

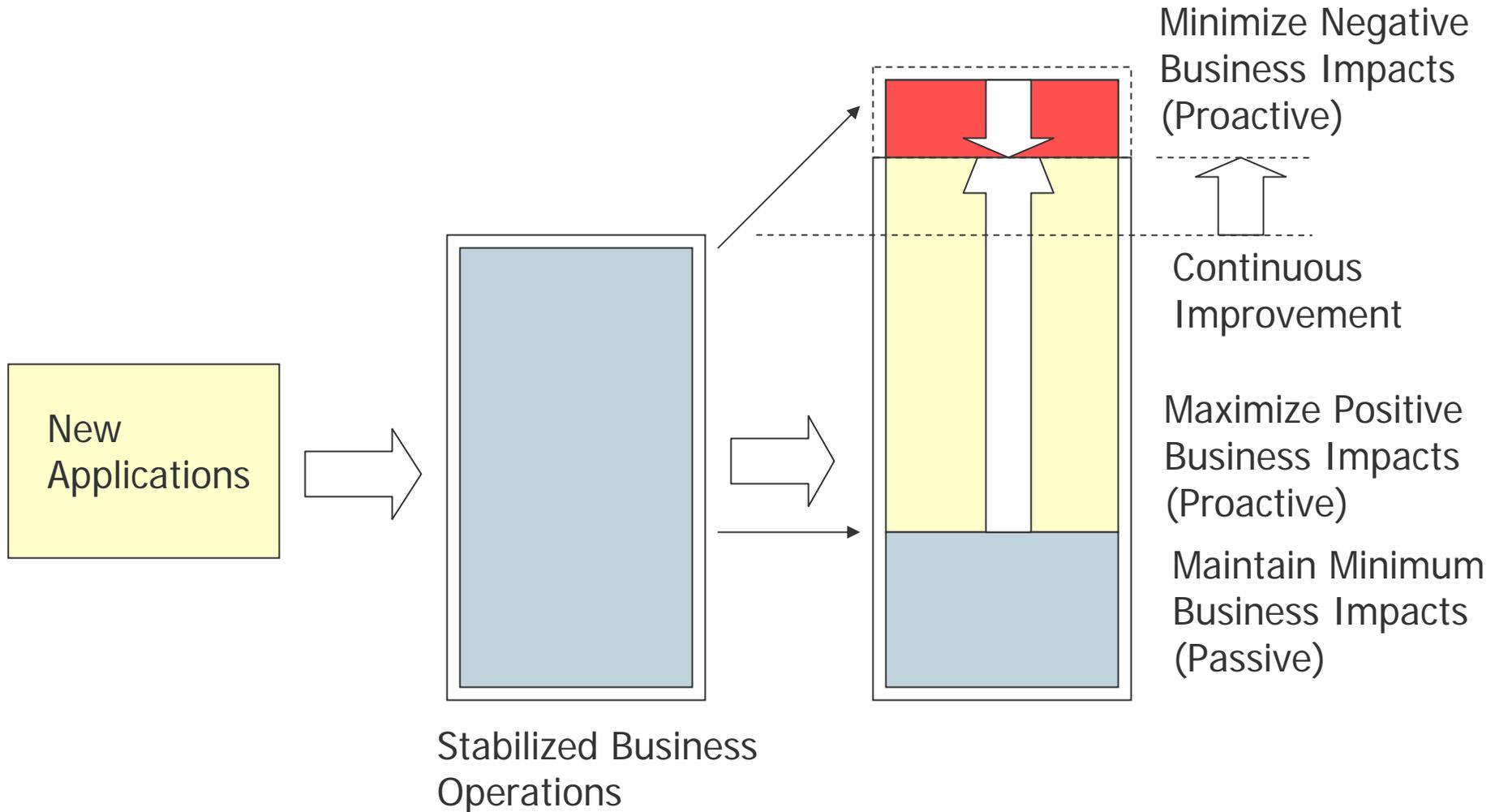
# A Business Functions Based Matrix

For Application Development, Deployment, and Operations

Alan Tung

*EDS Global Product Development*

# Objective of Application Implementation



# Current Situation

## IT Organization



Focal point/sign-off based project planning and execution



Solicit Focal Point, Requirements, and Test Cases

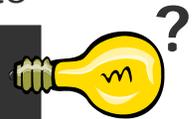
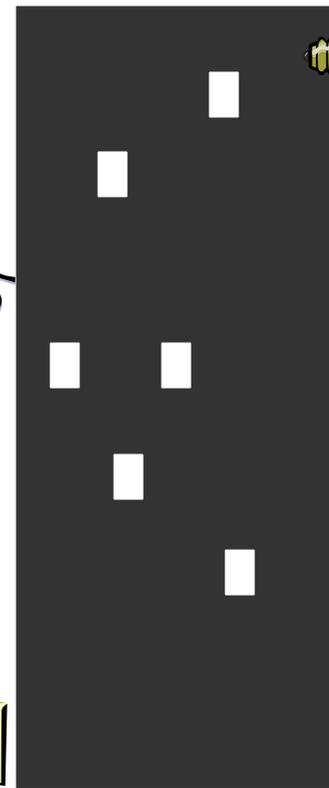


Enforce sign-off from Focal Point



Deliver and hope for success

## Business Units

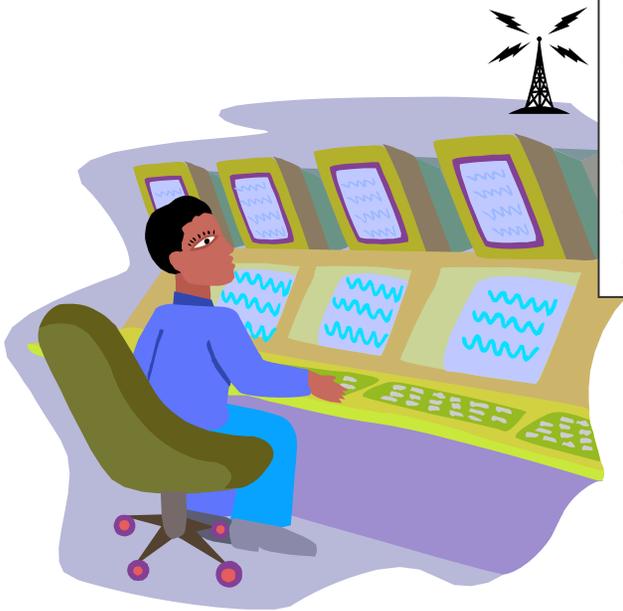


# Issues

- Long lead time to identify a business focal point
