



Lower Costs and Increase  
Business Agility through  
Application Portfolio Management

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IBM Software

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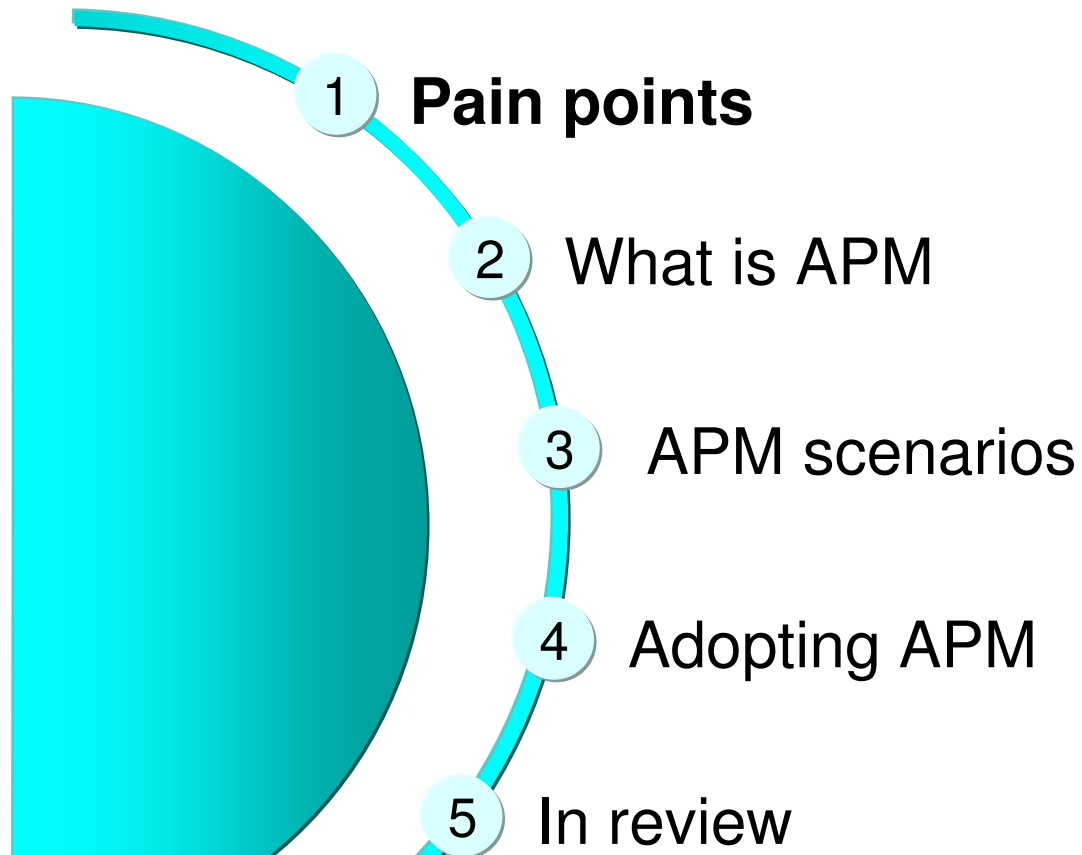


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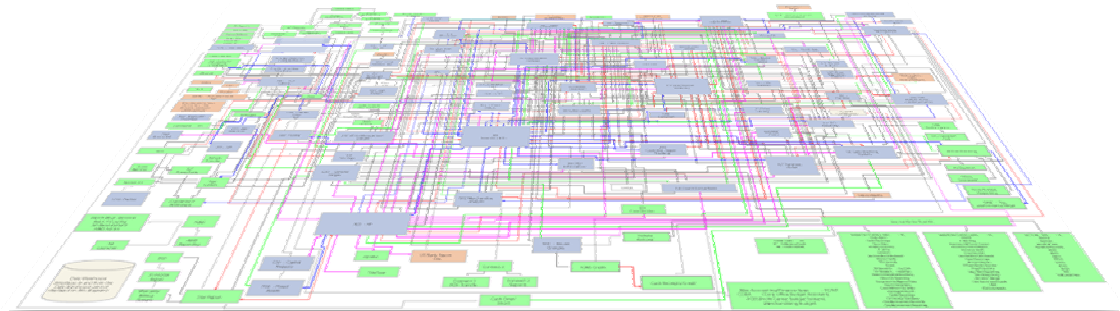


## Discussion Points



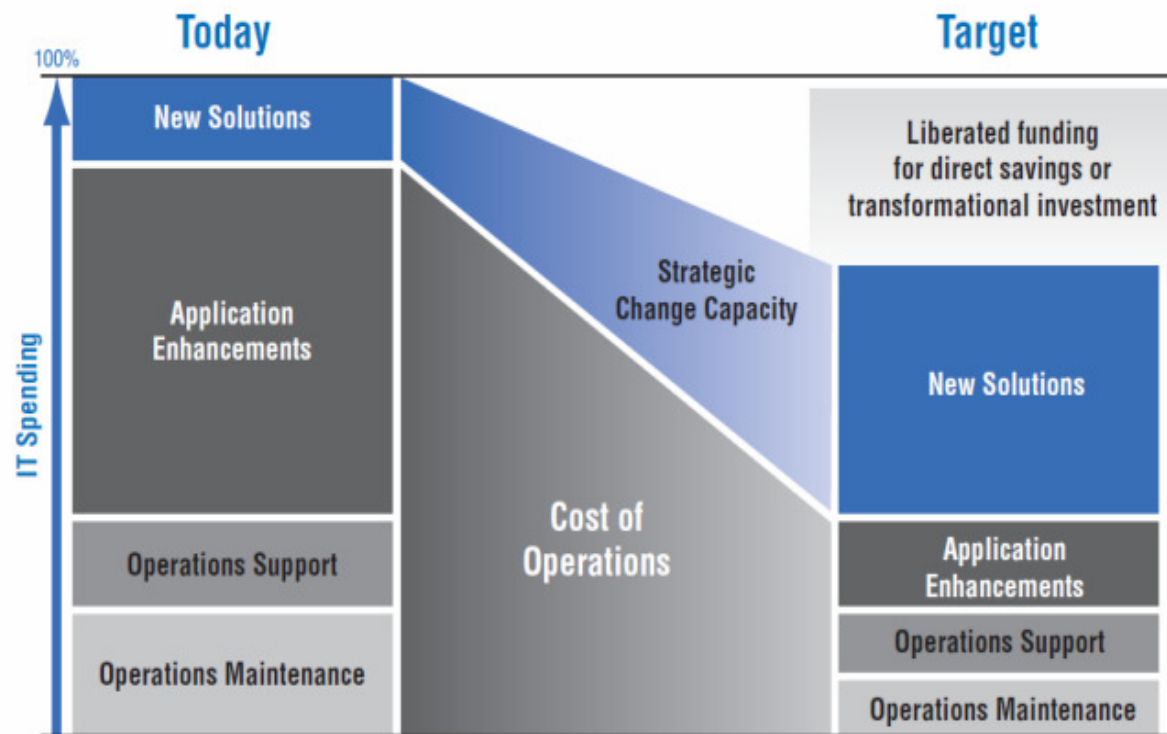
## The problem

- Cost – 80/20 budget trap
  - ▶ Keeping lights on consumes a significant % of a declining IT budget, limiting funds available for new initiatives
- Business Agility
  - ▶ Brittle and tightly coupled architectures, unwarranted complexity, and proliferation of technologies limit code mobility
- Risk / Supportability
  - ▶ Skills erosion, baby boomer retirements, and aging technology



**Customers are spending billions on maintaining business apps. APM can aid in cutting cost as well as provide a framework for managing investments in apps to get out of the 80/20 budget trap.**

## Impact: Insufficient spend on strategic projects



**“A large UK bank initiated its APM effort to take a 90:10 ratio for run-the-bank / grow-the-bank down to a more reasonable 40:60 ratio. Dell shifted its maintenance-to-innovation ratio from 80:20 to 50:50.”**

*- The Application Portfolio Management Landscape — Combine Process And Tools To Tame The Beast, Phil Murphy, Forrester Research, Inc. April 15, 2011*

Solving the problems requires a different approach....

***"We can't solve problems by using the same kind of thinking we used when we created them."***

*- Albert Einstein*

Addressing the problem requires an **asset (application) portfolio approach** to complement the traditional project portfolio approach

