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IBM

Smarter Computing with Application Portfolio Management

*Reduce Cost and Improve Business Agility*

Smarter software for a smarter planet

Enabling Product and Service Innovation | Rational

# An Emerging Trend: Making EA Relevant to the Business

- "Traditional" Enterprise Architecture focus
  - Architectural frameworks: TOGAF, MODAF, DODAF, …
  - Comprehensive features: Impact analysis, architectural roadmaps, …

- Business concerns with 'traditional' EA programs
  - Do we get enough value out of EA?
  - Ivory tower? Is it sufficiently linked into how we make business decisions?

- We see an emerging theme in our discussions with customers
  - A realization that EA is critical, but EA programs needs to be wrapped into broader strategies and solutions for addressing the core problems that organizations are facing
  - This presentation will focus on solutions developed in response to those discussions, and the success customers have seen when adopting those solutions

Wrap Enterprise Architecture into broader business-oriented solution that can address root causes to critical business problems
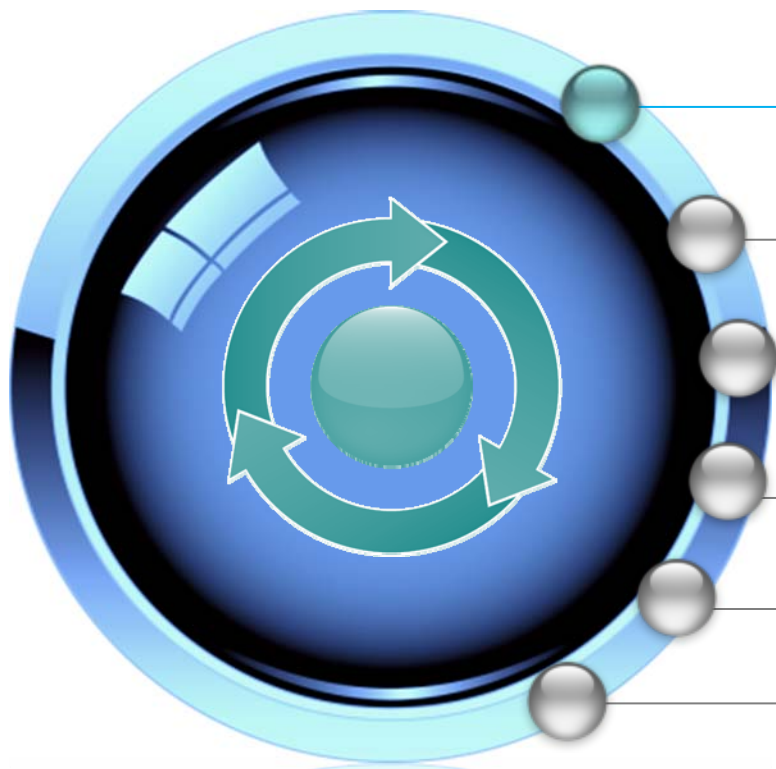
What Aspects of EA Will We Discuss?
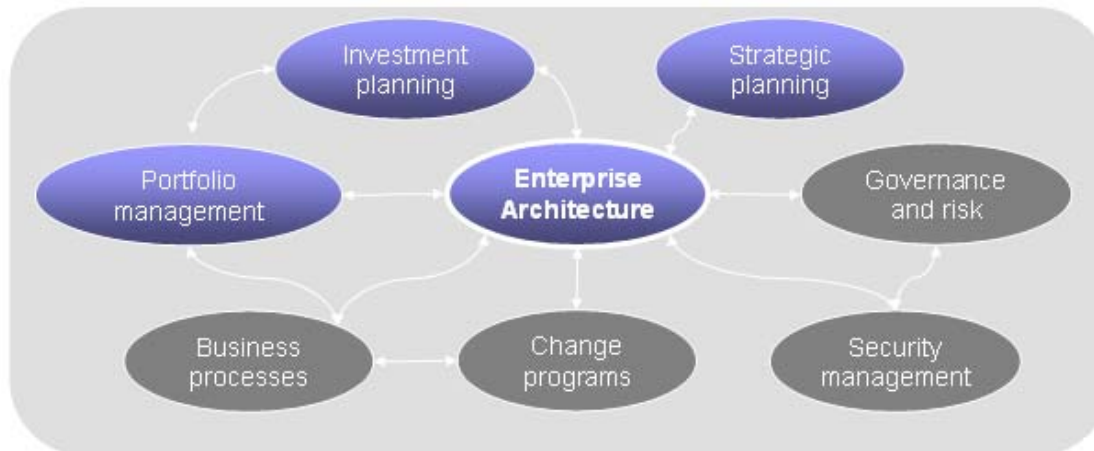
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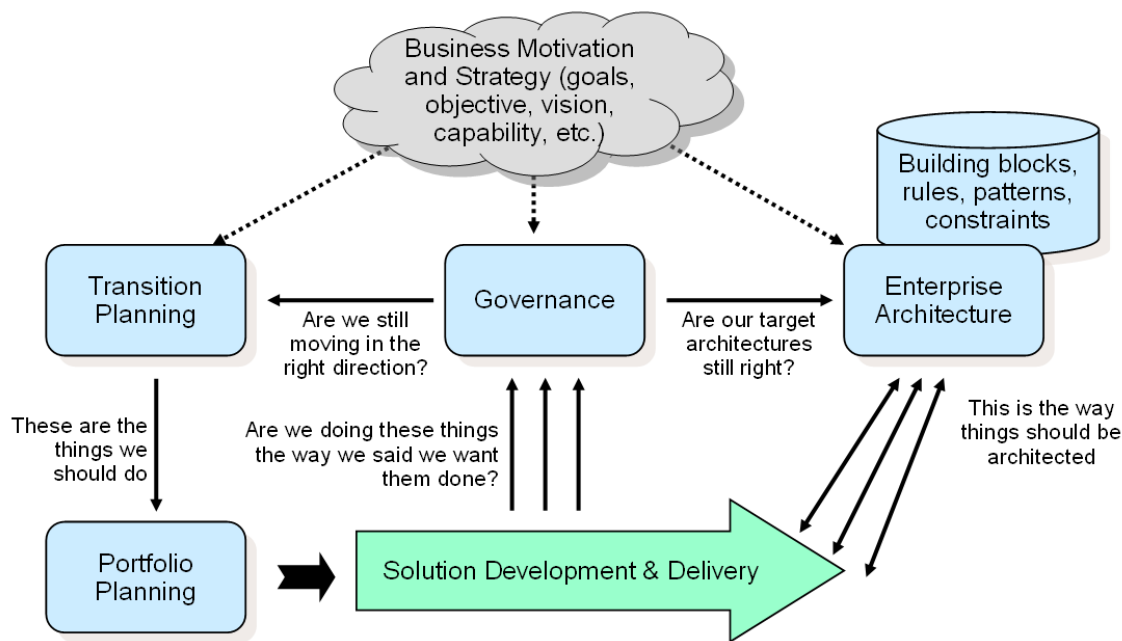
Agenda

