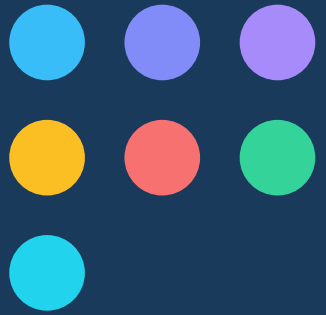
Project Lifecycle

(PLC) Framework

Information Technology Department



7 Phases to Project Success

Why PLC Matters: Training Objectives

What This Framework Delivers

Consistent Delivery

A single, repeatable framework for all ITD projects—small or large.

Common Language

Shared terminology across teams reduces miscommunication and rework.

Living Framework

Flexible and adaptable—designed to evolve with business needs.

Minimize Overhead

Right-sized processes that match project complexity.

What You'll Gain

Risk Management

Identify and mitigate risks early—before they become crises.

Scope & Cost Control

Keep projects on time, on budget, and in scope.

Stakeholder Alignment

Ensure customers and sponsors stay engaged and informed.

Quality Outcomes

Structured QA gates prevent defects from reaching production.

Project Lifecycle at a Glance

GOVERNANCE — Decision-making framework that spans the entire lifecycle

1	2	3	4	5	6	7
Ideation	**Planning**	**Requirements**	**Construction**	**Quality Assurance**	**Implementation**	**Sustain**
Charter & Concept	Methodology & Plan	Gather & Document	Build & Develop	Test & Validate	Go Live	Maintain & Improve

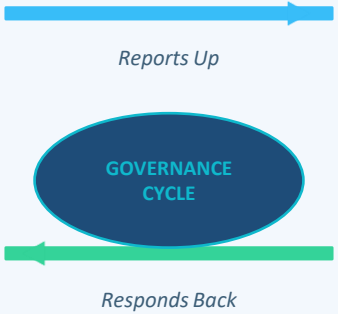
The success of each phase directly determines the quality of the next — and the overall project outcome.

Governance: The Decision-Making Framework

A logical management framework for making project decisions — the leadership structures and processes that ensure project success

PROJECT TEAM REPORTS

- → Deliverables status
- → Change order requests
- → Issues & risk updates
- → Budget / Time / Scope variance
- → Project status reports
- → Requests for sign-off



GOVERNANCE RESPONDS

- ← Approval of deliverables
- ← Authorization to proceed
- ← Project decisions
- ← Issue mitigation guidance
- ← Budget / Time / Scope direction
- ← Sign-off / Project close-out

Phase 1

Ideation

Transform ideas into approved, actionable project charters

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Ideation

PHASE 1

Ideation: Approach & Key Activities

What Is Ideation?

The conceptual phase where ideas for improvement are captured and evaluated. Like a modern suggestion box — ideas are documented and assessed for feasibility before committing resources.

Key Activities

- Identify business drivers and project objectives
- Define high-level scope and set project direction
- Establish priority of the project and within the project
- Identify and engage key stakeholders
- Establish executive sponsorship
- Perform feasibility studies when necessary
- Obtain approvals for charter, proposal, funding & resources
- Assign the Project Manager

Outcome

Approved Project Charter

Estimate Includes

- Time to achieve the output
- Resources required
- Key stakeholder identification
- High-level risk assessment

When Does Ideation End?

- Sponsor approval obtained
- Project Manager assigned
- Project charter signed off

PHASE 1

Project Charter: What It Is — and What It Isn't

THE CHARTER IS

Commitment Before Work Begins

Must be approved BEFORE the project officially starts.

Goal Alignment Document

Articulates what the project is intended to deliver.

Stakeholder Agreement

Identifies owners, sponsors, and resources—creating accountability.

Scope Boundary Setter

Establishes what is in scope and what is not.

Organizational Visibility

Makes the project visible and official to the entire organization.

THE CHARTER IS NOT

✗ A Project Plan

It doesn't define tasks, timelines, or work breakdowns.

✗ A Requirements Document

It doesn't capture detailed functional or system needs.

✗ A Design Document

It doesn't specify technical solutions or architecture.

✗ A Proposal

It's not a sales pitch — it's a commitment and alignment tool.

WHY IT MATTERS: Goals keep teams focused · Scope validates requirements · Sponsors guide success · Resources ensure delivery

Phase 2

Planning

Define how the work will be done — before the work begins

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Planning

PHASE 2

Planning: Approach & Key Components

Planning ensures the team agrees on HOW the project will be executed. A well-planned project is far less likely to run over budget, miss deadlines, or fail to meet requirements.

