



# Getting Started with Enterprise Architecture using Rational System Architect and Focal Point

**Lou Varveris**  
Senior Product Manager, Enterprise Architecture

**Rational.** software

*iEA02*



# Cutting cost and risk by making the right strategic decisions

*Actionable Enterprise Architecture*



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# Businesses are facing an unparalleled rate of change



**Successful businesses use enterprise architecture to their competitive advantage**

# Economic pressures are driving the need to achieve greater value from enterprise investments



*“Supporting investment in **information technology is critical in order to raise productivity...** Those who maintain their investments in IT will be primed for more **aggressive growth when the economy recovers.**”*

– Helen Walters, BusinessWeek, January 26, 2009  
“For Recession Help, an IT Innovation Tax Credit?”

*“**Transformation and innovation will lead recovery.** When we come out the other side of this crisis, companies will look quite different – and **technology will have been a catalyst** in those changes.*

– George Colony, Forrester Research, October 26, 2008  
“Why this tech recession will be different”

*“Although times are lean, many companies are finding that they **can't afford to postpone IT investments that lead to increased security, efficiencies or revenues.**”*

– Denise Dubie, NetworkWorld, April 14, 2009  
“Recession resistant: 10 technologies CIOs are still buying”

# The need for transformation planning and execution is clear...



98 percent of CEOs plan business model changes. The gap between CEOs who expect change and those who have the ability to handle change has widened sharply – nearly 3X.

*2009 IBM Industry Survey*



...business executives now want IT to deliver more creative products that can help drive sales and increase revenue.

*Forrester - 2009*



CIOs and business leaders are looking for larger-scale efficiencies through outsourcing, offshoring, and software-as-a-service (SaaS).

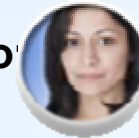
*Gartner – 2009*

# Make the right strategic decisions, align investments with priorities

## Customer Speak!

### 1. Make faster, better-informed strategic and tactical decisions

Enterprise blueprinting with interactive visualization and analysis



*"Our enterprise planning helped us recover \$10M in costs by optimizing IT landscapes & processes"*

### 2. Crystallize business priorities for IT action

Make planning actionable



*"We can easily prioritize our next steps, and predict how change will impact the organization."*

### 3. Achieve cost savings from consolidation, M&A and other change initiatives

Increase operational efficiency while reducing recurring and incremental costs



*"We were better able to visualize and compare our current infrastructure with our future goals and visualize the journey between the two."*

### 4. Turn strategy into execution and measure the results

Efficiently deliver solutions that keep pace with the business plan

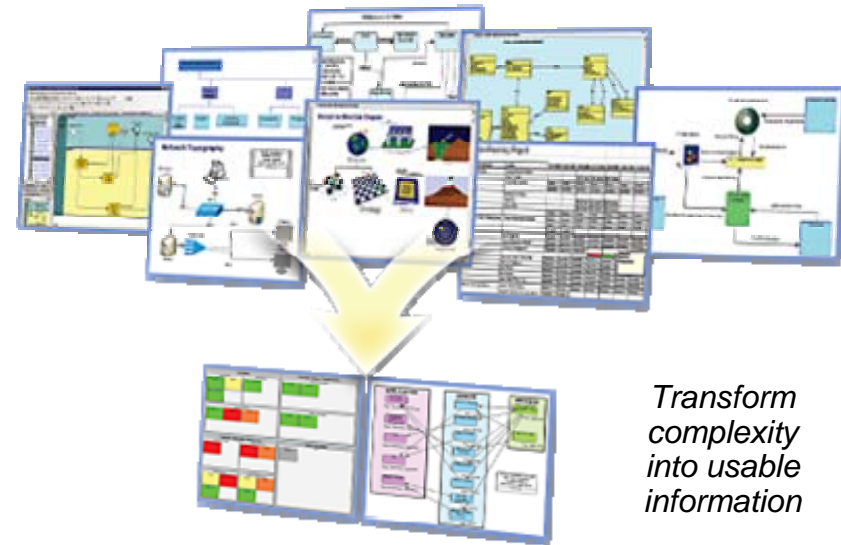


*"We have seen a 33% reduction in IT end-user costs based on implementation of enterprise architecture"*

# 1. Make faster, better-informed strategic and tactical decisions

## *Enterprise blueprinting with interactive visualization and analysis*

- Link, consolidate and analyze business and IT information in **blueprints**
  - ▶ Strategies, goals, and organizational info
  - ▶ Business architecture and process analysis
  - ▶ Applications, services, and data
  - ▶ Systems, networks, and components
  
- Simplified modeling with robust support for **standards**
  - ▶ Create a common and consistent information resource to guide enterprise planning
  - ▶ Multiple modeling standards in one tool
  - ▶ Changes are propagated throughout the data blueprint, simplifying maintenance



*Transform complexity into usable information*



“We are able to manage enterprise information, run impact analysis, and make decisions more effectively.” **Juma Alghaith**  
Executive Director for Customs Development

## 2. Crystallize business priorities for IT action

### *Make planning actionable*

- **Prioritize** competing projects and supporting investments
  - ▶ Perform cost benefit and trade-off analysis of the business and IT architecture
  - ▶ Collaborate on priorities across broad constituencies
- Show impact of portfolio **decisions**
  - ▶ Extend application planning into enterprise architecture
- Assure projects remain **aligned** with business goals
  - ▶ Use IT roadmaps to guide planning to successful outcomes



*"[We] saved time and money by prioritizing applications for reuse, and by identifying areas where spend is not aligned to the IT roadmap."*

Chief Information Officer  
Large Financial Organization



### 3. Manage the impact of change, consolidation, and M&A

**Increase operational efficiency, reduce recurring costs and mitigate risks**

- Understand your **current** state, and use it to map to your **future** optimized state
  - ▶ Set the course to optimal ROI
- Identify **redundancy** and **reuse** of business and technology assets
  - ▶ Enterprise analysis reports provide complex IT information in business-friendly formats
- Identify and minimize execution **risk**
  - ▶ Group information for accurate integration planning
  - ▶ Reveal critical data required for accurate decisions
- Minimize execution risk through **transformation** due diligence



*"We used enterprise architecture to guide the consolidation of our US operations in an efficient and cost-effective manner."*

Director of IT  
Leading Express Shipping Organization

## 4. Leverage resources for innovation; improve organization performance

### *Realize business benefits from technology solutions*

- Make architecture actionable
  - ▶ New integrations *drive* transformation and traceability of artifacts from business and IT **strategy** to solution development and **delivery**
  - ▶ *Pinpoint* how and when to leverage **services** and **technologies**
  - ▶ *Improve* efficiency and agility – change architectures to respond to business **change**
  
- Reduce cost and improve solution quality
  - ▶ *Achieve* increased asset **reuse** and **governance**
  - ▶ *Assure* new applications and services are driven by business **needs**



*“The challenge in any company is to do more with less, [our enterprise architecture] continues to enable us to achieve our goals at relatively low cost.”*