- Long lead time to solicit information from business focal point
- Relies heavily on sign-off procedure, rather than analysis
- High learning curves for each project
- No broad SME pool for impact analysis
- Inconsistent information among development, deployment, and operation organizations
- No existing baseline for improvement

# Proposed Solution

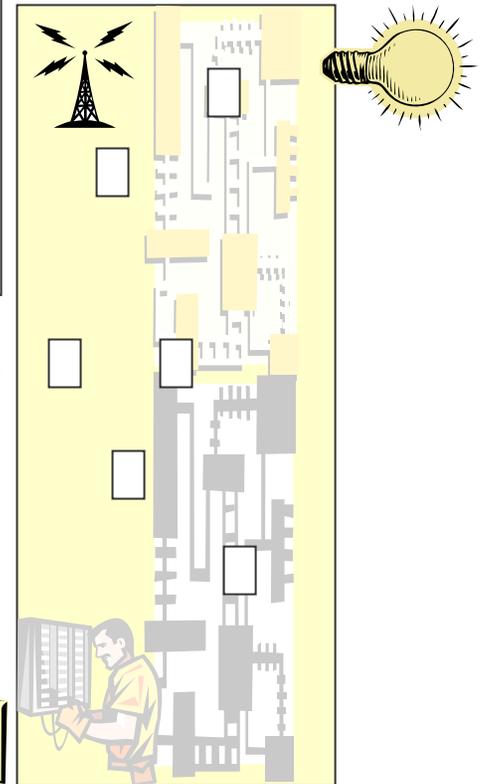
IT Organization



## Business Functions Based Matrix with documented

- Business organizations and Functions
- Business Dependencies on Applications
- Applications and modules
- Interdependent applications
- Dependent infrastructure

