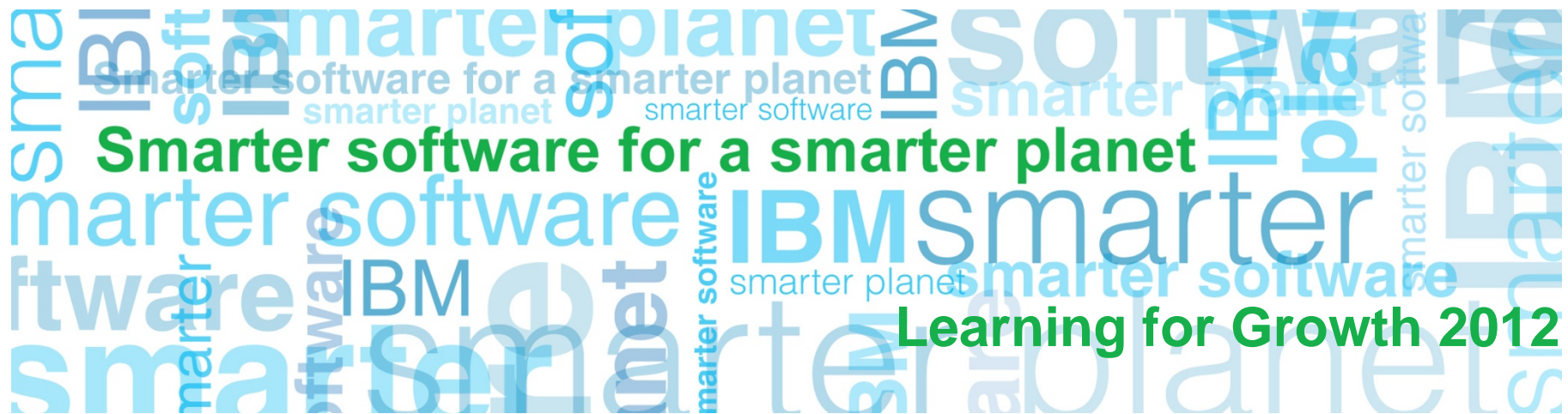


# Selling Rational for System z in 2012

Michelle A. Cordes – Rational for System z Enablement Lead

[mcordes@us.ibm.com](mailto:mcordes@us.ibm.com)

January 2012



## Learning objectives

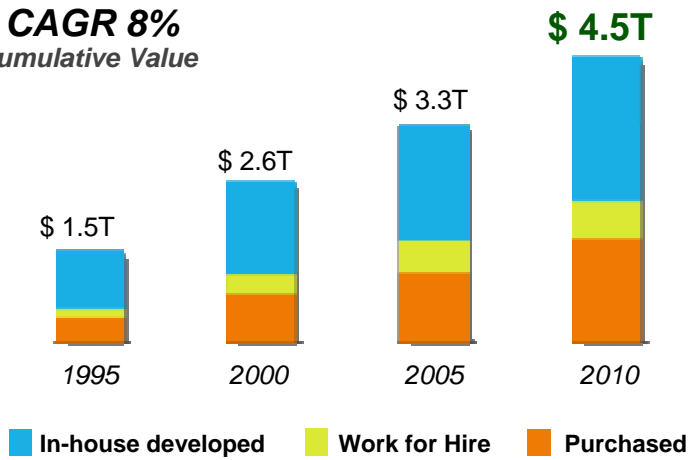
- Describe the 2012 key focus areas for Rational in the System z environment
- Assess existing customer situations to identify EM opportunities
- Articulate benefits of key Rational Enterprise Modernization offerings for the System z environment