CIO Challenges

What is Smarter Computing?

What is APM?

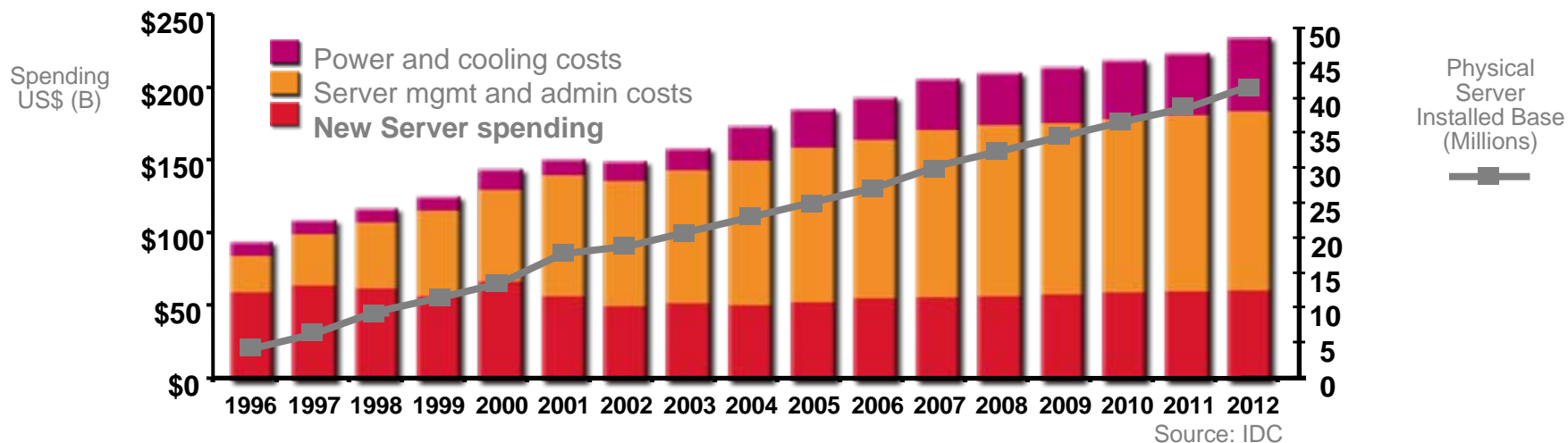How are customers adopting it?

