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IBM DevOps Solution: Continuous Business Planning to Get Cost Out and Agility In

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Abstract

Do you know what IT resources you have, what they are worth to your business, and what that return is costing you? Are you able to respond to the needs of your business and customer demand in a timely manner, while also managing the cost of delivering that value?

This session will discuss a collaborative approach for continuous software delivery. You'll learn about actionable strategies and techniques to get more out of your existing investments. We'll also discuss how to transform your application portfolio to reduce maintenance and development lifecycle costs and improve technology investment decisions.

Organizational IT ~~wants~~ has to…

Align their application portfolio to the organizations' overall strategy

Increasing Business Pressures

Minimize costs for maintaining and operating existing systems

Enable new business opportunities through new and innovative systems

Minimize risk exposure (Compliance, Schedules, Security, …)

Drive business process optimization through technology

Aging population possessing key domain, business and technology knowledge

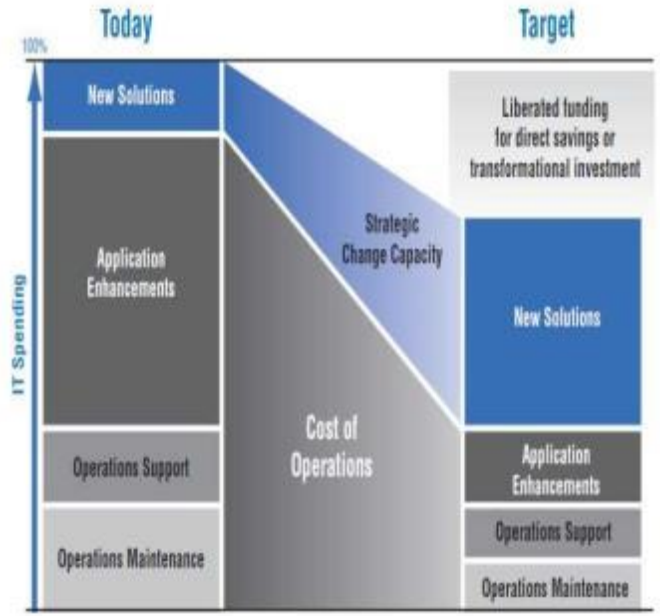
Complexity driven by continued expansion of technology options

Duplicated and competing capabilities and technologies

Degrading maintainability as a result of aging technology and brittle architectures

Increasing IT Constraints

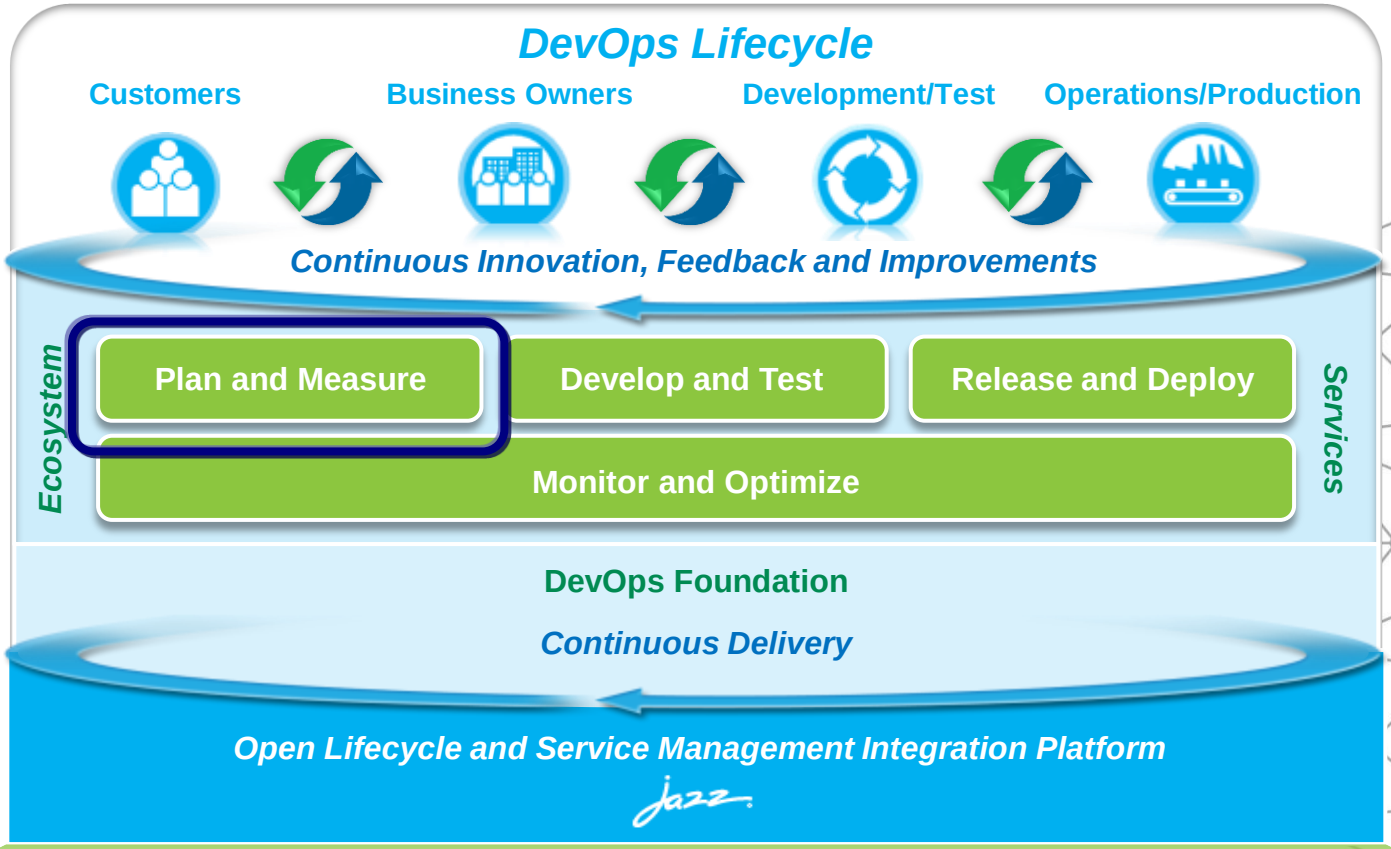
Insufficient Strategic Spend



But…

Lack of business and IT information makes decision making ad-hoc, error prone and politically driven versus analytical and fact-based. Limited awareness of applications (usage, design, relationship to business requirements, etc.) increases cost, slows development delivery and reduces quality.