# Today's IT investment realities

## Investment

**CAGR 8%**  
Cumulative Value

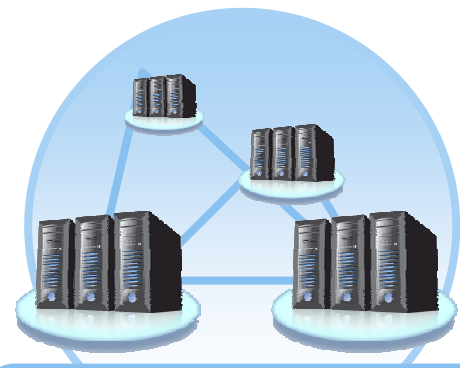


## Challenges

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



**Mainframe**



**Distributed**

# Four key barriers preventing optimal return on IT investments

**Decades of application investments**



***“We don’t understand the effort, risk and impact of modernizing our legacy applications.”***

**Islands of skills, languages and platforms**



***“Our skills gap keeps growing. How do we stay current with all the language and technology changes?”***

**Poorly integrated teams**



***“We need to enable our teams to collaborate across platforms, languages, and environments.”***

**Infrastructure inefficiency**



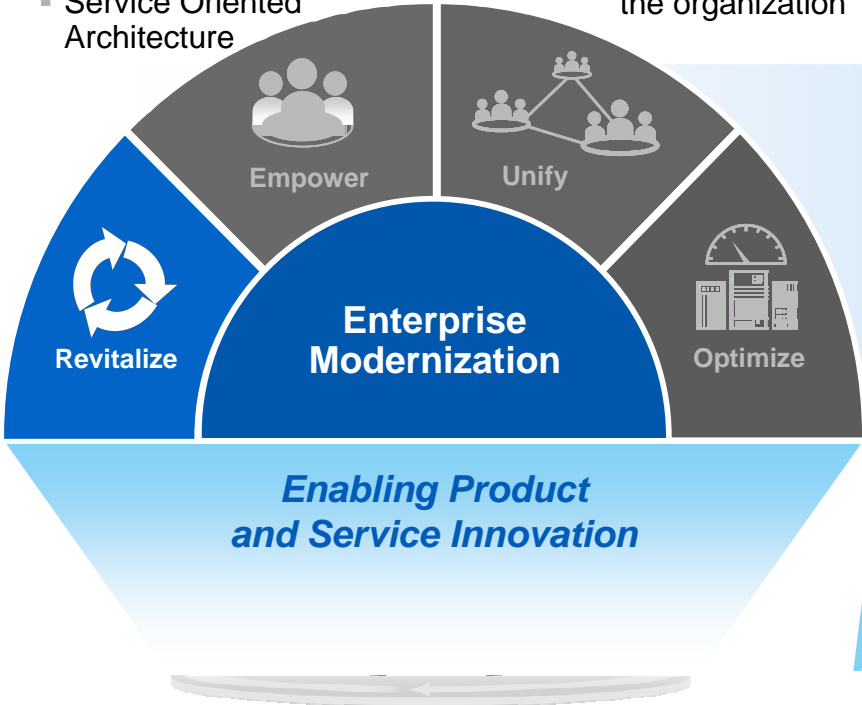
***“We need a cost effective way to improve our infrastructure efficiency and free up capacity to handle more workload.”***



# IBM Enterprise Modernization

**An incremental and continuous approach to achieving greater value and performance from your IT investments**

- Application portfolio management
- Business intelligence for applications
- Application security
- Operational reuse
- Service Oriented Architecture
- User interface modernization
- Application transformation tools and services
- Quality across the organization



**20 to 35%**  
cost reduction in managing and maintaining existing application portfolio

**Increase Application Flexibility**

**22-37%**  
improvement in developer productivity with modern tooling

**Boost Individual Productivity**

**Maximize Team Productivity**

**15 to 20%**  
decrease in development cycle time through common team infrastructure for collaborative application lifecycle management