APM in action

What drives results?
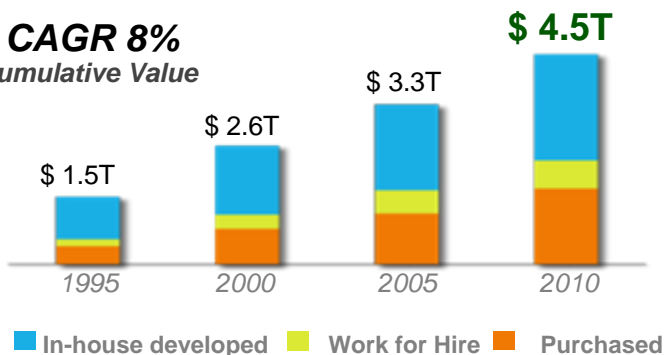
IT spending is not driving Innovation
"our hands are tied" with maintaining existing infrastructure

**Worldwide IT Spending on Servers, Power,
Cooling and Management Administration**

Spending US$ (B)

Physical Server Installed Base (Millions)

- Power and cooling costs
- Server mgmt and admin costs
- **New Server spending**

Source: IDC

Investment

CAGR 8%
Cumulative Value

$ 4.5T

$ 3.3T

$ 2.6T

$ 1.5T

1995 2000 2005 2010

■ **In-house developed** ■ **Work for Hire** ■ **Purchased**

Challenges

- **70%** budget locked in maintenance
- **80%** of Mainframers are 50+ years old!
- **50%** IT projects rolled back
- **85%** of distributed computing capacity is idle

Smarter Computing is realized through an optimized IT infrastructure

Smarter Computing
The IT Infrastructure that Enables a Smarter Planet

Designed for data
Harness all available information - **89% of CEOs** want better insight via Business Intelligence and analytics

Managed in the Cloud
Reinvent IT - **60% of CIOs plan to use cloud technologies** and **55% of business executives** believe cloud enables business transformation

Tuned to the task
Drive greater performance and improve IT economics - **total cost per workload can be reduced up to 55%** with optimized systems

How can we build an optimized IT infrastructure ?

> *"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

Many companies have the 80/20 rule wrong…

Adopt an Application Portfolio Management Practice

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:

