)
Project Charter	Project Manager	Required	None	Project Charter is not required for Change Requests
Technical Requirements	Technical Lead	Required	Optional	Technical Requirements maybe required for Change Request based on the scope of change requested (large)

PLM - Deliverables (contd.)



Deliverables	Accountable	Applies to Projects	Applies to Change Requests	Notes
Technical Design	Technical Lead	Required	Required	Change Requests may not need their own Technical Design document but the relevant documents must be reviewed and updated. Note: Although the Technical Lead is responsible, they must also review with the Architecture Review Committee.
System/Data Architecture	Technical Lead	Required	Required	Change Requests may not need their own technical design document but the relevant documents must be reviewed and updated. Note: Although the Technical Lead is responsible, they must also review with the Architecture Review Committee.
Unit Test Plan	Technical Lead	Required	Required	
Functional Test Plan	QA Analyst	Required	Required	
Defect Log	QA Analyst	Required	Optional	Defect Log maybe required for Change Request based on the scope of change requested (large)
Deployment Plan	Project Manager	Required	Required	
Production Readiness Checklist	Technical Lead	Required	Required	
Project Close Checklist	Project Manager	Required	None	

PLM - Roles & Responsibilities



Role	Profile	Primary Project Duties	Other Project Responsibilities
Project Sponsor	Member of the Executive Committee	<ul style="list-style-type: none"> • Recommends and advocates project to organization • Resolves funding, policy and/or resource issues 	<ul style="list-style-type: none"> • Reviews and approves Project Proposal and Project Charter • Monitors and addresses project status and issues with Service Owner and/or Project Manager, as needed • Assures completion of project scope on time and within budget
Service Owner	An individual, multiple individuals, a service provider and/or a department	<ul style="list-style-type: none"> • Delivers and/or utilizes the expected business benefit(s) 	<ul style="list-style-type: none"> • Develop Project Proposal • Responsible for overall delivery of Business Requirements • Responsible for overall delivery of User Acceptance Test (UAT) Plan • Responsible for Project Sign-off • Responsible for overall delivery of the Training Plan • Approves Project Proposal and Project Charter • Validates business objectives and project requirements • Manages service unit to deliver service benefits • Provides Subject Matter Experts to project
Project Manager	A single individual with knowledge and skills in Project Management; can be from IT or the Functional side	<ul style="list-style-type: none"> • Reports project progress, plans and issues to Project Sponsor & Service Owner • Manages all day-to- day project activities. • Responsible for overall project delivery and closure 	<ul style="list-style-type: none"> • May develop Project Proposal • Develops Project Charter • Develops and manages/updates Project Plan and all related project documentation and reports • Determines and manages resource requirements • Manages project budget • Develops Project Close Checklist • Responsible for Project Sign-off • Addresses and resolves issues with project team; escalates issues to Project Sponsor and Service Owner as needed • Identifies and secures the necessary technical skills and resources for the project • Plan, schedule, and manage Project Lifecycle Management activities • Tracks, manages, and reports risks, issues, and project status information

PLM - Roles & Responsibilities (contd.)



Role	Profile	Primary Project Duties	Other Project Responsibilities
Subject Matter expert (SME)	An individual from Functional side and/or IT	<ul style="list-style-type: none"> Provides knowledge and/or skills of a particular domain critical to the management, development and/or completion of the project 	<ul style="list-style-type: none"> Collaborates with project team members Communicates project status and issues to the Service Owner and Project Manager Assists with clarification of project objectives Works with Project Manager to define the project's deliverables and requirements
Project Team	Individuals from both Functional site and IT	<ul style="list-style-type: none"> Delivers project requirements within scope and schedule 	<ul style="list-style-type: none"> Communicates project status and issues to Project Manager. Assists with clarification of project objectives. Responsible for Project deliverables.
Business Analyst	An individual from IT	<ul style="list-style-type: none"> Analyzes, interprets and documents the business requirements, functional, non-functional, and user requirements 	<ul style="list-style-type: none"> Responsible for Business Requirements document. Assists the Technical team with clarification of questions that arise regarding Requirements. Acts as resource to QA analyst for information to create Functional Test Plan.
QA Analyst	An individual from IT	<ul style="list-style-type: none"> Ensures quality assurance testing 	<ul style="list-style-type: none"> Responsible for quality assurance testing and defect reporting. Responsible for Functional Test plan and Defect Log. Document Test results.
Technical Lead	An individual from IT	<ul style="list-style-type: none"> Oversees the technical development efforts. 	<ul style="list-style-type: none"> Responsible for Technical Requirements, Unit Test plan, Production Readiness Checklist and Technical Design, System/Data Architecture (if applicable). Provides programming assistance on Requirements. Responsible for the underlying architecture, as well as for overseeing the work being done by other developers working on the project.

