

IT Project Management and System Delivery Methodology (ITPM)

Overview of ITPM

- Project Management & Control Process – *monitor and control the project progress, costing, risk, quality throughout the project lifecycle*
- ITPM standardized project management and system delivery methodology, providing procedures and templates
- All IT application projects and enhancements has better adopt ITPM
- Our “Software Development and Maintenance” can be certified with ISO9001 Certification
- Compliance audit
 - Any exemption to the defined guidelines/ procedures/ deliverables should be documented with justifications

Stages of ITPM

| | |
|---|-----------------|
| Project Initiation Stage | |
| Business Analysis Stage | |
| Function Analysis Stage | |
| Package Selection Stage (optional) | |
| Business Process Analysis/Review Stage (optional) | |
| Design Stage | Iteration stage |
| Build Stage | |
| Test Stage | |
| Implementation Stage | |
| Initial Production Stage | |
| Post Implementation Stage | |

Stage of ITPM

1. Project Initiation

Prepare a clear statement for project and budget approval

- Mainly by Business Portfolio Manager and Business Analyst
- Usually performed during annually IS/IT planning
- Major Deliverable:
 - Business Case
 - One Page Summary

2. Business Analysis

Understand business need

- Mainly by Business Portfolio Manager and Business Analyst
- Major Deliverable:
 - Requirement Specification
 - Report to Information Technology Executive Management Committee

Stage of ITPM

3. Functional Analysis

Project formation and expand business analysis to ensure business accuracy, feasibility and a sound foundation for design

- Mainly by Project Team
- Define the project implementation approach
- Major Deliverable:
 - Project Charter
 - Security Risk Assessment

4. Package Selection [Optional]

Initiate the acquisition and select appropriate package

- Mainly by Project Team with Purchasing Team
- Major Deliverable:
 - Scoring Scheme
 - Tender Recommendation

Stage of ITPM

5. Business Process Analysis/ Review [Optional]

Re-confirm the user requirements

- Mainly by Project Team
- Identify areas for improvement in current processes
- Major Deliverable:
 - Business Process Review Report

6. Design

Transform requirements into functional and technical design

- Mainly by Project Team and IT Lead
- Major Deliverable:
 - Functional Design Specification
 - Technical Design Specification
 - Integration Functional Design Specification
 - Threat Model Report
 - Service Level Agreement

Stage of ITPM

7. Build

Develop the solution

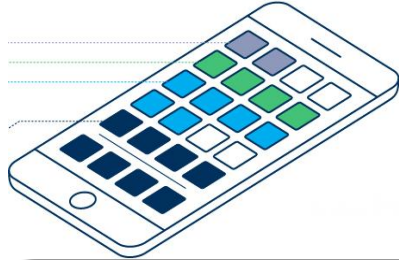
- Mainly by Project Team and IT Lead
- Pay attention to IT coding standards and coding assurance procedures
- Major Deliverable:
 - Code Analysis Report
 - Code Inspection Report

8. Test

Test against the requirement to ensure the completeness and quality of the system functionality

- Mainly by Project Team
- Ensure the completeness of requirement through testing
- Major Deliverable:
 - Application Test Specification
 - Performance Test Specification
 - Product Audit Report
 - Code Scan Result/Security Scan

Iteration Stage



Refine Use Case/
Requirement

Design & Build



Application Test

Change
Requested ?

Yes

No

Ready to Deploy



User Evaluation & Acceptance



Stage of ITPM

9. Implementation

Implementing the developed and tested solution to the production

- Mainly by Project Team and IT Lead
- Ensure operations readiness
- Minimize the impact and interruption to the business
- Major Deliverable:
 - User Manual (if applicable)
 - Operations Readiness Checklist
 - System Handover Form
 - Cutover Plan
 - System Migration Form

10. Initial Production

Ensure smooth running of the system with minimum intervention from operations or support staff

- Mainly by Project Team
- System usage and performance should be monitored
- Systems Enhancement Request may be raised for bug fixing