- Align the application portfolio with business strategies

- Reduce costs and optimize value

- Increase speed-to-deployment and speed-to-market

- Reduce risk associated with technology or resources
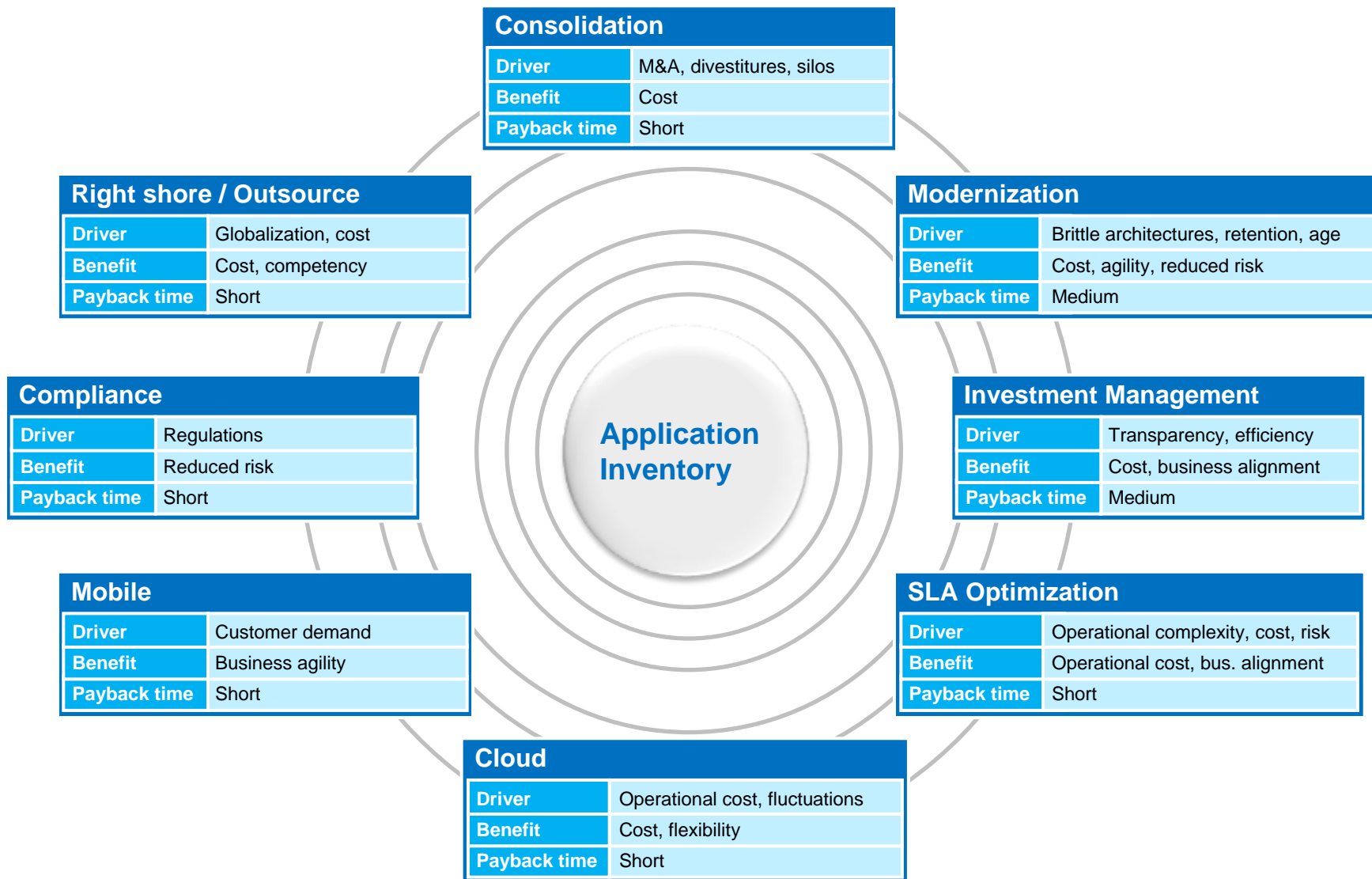
- Implement shared services

Application Portfolio Management needs to be informed by Enterprise Architecture to enable good decision making

Problem: Information needed is not accessible at time of decision

Determining the right action requires analysis of information across information areas

	Areas of Concerns	**Typical Actions** **Rationalization**
Architecture and Technology	▪ Risk exposure? ▪ Application dependencies?	▪ Re-vitalize
Financial Performance	▪ Where does my IT budget go? ▪ Which apps increase operations costs?	▪ Optimize funding
Organization	▪ Skills risk exposure due to retirements?	▪ Proactive technology or personnel decisions ▪ Sourcing options
Business Alignment	▪ Which applications are business critical?	▪ Re-vitalize or replace
Technical Debt	▪ Are my systems compliant? ▪ Which systems hinder business agility?	▪ Re-factor

Smarter Computing business outcomes
APM-driven scenarios

Consolidation

Driver	M&A, divestitures, silos
Benefit	Cost
Payback time	Short

Right shore / Outsource

Driver	Globalization, cost
Benefit	Cost, competency
Payback time	Short

Modernization

Driver	Brittle architectures, retention, age
Benefit	Cost, agility, reduced risk
Payback time	Medium

Compliance

Driver	Regulations
Benefit	Reduced risk
Payback time	Short

Investment Management

Driver	Transparency, efficiency
Benefit	Cost, business alignment
Payback time	Medium

Application Inventory

Mobile

Driver	Customer demand
Benefit	Business agility
Payback time	Short

SLA Optimization

Driver	Operational complexity, cost, risk
Benefit	Operational cost, bus. alignment
Payback time	Short

Cloud

Driver	Operational cost, fluctuations
Benefit	Cost, flexibility
Payback time	Short

Case Study: Simplify IT to improve business agility
A global conglomerate

Challenge
Cost

- Too much money spent on maintenance and operation

Solution

- Established application inventory in first month
- Assessed business value versus cost and risk
- Reduced number of local and non-strategic applications

Results

- ✓ Reduced number of applications by 45% in 18 months
- ✓ Reduced money spent on keeping lights on from 85% to 50%

Challenge
Business agility

- IT not reactive to business needs
- Business had low confidence in IT's ability to add value

Solution

- Established demand management process
- Used tools for improved business and IT collaboration
- Re-invested savings from keeping lights on into innovation

Results

- ✓ Reduced response time to business change request from 200 to 14 days
- ✓ Improved trust between Business and IT
- ✓ IT is now viewed as an enabler of innovation, rather than as a cost center