What is DevOps



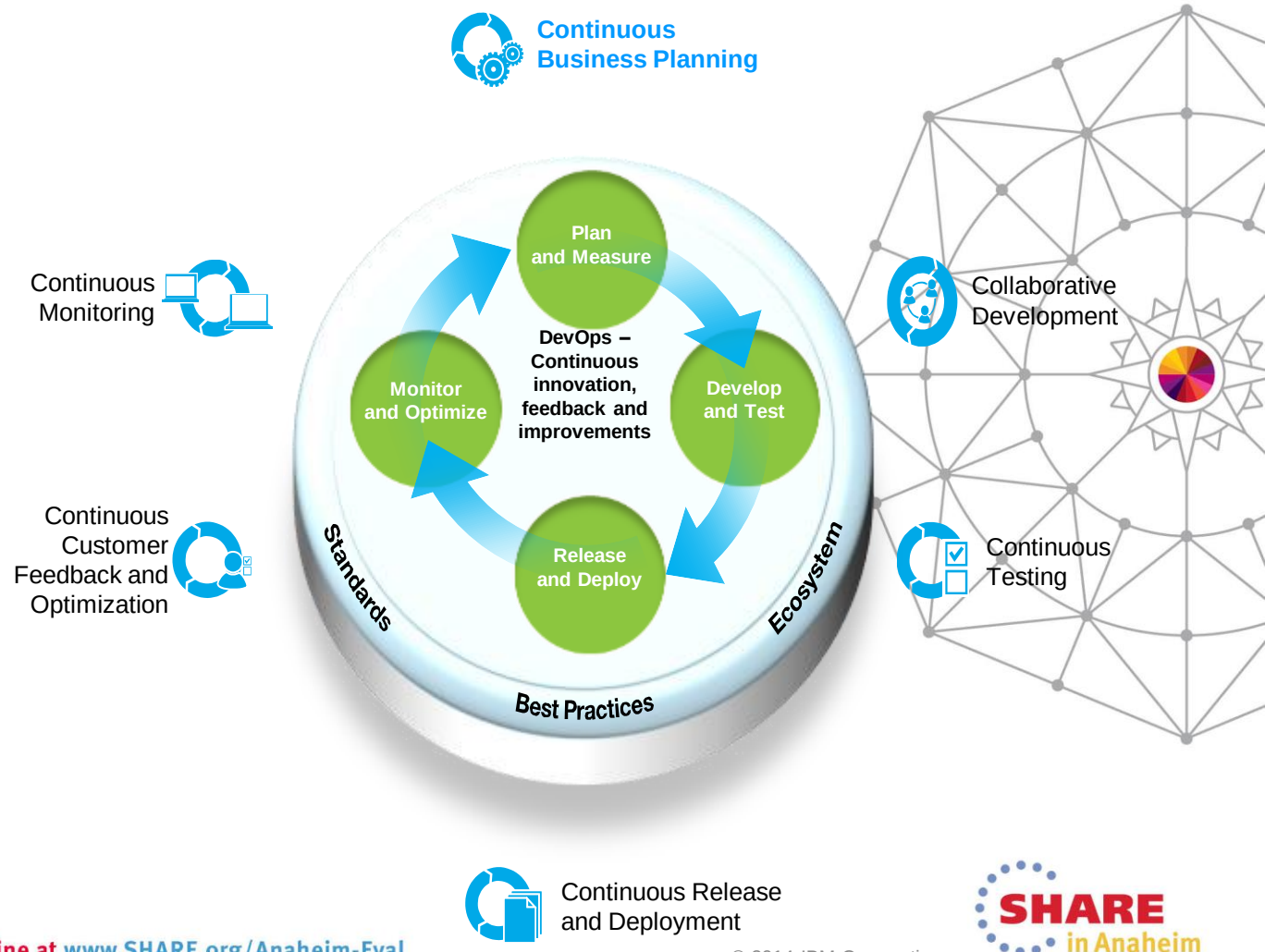
IBM DevOps – Continuous Software Delivery

Enterprise capability for continuous software delivery that enables clients to seize market opportunities and reduce time to customer feedback

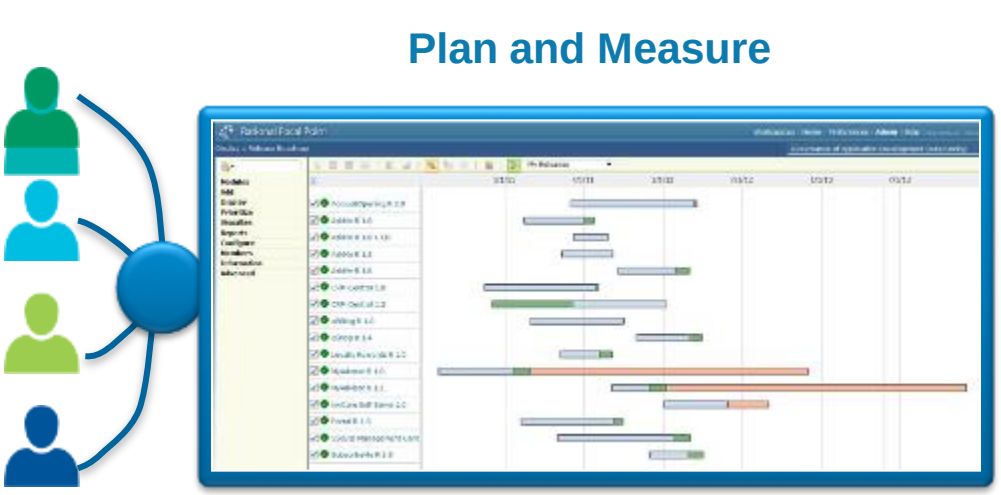
Accelerate software delivery – *for faster time to value*

Balance speed, cost, quality and risk – *for increased capacity to innovate*

Reduce time to customer feedback – *for improved customer experience*



Plan and Measure



- Collaborative decision making
- Produce release roadmap
- Understand capacity
- Track status of each business release
- Track status of each business need / feature
- Shorter delivery cycles through end-to-end integration

- Define operational releases for each business release
- Allocate deployment environments to releases
- Orchestrate changes across multiple applications
- Track quality milestones and deployment status

Continuous Business Planning

Maximize business outcomes and value through an open collaborative, standards-based platform and strong governance framework.

Execute on a strategic vision

- Make desired outcomes a reality
- Manage business concepts, business requests and business releases

Stay constantly aligned

- Working on the right things at the right time, keeping strategy aligned with execution
- Make informed decisions to better align products and portfolio investments
- Improve visibility and transparency of development initiatives
- Learn what customers really want and steer with agility

Plan perpetually

- Take a pulse on progress perpetually, adjusting strategies when warranted and staying on top of market opportunities
- Provide input, gain clarity, better achieve consensus, and adapt to changes more quickly

Quiet revolution

Portfolio driven Application Lifecycle Management will deliver a continuous stream of value

- **The voice of the customer will be that of the actual customer.**
- **Continuous delivery will change demand management.**
- **Product focus will replace project focus.**

A previously quiet revolution in ALM called DevOps is now noisily elbowing its way into the mainstream.

If Agile software development was the opening act to a great performance, continuous delivery is the headliner. The **pace at which consumers expect change is causing a crisis** in application development and delivery (AD&D), but it's exactly what's essential to create a sense of urgency. **Agile was a good start, but it wasn't sufficient to drive better business results**; continuous delivery forges the broken link in the value chain, connecting business strategy with business results.

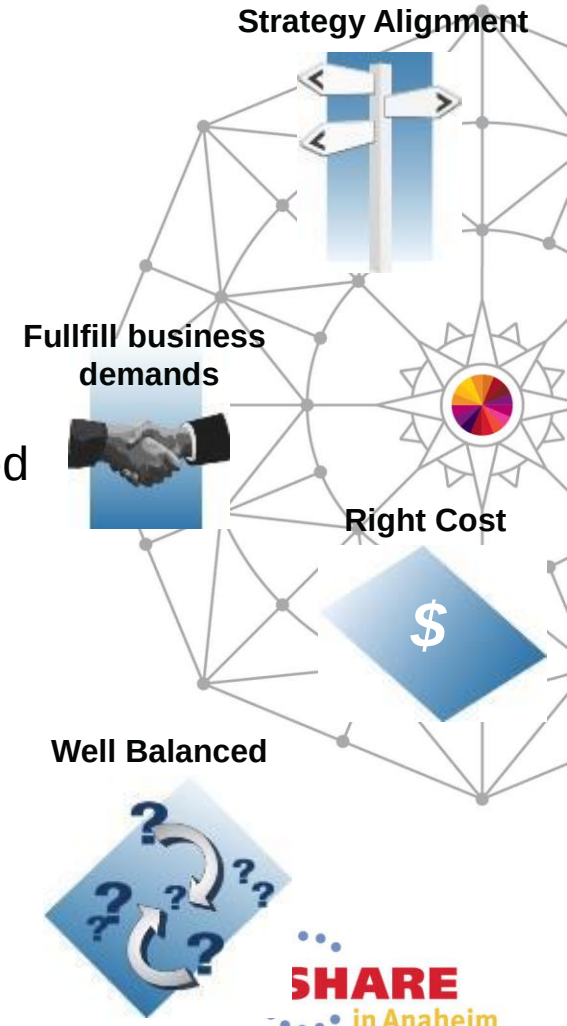
Source: Continuous Delivery Is Reshaping The Future Of ALM by Kurt Bittner, July 22, 2013, Forrester Research, Inc.