Business



Sign-off with facts and verifications

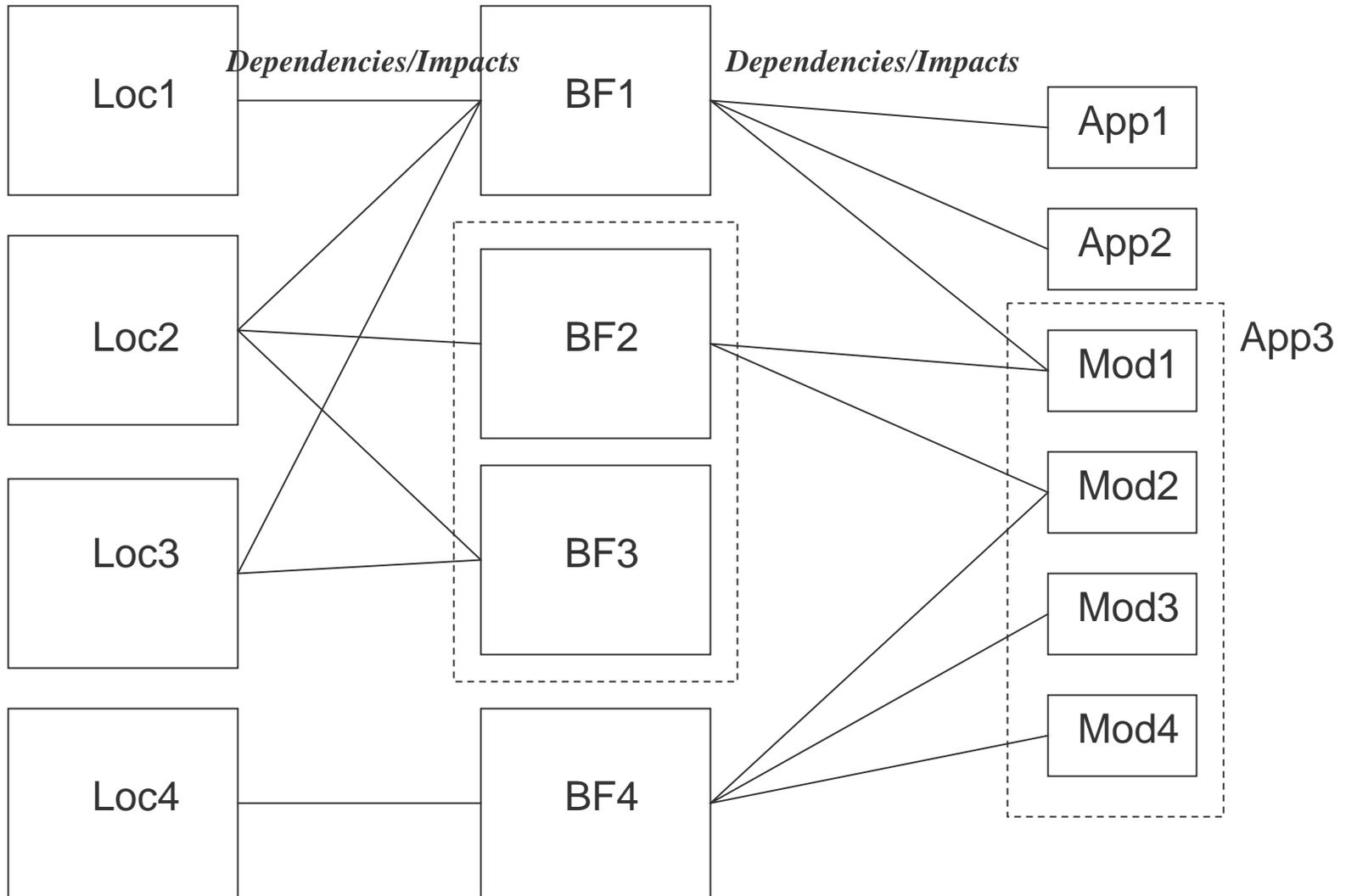


Deliver with confidence

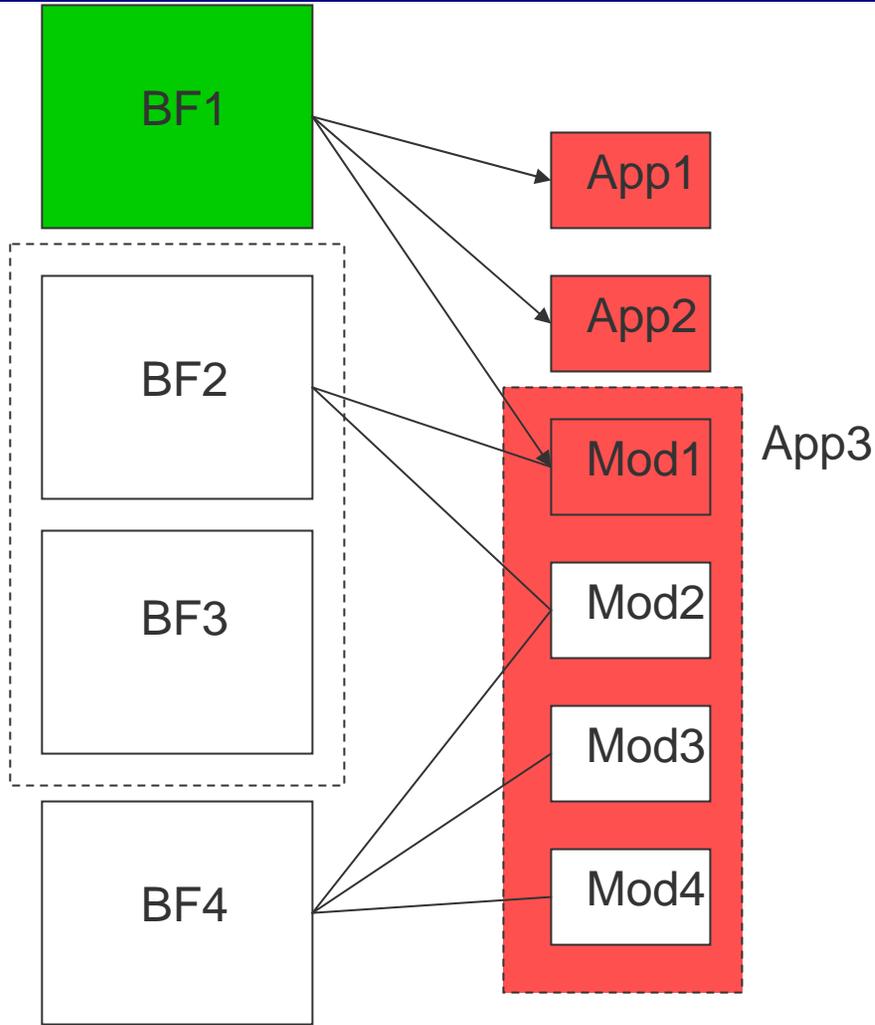


Analysis based project planning and execution

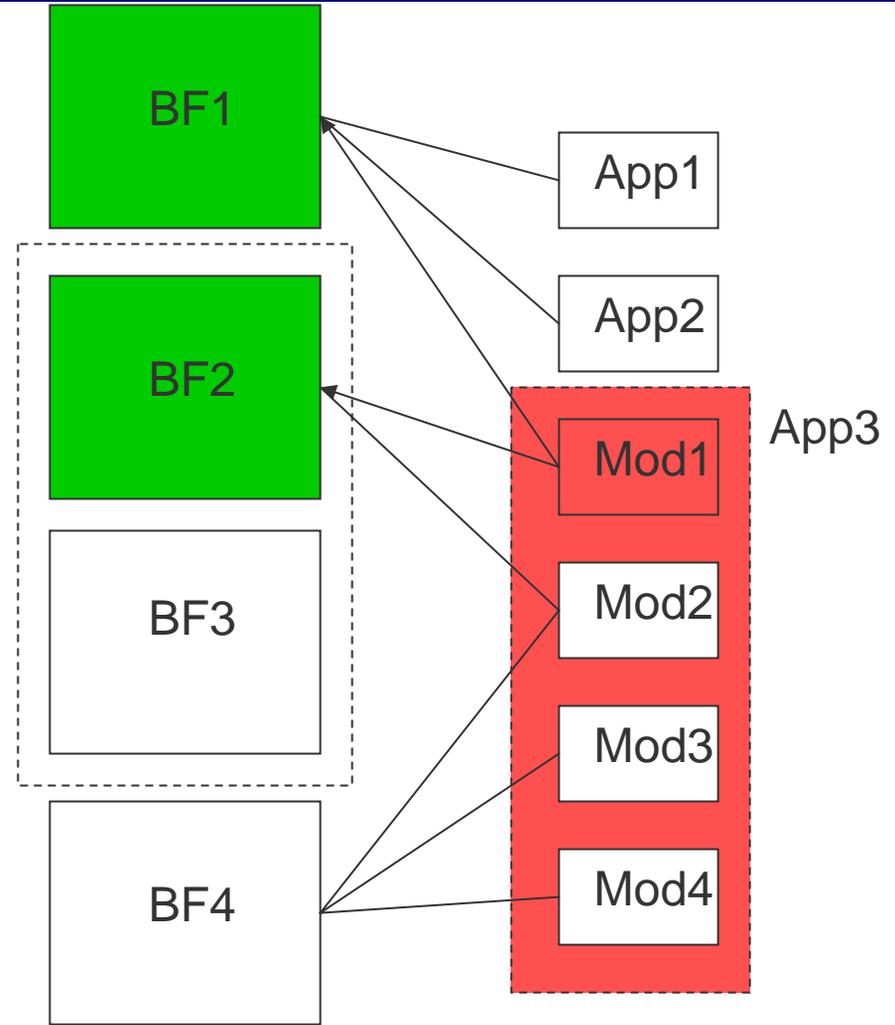
# Business Functions Based Matrix



# Impact Analysis Based On Project Scope



**Business Perspective - Impacts on applications when BF1 initiates changes**



**IT Perspective - Impacts on business functions when App3/Mod1 is changed**

# Benefits

- **Business Benefits**

- Business process focused technology advancement (common)