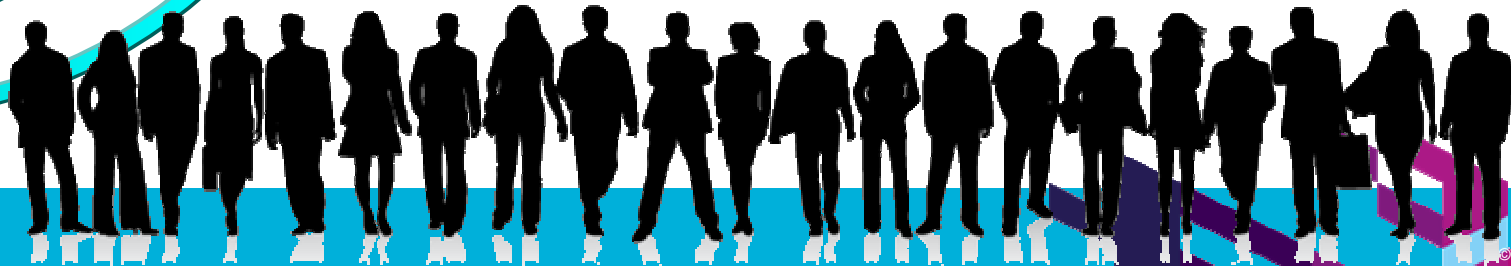
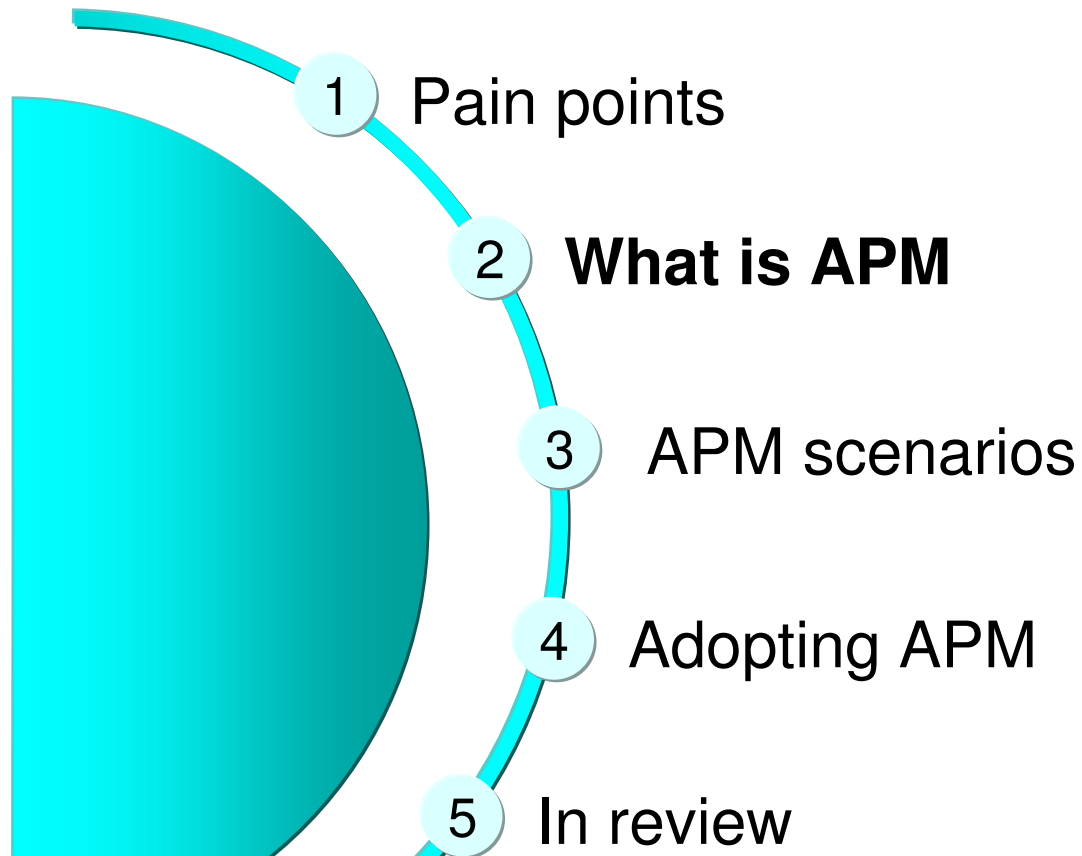
### Project Portfolio Management

- Commonly used in mature companies
- Provides executives (only)
  - ▶ control over 20% of this year's budget,
  - ▶ ability to affect this year's project proposals.

### Application Portfolio Management

- Used effectively by only a few leaders
- Provides executives
  - ▶ multi-year control over 80% of the budget,
  - ▶ ability to generate new project proposals such as structural changes to address problems faced.

## Discussion Points



## A Definition of Application Portfolio Management



Application portfolio management (APM) is a repeating process using information and analytics that produces objective and transparent decisions around investing, consolidating, modernizing, or replacing applications.

### Benefits:

- Reduce costs and optimize value
- Increase speed-to-deployment and speed-to-market
- Reduce risk associated with technology or resources
- Align the application portfolio with business strategies
- Implement shared services

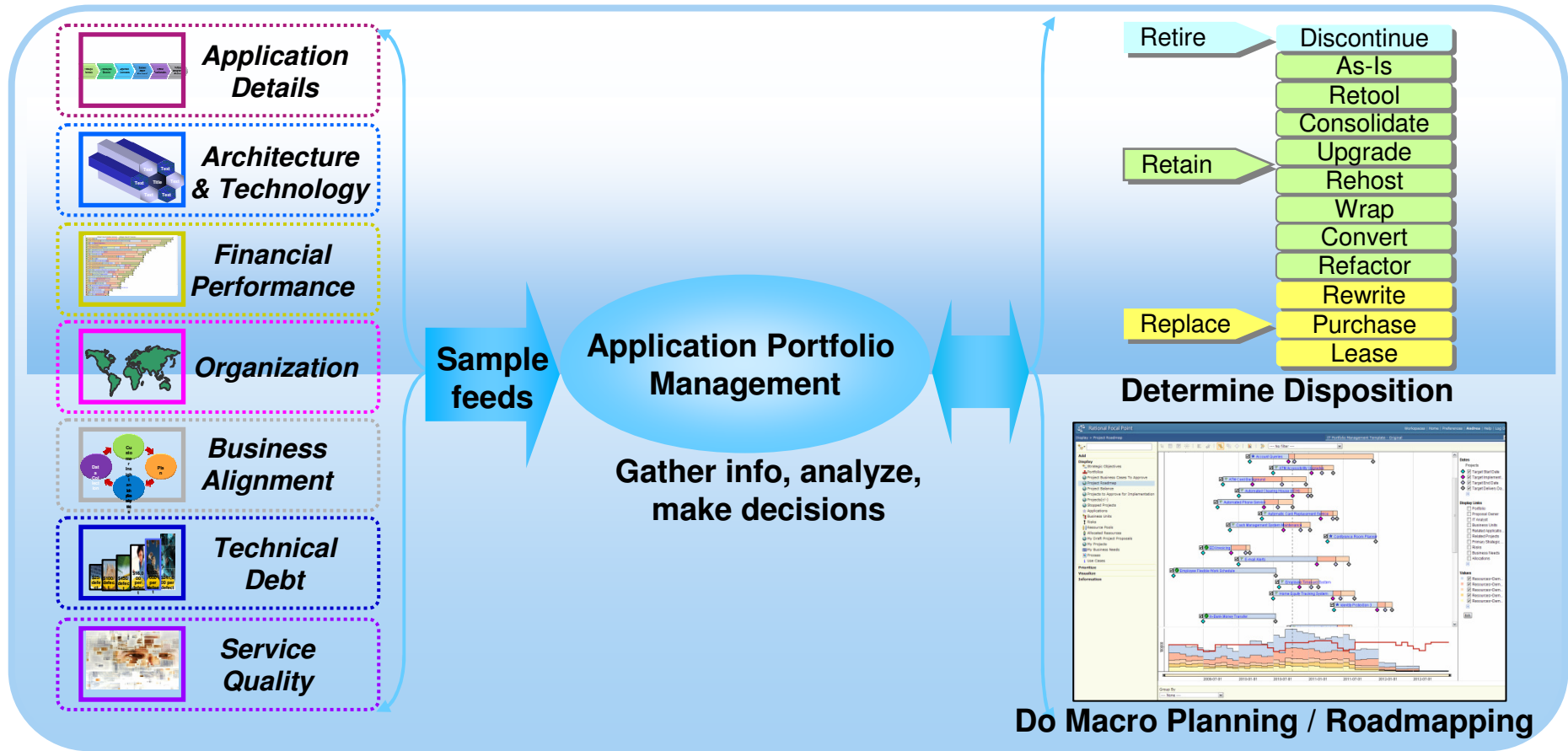
**“Making IT resource consumption transparent and understandable to business leaders enables healthy business discussions around how to shift resources to where they will do the most good for the whole business.”**

*-Define “Application” Based On Your Content To Avoid False Starts In Your Rationalization Efforts, Forrester Research, Inc., January 26, 2011*

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# Solution: Well-defined process with information feeds