► **Read the full case study**

Case Study: Rationalize and optimize to align with the business
Financial institution in North America

Challenge
Complexity

- Unclear what applications exists and their value

Solution

- Built application inventory in two months, replacing previously scattered information
- Enabled portfolio management and EA teams to collaborate

Results

- ✓ Reduced number of applications by 75% in 18 month

Challenge
Business alignment

- SLA's and application support costs not driven by business justification and priorities

Solution

- Assigned appropriate SLA level based on needs
- Streamlined organization to align with simplified SLA levels and smaller application portfolio

Results

- ✓ Reduced number of SLA levels from 17 to 4
- ✓ Double digit reduction in operations cost

► Read the full case study

Case Study: Prioritize spend on maintenance and rationalization
Financial institution in Europe

Phase 1

Application Architect
- Assess application health in consistent manner
- Submit architectural needs

Architecture Boards
- Prioritize architectural needs across the organization

Phase 2
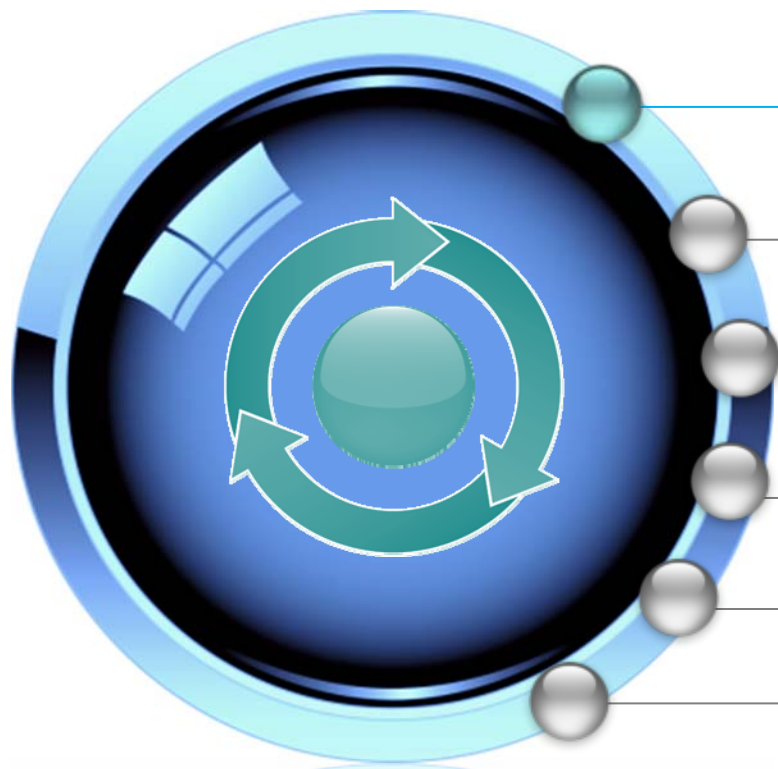
Line of Businesses
- Submit business requests

Investment Boards
(Business and IT)
- Prioritize funds for maintenance and rationalization based on architectural needs
- Prioritize business requests based on business priorities