**Optimize System Utilization**

**20 to 60%**  
improvement in application performance with latest compilers for IBM Systems



# Enterprises want to...

**Align their application portfolios to the business' 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



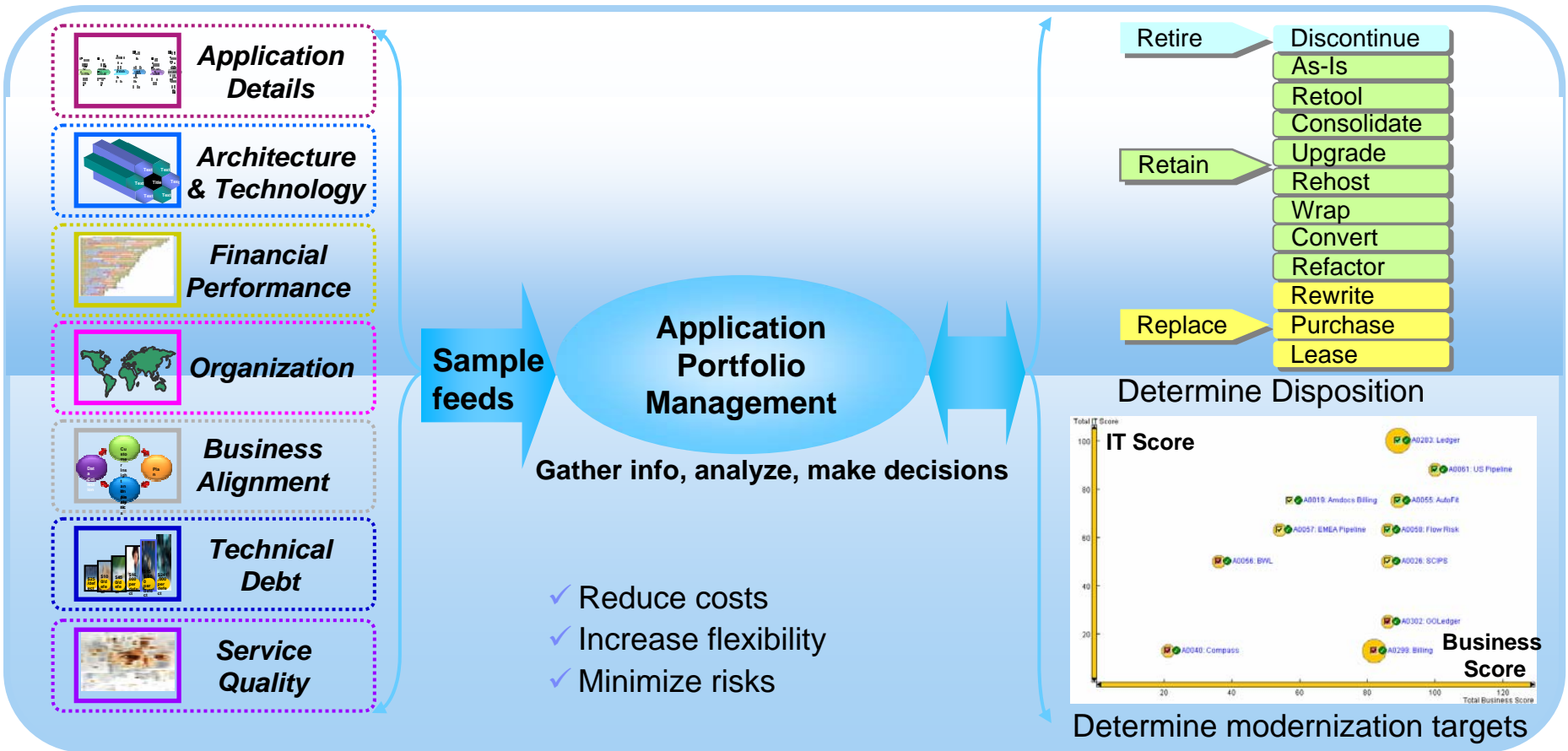
## But...

*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.*



# Solution: Comprehensive application portfolio management

**Helps organizations proactively make faster and better-informed decisions**



*“Smarter APM and associated application revitalization has enabled IBM’s IT to cut maintenance costs by 20% and defects by 58%.”*