*Effectively translate business needs to executable roadmaps*

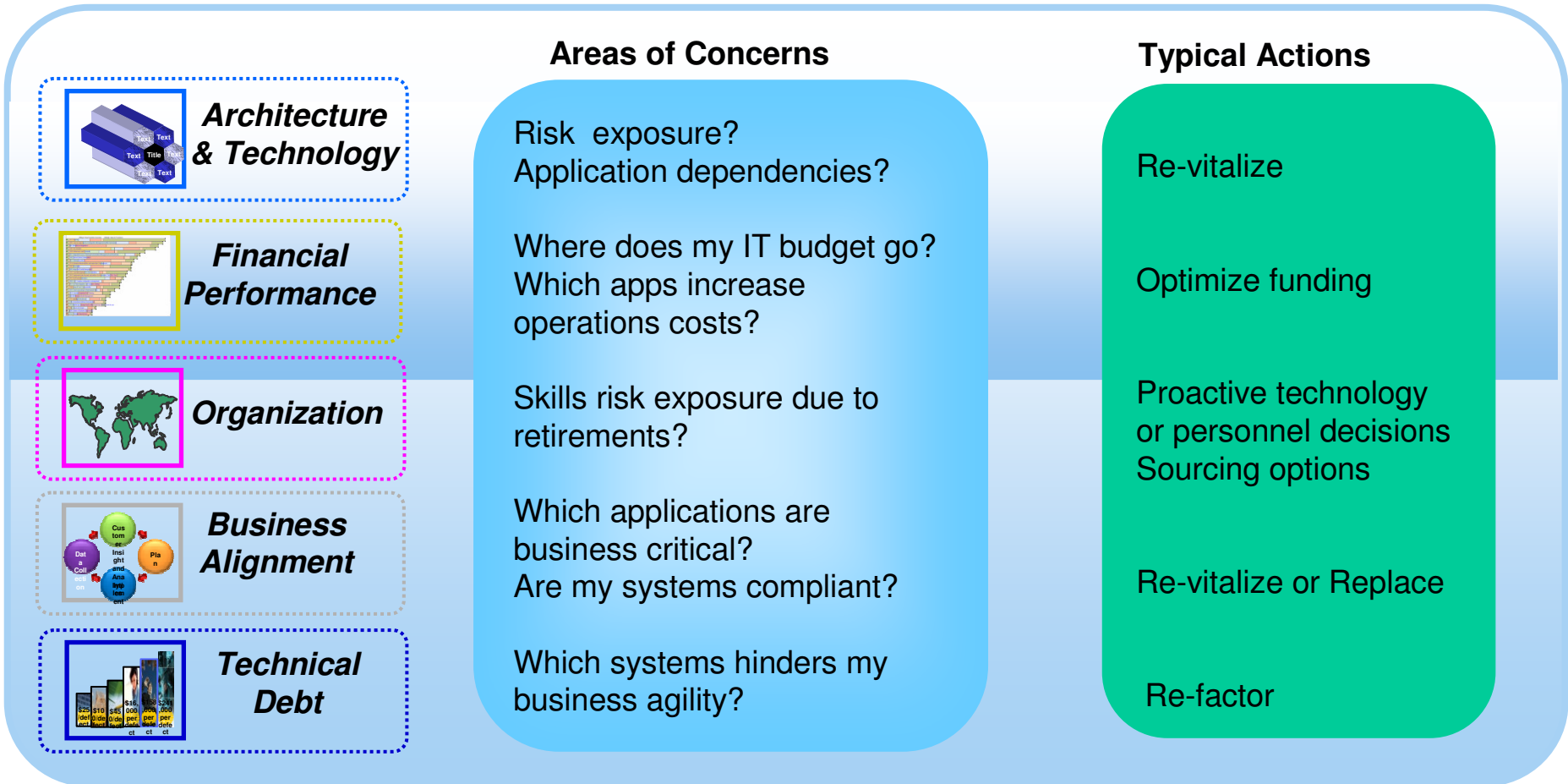


Enabled through maturing analytics:  
 Qualitative ⇨ Quantitative ⇨ Predictive

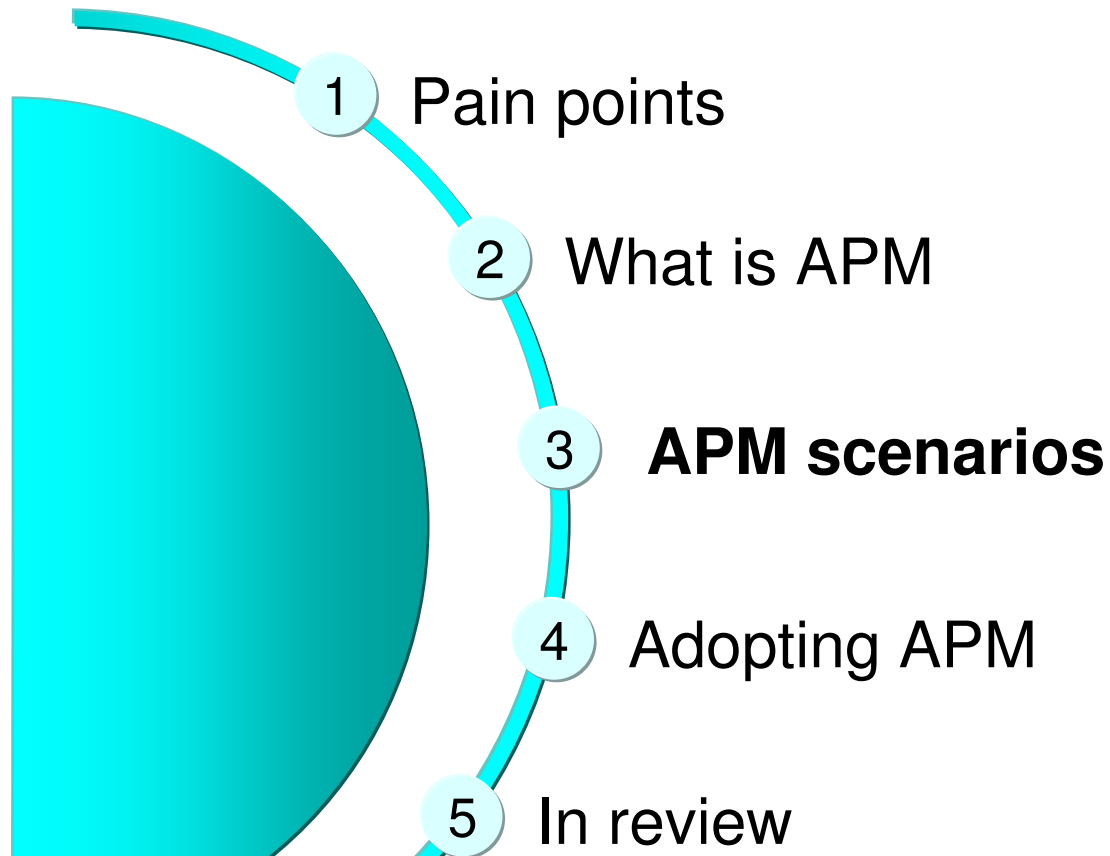


# Solution: Well-defined process with information feeds

*Effectively translate business needs to executable roadmaps*



## Discussion Points



## Budget Planning Scenario



Jane - CIO

- Jane is preparing her annual IT budget
- As an executive, she's compensated on controlling IT's costs and delivering proven value to the business's bottom line
- She has to determine how to distribute operational budget between departments and their associated applications
- She also has to determine which funding requests to approve
- Finally, she needs to address any risks and trouble areas in her portfolio that could lead to outages, lost data, performance problems, out of control costs, etc.

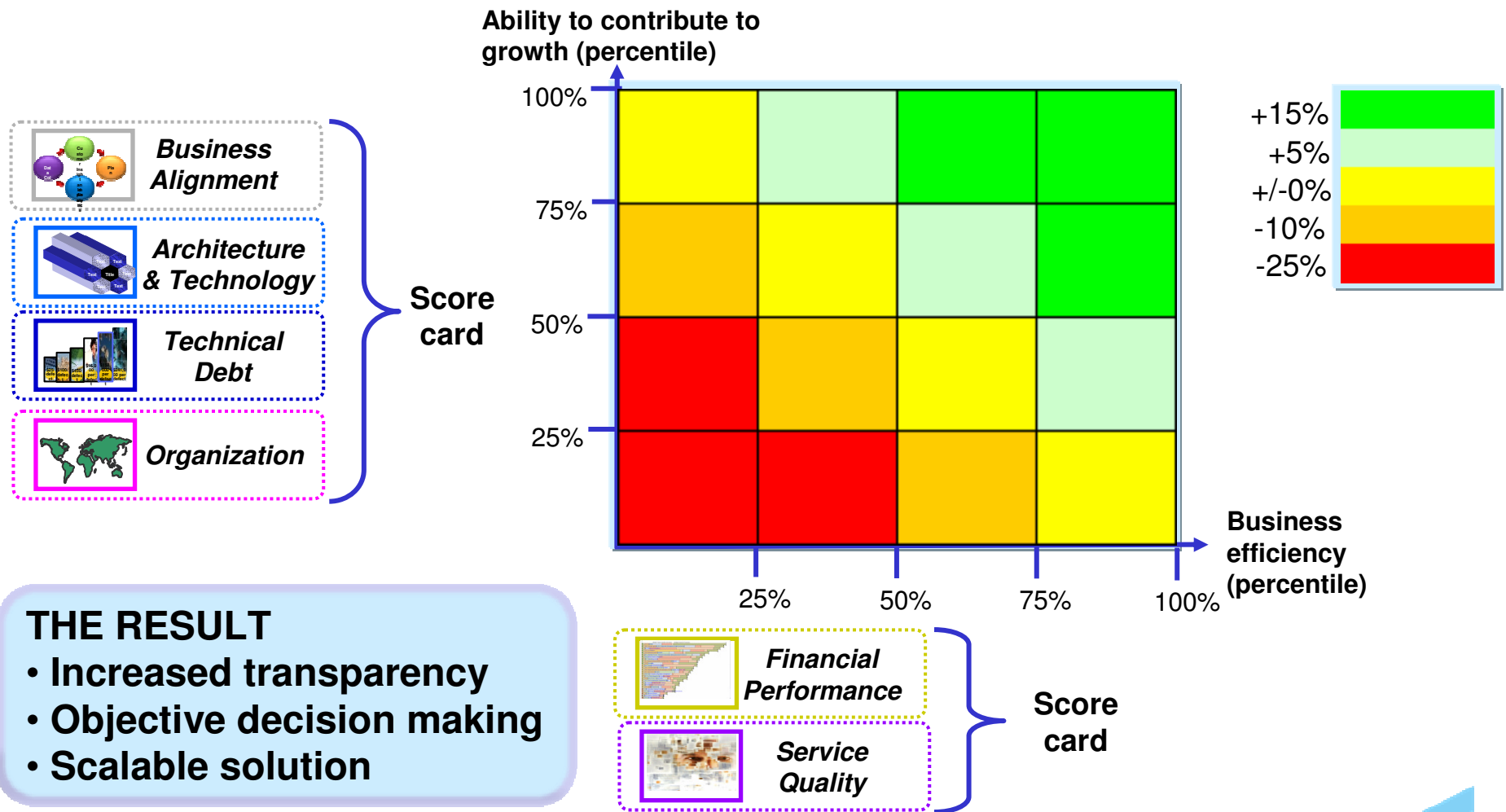
## APM Dashboard – Application Performance

Name	Portfolio	Star Rating	Projected Annual Cost	Cost Variance
Active Risk Manager	Sales portfolio	4 stars	10,600	
AutoFit	Enterprise Application Portfolio	2 stars	86,700	
Billing	Finance Portfolio	1 star	608,000	
GOLedger	Finance Portfolio	4 stars	42,400	
Ledger	Finance Portfolio	5 stars	616,900	

- This dashboard lists all the applications in Jane’s portfolio
- It rates the applications from one to five stars, where a five star application represents a high performer and a one star app represents a poor performer
- These ratings are calculated from a number of analytics including financial performance, technical information, organization, etc.