Phased rollout of governance processes
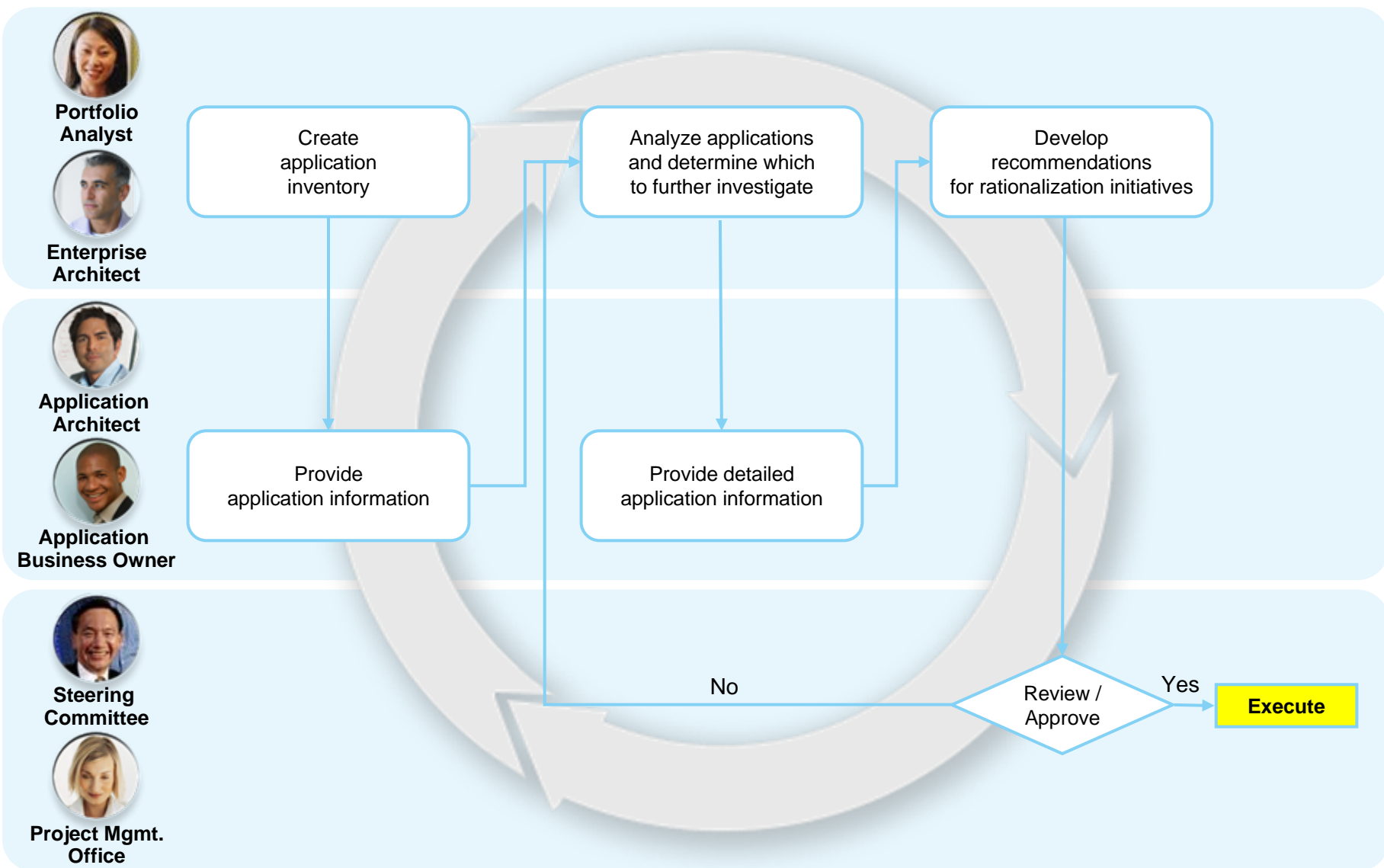
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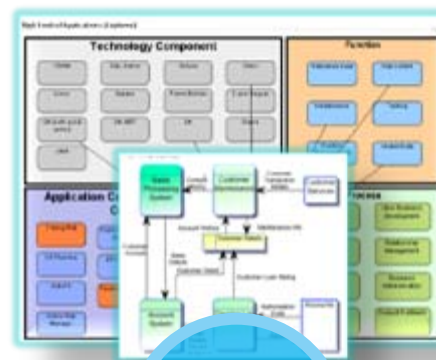# Application Portfolio Assessment: *Simplified workflow*

Portfolio Analyst

Enterprise Architect

Application Architect

Application Business Owner

Steering Committee

Project Mgmt. Office

Create application inventory

Analyze applications and determine which to further investigate

Develop recommendations for rationalization initiatives

Provide application information

Provide detailed application information

No

Review / Approve

Yes

Execute

Delivering value: From decisions to execution

Analysis, decisions, governance, execution roadmaps

Collaborative Decision Making

Architectural Context

IBM Rational Focal Point

IBM Rational System Architect

Architectural Deep Dives

Impact analysis, architectural roadmaps, future visioning

Execution status *Execution roadmap*

Integrated Application Lifecycle Management Solutions

Execution

Tracked

Enterprise Modernization Solutions

Project execution in collaborative team environment

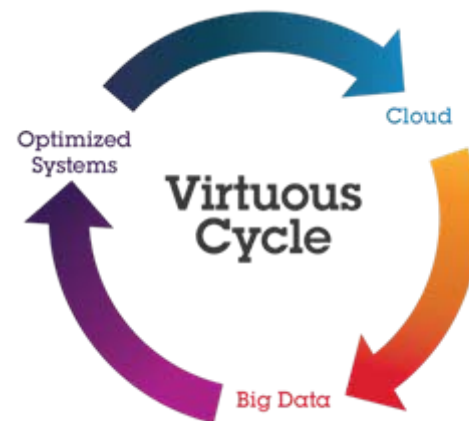Application flexibility, individual and team productivity, and system utilization

