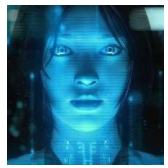
Agile Portfolio Management

(Connecting Systems with Assembly)



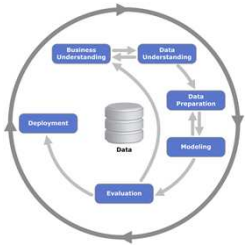


PMI® Project Management Institute

Scaled Agile® Framework

Richard Frederick, PMP (rfrederick.pmp@gmail.com; 214-755-7035 talk or text; www.linkedin.com/in/rfrederick)



CBDA CERTIFIED IIBA

ISO International Organization for Standardization

ANSI American National Standards Institute

sas

OMG OBJECT MANAGEMENT GROUP

INCOSE International Council on Systems Engineering

IEEE

PMI Project Management Institute

Scaled Agile Framework

IIBA International Institute of Business Analysis

UNIFIED MODELING LANGUAGE

W3COMPUTING A DEVELOPER REFERENCE WEBSITE

Requirements Development Management (RDM) for

Business Data Analytics

(The Language of Data)

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Requirements Agenda

Business Data Analytics "The Language of Data"

01-FOUNDATION

- **LAB-Introductions (Name, Job Title, Objectives)**
- Dashboards and Robots (Data Mining & Machine Learning)
- Requirements and Testing (Four Quadrants)
- What are Structured Language Requirements? (Structured English and Structured Query Language)
- Why Should You Care? (Primary Source of Project Problems)
- How Do They Work? (Discreet Intellectual Property Inventory)
- Types of Requirements (Product, Project, DATA)
- Natural Language Processing (Morphology, Semantics, Syntax and Linguistics)
- OMG-SBVR (Semantics of Business Vocabulary & Rules)
- IEEE-EARS (Easy Approach to Requirements Syntax)
- INCOSE (Rules for Writing Requirements) & QVscribe
- Waterfall and Agile (Assembly Methods)

02-ELICIT

- **LAB-Vision/Scope (Seek to Understand)**

Elicitation Techniques:

- Document Analysis (Low Hanging Fruit)
- Interface Analysis (Navigation & Functionality)
- Benchmarking (Actual Data)
- Brainstorming (Every Idea is a Good Idea until it becomes a Bad Idea)
- Prototyping (Minimum Viable Product)
- Reverse Engineering (Begin with the End in Mind)
- Interview (Thinking Questions)
- Workshop (Group Interviews)
- Observation (What do you See?)
- Survey Questionnaire (Paper equals proof)

03-ANALYZE

- What are Models? (Pictures of Language)
- **LAB-The Language of Modeling (GIVEN pre WHEN process THEN output-result)**
- Types of Models (Context-Structure, Usage, Data Behavior, Process Flow)
- Context-Structure (Vision, Roadmap, Scope WBS)
- Usage (EPIC, UseCase, UserStory, Feature)
- Data Behavior (ERD, JOIN-Denormalization, Star Schema, Dimensional OLAP, Dashboard, Intelligence)
- Data Behavior (Data Dictionary, DataFlow, Data Structure Instance, Data Element Attribute, Data Store)
- Data Behavior (Process Logic, Business Rules)
- Process Flow (Swimlane)

04-DOCUMENT

- Categorization, Organization, Documentation, Integration, Automation
- Making Documents Easy to Read (Fonts & Navigation)
- Document Types (BRD, TRD)
- **LAB-Business Requirement Document (Concept of Operation)**
- Technical Requirement Document (System Specification)

05-VALIDATE

- Validation thru Triangulation (Prep Drills)
- Traceability (Project Unique Identifier)
- Requirements Baseline (ROM Estimate, Planning Estimate, Definitive Estimate)
- **LAB-Estimating Story Points (Complexity and Risk)**
- Lessons Learned (Course Wrap-Up)

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Project Management Agenda

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- INCOSE (Rules for Writing Requirements) & QVscribe
- Waterfall and Agile (Assembly Methods)
- About PowerBI (Business Intelligence)

ENVISION (Initiate)

01-Understand the Business Need

- **Determine BUSINESS OBJECTIVES**
- Background
- Business Objectives
- Success Criteria
- **Assess SITUATION**
- Inventory of Resources
- Requirements, Assumptions, and Constraints
- Risks and Contingencies
- Terminology
- Costs and Benefits
- **LAB-Charter Vision**