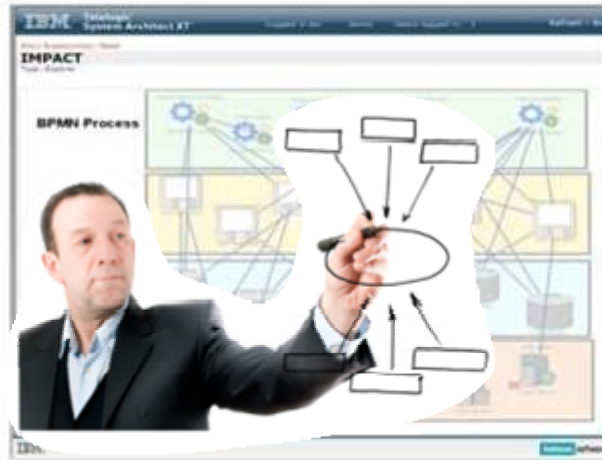
Wayne Pales, Head of Strategy & Architecture, AGL

# Make the right strategic decisions; align investments with priorities



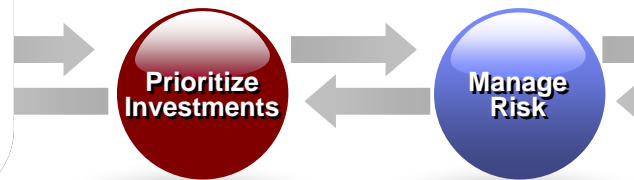
### Rational System Architect

- Streamline your decision-making
- Consolidate and link business and IT information
- Provide key input into enterprise planning
- Provide accurate risk and impact analysis
- Guide successful enterprise transformation



### Rational Focal Point

- Build, Buy, and/or Implement the right assets
- Build and implement assets in the right manner
- Maintain & operate assets in the right ways and retire or replace them at the right times



- **Rational Requirements Composer** ensures business stakeholder satisfaction by enabling more precise requirements elicitation

- **Rational Asset Manager** and **Tivoli CMDDB** reduce cost by driving greater reuse across distributed and legacy environments

- **Rational Software Architect** integrates with **Rational System Architect** to drive alignment from enterprise architecture to solution architecture and design



IBM Rational Software Conference 2009  
As Real as It Gets!

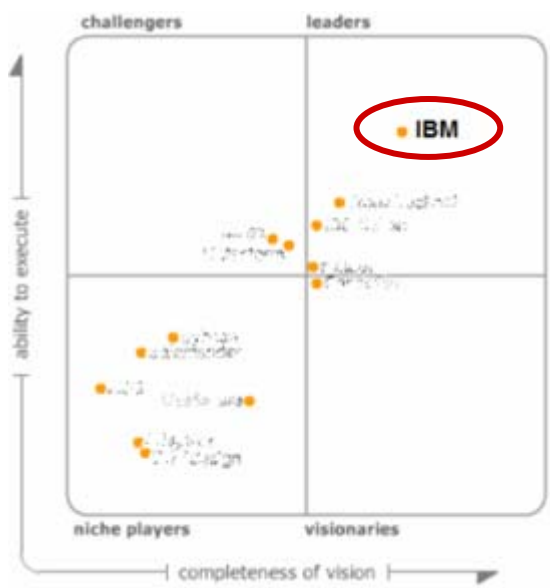


# Rational System Architect

v11.3

## IBM's Enterprise Architecture Foundation

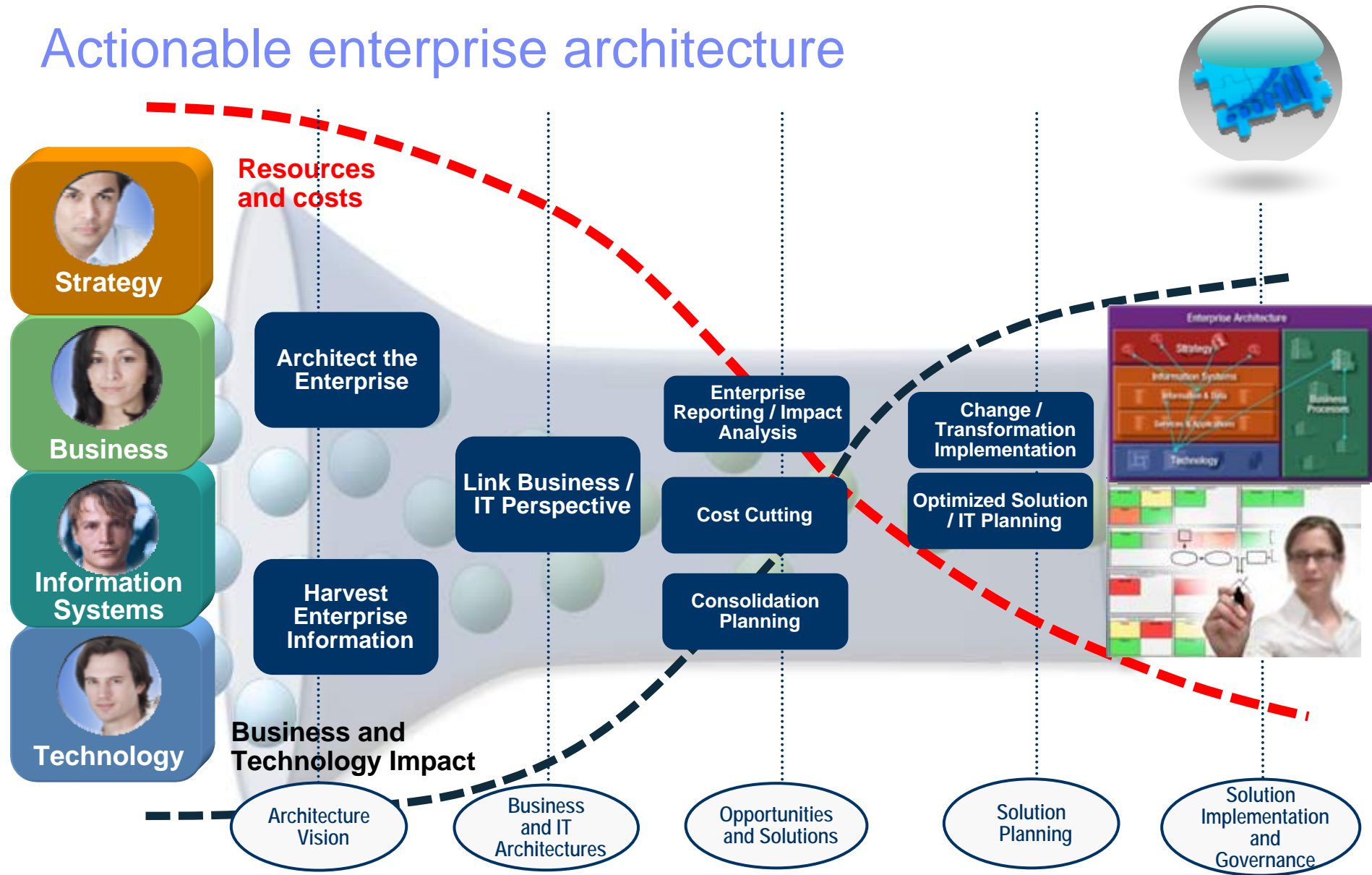
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As of June 2008

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# Actionable enterprise architecture



# Capture and model all domains of the organization

*Utilize industry-standard modeling notations and frameworks*



## Multiple Modeling Notations and Standards

- Strategy Modeling (Business Motivation Model (BMM))
- Business Process Modeling (BPMN)
- Network and Infrastructure Modeling
- Data / Information Modeling

## Industry Frameworks

- TOGAF, Zachman
- DoDAF, DoDAF ABM
- MoDAF, NAF, FEA (iRMA)
- Custom Framework Manager

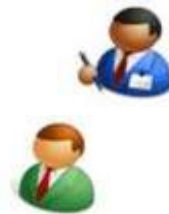
# Rational System Architect

**Multiple User Interfaces:** *Web portal, Web client, Visio interface, Thick client*

- Decision makers
- Information consumers
- Operations
- ...