# Applying Analytics to Determine Funding Levels

*Propose investment levels based on alignment with strategic initiatives*

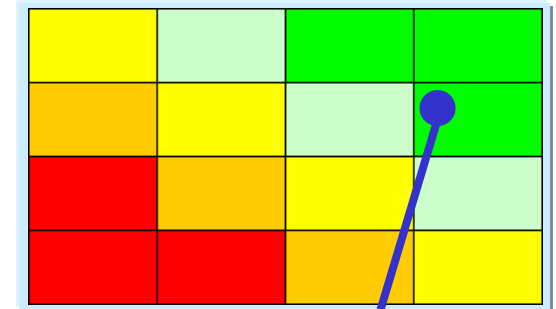


**THE RESULT**

- Increased transparency
- Objective decision making
- Scalable solution

# Budget and Planning: Ledger Application

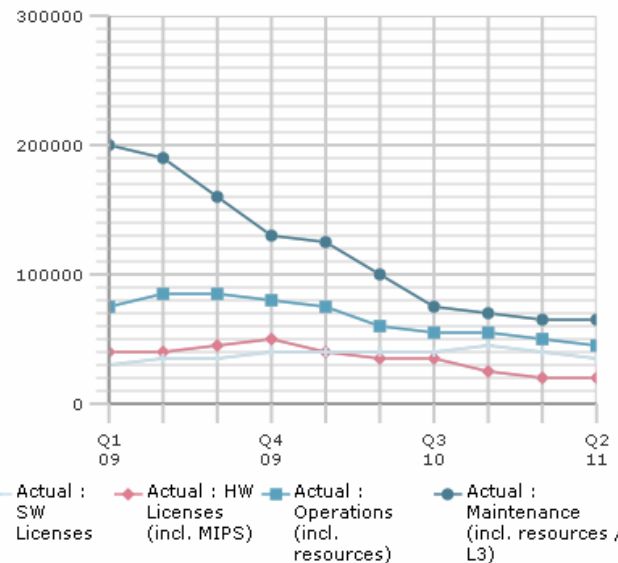
**Favorable business assessment**  
**Trend: Financials, operations headcount and development headcount have decreased.**



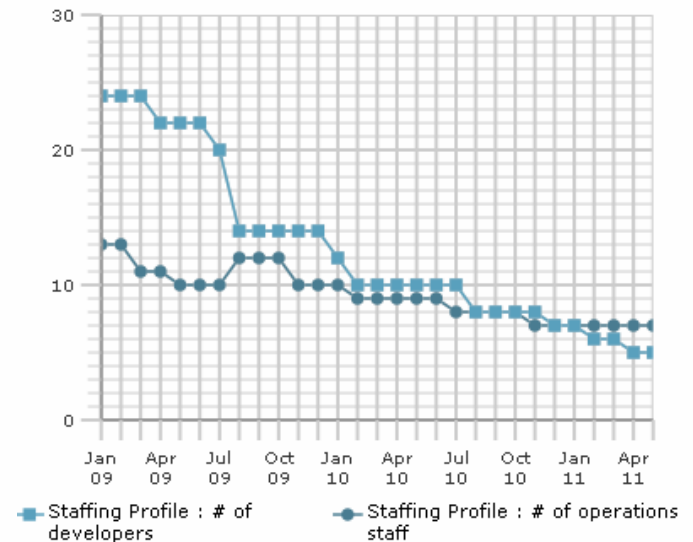
Ledger Application

Business Assessment	
Business Alignment	4 - High
Business Criticality	5 - Very High
User Base	4: 100-999
Availability	3 - 12x5
Impact on Outage	1 - Low
Revenue Generation	4 - High
Revenue Growth Potential	5 - Very High
Customer Facing	1 - No
Flexibility Importance	2 - Somewhat impor
Business Risk	1 - Very Low

Business Score



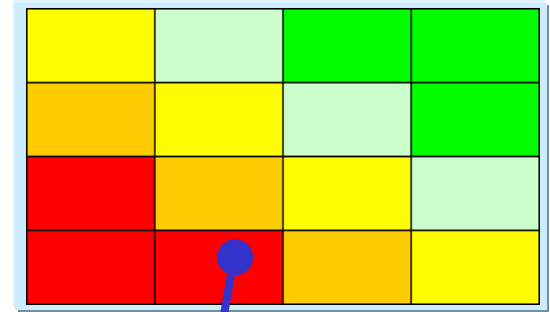
Financials



Staffing Profile

# Budget and Planning: Billing Application

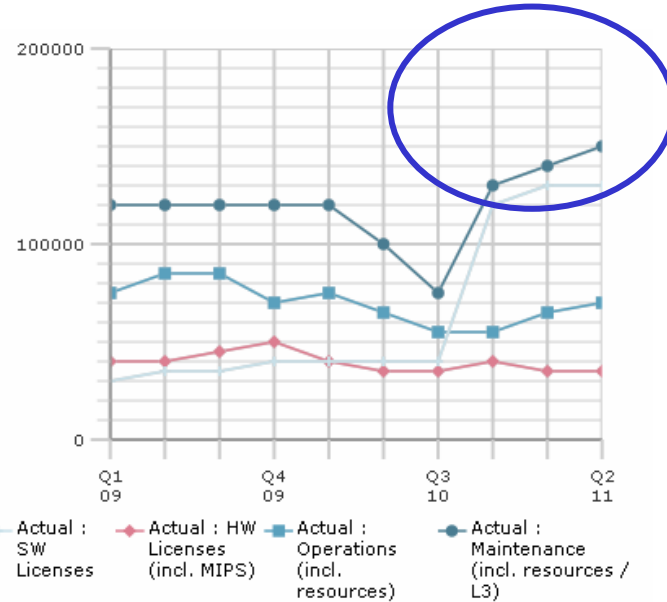
**Declining rating, low usage, poor business and IT alignment.**  
**Trend: Maintenance and SW licensing cost trending upwards.**



Billing Application

Business Assessment	
Business Alignment	2 - Low
Business Criticality	4 - High
User Base	1: <10
Availability	3 - 12x5
Impact on Outage	1 - Low
Revenue Generation	4 - High
Revenue Growth Potential	2 - Low
Customer Facing	1 - No
Flexibility Importance	3 - Important
Business Risk	3 - Medium

Business Score



Financials

Technical Assessment	
IT Alignment	1 - Very Low
IT Risk	4 - High

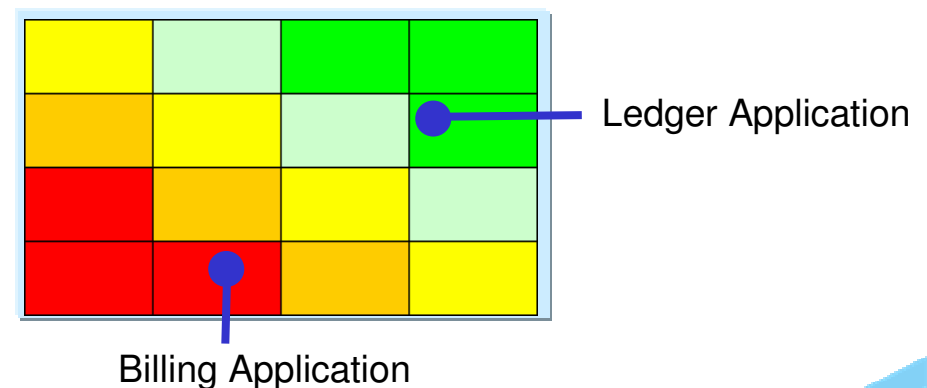
Technical Assessment

## Determine Investment Levels and Need for Additional Analysis



Jane - CIO

- After reviewing the data, Jane decides to fund additional enhancements to the ledger application.
- She also flags the billing application for additional analysis
- She tasks one of her staff to dig into the business alignment scores and software costs for the billing application





## Assess Alternatives for Remediation

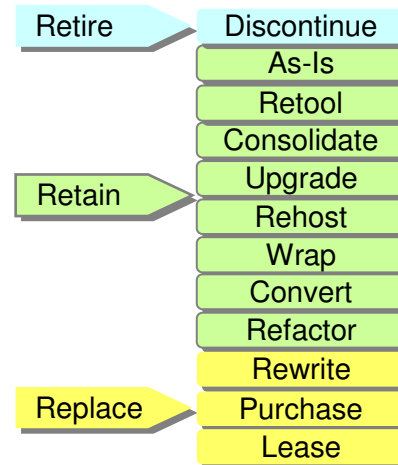


Bob - Analyst

- Bob is tasked with figuring out what is going wrong with the Billing application.
- He also needs to evaluate what actions need to be performed to bring the application's rating up.