PLM - Overview



Project Initiation

Requirements

Functional & Technical Design

Develop

User Acceptance Testing (UAT)

Deployment & Closing

Overview	Define and authorize a project's objectives, scope, purpose, and deliverables.	Define detailed requirements for the proposed solution.	Define system design according to the requirements.	Perform development, unit and integration testing of the system.	Prepare for implementation of the developed system through UAT.	Deploy the developed system in production and close the project.
Activities	<ul style="list-style-type: none"> ➤ Create project proposal. ➤ Define business needs. ➤ Develop high level project plan. ➤ Estimate costs ➤ Estimate/Identify resources - core team vs. extended team. ➤ Assess PLM needs for the project. ➤ Register project in Tool. ➤ Review project governance structure. ➤ Project kick-off meeting. 	<ul style="list-style-type: none"> ➤ Define business requirements. ➤ Develop requirements traceability matrix. ➤ Create functional requirements. ➤ Develop use cases. ➤ Identify test strategy. ➤ Update project charter. ➤ Update project plan. 	<ul style="list-style-type: none"> ➤ Conduct JAD (Joint Application Design) sessions. ➤ Create process diagrams. ➤ Create test scripts. ➤ Update project plan. ➤ If Applicable: <ul style="list-style-type: none"> - Define data architecture. - Define system architecture . - System integration design. - Create prototype. - Create infrastructure plan. 	<ul style="list-style-type: none"> ➤ Develop solution. ➤ Execute unit & integration test. ➤ Execute system and functional tests. ➤ Identify defects and maintain a defect log. ➤ Develop deployment plan. ➤ Update project plan. ➤ If Applicable: <ul style="list-style-type: none"> - Build infrastructure environment . - Demo to stakeholders. 	<ul style="list-style-type: none"> ➤ Execute User acceptance test cases. ➤ Prioritize and assign defect resolution. ➤ Develop training plan. ➤ Validate training materials. ➤ Conduct training and communication. ➤ Review release readiness. ➤ Plan release. ➤ Update project plan. 	<ul style="list-style-type: none"> ➤ Deploy release to production. ➤ Verify production release. ➤ Stabilize release. ➤ Conduct knowledge transfer sessions. ➤ Conduct lessons learned session. ➤ Update project metrics. ➤ Archive project documentation. ➤ Release project resources. ➤ Obtain project sign-off. ➤ Close project.
Deliverables	<ul style="list-style-type: none"> ➤ Project Proposal ➤ Project Charter - Cost Estimate - Resource List - Issues & Risk Register - Communication Plan ➤ High Level Project Plan 	<ul style="list-style-type: none"> ➤ Business Requirements Document - Functional & Non Functional Requirements - Use Cases ➤ User Acceptance Test Plan 	<ul style="list-style-type: none"> ➤ Technical Requirements Document - Process Diagrams ➤ If Applicable: <ul style="list-style-type: none"> - System/Data Architecture - Technical Design Document 	<ul style="list-style-type: none"> ➤ Unit Test Plan ➤ Functional Test Plan ➤ Defect log ➤ Deployment plan 	<ul style="list-style-type: none"> ➤ Training Plan - Material - Schedule ➤ Updated Defect log ➤ Production Readiness Checklist 	<ul style="list-style-type: none"> ➤ Project Sign-off ➤ Project Close Checklist - Project Metrics - Lessons Learned Document



One Size...