The changing landscape of business planning

Lean Portfolio Management

In a world of scarce resources, the key question is:
Are we working on the most valuable things?

- Requires a Business and IT dialog
- Translation of those priorities to a release roadmap
- Account for the inherent uncertainty of software development through risk / reward analysis
- Demand / supply of financial and people resources, based on a value-based discussion
- Monitor execution and take corrective actions

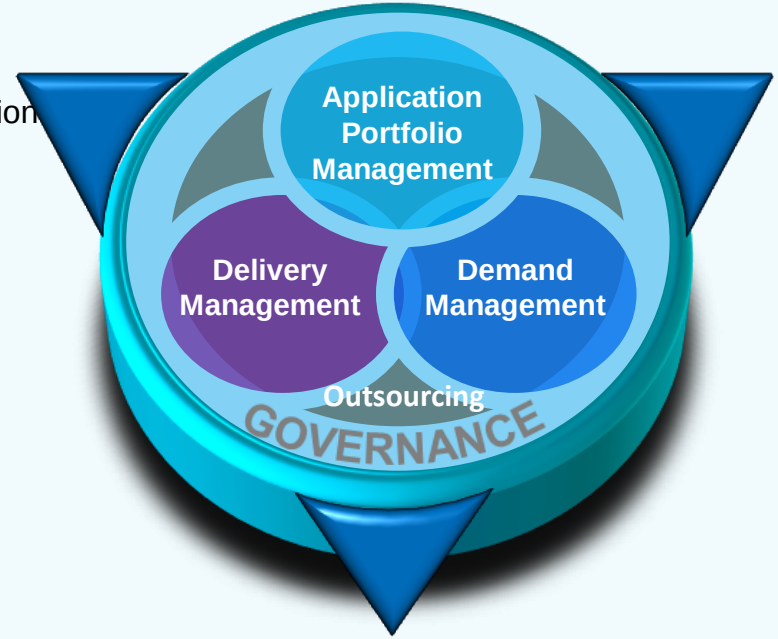


Leverage the flexibility of IBM solutions

Process / Capability Focus

Prioritize and Manage

Rationalize improvements to technology assets with Application Portfolio Management



Gain Visibility

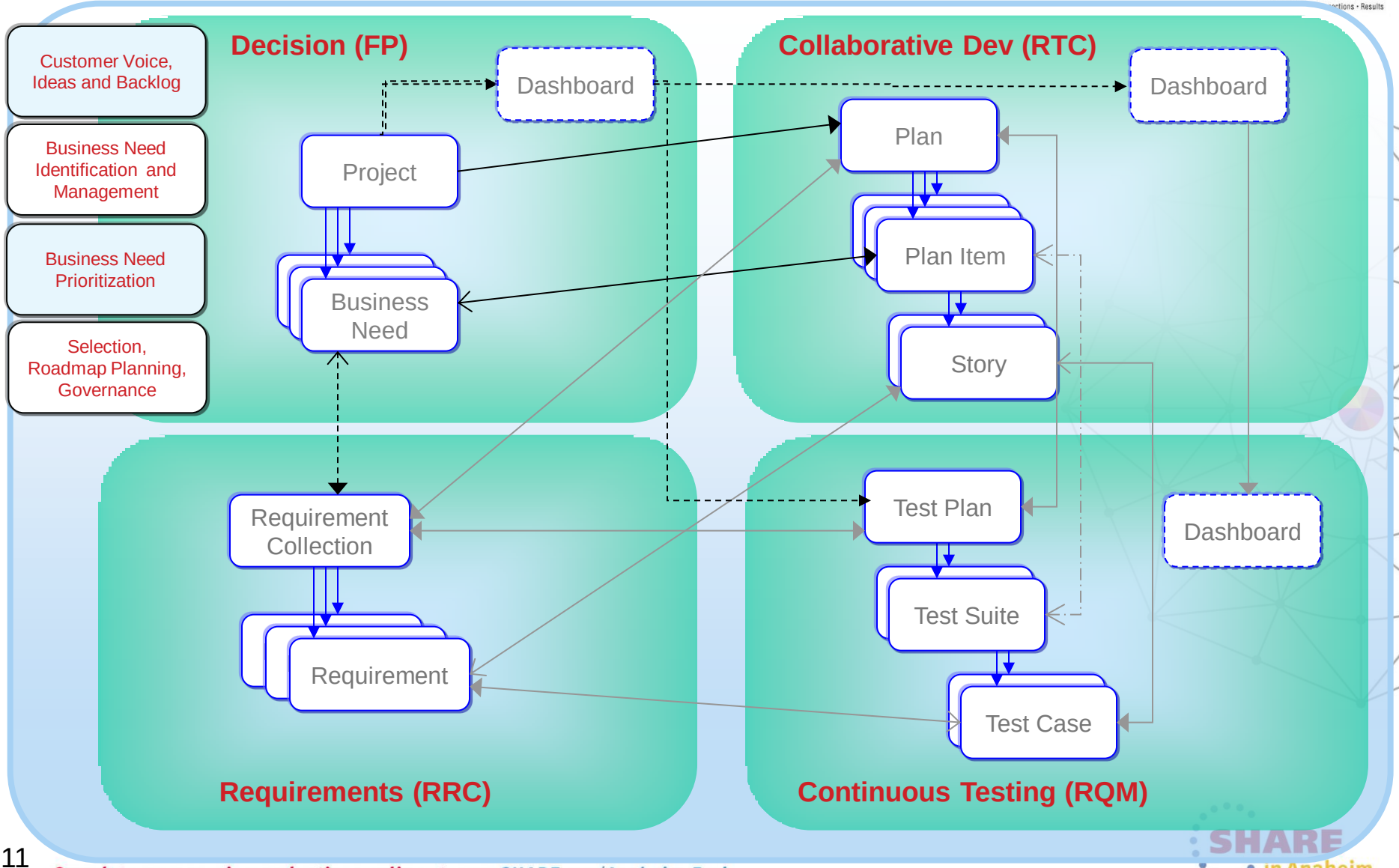
Balance your Enterprise Portfolio across your business in alignment with goals

Govern

Achieve IT Governance to optimize technology investments with critical business requirements