# Retire, Retain, Replace – What Are the Options

There are a spectrum of strategies



The business drivers is one of several drivers for selecting which modernization strategy is the most appropriate

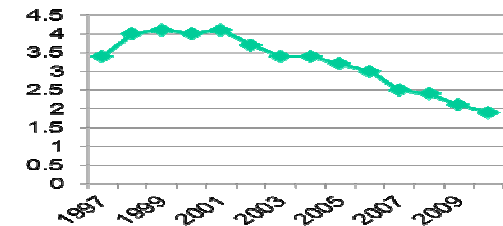
Business Drivers	Modernization Strategy					
	Re-host	Wrap	Convert	Refactor	Re-tool	Rewrite
Operations Costs	Light Green	Orange	Light Green	Light Green	White	Light Green
MIPS Cost	Light Green	Orange	Light Green	Light Green	White	Light Green
Maintenance Cost	White	Orange	Light Green	Light Green	Light Green	Light Green
License Costs	Light Green	White	White	White	Orange	Orange
Time to Market	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
Personnel Risk	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
Technology Risk	Light Green	White	Light Green	Light Green	White	Light Green
Implementation Cost	Orange	Orange	Orange	Orange	Orange	Red

**Remediation projects needs to be assessed based on their contribution to business drivers vs. project cost and execution risk**

# Budget and Planning: Billing Application

**Vendor increased SW licensing cost by 120% in the last two years.  
Labor cost increases due to skills exposure.  
Low code quality, brittle architecture.**

Rating: ★★



## Rating History

## Average Labor Cost

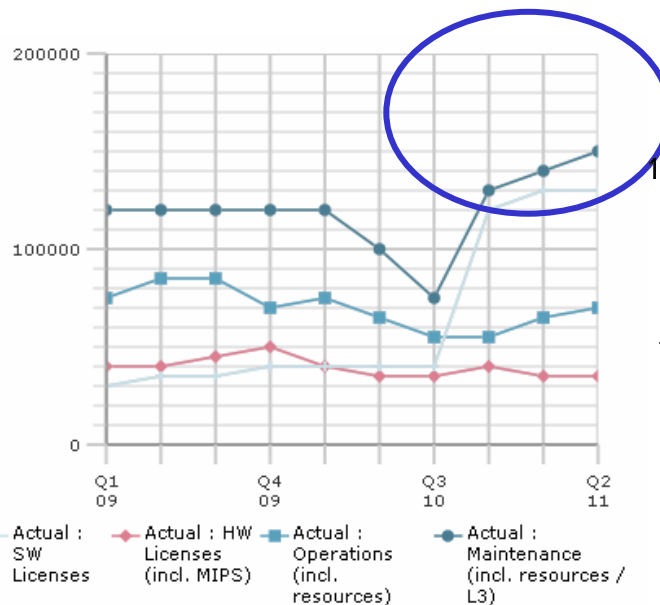


## Technical Assessment

IT Alignment	1 - Very Low
IT Risk	4 - High
Size	32,000
Defect Rate	188
Defect Density	5.875
Dependency Factor	2 - Low
Meet SLAs	1 - Yes
Skills Risk	5 - Very high
Code Complexity	1.9
Maintainability Score	1.8
Transferability Score	2.1
Changeability Score	2.4
Robustness Score	2.2

IT Score 18 (out of 100)

## Technical Assessment



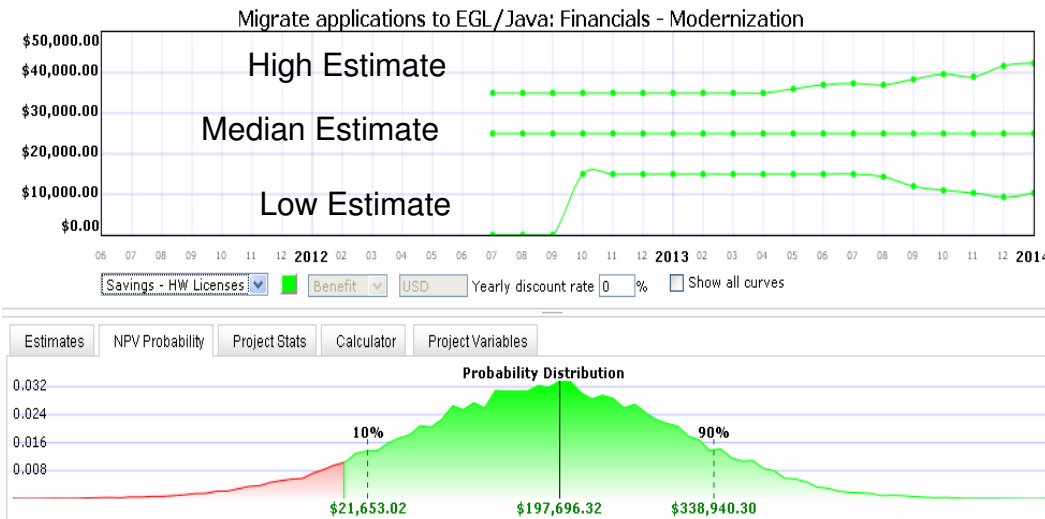
## Financials

## Labor Cost

# Determining the business case for migration

*Applying analytics to understand benefits vs. cost and risk*

## Option analysis: Migrate from Natural / Adabas to EGL or replace with ERP?



- Model uncertainty (risk) of your benefit and cost stream
- Calculate Net Present Value (NPV) of doing a migration
- Assess which alternative provides the most favorable NPV

	Cost	Risk
Migrate to EGL	\$1.5 / loc	Inherited technical debt, less agile system
Replace with ERP module	\$3 / loc	Package will require large amounts of customization

# Review Project and Establish Execution Roadmap

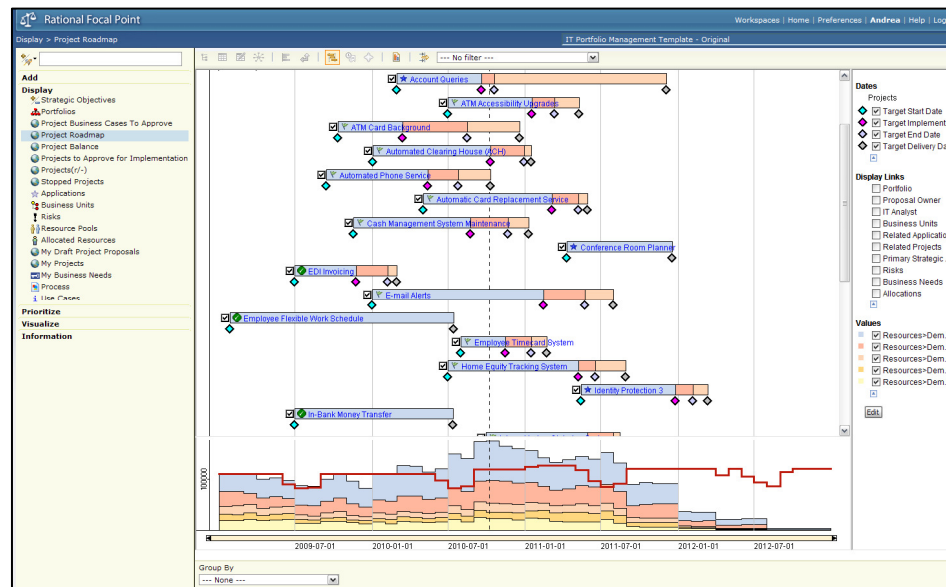


Jane - CIO

- Bob presents the findings along with the business case to Jane
- Jane is able to model the impacts of revitalization project to determine the budgetary impact
- Jane selects the migration approach