- Complete impact analysis before project starts
- Plan projects around known risks
- Priority set by facts, not by noise level
- Common baseline for disaster recovery

- **IT Benefits**

- High confidence level of project executions
- Quick turn around cycle for re-planning projects
- Focused test planning
- Focused communication planning
- Reduced learning curves by leveraging configuration baseline

# How to implement a feasible BFBM Tool?

PLM on PLM Concept

# PLM on PLM Concept

- Correlate Application Management with Manufacturing Process Planning

TeamCenter Item Types	Application Release Process	Manufacturing Process Planning
 Product	Applications, Modules, and Application Releases	Product Assembly, Components, and Design Releases
 Process	Business Functions, Processes, Operations	Business Functions, Processes, Operations
 Plant	Locations, Sites, Devises	Plants, Work Areas, Assembly Lines

Application Management Logic – *X application* is used by *Y business function* at *Z location*

Manufacturing Planning Logic – *X Product* is manufactured by *Y process* at *Z Plant*

# BFBM Management Tool – TeamCenter

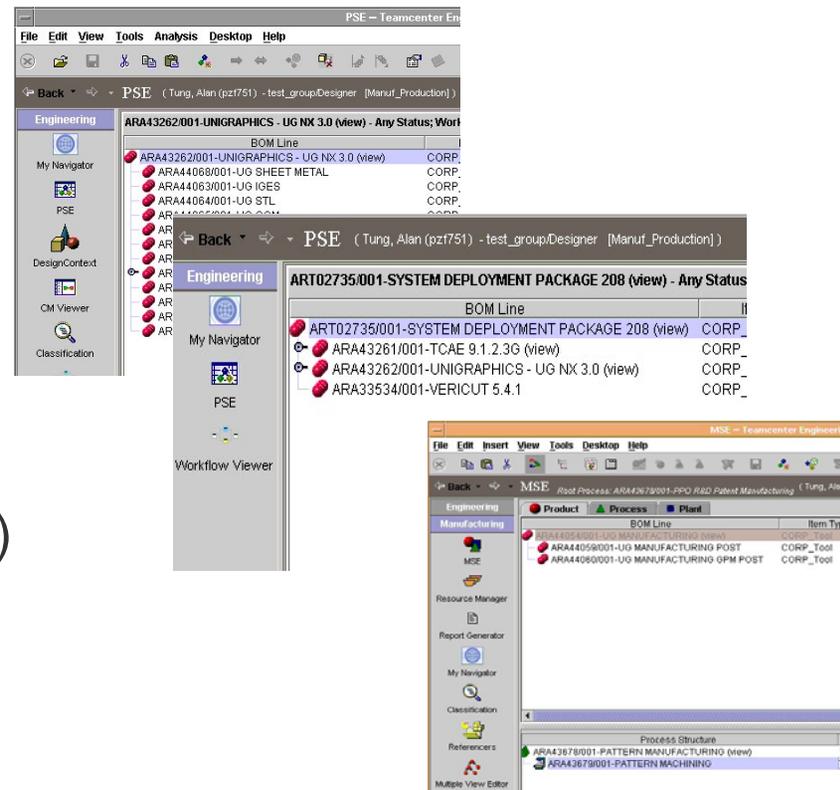
## Why TeamCenter???