- Executives
- Business owners
- HR, finance, sales
- ...



- Business & Enterprise architects
- Business analysts
- IT Managers
- ...



## SA Publisher SA Process Integrator

- Enhanced web templates
- Improved interaction with Visio modelling

## System Architect XT

- More powerful web client
  - ▶ Modelling
  - ▶ Search
  - ▶ Dashboard analysis

## System Architect

- Enhanced “work spacing” for integration planning
- Usability improvements
- New Heat map reports

*Simplicity in reporting and collaboration*

*Power of enterprise analysis and modeling*



# Group information for more accurate planning

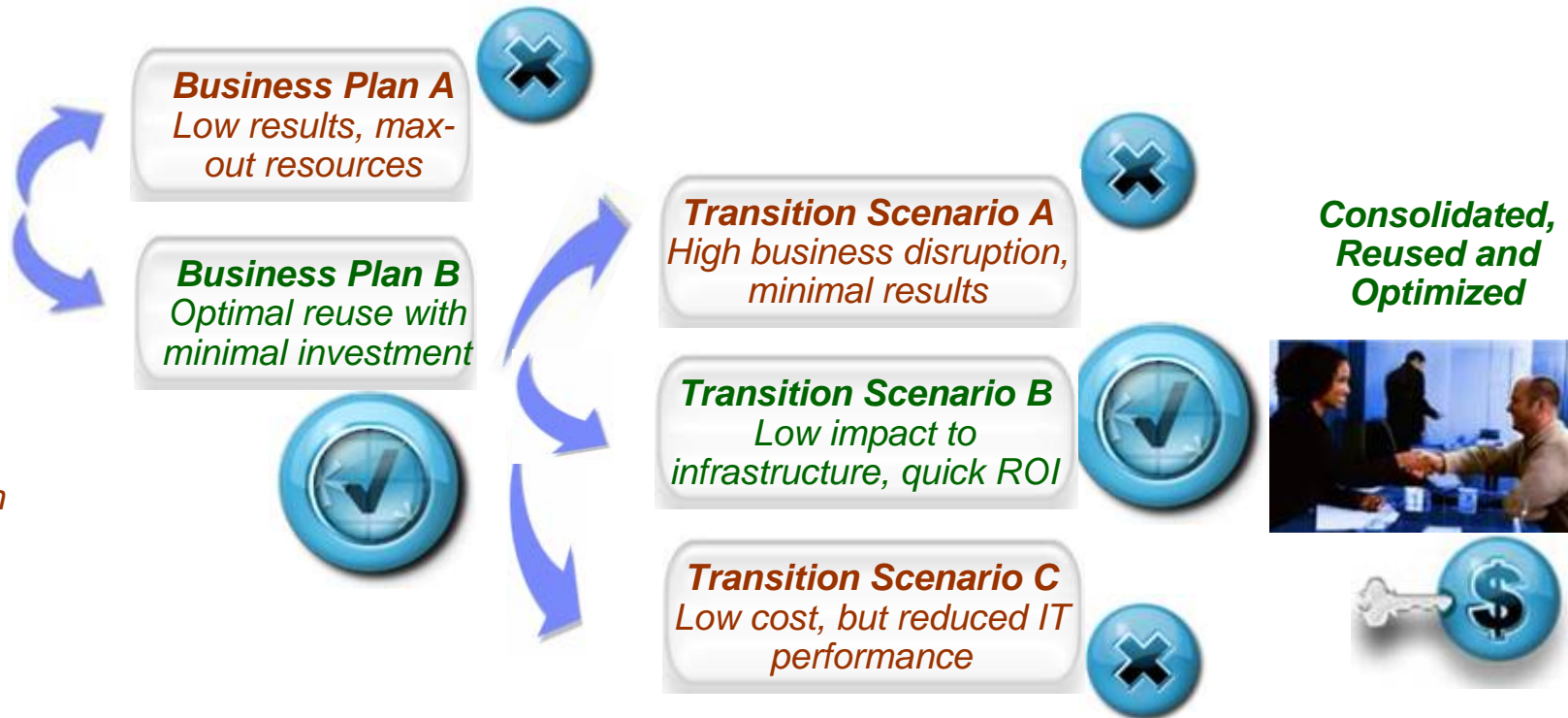
*Unique folders & workspaces for current- and future-state analysis*