PLAN (Increment Zero)

02-Understand the Data

- **Collect INITIAL DATA**
- Data Collection Notes
- **Describe DATA**
- Data Description Notes
- **Explore DATA**
- Data Exploration Notes
- **Verify DATA QUALITY**
- Data Quality Notes
- **LAB-WBS Roadmap**

DEVELOP (Execute)

03-Prepare the Data

- **Select DATA**
- Rationale for Inclusion/Exclusion
- **Clean DATA**
- Data Cleaning Notes
- **Construct DATA**
- Derived Attributes
- Generated Records
- **Integrate DATA**
- Merged Data
- **Format DATA**
- Reformatted Data
- **LAB-Duration Story Points**

04-Model the Data

- **Select MODELING TECHNIQUES**
- Modeling Technique
- Modeling Assumptions
- **Generate TEST DESIGN**
- Test Design
- **Build MODEL**
- Parameter Settings Model
- Model Description
- **Assess MODEL**
- Model Assessment
- Revised Parameter Settings
- **LAB-Risks & Release Schedule**

STABILIZE (Control)

05-Evaluate the Data

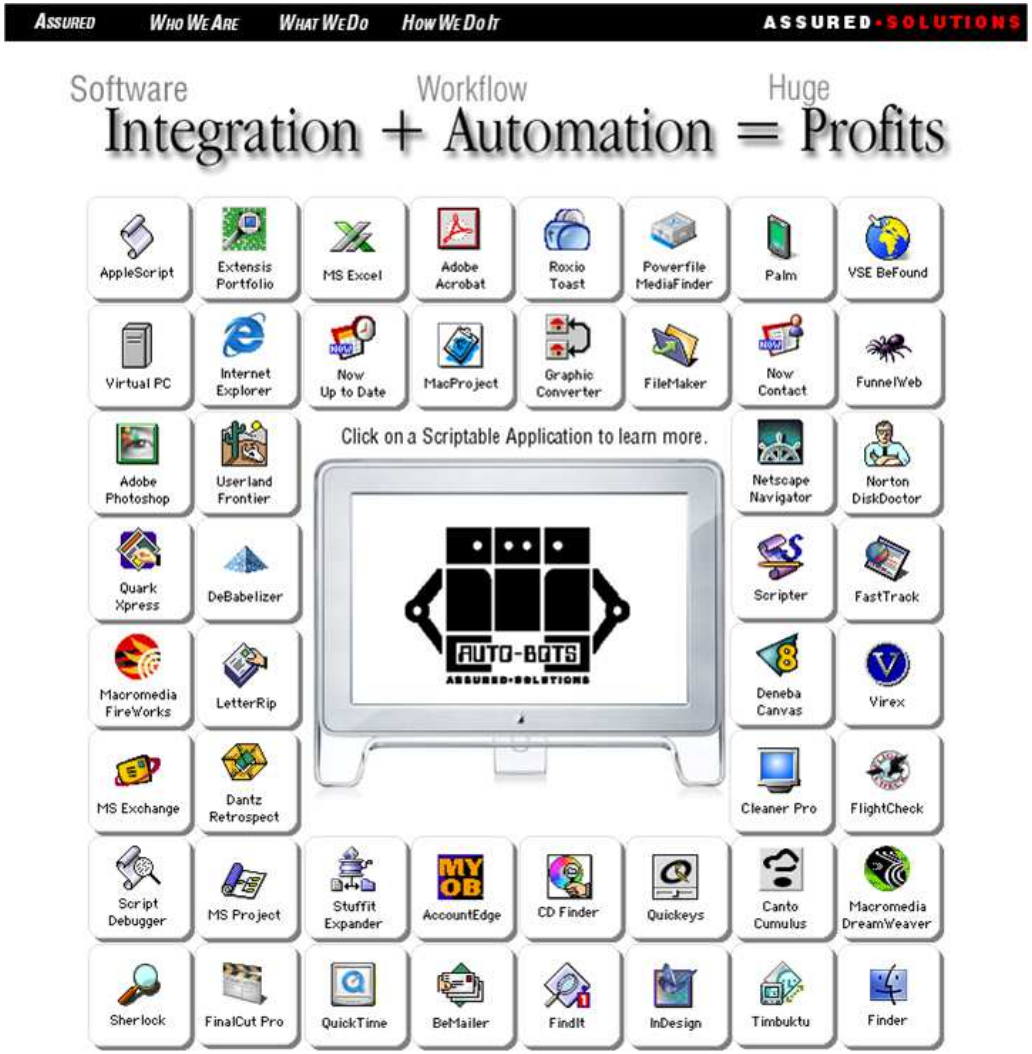
- **Evaluate RESULTS**
- Assess the Results against the Business Success Criteria
- **Review PROCESS**
- Review of Process
- **Determine NEXT STEPS**
- List Possible Actions
- Decision
- **LAB-One Page Project Manager (OPPM)**