— IBM Corporation

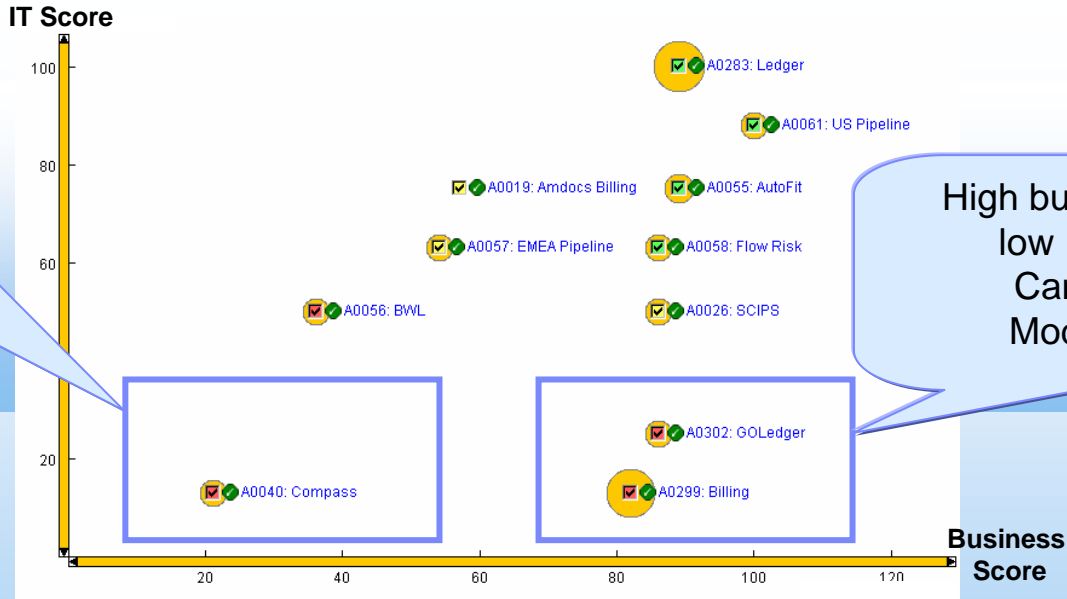


# Solution: Comprehensive application portfolio management

## Helps organizations proactively make faster and better-informed decisions



Low business score + low IT score => Candidate for Discontinuing



High business score + low IT score => Candidate for Modernization

- Rational Focal Point NEW!
- Rational Asset Analyzer
- Rational System Architect