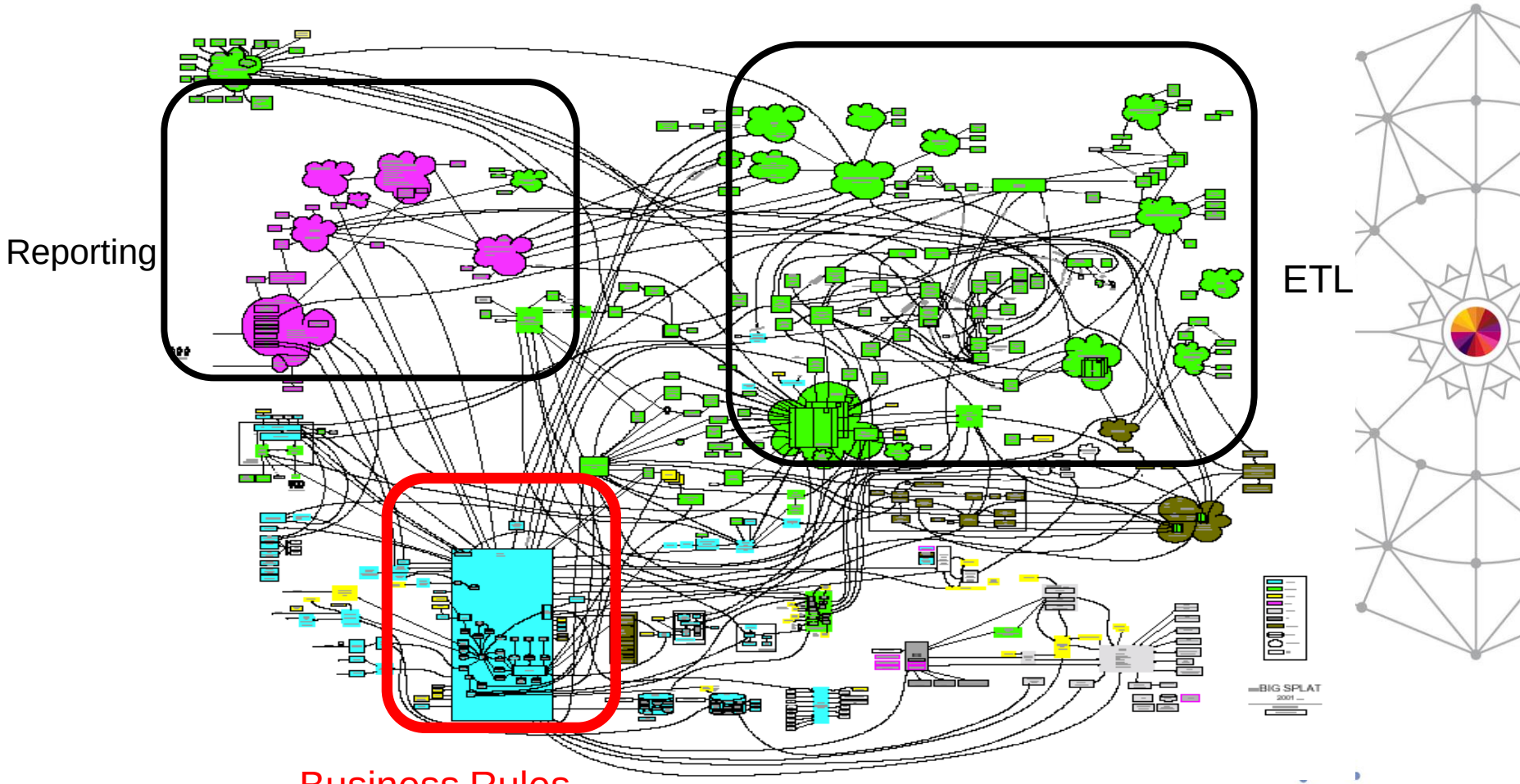
Open platform for data and tools integration and automation

Typical tool workflow

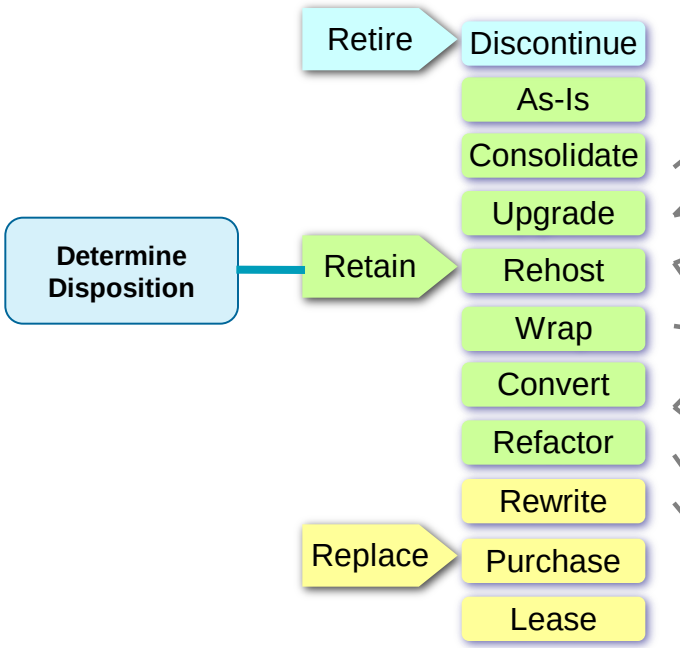


Functional Component Segregation

Use powerful tools to quickly begin SOA evolution by harvesting and repurposing proven assets



Application modernization what are the modernization options



- Maintain, Consolidate, Update
- Expand/modernize user access
- SOA modularization/reuse (includes Decision Mgmt based Modernization)
- Modernize language for multiple platforms
- Decision Mgmt based Modernization

Decision Management Modernization

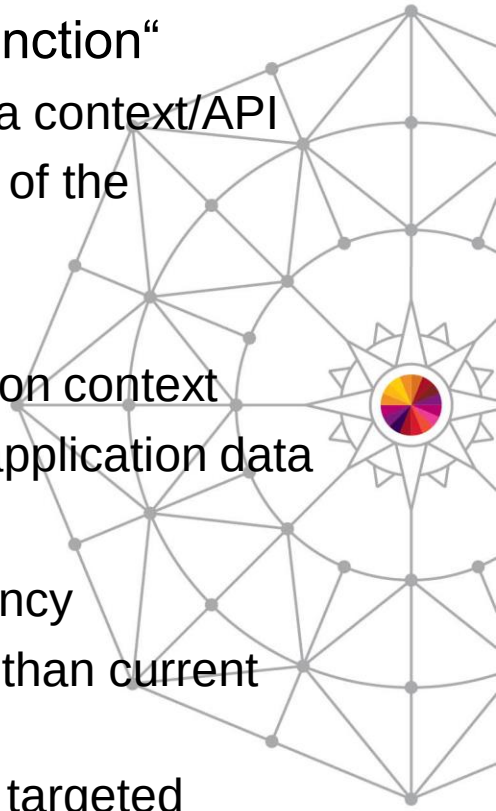
- Business need: Business application “decision making” needs to adapt to changes in the marketplace, in time to make a difference

- Application Development drivers:
  - Cost savings
    More effective application development & maintenance with less business risk
    Consolidation/Restructure of existing applications, saving hardware & resources
  - Changing ratio of source inventory to development skills
    Forcing need for formal processes with an on line electronic repository
  - Be able to react to changes requested by business in days, not months

- Modernization with Decision Management: Applying technology and process to gain increased “decision making” agility for business applications

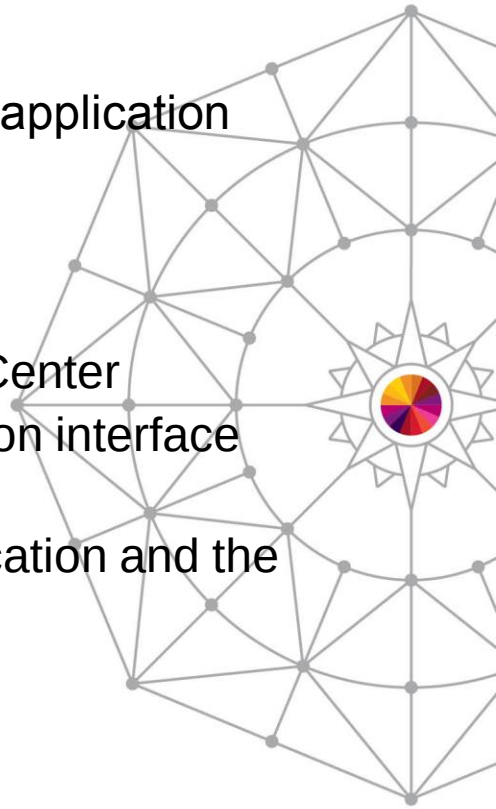
Integrating Decision Management Design/Architecture on the Mainframe

- Isolate the decision calls into a separate "callable function“
  - Minimizes the impact of application change on the data context/API
  - Allows the decision call to be shareable by other parts of the application
- Design the data context as part of the interface
  - Recommend a custom copybook/include as the decision context
  - Allows the data context to be a tailored subset of the application data
- Identify extractable rules decisions
  - Focus on LoB driven changes with any regularity/urgency
  - Define the decision from actual business policy rather than current application behavior
  - Architect an incremental application refactor driven by targeted decisions