DEPLOY (Close)

06-Deploy the Solution

- **Plan DEPLOYMENT**
- Deployment Plan
- **Plan MONITORING & MAINTENANCE**
- Monitoring & Maintenance Plan
- **Produce FINAL REPORT**
- Final Report
- Final Presentation
- **Review PROJECT PLAN**
- Experience Documentation
- **LAB-Lessons Learned (Train the Trainer)**

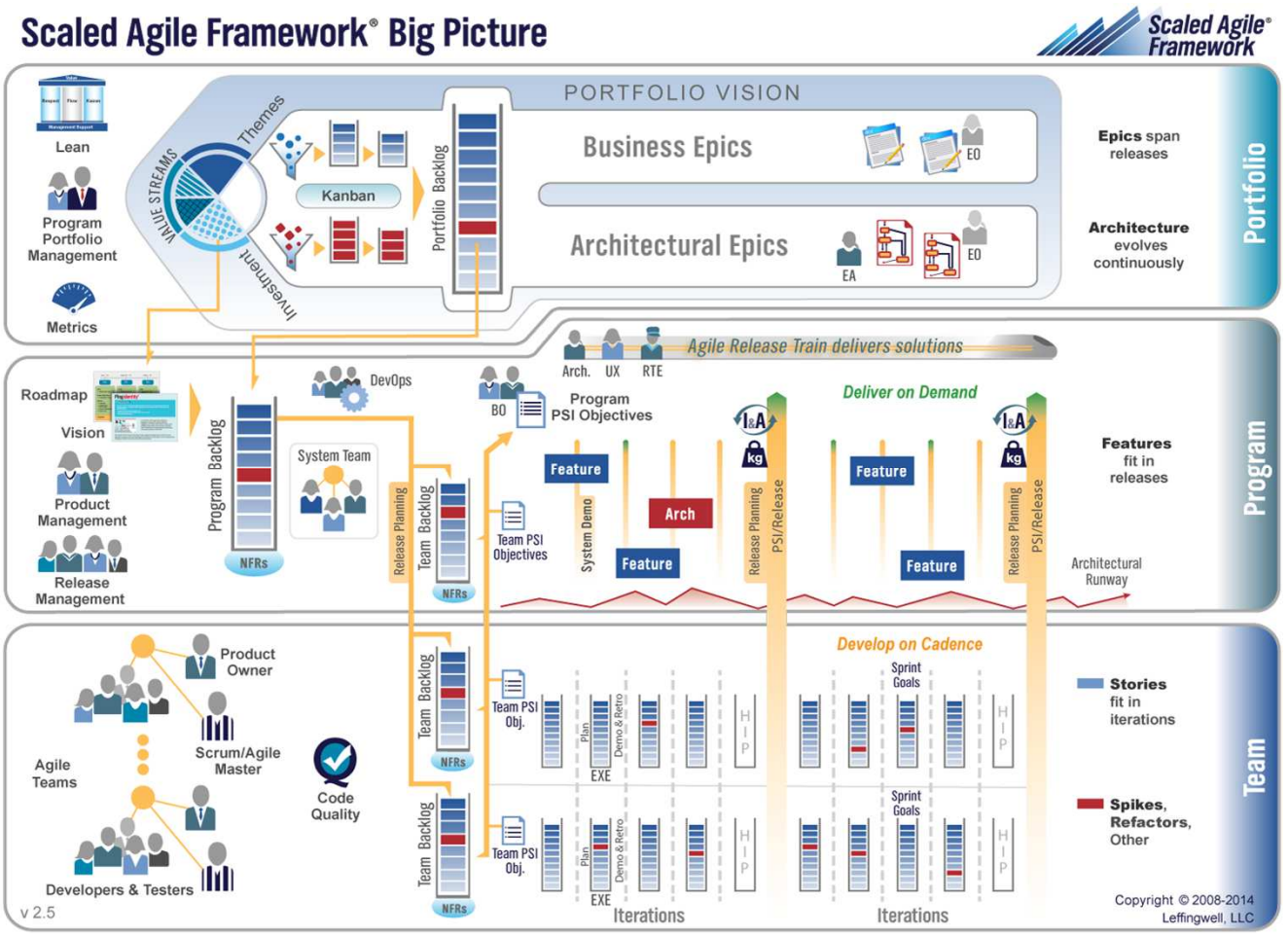
Assured Solutions

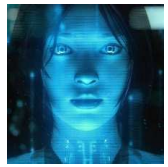


Overview "Seek to Understand"

- Scalable Agile
- Five Levels of Agile Planning
- Portfolio Management
  - Create > Select > Plan > Manage > Close
- Scalable Agile Portfolio Management
- Scalable Agile Portfolio Tools

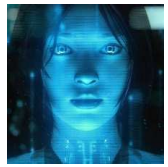
Scalable Agile





Five Levels of Agile Planning