*“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.”*

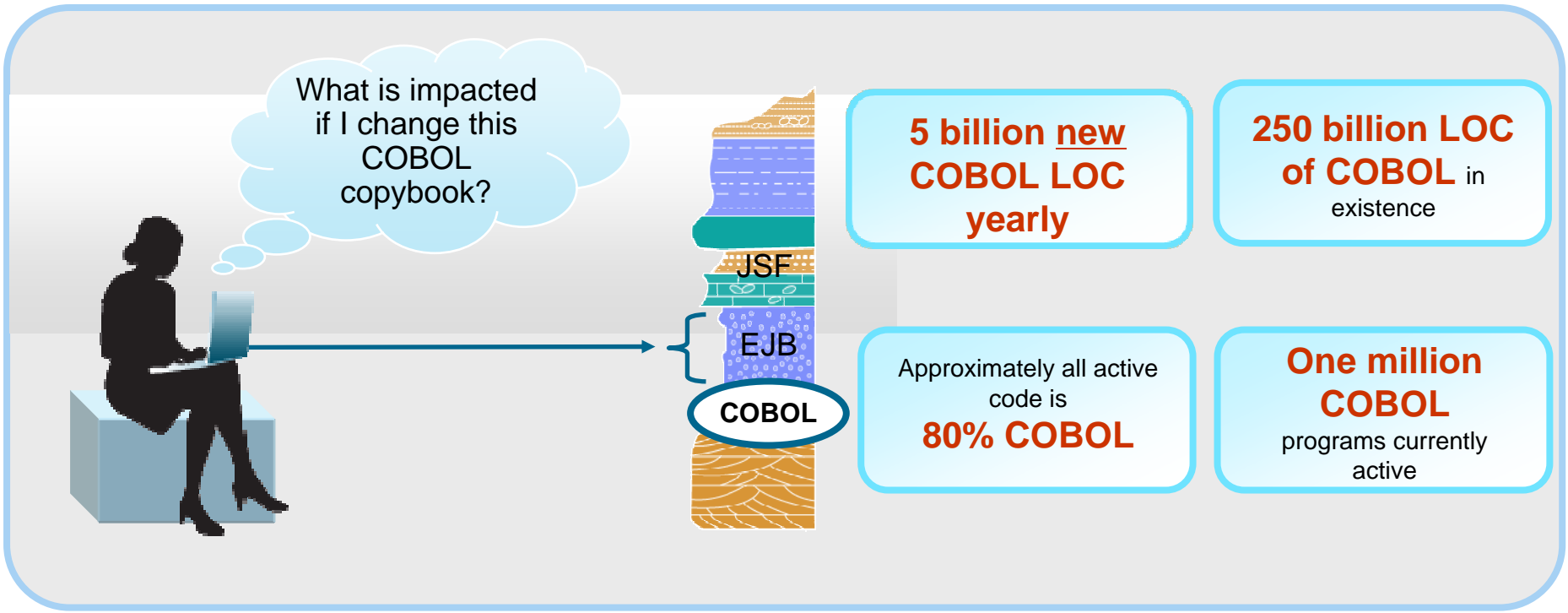


— Define “Application” Based On Your Content To Avoid False Starts In Your Rationalization Efforts, Forrester Research, Inc., January 26, 2011



## Enterprises want to...

**Understand the impact and cost of changes to their IT systems, harvest and manage business rules from existing applications, analyze these rules and minimize rework and points of failure**



## But...

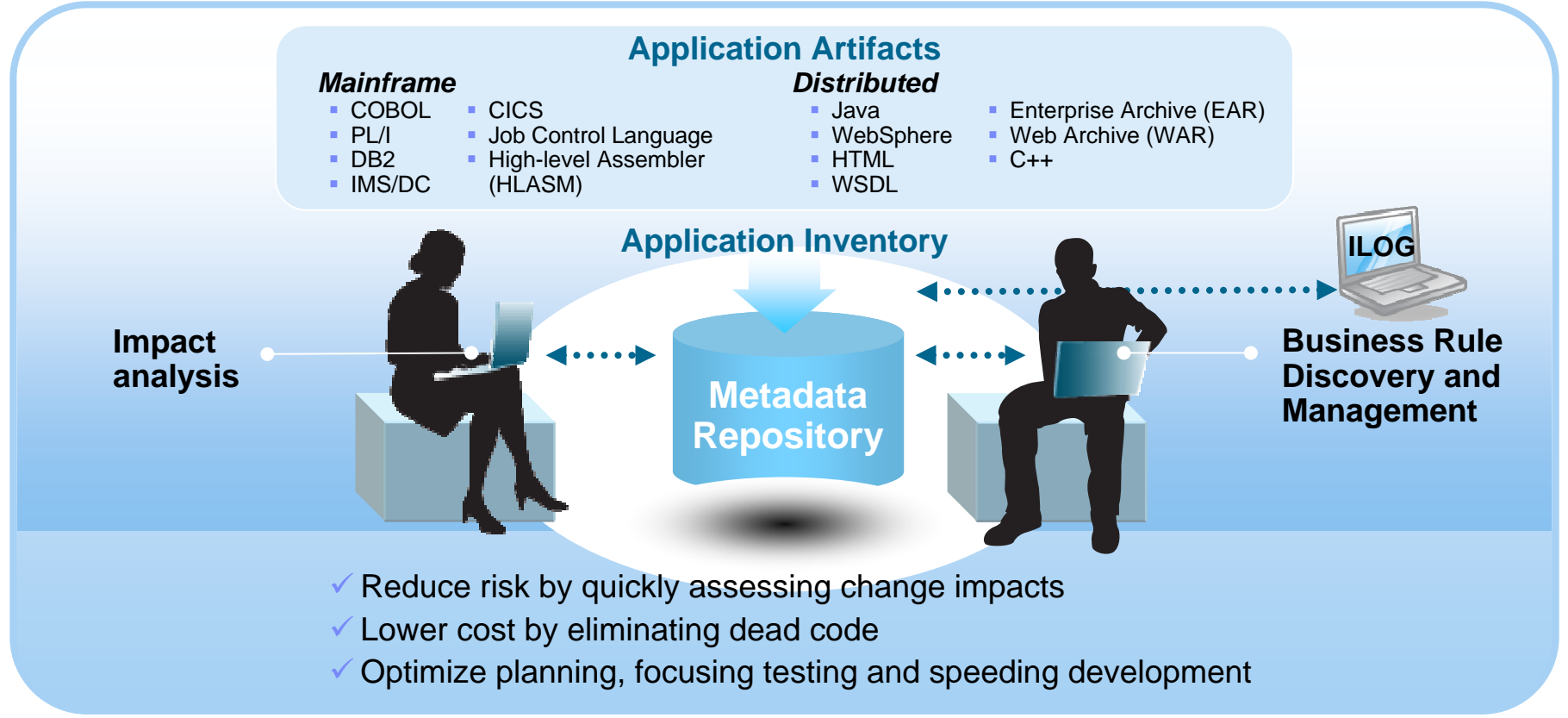
*They have no business intelligence inventory of their application assets, relying instead on manual, error-prone processes and incomplete knowledge. They must compensate with more extensive planning and extra testing and by manually 'searching' for code affected by business decisions.*