## Example consolidation exercise



**Company A**  
Redundant,  
Inefficient, High  
Cost

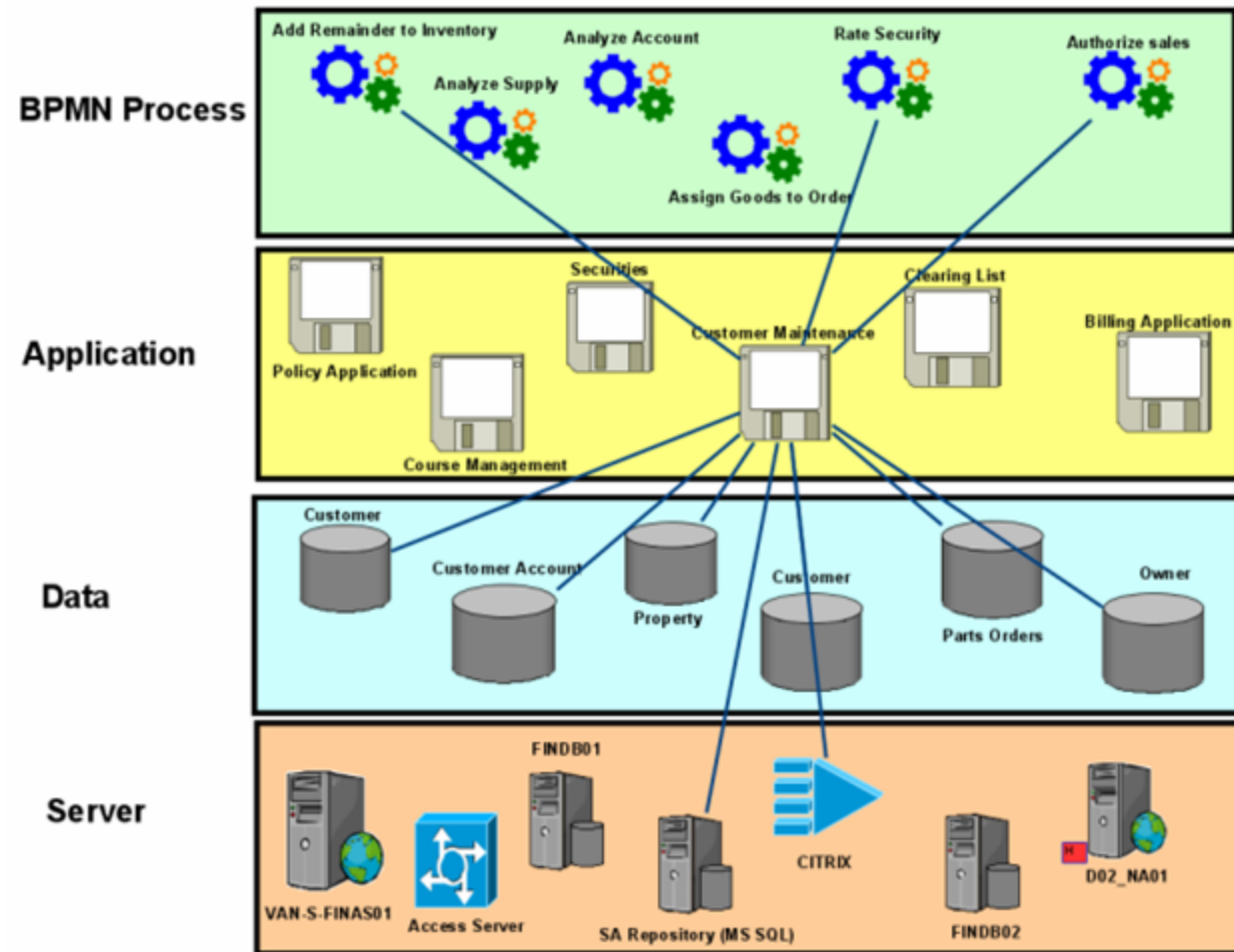


- Mergers
- Acquisitions
- Consolidation
- Cost-Cutting

- Divestures
- Outsourcing



# Visualize the enterprise and the impact of change



***Understand enterprise strategies and their implementation***  
***Understand how infrastructure changes impact the business***  
***Understand projects' dependencies and impacts on the organization***

# Reveal risk and enable planning

Issues answered directly:

- Which existing applications will be enhanced and when?
- What new applications will be deployed and when?
- What enabling technologies are required?
- What data will be migrated, and when?



Desired Environment



Current Environment

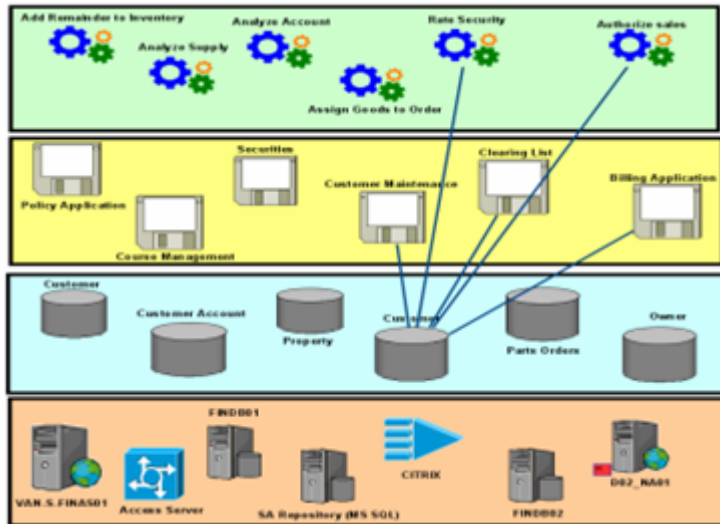
Issues requiring further investigation:

- What resources are required to support this transition plan?
- What if Project X is delayed?
- How do we ensure continued support of critical processes?
- What has the highest risk?

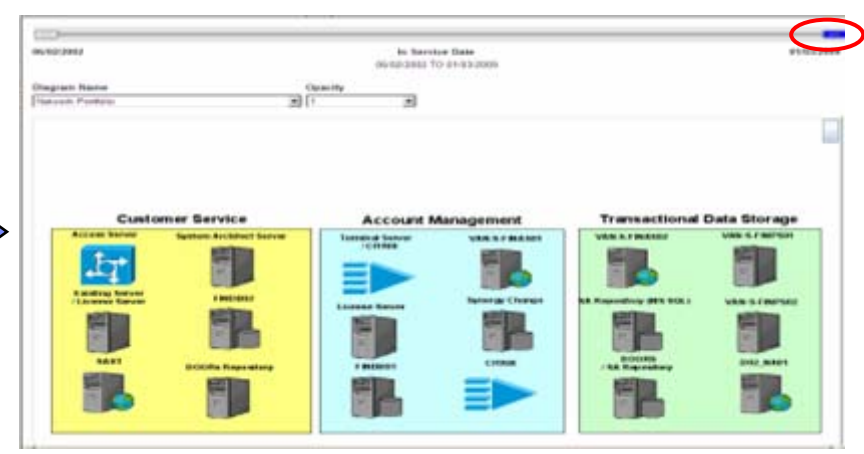
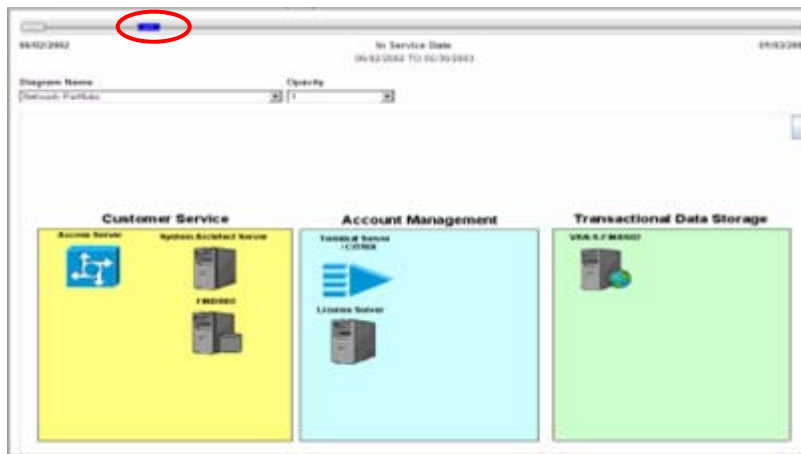
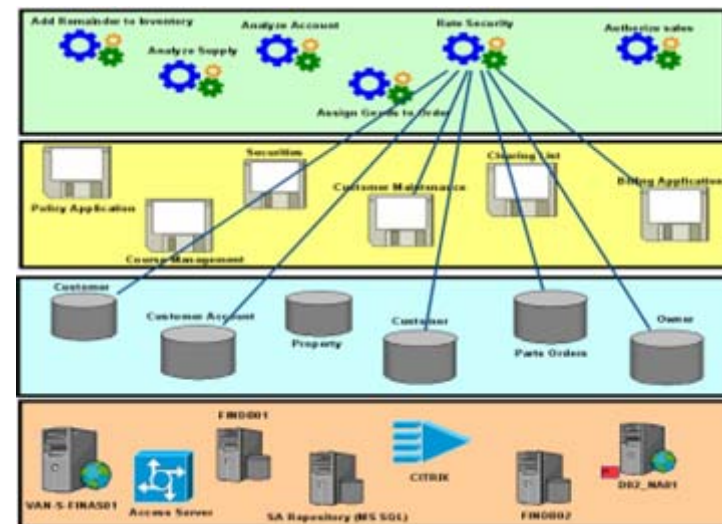