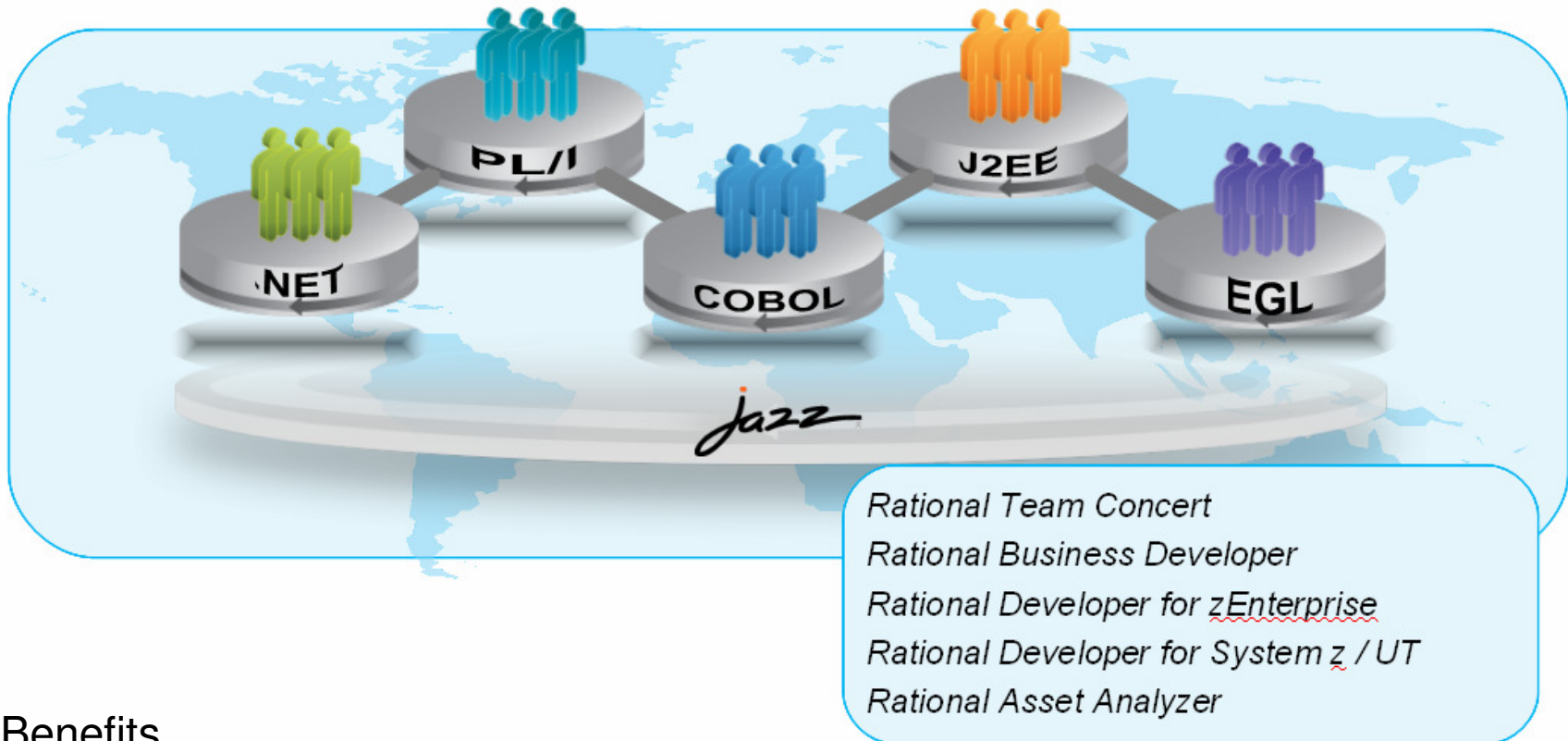


Bob - Analyst



## Execute with collaborative application lifecycle management

*Deploy new, common team infrastructure to manage modernization projects*



### Benefits

- Improved communication, higher quality, informed decision making, and more automated, transparent, and predictable software development
- Support for re-platforming, UI modernization, conversion, refactoring, and rewriting

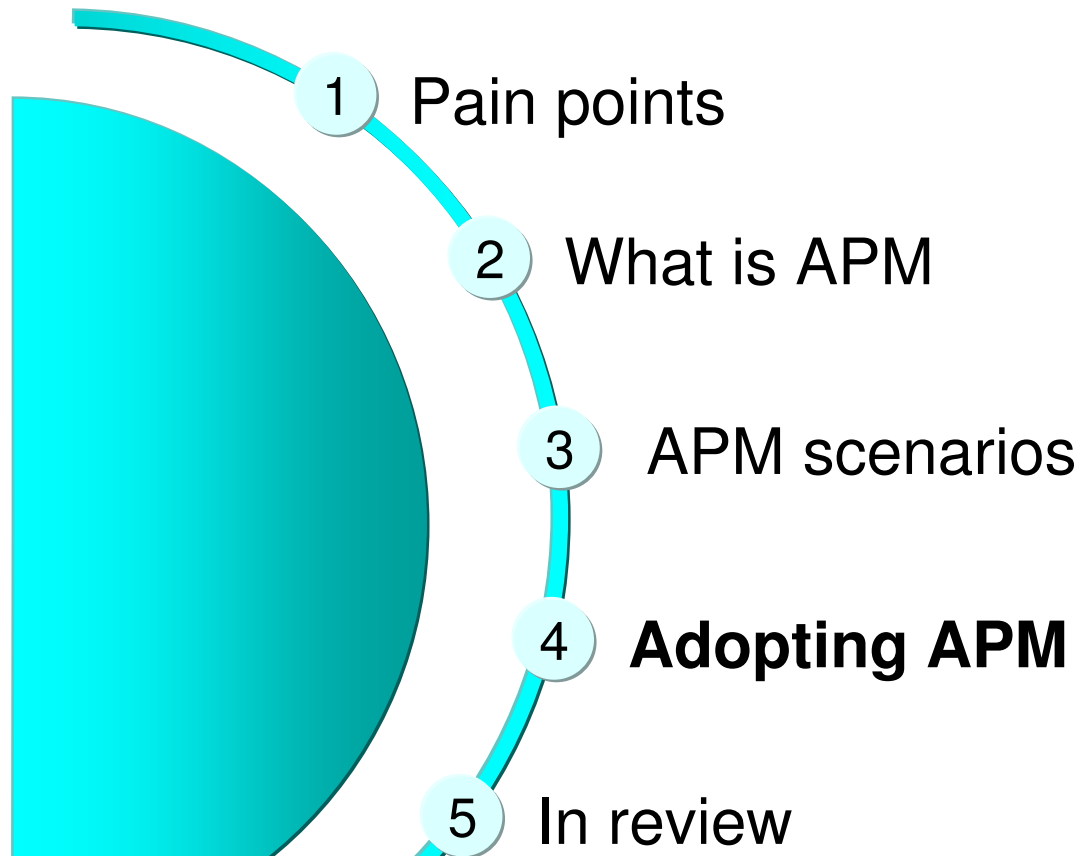
# Monitor Projects

## Integrated Portfolio and Application Lifecycle Management

- Monitor portfolio progress in Focal Point with –
  - Overall portfolio progress
  - Cost and schedule variances



## Discussion Points

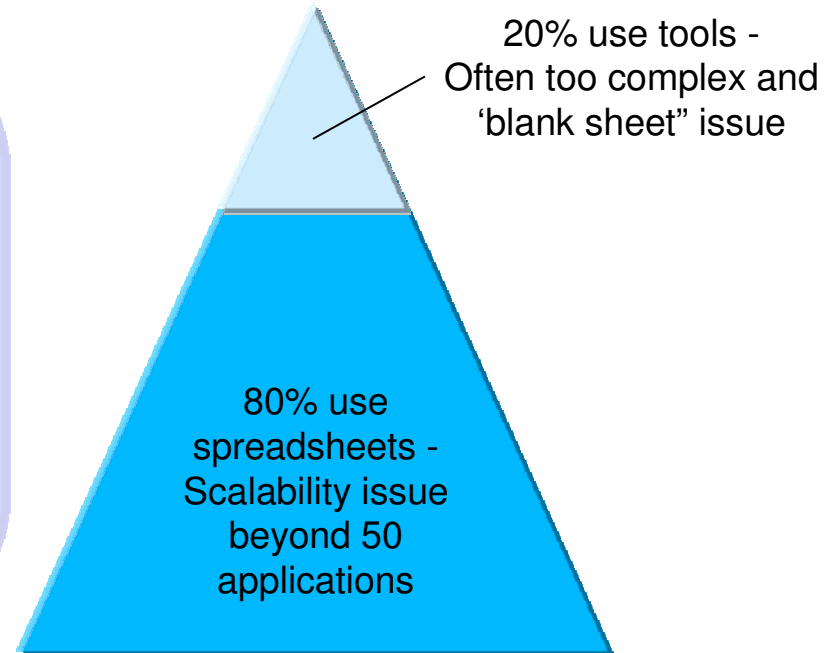




## Adoption of APM: Industry Maturity

**“Business leaders demand that IT leaders “do more with less” to free resources for innovation and growth. Applications professionals are turning to application portfolio management (APM) to meet those challenges”**

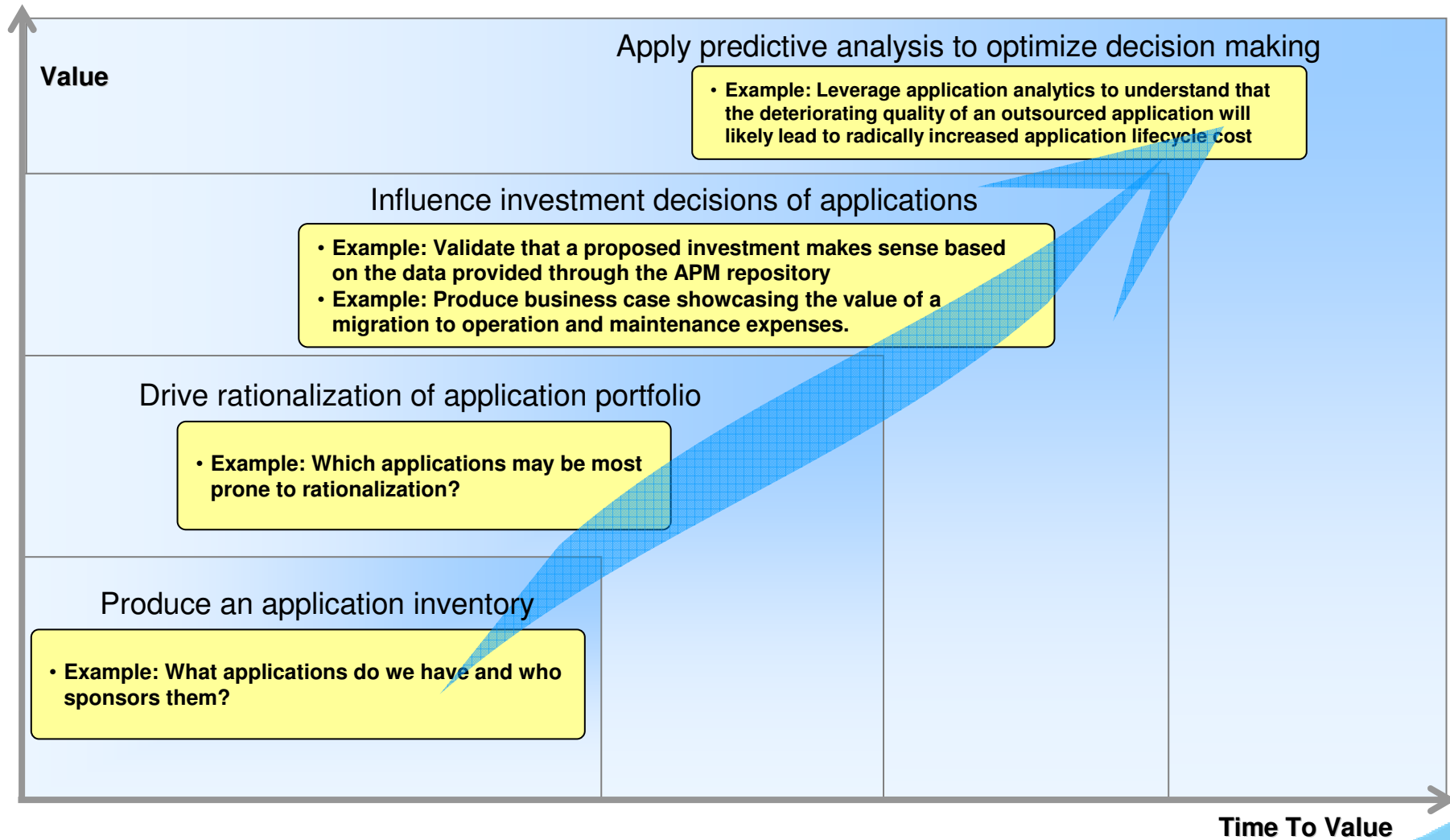
*-The Application Portfolio Management Landscape — Combine Process And Tools To Tame The Beast, Phil Murphy, Forrester Research, Inc. April 15, 2011*