Stage of ITPM

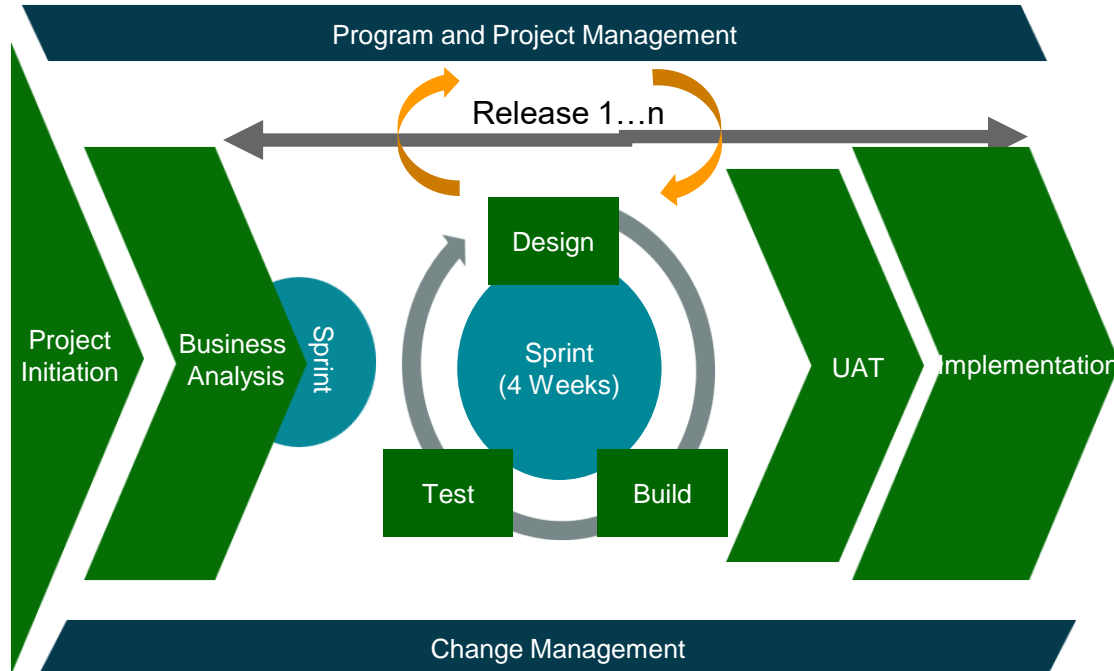


11. Post Implementation

Assess the performance of the project and delivered product; share the lesson learnt

- Mainly by Project Team
- Post Completion Review Report

Scrum Methodology for ITPM



| Sprint | Sprint (Development Cycle) | SIT/UAT & IM (Release Cycle) |
|--|---|--|
| <ul style="list-style-type: none"> Form the Scrum team Prepare Initial Product Backlog (requirement) High Level Solution Architecture Design | <ul style="list-style-type: none"> Sprint Planning – requirements prioritization Sprint – implementation Sprint Review – demo and accept deliverables | <ul style="list-style-type: none"> UAT – testing before release Release new features to Production Go back to Sprint cycles after Release -> Repeat until total project is completed |

Scrum Events

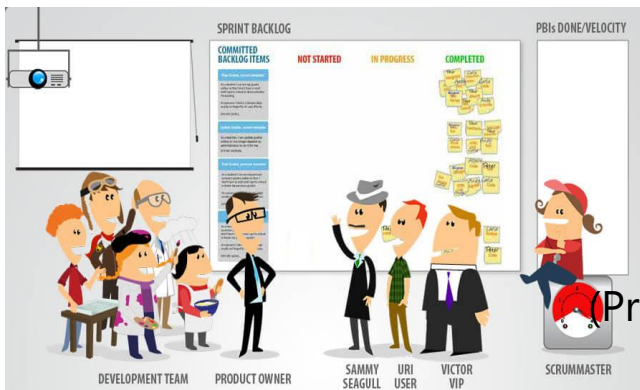


Sprint Planning Meeting
What and How
(Product Owner, Scrum Master, Development Team)

Daily Scrum Standup
Team Commitment
(Scrum Master, Development Team)