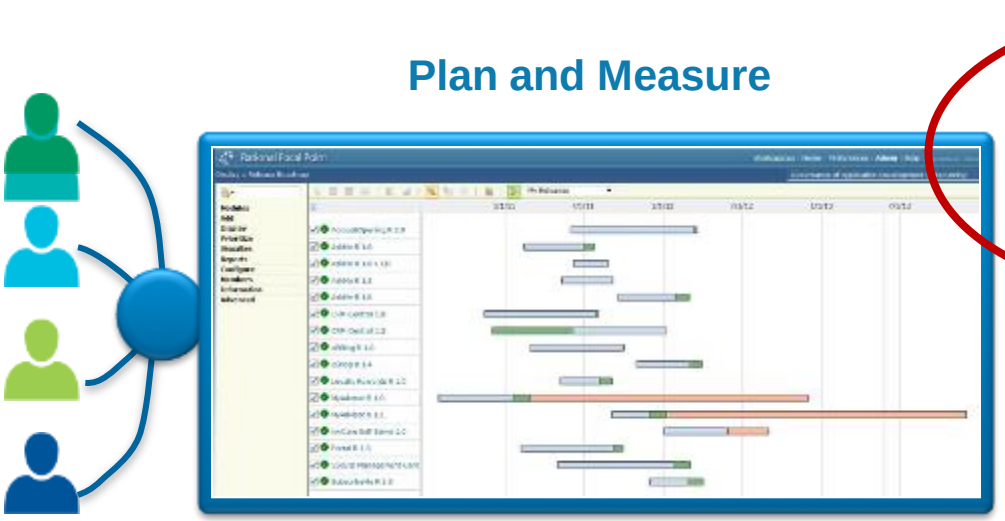


Integrating Decision Management Adapting the Process on the Mainframe

- Adapting the Application Lifecycle
  - Establish a "decision change cycle" distinct from the “application change cycle”
  - Changes in data context may fall into either or both
  - Align QA testing to the changes
    - Decision testing could be handled within Decision Center
    - Decision only changes QA may only need application interface validation
    - Data context changes need to verify both the application and the decisions

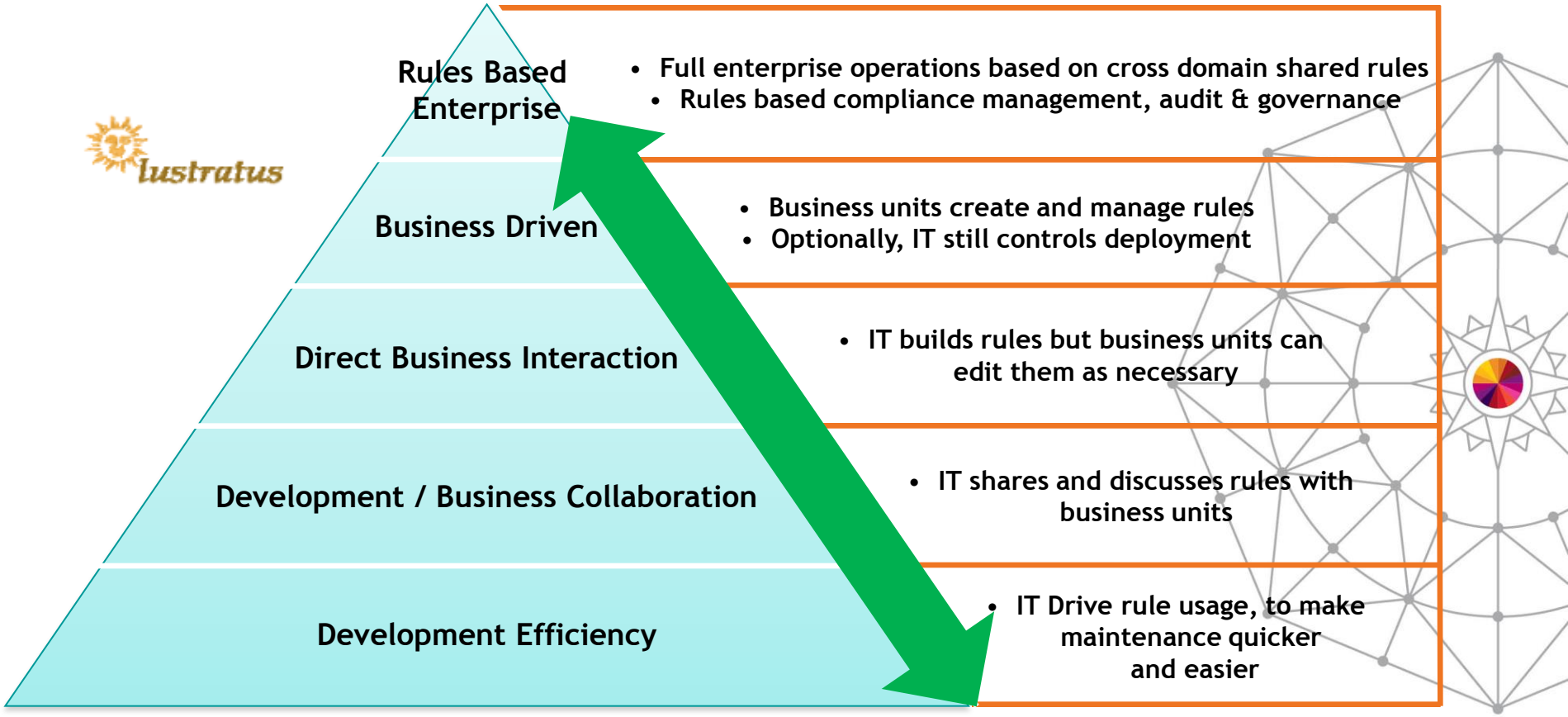


Integrating Decision Management Adapting the Process on the Mainframe



- Adapting the requirement process
  - Reach consensus with the LoB analysts on the decision vocabulary
  - Establish the requirement working language based on the decision vocabulary
  - Express business requirements as decision artifacts
  - Expect the “requirement is the design is the program” efficiencies

Building Collaboration



http://www.lustratusresearch.com/store/product/Using-business-rules-with-CICS-for-greater-flexibi,215,0.aspx