APM decisions and plans are executed and tracked in solutions for Application Lifecycle Management and Enterprise Modernization

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Smarter Computing with Application Portfolio Management
An incremental and continuous approach to achieving greater value and performance from your IT investments
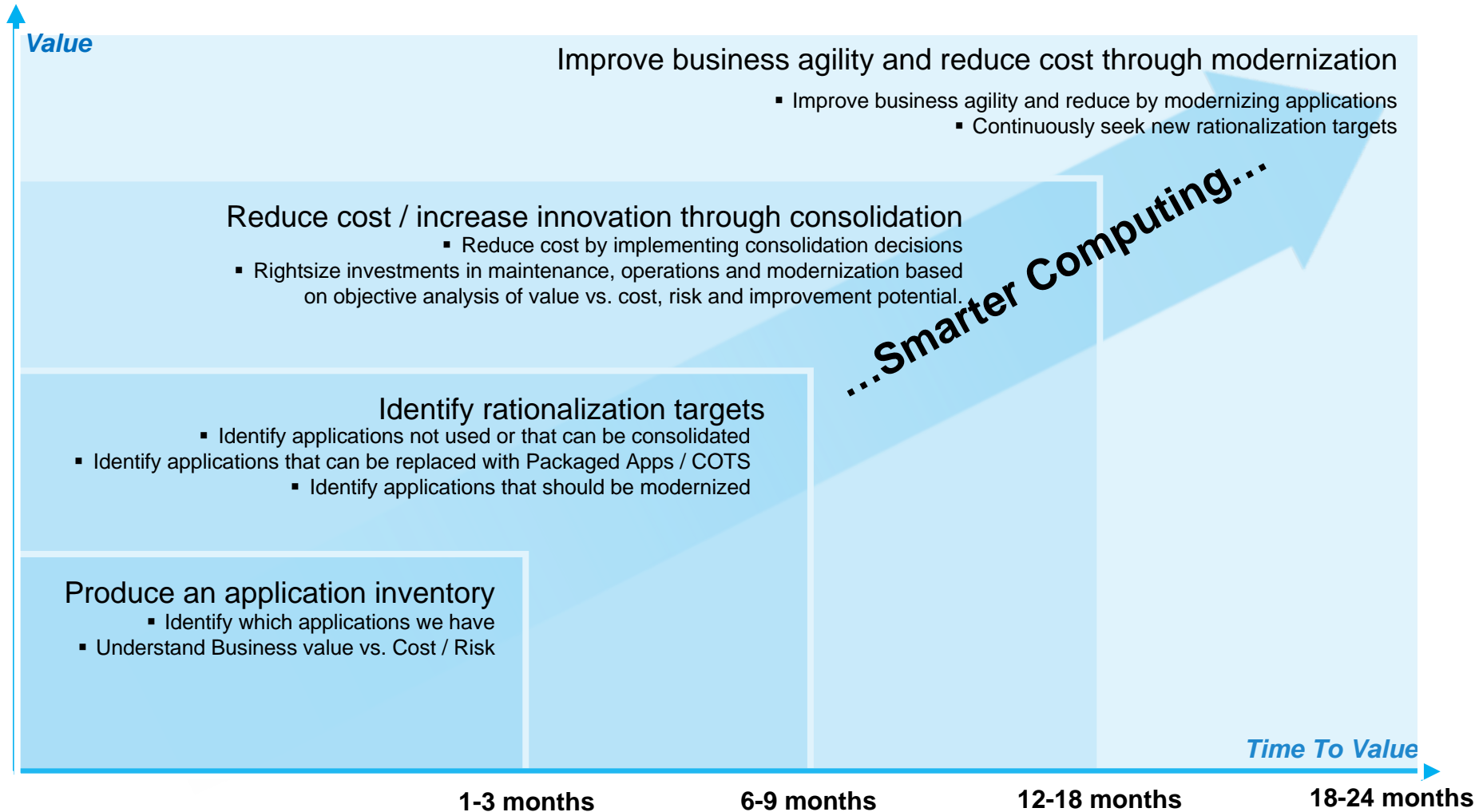
Smarter Computing