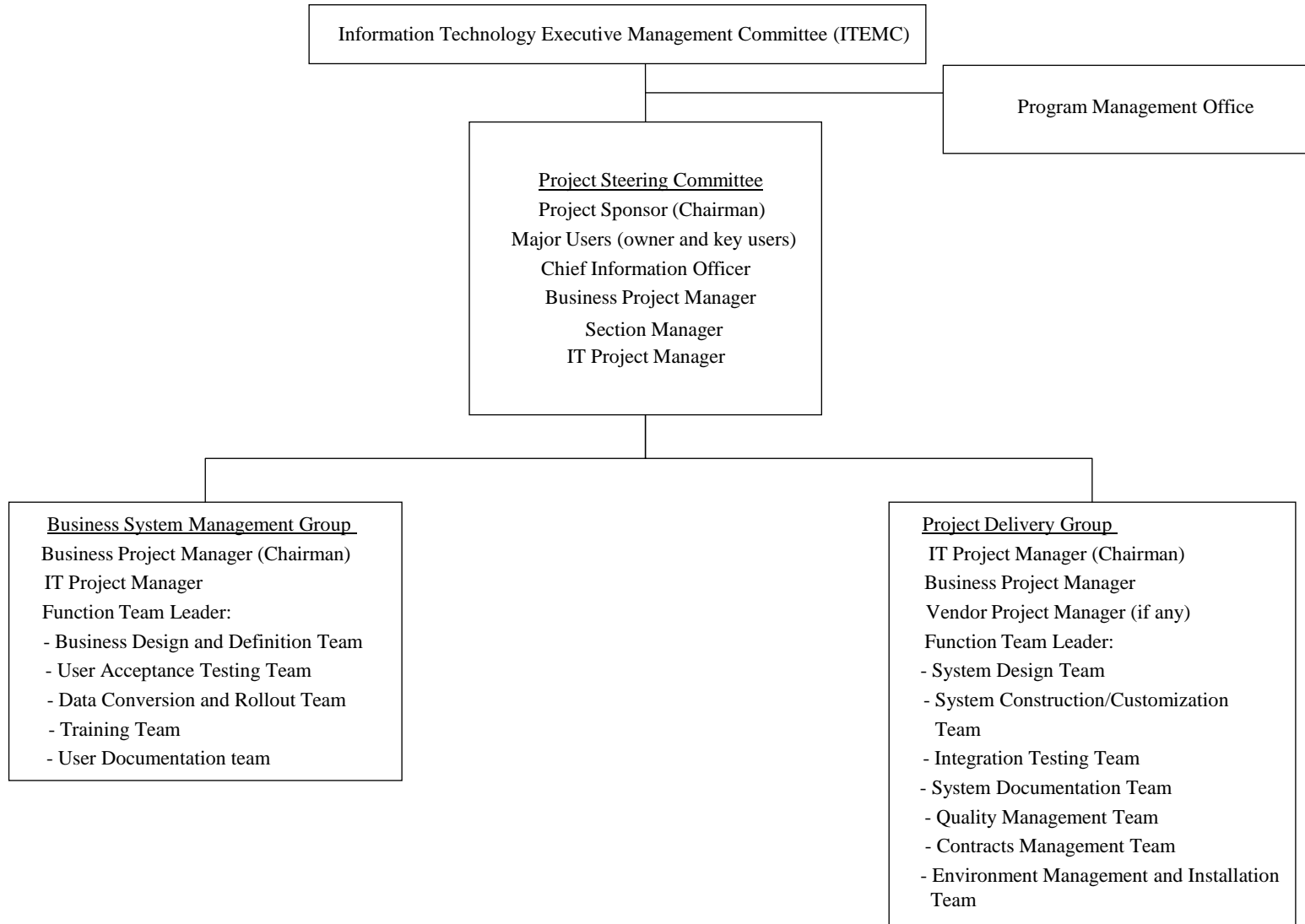
Sprint Review Meeting
Feedback and Alignment
(Product Owner, Scrum Master, Development Team, Stakeholder)



New Key Roles in Scrum Methodology

| Traditional Roles in Waterfall | New Roles in Scrum Methodology |
|---|--|
| <p>Business Project Manager</p> <ul style="list-style-type: none"> Review and approve change in project scope, cost, schedule, resource and management issues | <p>Product Owner</p> <ul style="list-style-type: none"> Similar to Business Project Manager roles + Prioritize user requirements and highly engage in scrum activities |
| <p>Project Manager</p> <ul style="list-style-type: none"> Ensure project completion on time and within budget Prepare and report progress and issues | <p>Scrum Master</p> <ul style="list-style-type: none"> Similar to Project Manager roles + Supports the Product Owner, coaches the team and facilitate Scrum Collaborations + Monitor the scrum processes and meetings |
| <p style="text-align: center;">Development Team</p> <ul style="list-style-type: none"> Communicate with PO directly Cross-functional (SA, Programmer, Testers) and Self Organize Take the ownership to present the deliverables | |

Project Organization Example



Audit

Propose : Evaluate the ITPM process via Audit

Example:

- ISO9001 Audit
 - Internal Audit
 - External Audit
- Audit by Internal Audit Department

Quality is by Build, Not Check

Lesson Learnt from Audit

- Careless mistakes can lead to misperception by auditors
- Understanding the consequences
- Affecting people and department image

Common audit finding

- Using Obsolete forms/ template
- Partially documented testing results
- Missing sign-off/ name of the signer
- Image signature
- Missing testing evidence

Quick Tip - Document Sign-off

- Sign-off/ Approval
 - No image signature copying
 - Can be performed by 3 different ways



1. Sign physical copy of the document



2. Sign cover sheet attached with documents



3. Collect acceptance email

Quick Tips - 4 Types of Testing Evidence

1. Screen captures
2. Video clips
3. Testing environments and server records
4. Well documented test case, test data, expected result and actual test result