# Visualize and manage the transformation

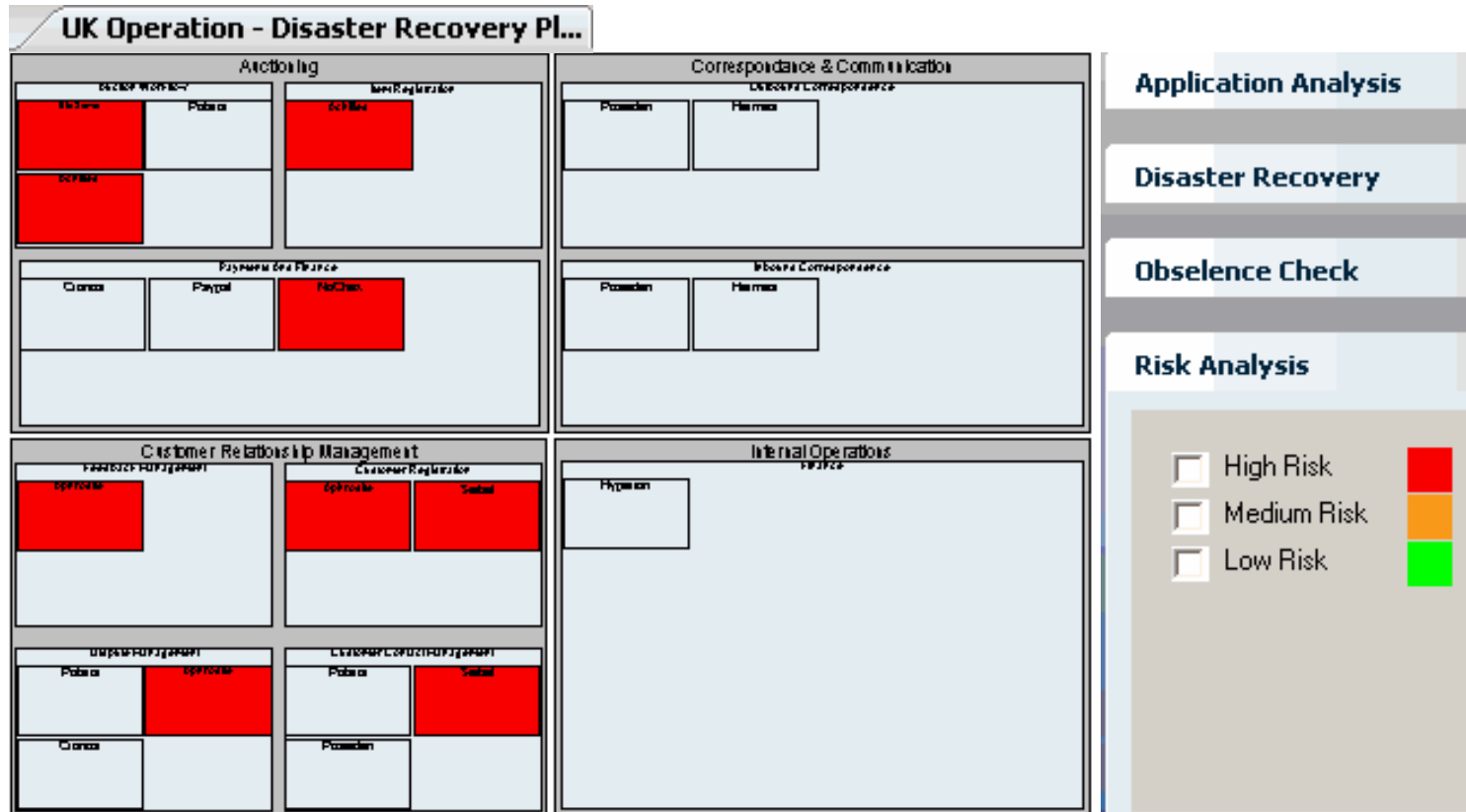
## Current



## Proposed



# Avoid risk, locate reuse, optimize IT assets



- Identify redundancy, risk and reuse of business and technology assets
  - Enhanced heat maps report IT information in business-friendly formats

Example: This Heat Map diagram shows Apps sitting on Servers whose Operating Systems are due to change by a certain date, yet those Apps will still be supporting services required by business

# Collaborate on the results



The screenshot shows the IBM Telelogic System Architect XT interface. The main window displays the title "PROCESS (BPMN) USING MOST APPLICATIONS". It features a pie chart titled "Top 10" and a table of items. The pie chart shows the distribution of process usage across various applications, with "Authorize Payment - BPMN Process" being the most frequent at 3 (11.11%).

Item	Count
Capture information	4
Add Remainder to Inventory	4
Create/Modify Business System Plans	3
Cancel Claim	3
Authorize Payment	3

- Gain clarity in enterprise decision making
  - ▶ Enhanced web collaboration creates a common perspective of the organization, from one location
  - ▶ New enterprise search quickly reveals critical data required for accurate decisions

# The complete enterprise offering

## Quickstart and Rapid Deployment

- Proven Method
- Based on Best Practices
- Covers Tool and Methodology
- Demonstrate Immediate Value

## Tools

- Industry Leading EA Solutions
- Collaborative Environment
- Intuitive Usability

## Certification and Training

- Carnegie Mellon EA Certification
- e-Learning
- Tool and Methodology Training

## Two customer success stories...



Energy in action®



CHRISTIANA CARE  
HEALTH SYSTEM

### Doing More With Less

**Customer Pain:** AGL needed to reduce time and effort to complete analysis required for technology investment decisions and to mitigate the risks associated with loss of IP when transitioning to an outsourced IT support model.

**The IBM Solution:** AGL identified systems for acquisition and decommissioning, aligned technology investment decisions with business strategy, and effectively managed the transition to outsource IT services.

**The Bottom Line:** “The challenge in any company is to do more with less,” said Wayne Pales. “System Architect continues to enable us to achieve our goals at a relatively low cost compared with historic approaches.”

### Aligning IT with Business Need

**Customer Pain:** The reliance on IT has changed. IT must be highly available. IT has become highly integrated, and projects must be related. Setting planning process to manage requirement for integration between business and IT, addressing increasingly complex applications and data sharing requirement.

**IBM Solution:** The Projects can now be tied to business goals, governance is the “reminder”. Organizational resources can be applied where they are most critically needed. Established a risk platform so that when change happens, we know the impact beforehand.

**The Bottom Line:** “... enterprise planning enables us to better visualize and compare our current environment with our future goals and visualize the journey between the two.”