**The market situation opens an opportunity for leaders to differentiate themselves from laggards**

# Adopting APM: Start Small and Expand

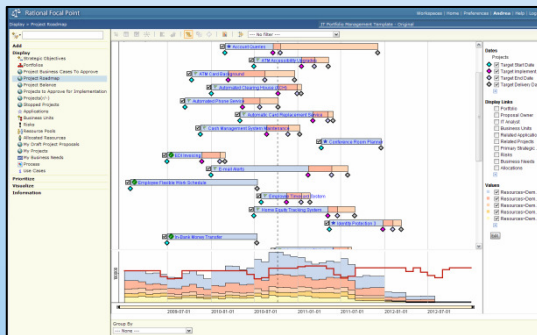
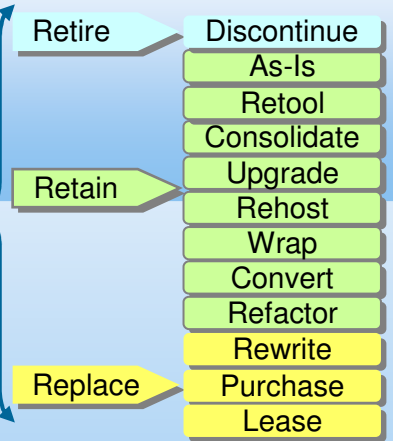
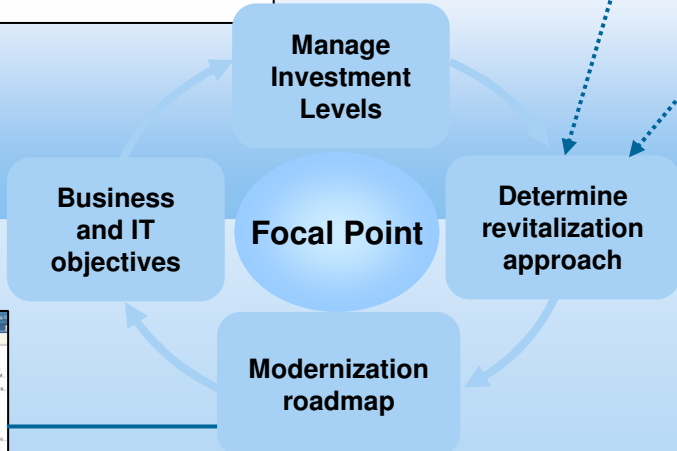
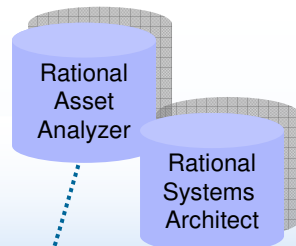
*Sample evolution of the maturity of an APM solution*



# Solution: Entry-level solution based on Focal Point

*Effectively translate business needs to executable roadmaps*

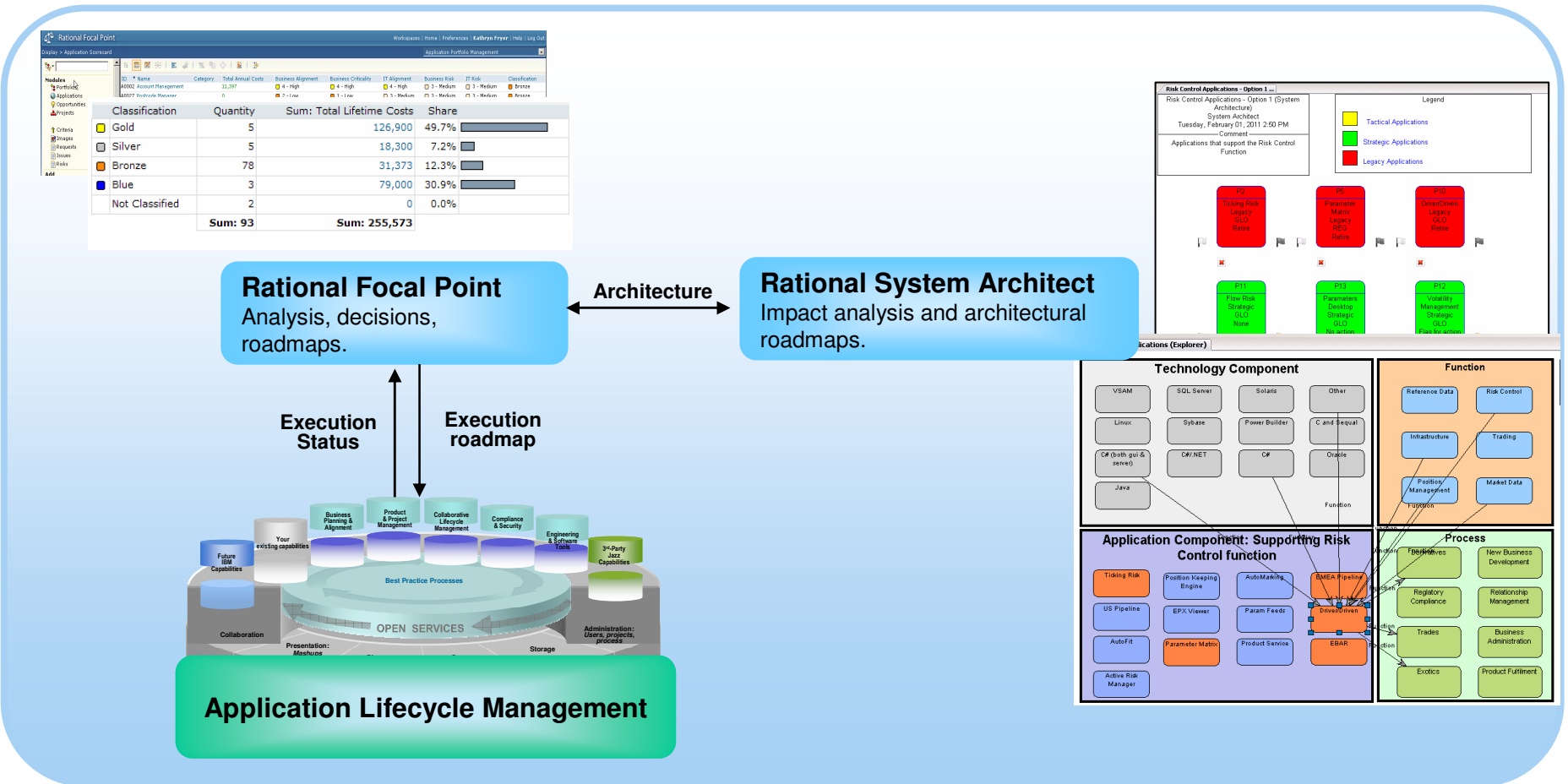
Classification	Quantity	Sum: Total Lifetime Costs	Share
Gold	5	126,900	49.7%
Silver	5	18,300	7.2%
Bronze	78	31,373	12.3%
Blue	3	79,000	30.9%
Not Classified	2	0	0.0%
<b>Sum: 93</b>		<b>Sum: 255,573</b>	



**Out-of-the-box workflows, information model and analytics**

# Solution: Application Rationalization through Smarter APM

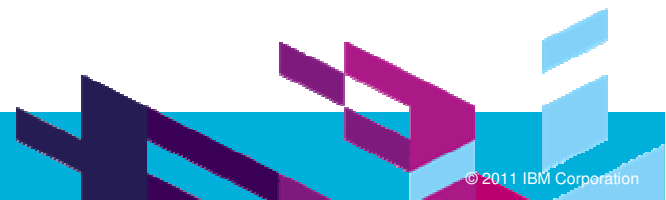
Combine business planning with architectural roadmapping