Portfolio	1.Vision and Objectives	Defines Who, What, When, and Why, Constraints, Assumptions, Objectives, and Outcomes
Program	2. Roadmap	Provides a view of planned features by service organized by releases over a timeline horizon (6-12 months)
	3. Release Plan	Facilitated by RTE, Teams participate in developing a plan of what will be delivered in the next release.
Team	4. Sprint Plan	Stories, tasks, definition of done, level of effort, and commitment for work to be done in a Sprint.
	5. Daily Plan	Presented at daily standup meetings in the form of 1) what I did yesterday,2) what will be done today, and 3) what are my impediments.



Portfolio Management

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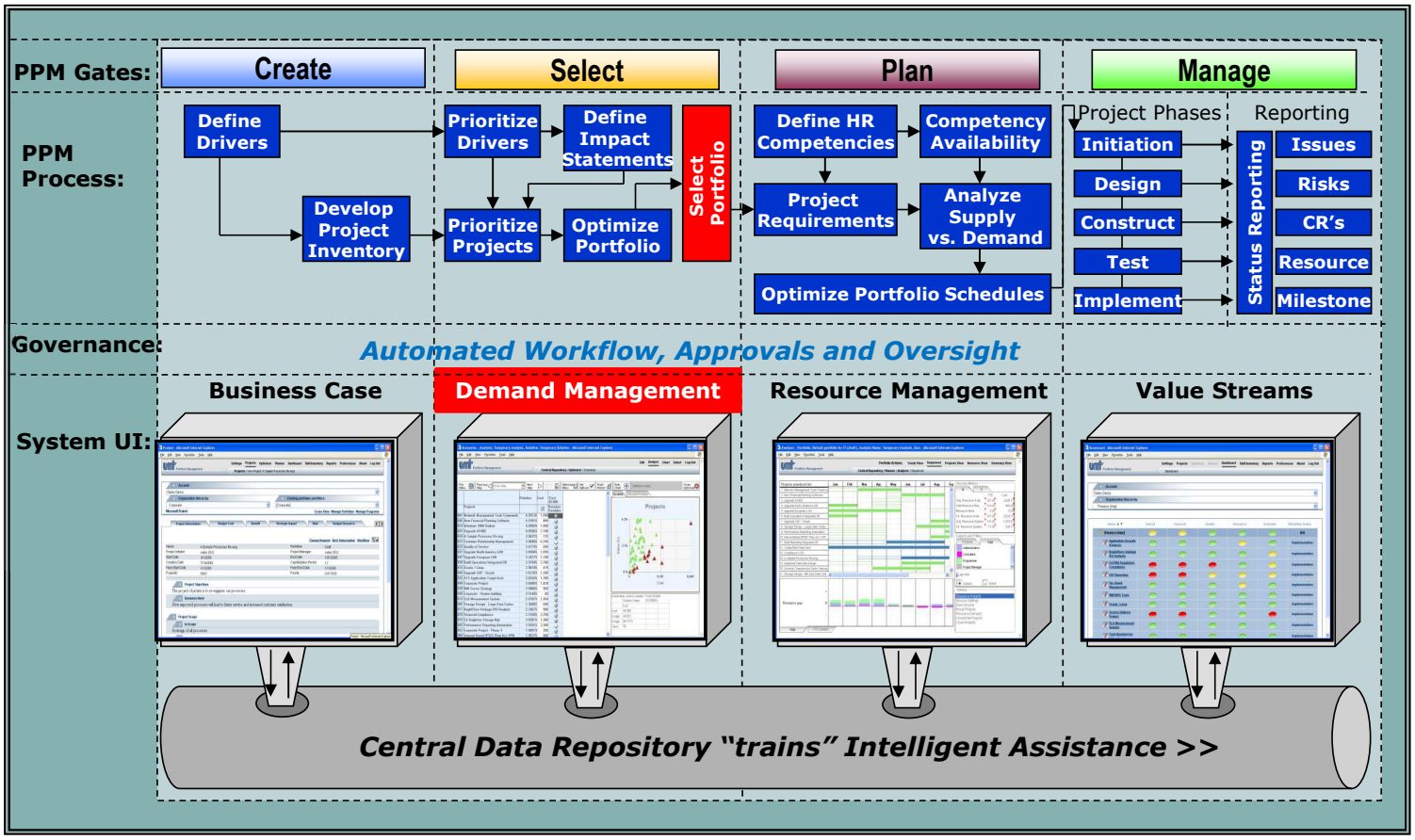
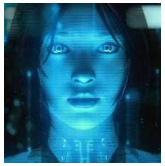
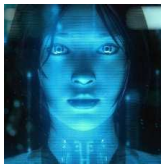