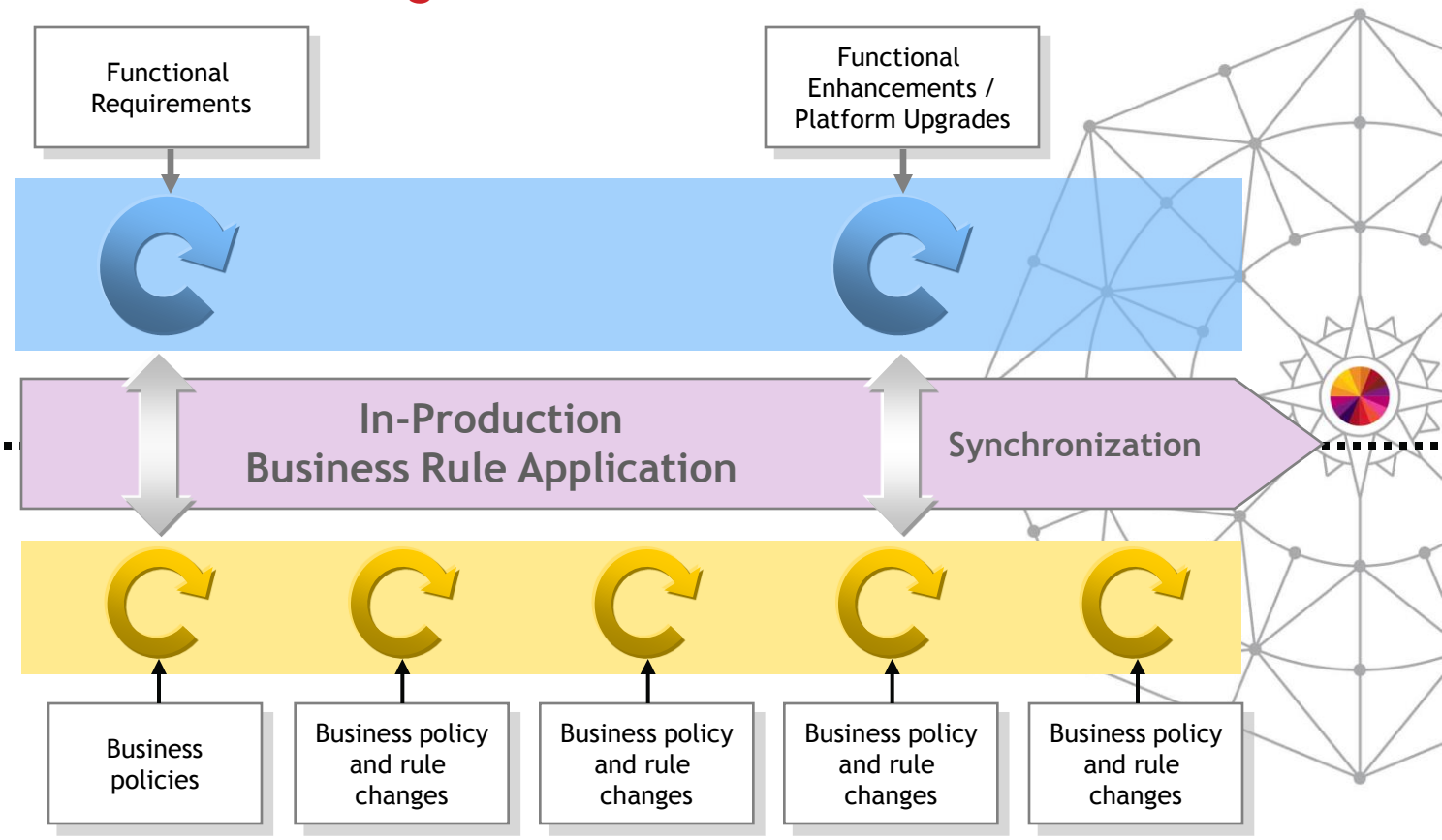
Redefined Application Change Cycles

Application Developer

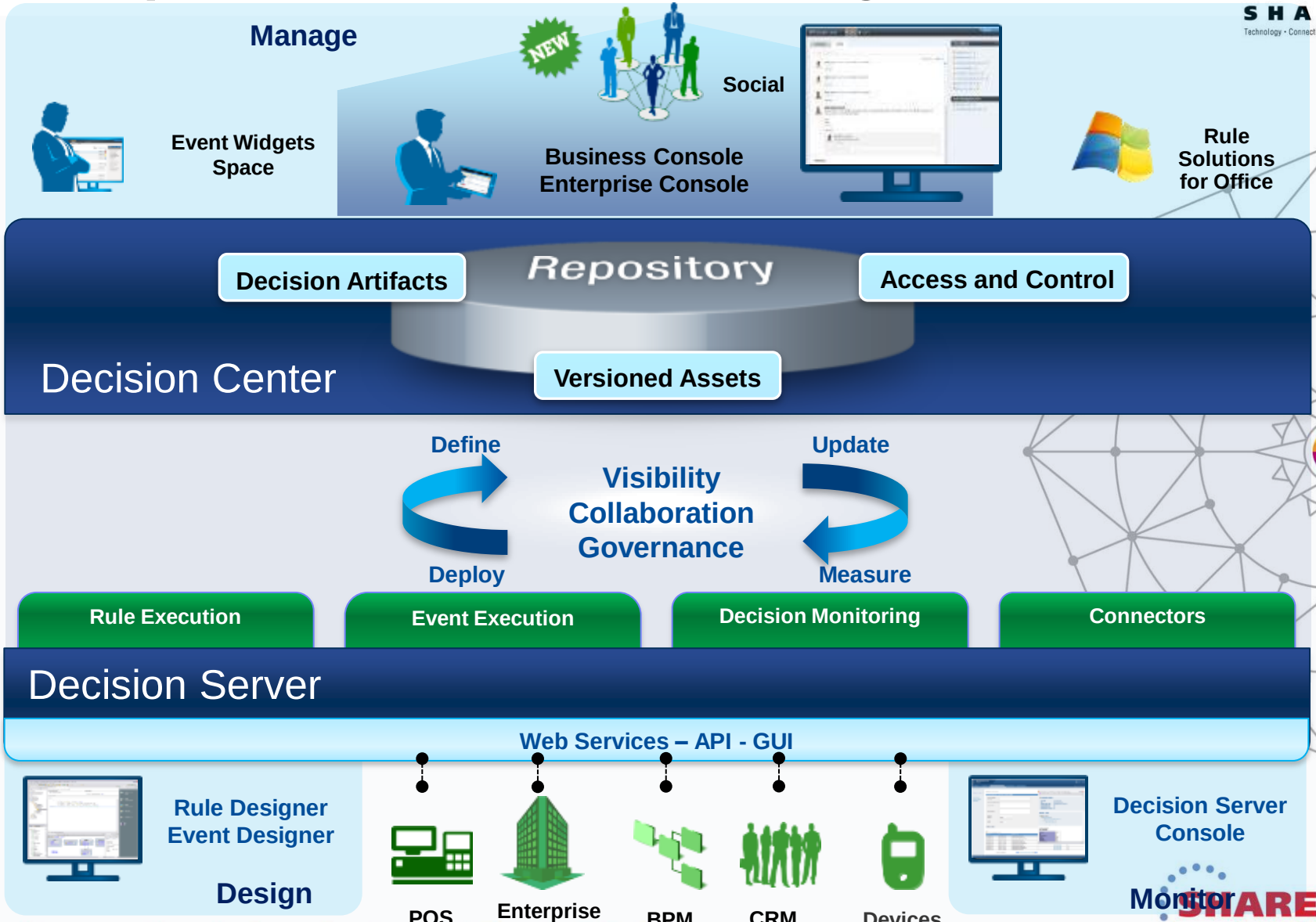
Application Development

Business Rule Management

Business & IT



IBM Operational Decision Manager v8.5.1



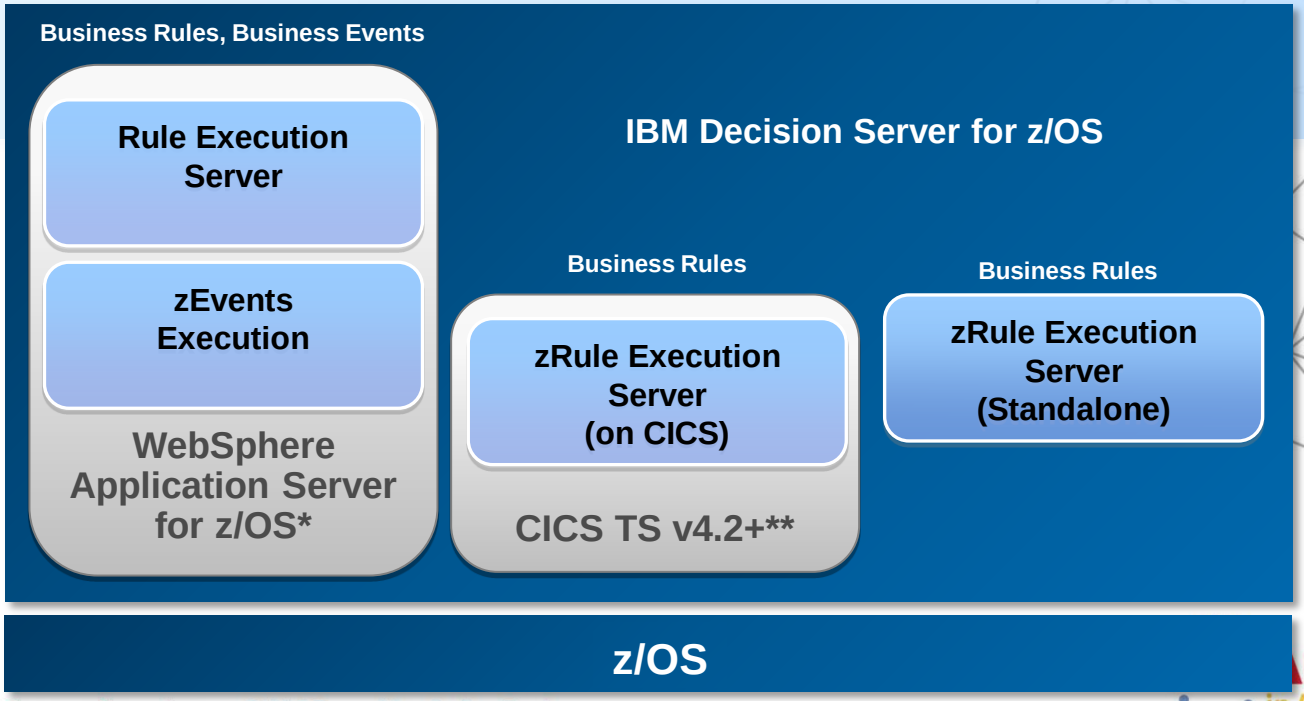
IBM Operational Decision Manager for z/OS Runtime options