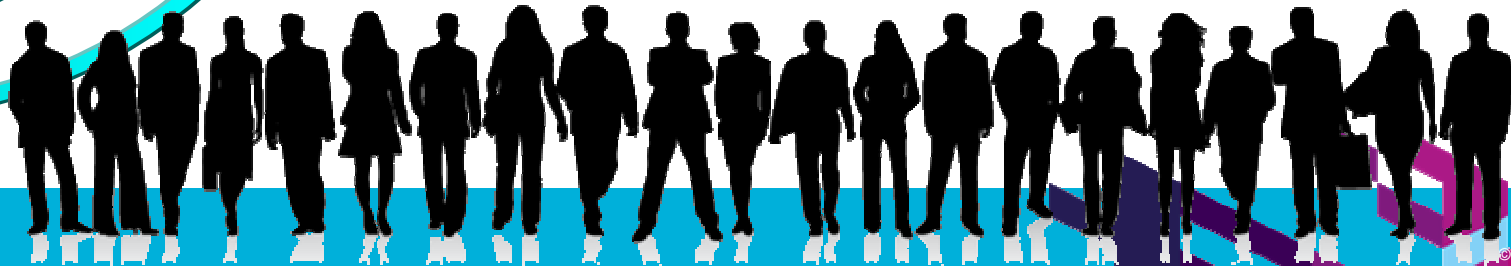
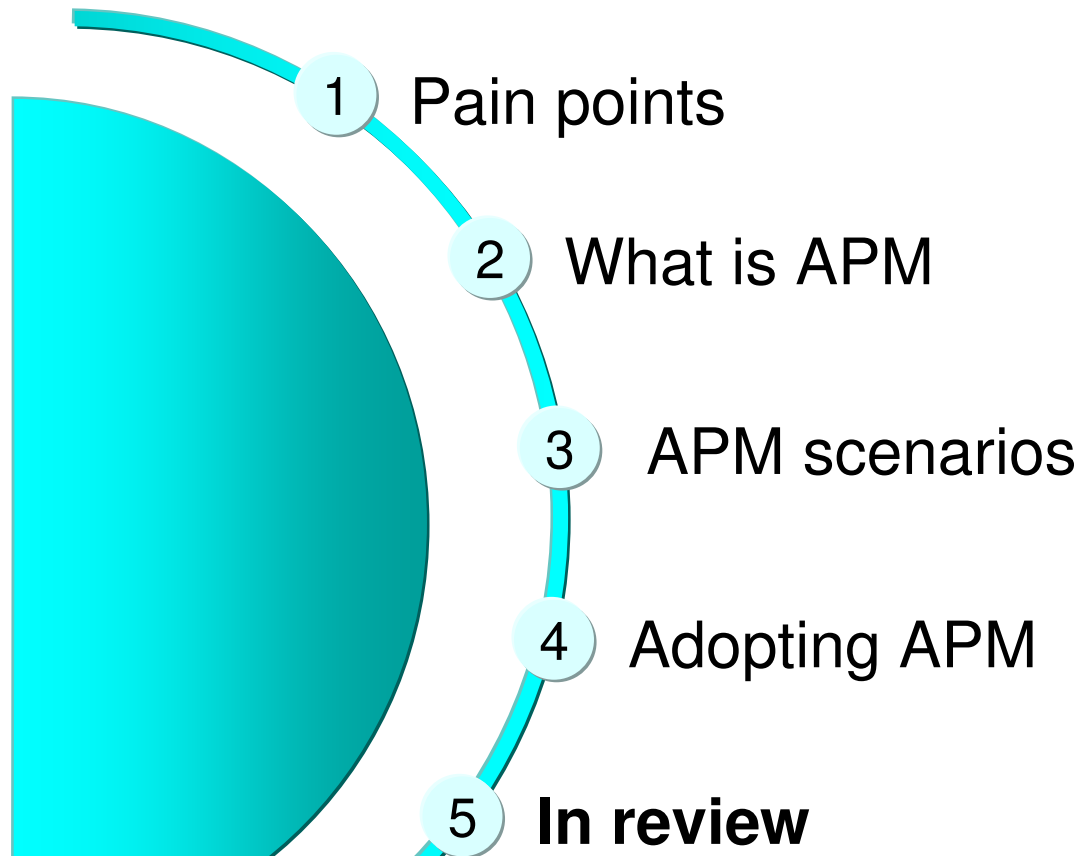
**Extend Enterprise Architecture with APM to enable Smarter APM**



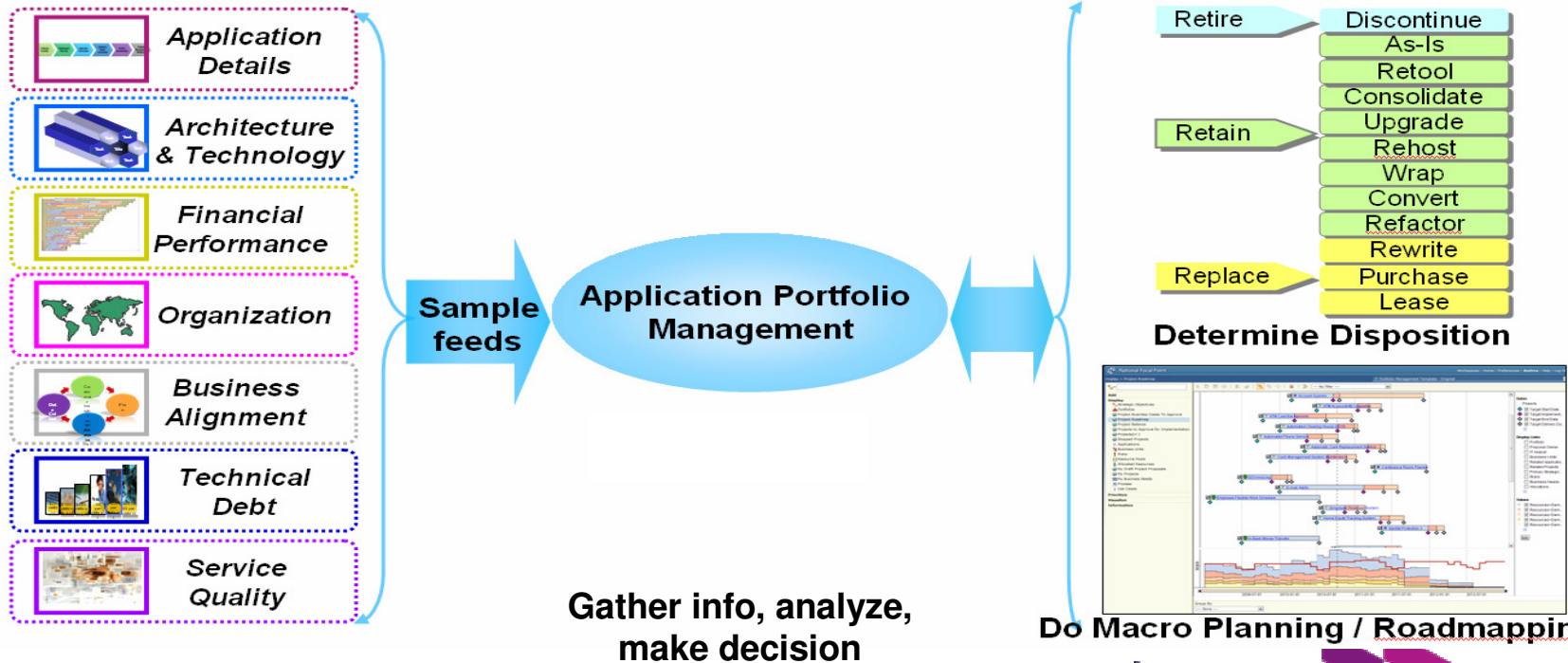
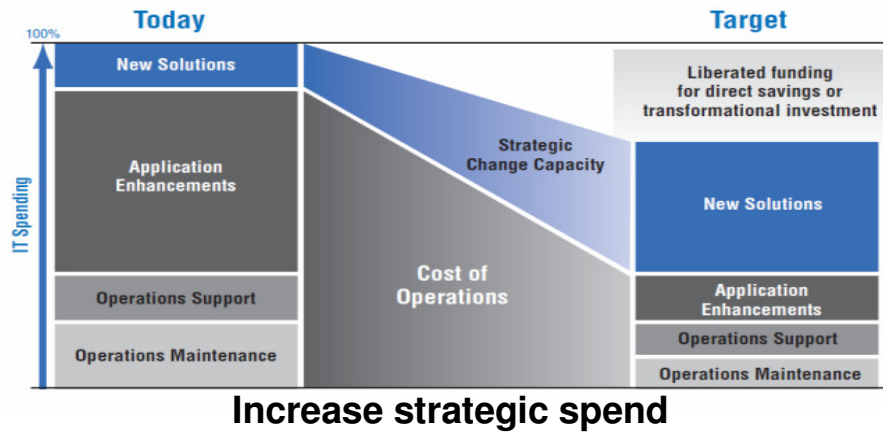
[www.ibm.com/software/rational](http://www.ibm.com/software/rational)



## Discussion Points



# In Review



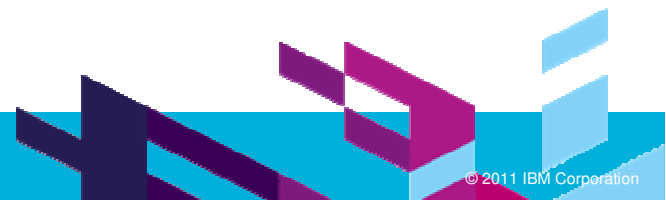
## Resources

- IBM Rational's Information Model (a Focal Point workspace) for Application Portfolio Management is available on request
- Article: *Application Portfolio Management: New Path to Strength and Innovation*, Hayden Lindsey  
<http://www.ecnmag.com/blogs/2011/05/soapbox/portfolio-management.aspx>
- IBM Portfolio Management Solution  
<http://www.ibm.com/software/rational/offerings/ppm/portfolio.html>



# QUESTIONS

[www.ibm.com/software/rational](http://www.ibm.com/software/rational)





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# Vision: Enterprise Application Portfolio Management

Monitor, Analyze, Decide, Execute

- IBM APM
- IBM non-APM
- 3<sup>rd</sup> party