# Solution: Business intelligence for applications

## Restore lost application knowledge via technical analysis



*“IBM Rational Asset Analyzer software is a robust and reliable tool that supports portfolio analysis of large applications in a short period of time, delivering accurate reports that give a clear understanding of the application at the business, architecture and program levels.”*

— Sihab Kolaparambil, practice manager, Wipro IT Business





# Solution: Business intelligence for applications

## Restore lost application knowledge via technical analysis

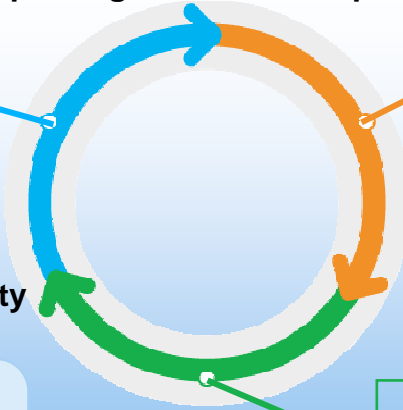
→ Improving maintenance quality

**IDENTIFICATION**  
Rational Asset Analyzer

- What decisions
- Using which rules
- Where in the source

**VALIDATION & MANAGEMENT**  
WebSphere® ILOG® BRMS

- Align rules with business goals
- Manage business rules life cycle
- Test and validate rules



→ Speeding up maintenance


**REMEDIATION**  
Rational Developer for System z®

- Adjust the source to match the rule
- Extract the rule to a callable element
- Extract the rule to a rule server

→ Increasing business agility

### Application Artifacts

- |  |   |
|--|---|
| <b>Mainframe</b>   | <b>Distributed</b>  |
| <ul style="list-style-type: none"> <li>▪ COBOL</li> <li>▪ PL/I</li> <li>▪ DB2</li> <li>▪ IMS/DC</li> </ul> | <ul style="list-style-type: none"> <li>▪ CICS</li> <li>▪ Job Control Language</li> <li>▪ High-level Assembler (HLASM)</li> <li>▪ Java</li> <li>▪ WebSphere</li> <li>▪ HTML</li> <li>▪ Enterprise Archive (EAR)</li> <li>▪ WSDL</li> <li>▪ Web Archive (WAR)</li> <li>▪ C++</li> </ul> |

- Rational Asset Analyzer
- Rational Asset Analyzer for System z 
- Application Health Assessment

*“IBM Rational Asset Analyzer software is a robust and reliable tool that supports portfolio analysis of large applications in a short period of time, delivering accurate reports that give a clear understanding of the application at the business, architecture and program levels.”*