Enterprise Modernization

- Empower
- Unify
- Revitalize
- Optimize

Optimized Systems

Integrated Application Portfolio Management Solutions

Jazz

Virtuous Cycle

- Optimized Systems
- Cloud
- Big Data
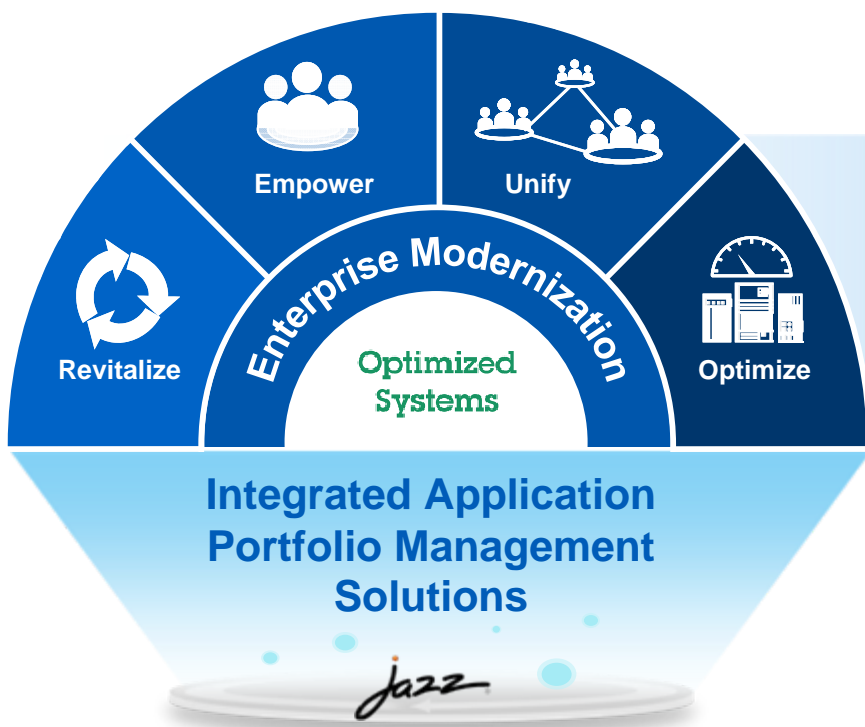
Adopting APM: Shortest Route to Value for Smarter Computing
Incremental adoption with incremental value delivery

Value

Improve business agility and reduce cost through modernization
- Improve business agility and reduce by modernizing applications
- Continuously seek new rationalization targets

Reduce cost / increase innovation through consolidation
- Reduce cost by implementing consolidation decisions
- Rightsize investments in maintenance, operations and modernization based on objective analysis of value vs. cost, risk and improvement potential.

…Smarter Computing…

Identify rationalization targets
- Identify applications not used or that can be consolidated
- Identify applications that can be replaced with Packaged Apps / COTS
- Identify applications that should be modernized

Produce an application inventory
- Identify which applications we have
- Understand Business value vs. Cost / Risk

Time To Value

| 1-3 months | 6-9 months | 12-18 months | 18-24 months |

What are driving success

- **The approach to EA**
  - Start with the decisions to make
  - Who needs to be involved in the decision making?
  - What is the minimum set of information needed to make the decisions?

- **Executive sponsorship**

- **Establish a single source of truth**

- **Business – IT collaboration**

- **Incremental adoption**

Gather info, analyze, make decision

DRIVES

Increase in strategic spend

Strengthened business and IT collaboration

Call to action
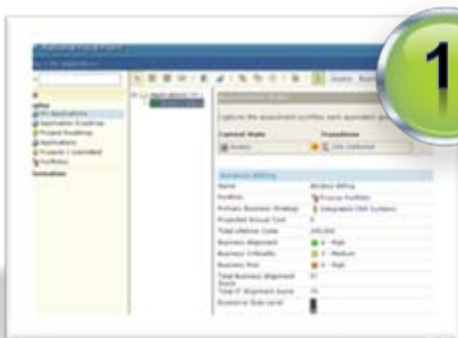
See APM in Action!
*Attend the Demo in the IBM Application Lab
from 2:00 – 2:45*

Stop by the IBM Pedestal
*Interact with our zEnterprise
and APM experts*

Visit www.ibm.com/software/uk/system-z/
*Get latest news on Mainframe Software
for System z and zEnterprise*

Resources

- Smarter Computing
  – Software for System z and zEnterprise

- IBM Software Capabilities
  – Business Planning and Alignment
  – Enterprise Modernization

- APM content on ibm.com
  – whitepapers, demo, podcast, video etc.

- APM reference stories: North American Bank , Global Conglomerate

- APM Forrester Research report on monetized value that IBM Rational customers experienced
  – Provided on request

- APM whitepaper: Empowering the CIO

- APM Content on developerWorks
  – demos, presentations, User Guides, etc.

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