Methodology

- Waterfall — sequential phases
- Agile — iterative sprints
- Fasttrack — lightweight/small projects

Milestones

- Key task completion dates
- Deliverable hand-offs
- Kick-off and Go-Live dates

Resource Plan

- Roles & responsibilities
- FTE vs. part-time allocation
- Backup plan for key resources

Issues & Risks

- Identify and log all risks
- Assign confidence levels
- Define mitigation plans

Change Mgmt

- Change request process
- Approval workflow
- Risk/impact assessment

Training Plan

- Train-the-trainer approach
- End-user training schedule
- Material development

PHASE 2

Project Essentials Matrix

Not all projects are equal. Use this matrix to determine what's required based on project size and cost.

Requirement	SMALL (up to $25K)	MEDIUM (up to $100K)	LARGE (over $100K)
Requirements Document	✓	✓	✓
Project Plan	—	✓	✓
Methodology	*Fasttrack*	*Waterfall / Agile / Fasttrack*	*Waterfall / Agile*
Proposal Timing	Planning phase	Before Requirements	After Requirements
Steering Committee	—	*Recommended*	**Required**
Communication	Email + Meeting Notes	Meeting Notes + Weekly Meetings	Meeting Notes + Weekly + Steering Committee Meetings

Phase 3

Requirements

Define, document, and validate what the solution must do

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Requirements

PHASE 3

Requirements: Approach & Entry/Exit Criteria

The purpose of this phase is to determine the requirements and produce formal documentation used in all subsequent phases. Requirements define scope boundaries — what's in and what's out.

Key Activities

- Elicit raw requirements from subject matter experts and end users
- Refine business requirements based on user feedback and sessions
- Develop models, diagrams, and prototypes as required
- Define functional and non-functional (system) requirements
- Set scope boundaries — explicitly document what is in and out of scope
- Document constraints and assumptions

Entry Criteria

- Approved Project Charter
- Project plan & milestones defined
- Project team & participants identified

Deliverables / Artifacts

- Requirements document
- System diagrams & models
- Prototypes / screen mockups
- Supporting documentation

Exit Criteria

- Approved requirements document
- Updated project plan & budget
- Updated risks & issues list

PHASE 3

Requirements Toolkit

Standard tools and artifacts used during the Requirements phase:

Diagrams & Models

- Context Diagram
- Use Case Diagram
- System Architecture
- Process Flow Diagram
- Screen Mockups (Balsamiq)
- State & Activity Diagrams

Document Templates

- Requirements Document Template
- Functional Requirements Template
- Meeting Agenda Template
- ASG/ISG Applicability Matrix

Software Tools

- Microsoft Word
- Microsoft Visio
- Balsamiq (mockups)
- Microsoft SharePoint Lists
- Microsoft Forms

Infrastructure Artifacts

- Logical Network Diagram
- Physical Network Diagram
- Rack Diagram
- Data Center Overhead Diagram

Project Foundation Docs

- Approved Project Charter
- Project Plan & Resource List
- Risk & Issues Register
- Meeting Minutes

Training & Learning

- Intro to Requirements Gathering
- YouTube diagram tutorials
- SumTotal LMS (alameda.sumtotal.host)
- CA-PMF Templates (CDT)

Phase 4

Construction

Build, develop, and unit-test the project solution

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Construction

PHASE 4

Construction: Key Steps & Phase Gate Criteria

Construction is where the project solution is designed, built, and tested. The team assembles all components, validates them against requirements, and prepares for deployment.

Construction Steps

1	**Review Input Docs**	Review approved requirements and design documents before building.
2	**Functional Design Review**	Share a logical view of how requirements will be implemented.
3	**Build Solution**	Develop the application, system, or solution based on design.
4	**Unit Testing**	Validate each developed component against functional design.
5	**Demo**	Live demonstration of product features and core user workflows.
6	**Deployment Planning**	Define the sequence of steps to deliver changes to production.
7	**Rollback Planning**	Define steps to revert changes if deployment fails.

Entry Criteria

- Project plan & methodology approved
- Business requirements approved
- Functional requirements approved
- Non-functional & security requirements approved

Key Deliverables

- Unit & system-tested solution
- Revised architecture & design assets
- Draft build & deploy instructions
- Draft rollback procedures

Exit Criteria

- Integrated project solution complete
- Build & deploy instructions finalized
- QA team ready for handoff

Phase 5

Quality Assurance

Validate that the solution meets ALL requirements before go-live

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Quality Assurance

PHASE 5

Quality Assurance: Testing Strategy & Artifacts

QA prevents defects from reaching production. Every component — functional, non-functional, and performance — must be validated before UAT sign-off.