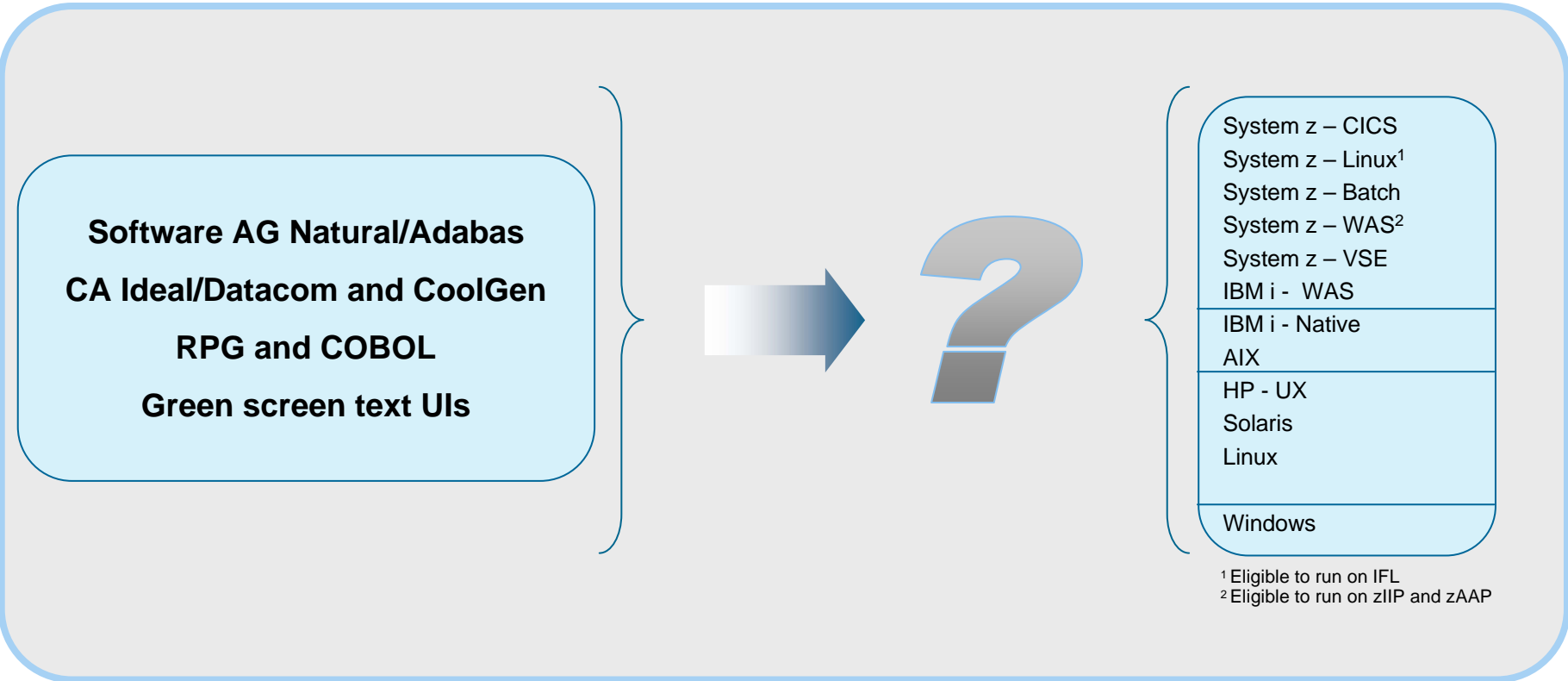
— Sihab Kolaparambil, practice manager, Wipro IT Business





# Enterprises want to...

**Reduce tool support costs and move to modern platforms, languages, and tools for their multiplatform application development**



<sup>1</sup> Eligible to run on IFL  
<sup>2</sup> Eligible to run on zIIP and zAAP

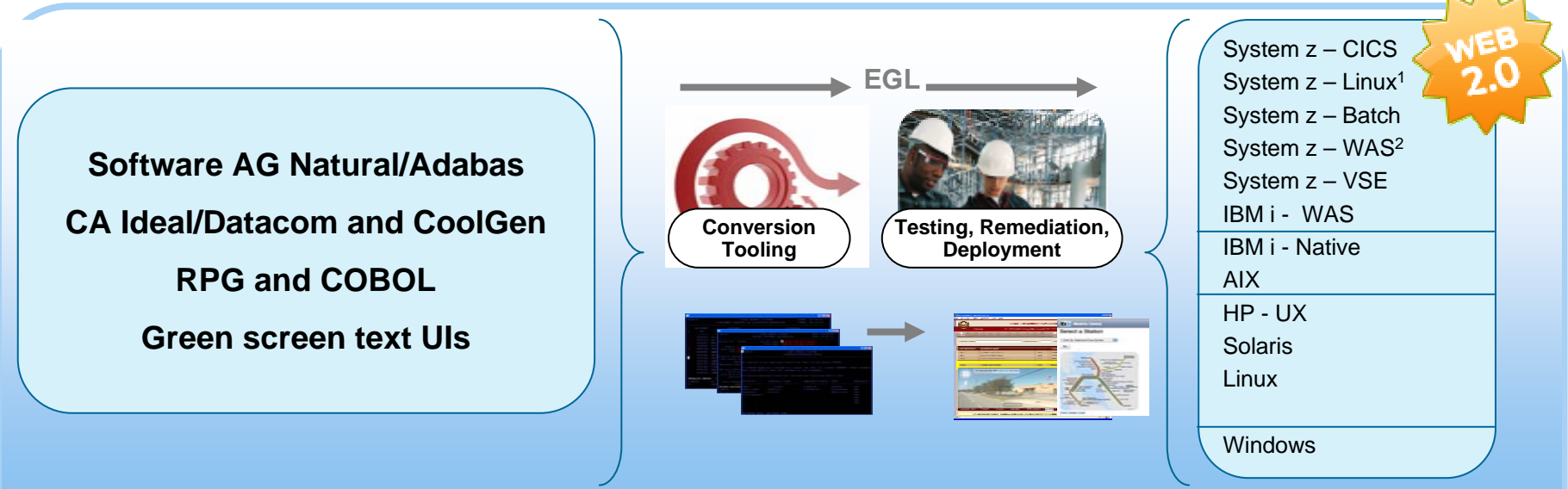
# But...