Scalable Agile Portfolio Management



Create > Select

Plan > Manage > Close

Portfolio

Business Architecture

Service Portfolio

Service | Service

SDP | SDP

Innovation & Need

Demand Management

Project: Vision | Objectives | Business Case | Impacts

Portfolio Backlog

Business Project

Architecture Project

Transformation Project

Benefits Realization

Business Outcomes

Program

Elicitation & Discovery

Business | Customer | User | Service

Service Change | People Change | Process Change | Data Change | Rule Change

Business Model | Change Canvas | Needs | Scenarios

Negotiated Change Business Value

Delivery

Roadmap

Release Plan

Feature Backlog

Feature | Feature | Feature | Feature | Feature | Feature

Requirements

Acceptance Criteria

Tests

Lean

Release Train

Team

Business Teams

Bundle | Bundle

Kanban | Kanban

HIP | HIP

Validated Learning

Plan | Assess | Learn

Bundle | Bundle | Bundle

Sprint | Sprint

Sprint | Sprint

Sprint | Sprint

HIP | HIP | HIP

Valuable Software

Technical Teams

Team Backlog

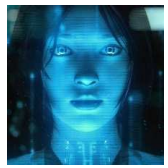
Story | Story | Story

Story | Story | Story

Story | Story | Story

Scalable Agile Portfolio Tools

Portfolio Tool	Scalable Agile	Description
Strategic Impact	Investment Theme	Investment Themes reflect how a portfolio allocates budget to the various initiatives it has defined to implement the portfolio business strategy.
Project	Business Epics	Business Epics are large customer-facing initiatives that encapsulate the new development necessary to realize the benefits of some new business opportunity
Project	Architectural Epics	Architecture Epics are large technology initiatives necessary to evolve portfolio solutions in order to support current and future business needs.
Roadmap	Roadmap	The Roadmap provides a view of the intended deliverables, such as Features, Epics, and other milestones, over a timeline horizon.
Release	PSI Release	The PSI (Potentially Shippable Increment) is the larger development time box (super-sprint) that uses cadence and synchronization to facilitate planning, provide for aggregation of newsworthy value, and provide a quantum unit of thinking for portfolio level consideration and roadmapping
Features	Features	Features are functionality provided by the system that fulfill one or more stakeholder needs.
Use Case Scenarios	Stories	Stories (user, technical, infrastructure) are the Agile replacement for traditional forms of requirement specifications. They are small, independent behaviors that can be implemented incrementally, each of which provides value to the business
Steps	NFRs	Nonfunctional Requirements (NFRs, or system qualities) describe system attributes such as security, reliability, maintainability, scalability, and usability (often referred to as the "qualities" or "ilities").



Summary “Train the Trainer”

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Let’s stay in contact:

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