*Dave Keifer Enterprise Architect, Christiana Care Health System*



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- v11.3** Rational System Architect
- v6.4** Rational Focal Point for Product and Portfolio Management



# Enterprise Architecture and Application Portfolio Management

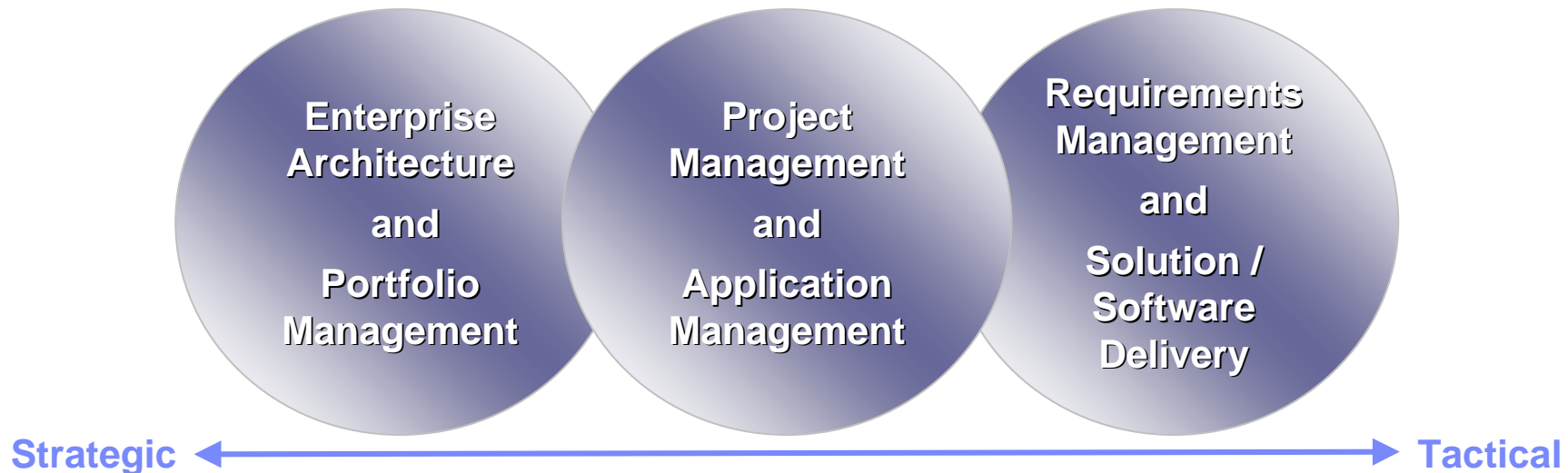
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New Integrations

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# Linking strategy to execution



- What is our current state?
- Is the portfolio **ALIGNED** with our strategy?
- Is the portfolio delivering the expected business **VALUE**?

- Are we doing the **RIGHT** projects?
- Are we spending in the **RIGHT** areas?
- Do we have the **RIGHT** resources?
- Do we have the right **BALANCE** of risk/reward?

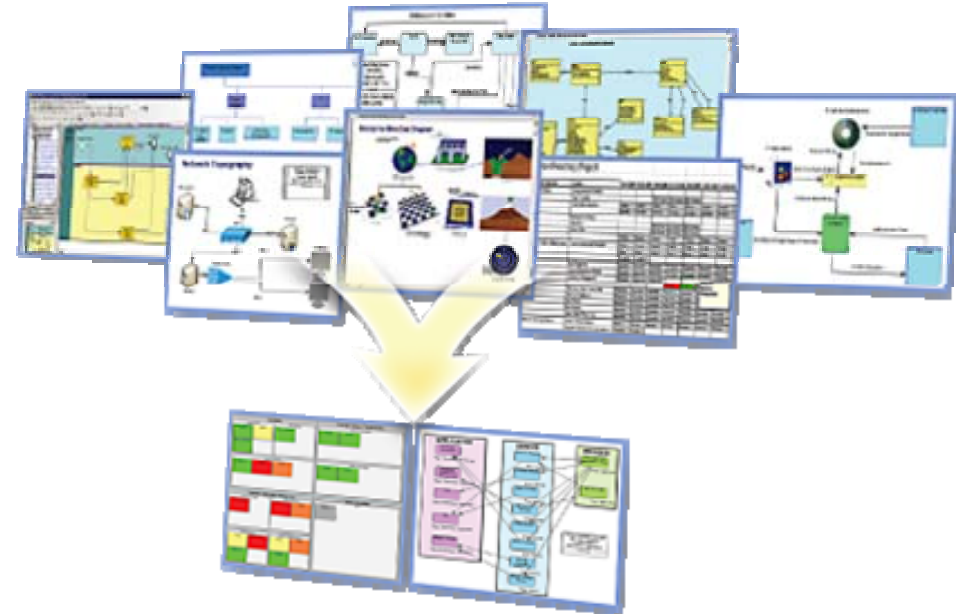
- Doing projects well?
- Delivering results on time and budget?
- Enhancing communication and productivity?

# Start with the big picture

*An enterprise view is required for enterprise planning*

## **Enterprise blueprinting with interactive visualization and analysis**

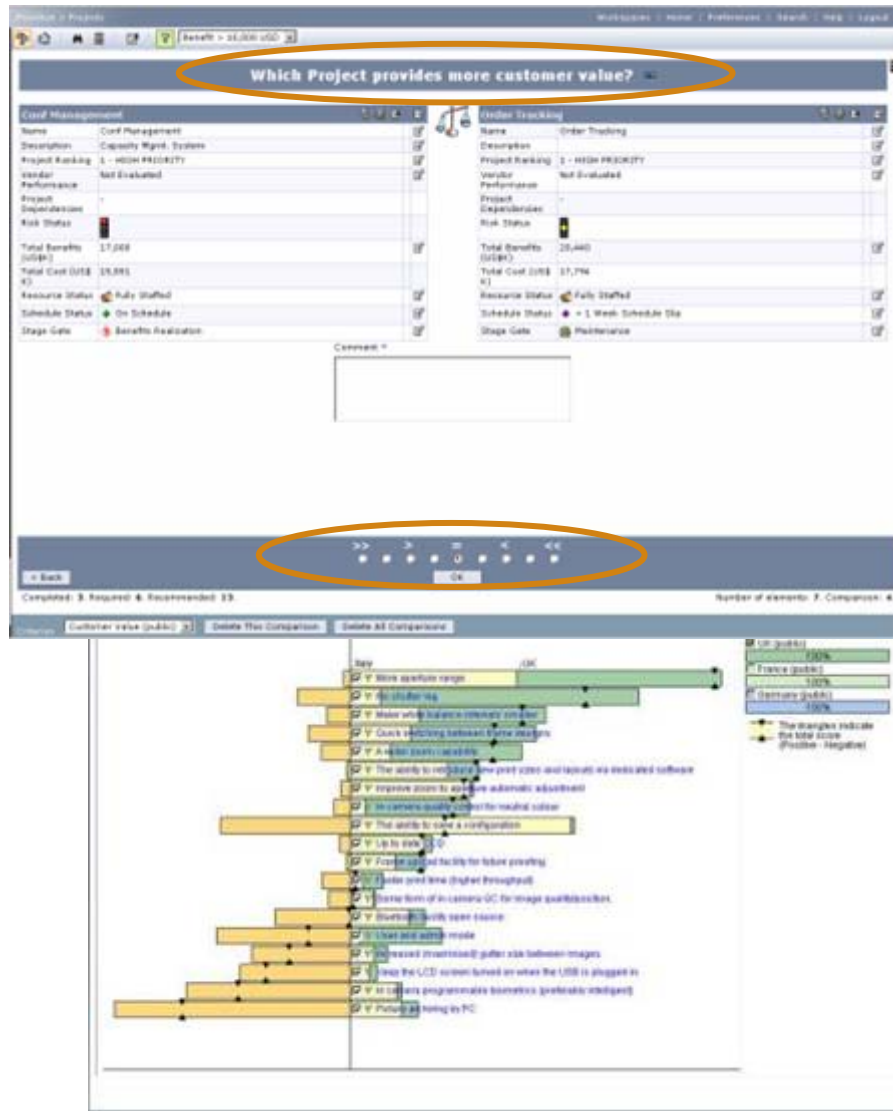
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### **v11.3 Rational System Architect**