Decisions can be invoked from existing CICS and IMS applications

Runtime support for COBOL and PL/I data types

Flexible runtime deployment to fit any z/OS environment:

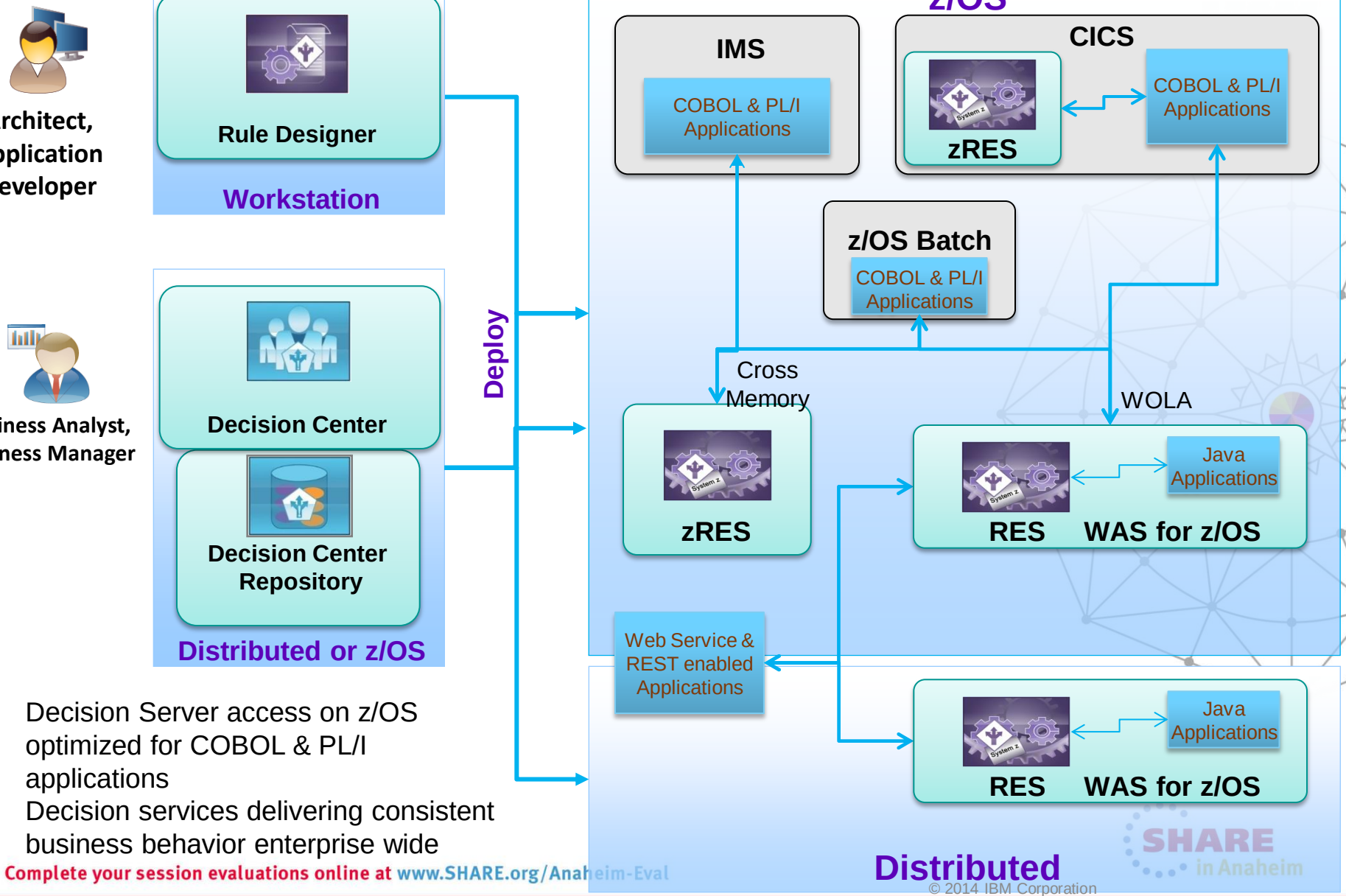
- Deployed on WebSphere Application Server for z/OS
- Deployed on CICS TS 4.2+ and above (JVM server environment)
- Deployed standalone to z/OS



* WAS for z/OS limited use entitlement included with Decision Server

** CICS Transaction Server licenses purchased separately

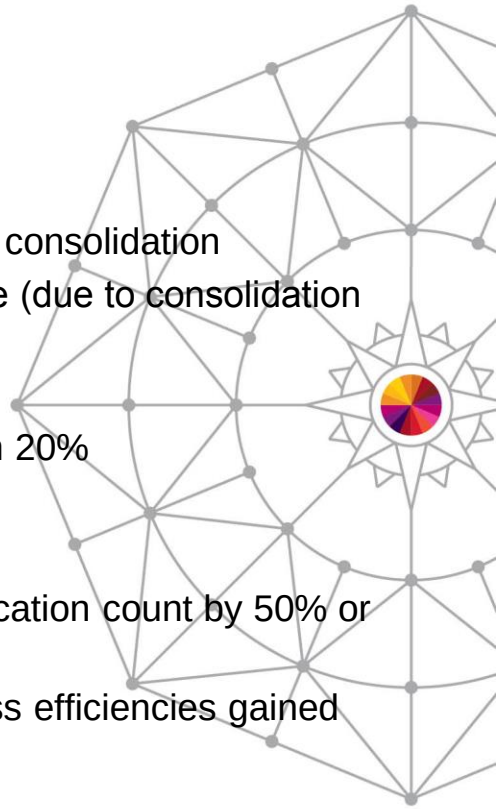
Decision Management: Comprehensive Flexibility



- Decision Server access on z/OS optimized for COBOL & PL/I applications
- Decision services delivering consistent business behavior enterprise wide

IBM CIO Office - Continuous business planning experiences

- Application reduction
  - From 16,000 to 4500
  - Targeting another 50% reduction by 2015
- Benefits
  - $1,5 Billion dollar estimated savings as a result of application and data center consolidation
  - Of applications classified as “Blue”, an estimated 95% savings in maintenance (due to consolidation and freeze of maintenance dollars)
  - SLAs now vary based on objective business criteria
  - Re-engineered applications - defects down 58% and maintenance costs down 20%
  - Separated low value work and applied strict governance and controls
- Ongoing process
  - Application Portfolio Management never ends, this is the 3rd time we cut application count by 50% or more….
  - Many other improvements besides IT cost reduction, such as business process efficiencies gained from global processes for a global company
  - For more info, see Computerworld article: http://www.computerworld.com/s/article/9226430/IBM_on_path_to_cut_internal_apps_by_85_