- Existing PLM Key Enabler
- Similar Data Structure and concept – *PLM on PLM*
- *Globally* available and accessible
- *Business Process Oriented*
- Open Structure - Designed for *Collaboration*
- Well supported in Operations Mode

# Scalability of BFBM in TeamCenter

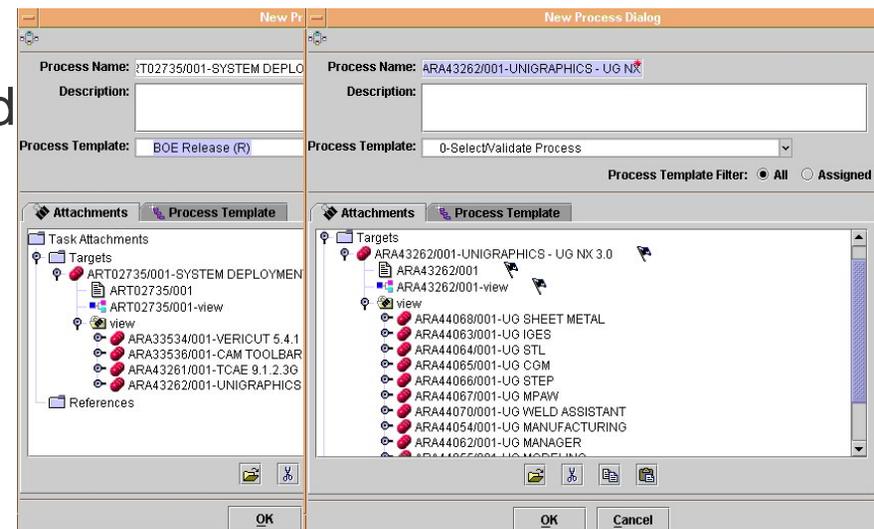
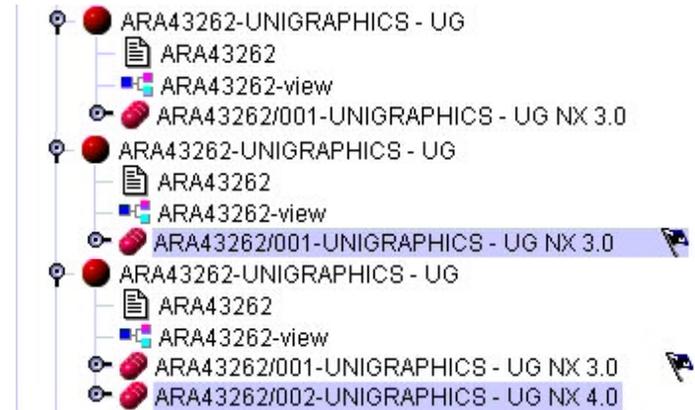
Application Management Logic – *X application (or x module)* is used by *Y business function* at *Z location*

- Data Populated by –
  - Product Structure Editor (PSE) to form an assembly structure of Application Xn (x1, x2, x3)
  - PSE to form an assembly structure for Deployment Package P(X1, X2, X3.....)
  - Manufacturing Structure Editor (MSE) to link X-Y-Z