*Enterprise Architecture identifies corporate systems, their key properties, and their interrelationships, and plans for and guides the evolution of the enterprise systems to support and enable the evolution of the enterprise in its pursuit of strategic advantage*

# Solicit feedback for organization enhancement



## v6.4 Rational Focal Point for Product and Portfolio Management

- Export architecture objects and assets to Focal Point for prioritization
  - ▶ Perform cost/benefit analysis, weight user importance against factors such as cost, development times, and resources available.
- User feedback guides decisions to:
  1. Build, Buy, and/or Implement the Right Assets
  2. Build and Implement Assets in the Right Manner
  3. Maintain & Operate Assets in the Right Ways and Retire or Replace Them at the Right Times

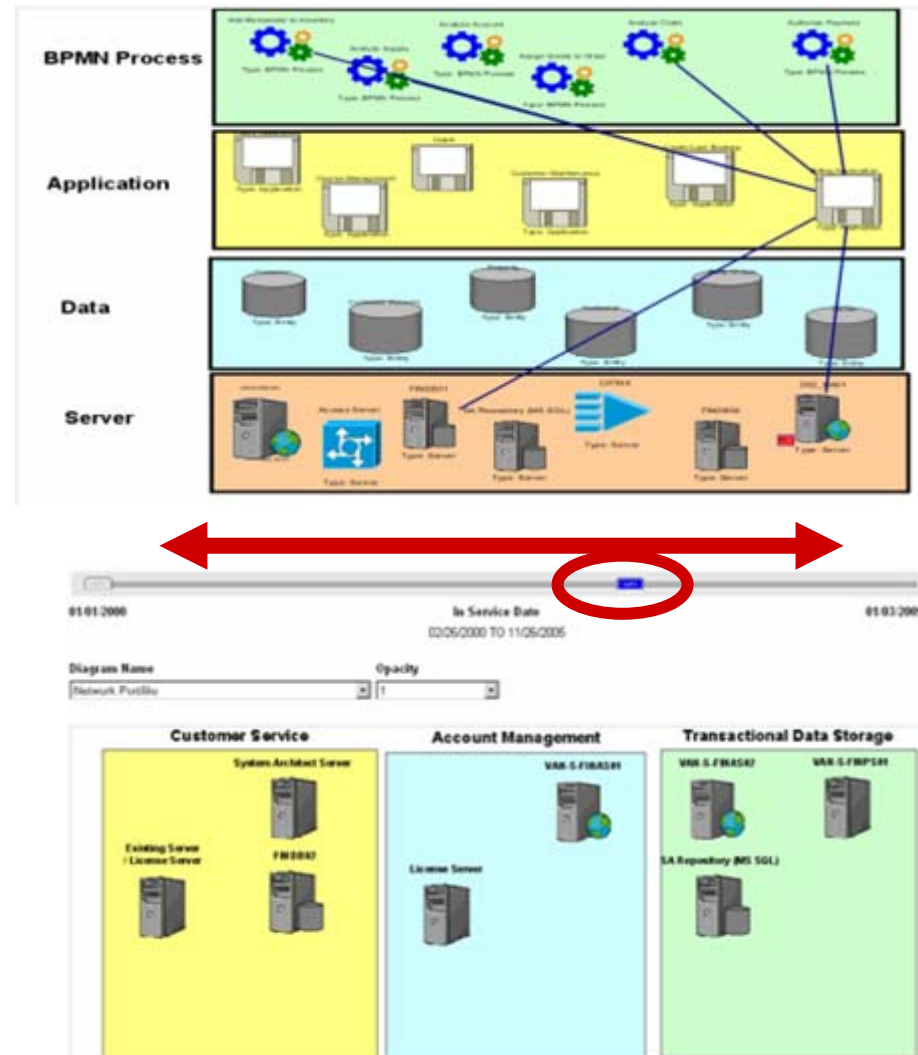
*"Everything that can be counted does not necessarily count; everything that counts cannot necessarily be counted"*

- Albert Einstein

# Use feedback to drive IT change and transformation

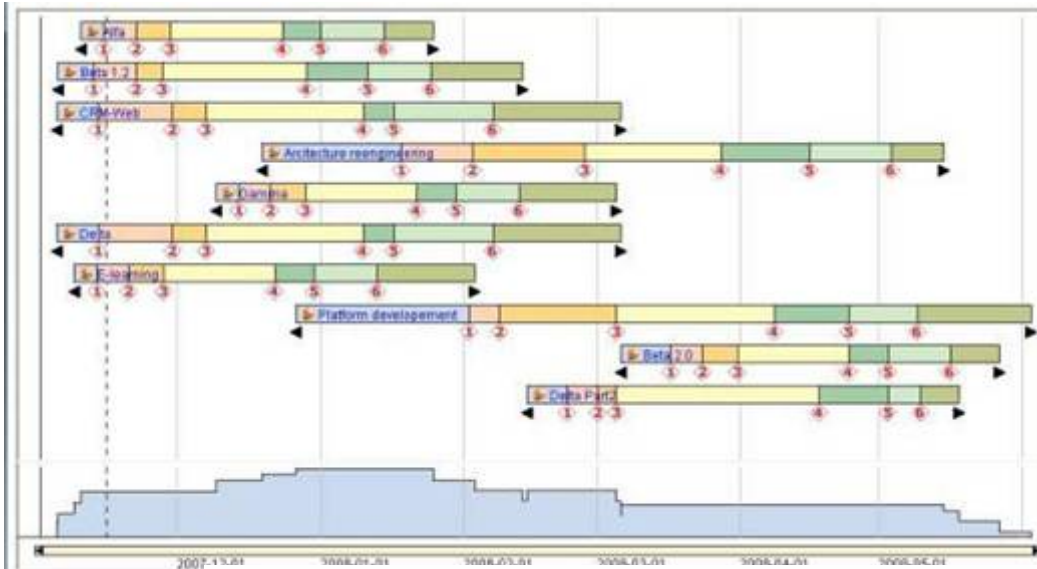
## *Understand impact to the organization*

- Enterprise planning supports impact analysis and transformation
  - ▶ Executive dashboard and visual reports for impact analysis based on related information across the organization
  - ▶ Visualization and time-based analysis for effective migration from current-state to desired future-state
  
- Application-level impact analysis to optimize future investments
  - ▶ Quickly identify how potential changes will affect applications or subsystems
  - ▶ Traceability matrix supports analysis of change to detailed requirements
  - ▶ Identify and reuse IT/engineering assets and applications that support design environment