PLM - Operations

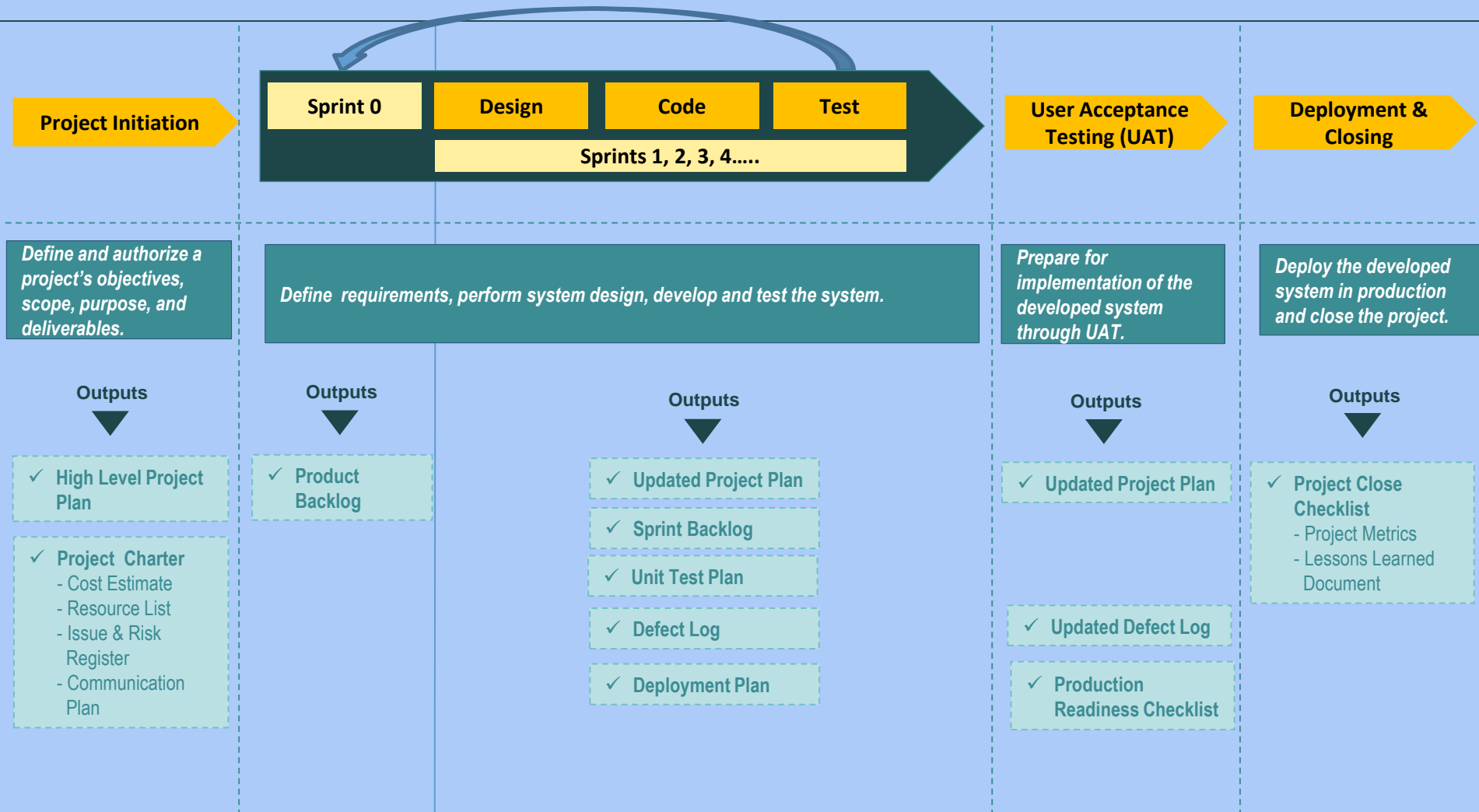
Deliverables - Information Technology

Concept of Operations	Requirements	Architecture & Design	Integration, Test & Verification	System Verification & Validation	Deployment
<i>Define and authorize a system's objectives, scope, purpose, and deliverables.</i>	<i>Define requirements for the proposed system.</i>	<i>Define architecture and design according to the requirements.</i>	<i>Perform integration, test and verification of the system.</i>	<i>Perform system verification and validation.</i>	<i>Deploy the developed system in production and close the project.</i>
Outputs ▼	Outputs ▼	Outputs ▼	Outputs ▼	Outputs ▼	Outputs ▼
<ul style="list-style-type: none"> ✓ High Level Project Plan ✓ Project Charter <ul style="list-style-type: none"> - Cost Estimate - Resource List - Issue & Risk Register - Communication Plan 	<ul style="list-style-type: none"> ✓ Updated Project Plan ✓ Updated Project Charter ✓ Functional & Technical Requirements 	<ul style="list-style-type: none"> ✓ Updated Project Plan ✓ Architecture Design Document ✓ System Design 	<ul style="list-style-type: none"> ✓ Updated Project Plan ✓ Integration Test Plan ✓ Defect Log 	<ul style="list-style-type: none"> ✓ Updated Project Plan ✓ System Test Plan ✓ Updated Defect Log ✓ Deployment Plan ✓ Production Readiness Checklist 	<ul style="list-style-type: none"> ✓ Project Close Checklist <ul style="list-style-type: none"> - Project Metrics - Lessons Learned Document



PLM - Agile

Deliverables - Functional Users & Information Technology





Q & A