1 Prepare Test Plans › 2 Set Up Test Environments › 3 Execute Test Scripts › 4 Log & Track Defects › 5 Certify UAT Release › 6 Obtain User Sign-Off

Test Plan

- Scope, approach, resources, schedule
- Test items and features to be tested
- Entry and exit criteria defined
- Who does each task and when

Defect Tracker

- Logs all defects found during testing
- Used from functional testing through UAT
- Lets PM monitor project readiness
- Tracks defect severity and resolution

Test Environment

- Controlled replica of production
- Isolates testing from external factors
- Must mirror production as closely as possible

Performance Testing Types

- Load Test — simulate normal routine workload to find weaknesses
- Stress Test — measure the maximum load the system can sustain
- Longevity Test — validate long-term performance under sustained load

User Acceptance Testing (UAT)

- Final round of testing before production deployment
- High-level business scenario validation by product owners
- Business customers are the primary stakeholders
- Successful completion signals the end of the QA phase

Phase 6

Implementation

Where rubber meets the road — seamless migration to production

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Implementation

PHASE 6

Implementation: Go-Live Planning & Execution

Implementation is the controlled migration of the solution to production. The goal is a seamless cutover with minimal disruption and a clear support plan in place.

Change & Approval Management

- Obtain all required change management approvals
- Follow organizational change process for production migration
- Ensure all stakeholders have signed off before cutover

Cutover Plan

- Ramp Down — pre-migration preparation tasks and checkpoints
- Cutover — step-by-step migration execution sequence
- Ramp Up — post-migration validation and recovery steps

Communication & Marketing

- Notify all affected stakeholders before, during, and after go-live
- Develop a marketing/awareness plan for end-user adoption
- Create user guides and quick-reference materials

Post-Implementation Support

- Establish a production support plan (hypercare period)
- Define escalation paths for post-launch issues
- Transition support to the maintenance team with documentation

PMBOK Alignment: Implementation maps to Executing + Monitoring & Controlling process groups — integrate with your org's change management framework.

Phase 7

Sustain

Close the project and transition to ongoing operations

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Sustain

PHASE 7

Sustain: From Project Closure to Ongoing Operations

The project has been delivered and is now in production. Sustain closes the project formally and transitions ownership to the operations/maintenance team.

Post-Implementation Review

- Evaluate whether the original project objectives were met
- Gather team and stakeholder feedback on what worked and what didn't
- Document lessons learned for future projects
- Confirm all deliverables were accepted and signed off

Transition & Knowledge Transfer

- Provide detailed technical documentation to the maintenance team
- Deliver training on configuration, administration, and troubleshooting
- Ensure support runbooks are in place before project closes
- Formal handoff meeting with operations team

Ongoing Change Management

- Review new business objectives that may drive future enhancements
- Any new capabilities re-enter the lifecycle at Ideation
- Maintain a product backlog for future release planning

Project Closure Checklist

- All deliverables accepted and documented
- Lessons learned captured and archived
- Resources released back to the organization
- Project formally closed in project tracking system

A well-sustained project becomes the foundation for the next great idea — feeding back into Ideation.

Learning Resources & Tools

Bookmark these resources to support your PLC journey:

Learning Management

- SumTotal LMS — alameda.sumtotal.host (training courses and completions)
- Microsoft Planner Help & Learning — microsoft.com

Microsoft 365 Tools

- Microsoft Bookings — scheduling and resource management
- Microsoft SharePoint Lists — project tracking and data
- Microsoft Forms — surveys, data collection, and feedback
- Microsoft Planner — task assignment and milestone tracking

Project Management Standards

- Waterfall & Agile | Project Resources — ca.gov (state project resources)
- PMBOK Guide — Project Management Body of Knowledge (PMI)
- CDT CA-PMF Templates — California Project Management Framework templates

On-the-Job References

- PLC Phase Checklists — available in SharePoint (entry/exit criteria per phase)
- Requirements Document Template — functional and non-functional requirements
- Project Charter Template — standardized charter for all project sizes
- Change Order Template — formal scope change documentation

Questions?

Let's make every project a success.

Information Technology Department
Project Lifecycle (PLC) Framework

7 Phases
Completed