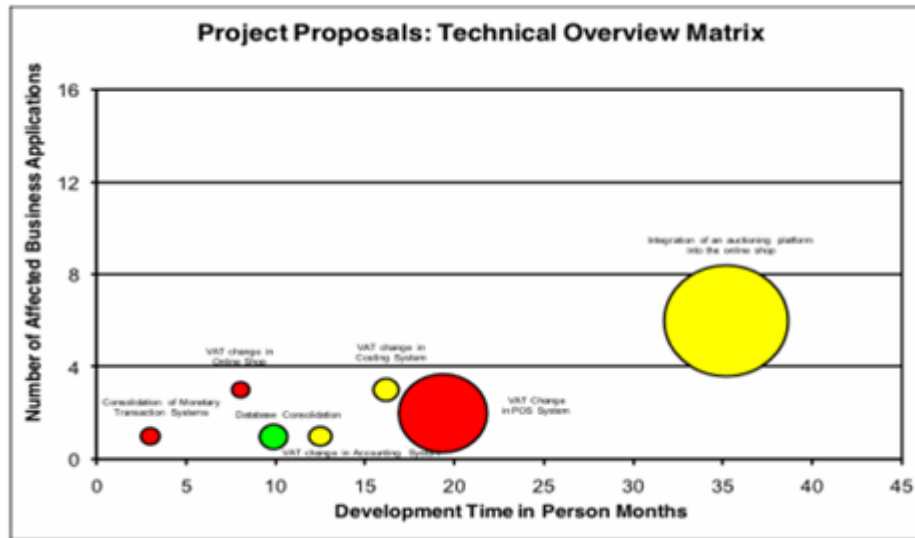
**v11.3 Rational System Architect**

# Project and resource management



**v6.4 Rational Focal Point for Product and Portfolio Management**

- IT Roadmaps and Project Analysis:
  - ▶ Scope transformation, consolidation, and deployment efforts
  - ▶ Identify and control resources
  - ▶ Control costs and quality
  - ▶ Projects remain aligned with business goals throughout their execution.



# Summary: Harnessing the Power of EA and APM

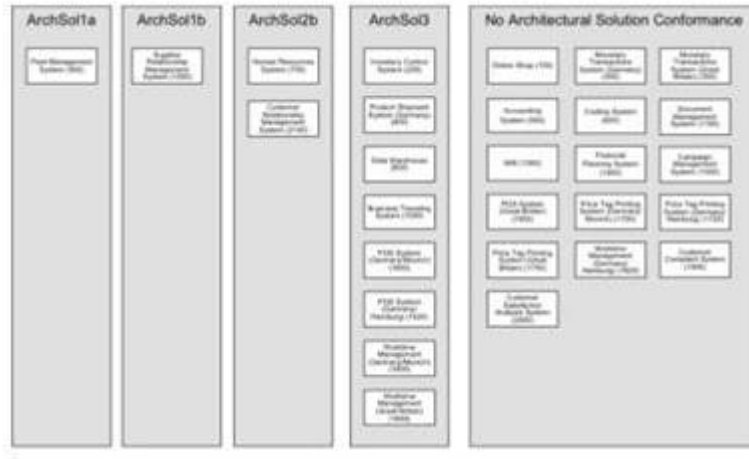
 **What**

 **Where**

 **How**

 **When**

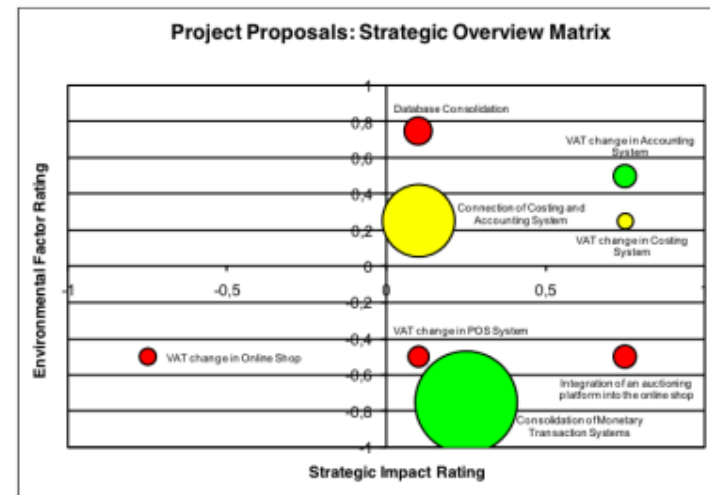
# Summary: Harnessing the Power of EA and APM



- What do we have?
  - Architectural Building Blocks
  - Application Inventory
  - Business Architecture

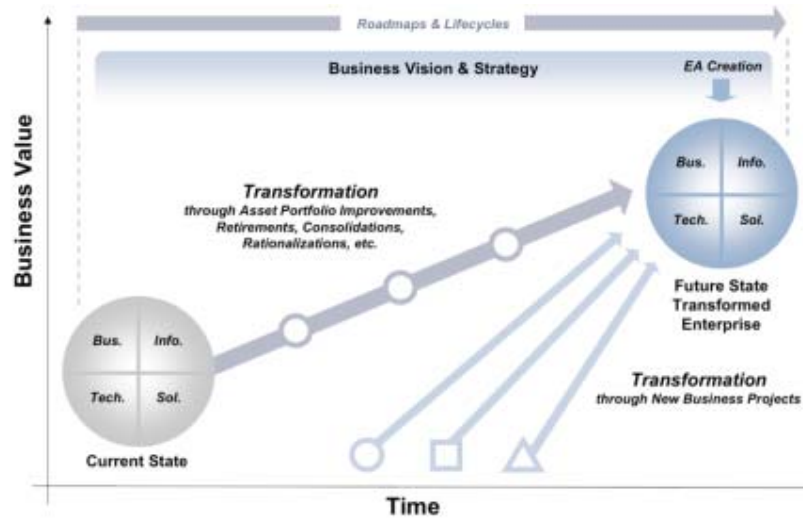
# Summary: Harnessing the Power of EA and APM

- Where should we be spending our precious resources?
  - Business Value Identification
  - Financial Analysis
  - Risk Management



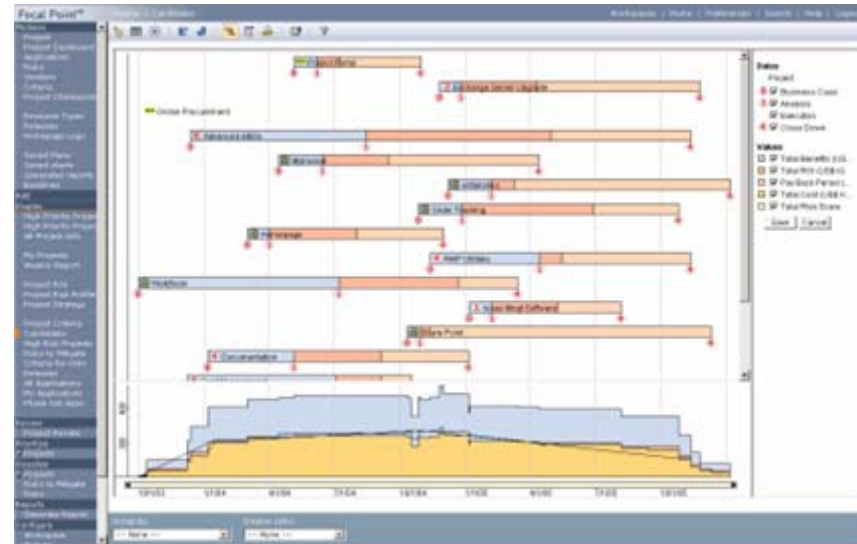


# Summary: Harnessing the Power of EA and APM



- Where are we going?
  - Architectural Options
  - Business Impact
  - Business Process Optimization

# Summary: Harnessing the Power of EA and APM




- How and When will we get there?
  - Resource Planning and Management
  - Release Planning
  - Monitor Results

# Summary: Harnessing the Power of EA and APM

 **What**

 **Where**

 **How**

 **When**

THANK YOU