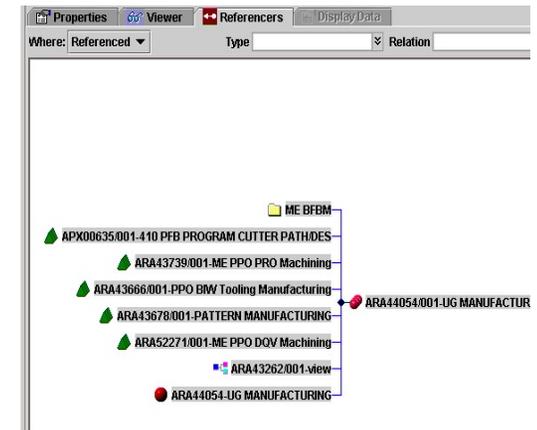
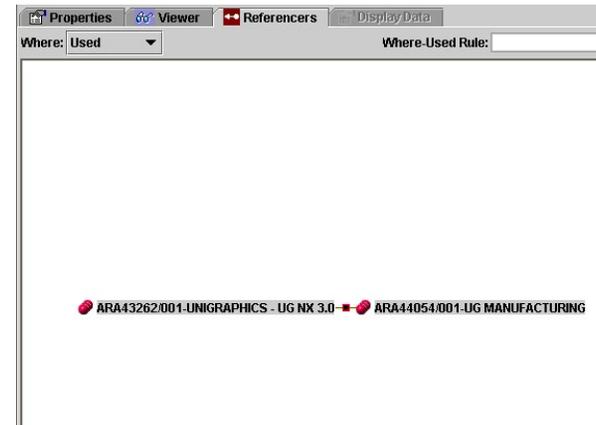
# Application Releases – Some Examples

- Item – Individual Application or Module
- Item Revisions – Application Versions
- Revision Rules –
  - Testing Phases – Latest Working
  - Production Mode – Latest Released
- Workflow Release –
  - Deployment Package Release
  - Application Suite Release



# BFBM Data Retrieval

- Data Queried by -
  - Where Used – Application Interdependencies
  - Where Referenced – Business Function/Application Dependencies
  - Data Query Logics –
    - Yn Process uses X1, X2, X3..... applications
    - Yn Process is executed at Z1, Z2, Z3..... locations
    - x3 module in X1 application impacts Yn Process at Z2, Z5, Z7..... locations



# TeamCenter Ownership Examples

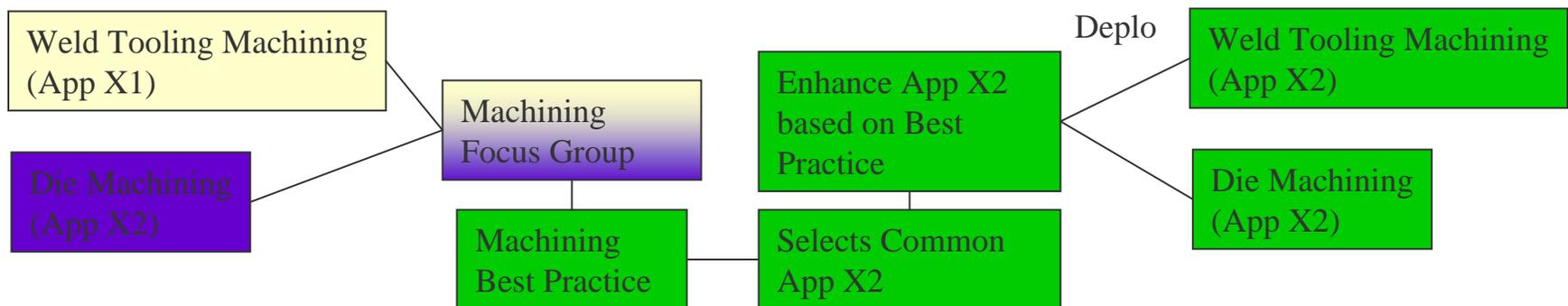
- Process-Location Relationship – Business Operations Manager
- Application-Process Relationship – Site Implementation Lead (A), Application Owner (R)
- Application Items, Item Revisions – Application Owners
- Application Suites, Application Deployment Packages Items, Item Revisions – Corporate Application Packaging Center
- Revision and Variant Rules – Program Office
- Monitoring and Controlling – Program Office CM Team