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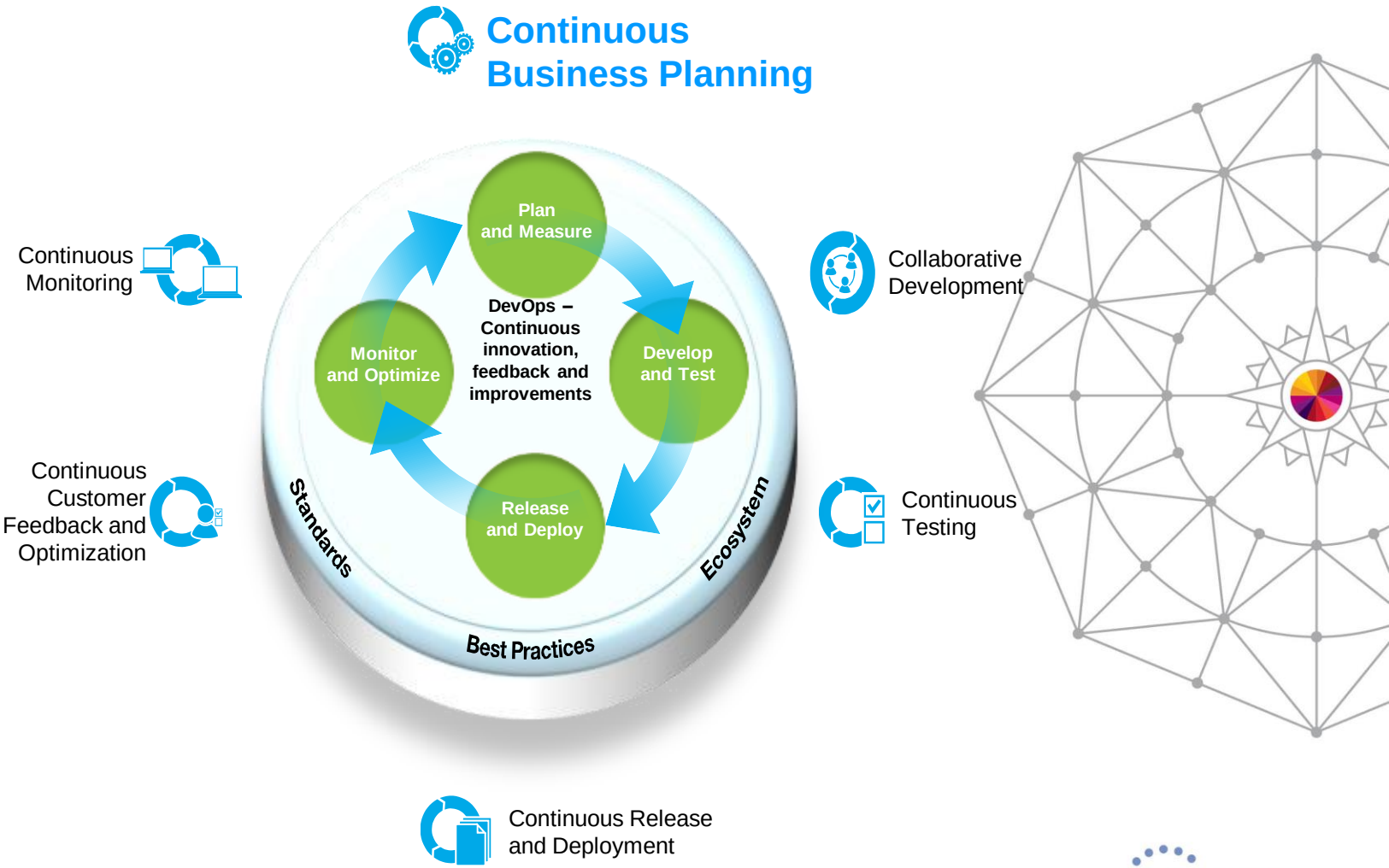
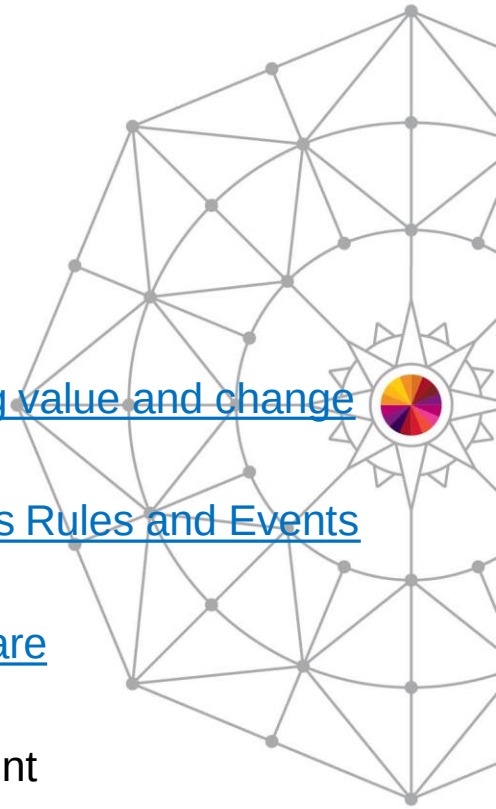


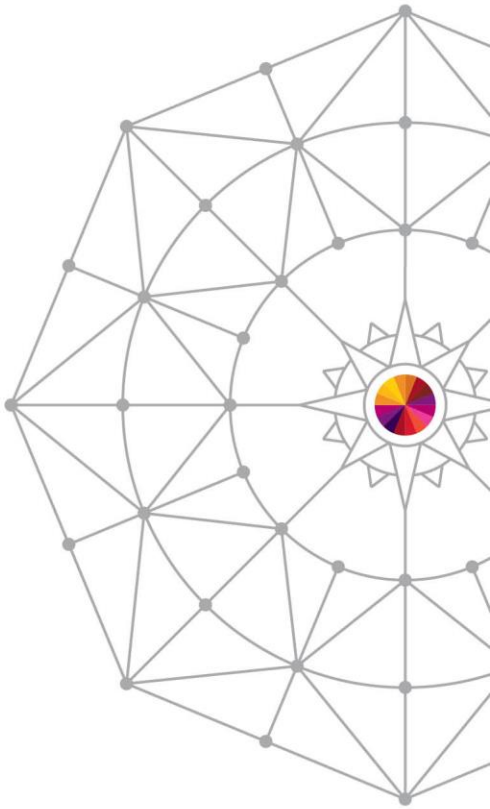
Resources

- Websites:
  - Continuous Business Planning
  - Portfolio Demand and Delivery Management
  - IBM Operational Decision Manager for z/OS
- White papers & tech docs
  - Four Steps to creating product value
  - Gartner report: PPM goes from managing projects to managing value and change
- Redbooks
  - Flexible Decision Automation for Your zEnterprise with Business Rules and Events
  - Batch Modernization on z/OS
  - Patterns: Integrating WebSphere ILOG JRules with IBM Software



- Demo: Project Portfolio Management using IBM Rational Focal Point
- IBM Operational Decision Management YouTube demo
- Top 10 Business Use Cases for Operational Decision Management

QUESTIONS?



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Hindi

多謝
Traditional Chinese

Grazie
Italian

ขอบคุณ
Thai

Gracias
Spanish

Merci
French

Спасибо
Russian

شكراً
Arabic

Obrigado
Brazilian Portuguese

Danke
German

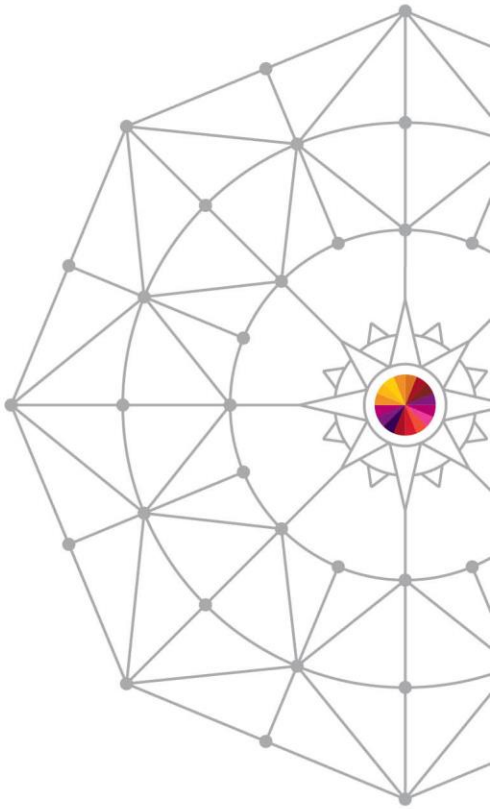
多谢
Simplified Chinese

நன்றி
Tamil

ありがとうございました
Japanese

감사합니다
Korean

THANK YOU



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