Abstract

High-budget and high-profile enterprise system projects, like Obama Care, have high failure rates. The first challenge is having multiple parallel teams working separately on different aspects. Design decisions made like Obama Care, have high failure rates. The first within each team may lead to integration failure. The challenge is having multiple parallel teams working requirements, including professional, legal, accounting and unarticulated requirements. Enterprise systems also unreasonable to expect business analysts to elicit all these requirements. Thirdly, project teams often focus on delivery without considering long-term maintenance. Once the external contractors leave, the local staff is left with maintenance issues. Finally, the lack of long-term study on these enterprise systems allows lessons learned to be forgotten. By studying multiple enterprise systems we distill lessons learned into a framework that incorporates maintenance needs and enforces consistency between teams. The framework also serves as a template for comprehensive requirements gathering.

Enterprise – Complicated Business Requirements

ENTERPRISE SYSTEM PROJECT CHALLENGES:
- Large project teams
  - Too complicated for anyone to oversee.
- No clear governance between teams or roles
  - Multiple teams work in parallel creates conflicts, inconsistencies and integration catastrophes.
- Complicated business requirements
  - Business requirements: professional, legal, accounting, unarticulated, etc.
  - Technical requirements: security, risk tolerance, service level agreements, etc.
  - Business analysts cannot elicit comprehensive requirements.
- Long-term maintenance
  - Project team with external contractors focus on delivery.
  - Local staff left with long-term sustainability issues.
- Limited knowledge or lessons learned
  - Needs study

Enterprise System Framework Benefits

- Integrated lessons learned from empirical enterprise system studies.
- Integrate with project management process.
- Incorporated Service Oriented Architecture (SOA) that benefits scalability, flexibility, adaptability and availability.
- Assist business analysts to gather complicated business and technical requirements by providing templates.
- Reduce dependency on business analysts’ and developers’ experience.
- Accompany with code generating tool that reduce development time and errors significantly.
- Lessen programmers’ burdens by embedding advanced programming logic in the framework.
- Ready for continuous integration and automated testing.
- Ready for continuous maintenance with standard procedures.
- Ease maintenance with standardized technology stack.
- Sustain consistency between parallel project teams.
- Moderate new employees learning curve by designating functions and features to specific components.
- Ensure legal compliancy.
- Provide dynamic and flexible authorization model.
- Enforce data protection and privacy.
- Tighten security defence and monitoring.
- Allow better infrastructure planning.
- Allow more accurate budgeting.
- Integrate with helpdesk support.
- Ready for full/partial cloud deployment.
- Allow individual components to be upgraded one at a time.

Enterprise System Framework Future

EDUCATION IN:
- Writing
- Training
- Mentoring

RESEARCH PARTNERS FOR:
- Business process integration
- Development integration
- Maintenance integration