# Where/How BFBM Fits In

- **PLM Implementation Projects –**
  - Project Planning – Impact Analysis, Project Contacts, Pre-Release Review
  - Development – Impact Analysis, Focus Group reviews, Functional Review, Configuration Management
  - Deployment – Impact Analysis, Functional Reviews
  - Testing– Test plan and Test Cases selections
- **Operations Management –**
  - Operations – Service Continuity Management (ADRP), Move services, BU Functions transition
- **Strategic Planning –**
  - IT Organizations – Infrastructure consolidations, application consolidations, Application Life Cycle Management
  - Business Organizations – Business process consolidations, application consolidations, Structural Cost Reductions

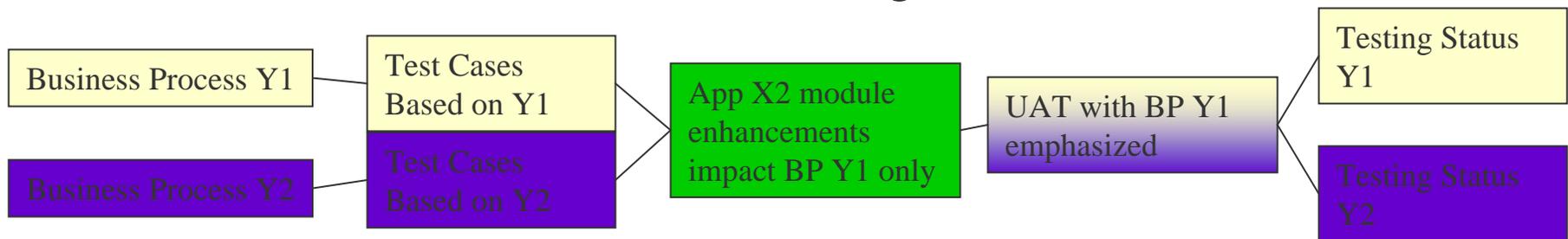
# Use Case 1 – Common Business Process and System Development and Deployment

- Where Referenced – Business-Application Convergence Map
  - Coordinated Business Focus Groups
  - Coordinated Application Focus Team
  - Commonized Business Functions/Processes
  - Business Process based application development
  - Commonized Application



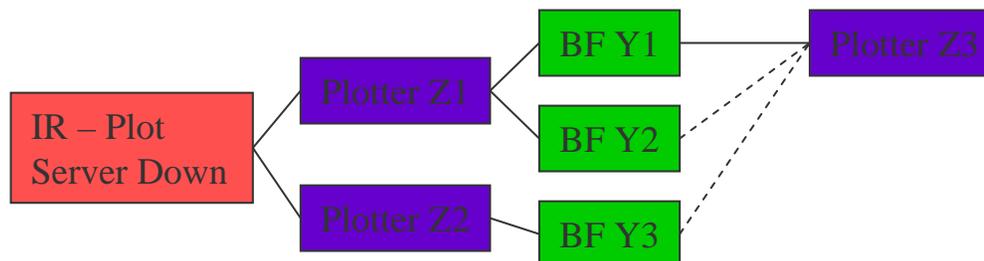
# Use Case 2 - Test Management

- Where Referenced –Test Cases Management
  - UAT based on real business processes
  - Selective test cases execution during regression testing
  - Leveraged testing efforts - one out of several BU conducts testing if business processes are the same
  - Consolidated view of testing status



# Use Case 3 – Operations Monitoring

- Where Used and Referenced – Real Time Impact Analysis
  - IT Infrastructure Impacts (Where Used) –
    - Application Modules, Infrastructure components
  - Business Impacts (Where Referenced) –
    - Direct Business Functions, Subsequent Business Functions, Business Locations
- Emergency workaround planning
- Root cause analysis based on impact maps



# Visions

- **Business Functions Based Matrix –**
  - Continuous Improvement on Business Processes by implementing IT applications with confidence
- **PLM on PLM –**
  - A globally available tool that manages Business Process as well as Application Life Cycles
- ***Next Generation BFBM –***
  - *A mathematical model that helps business and IT organizations make decisions more effectively*