*They are using older languages and/or are stuck on poorly supported, expensive, legacy development platforms*



# Solution: Application transformation tools and services

## Migrate from older languages and expensive tools to modern development platforms, languages, databases and tools



<sup>1</sup> Eligible to run on IFL  
<sup>2</sup> Eligible to run on zIIP and zAAP

- ✓ Greatly reduced development platform support costs
- ✓ More flexible, integrated development environment

- Rational Migration Extension for Natural
- Rational Migration Extension for CA
- Rational Migration Extension for Rich UI

Operating costs were reduced 55 percent by migrating from the VAGen legacy application to Java. *“The migration to EGL combines the best of both worlds: The stability of IBM System z and the flexibility of Java.”* Massive cost savings are also included!

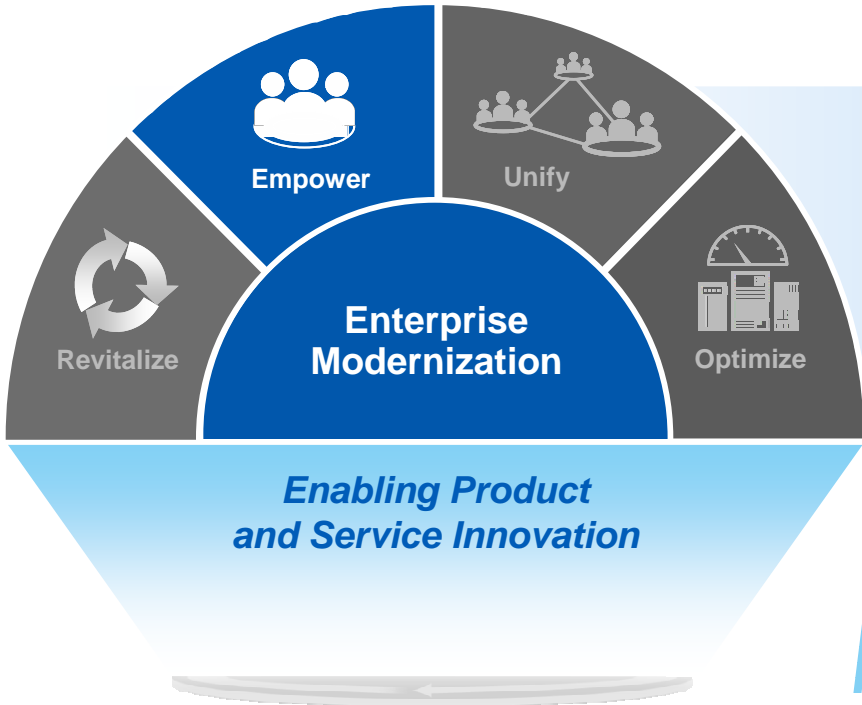


— Frank Landewee, project manager, Atos Origin GmbH, Essen

# IBM Enterprise Modernization

**An incremental and continuous approach to achieving greater value and performance from your IT investments**

- Modern IDEs for all platforms and languages
- Modern business languages
- Enterprise training programs, communities and resources



<p><b>20 to 35%</b> cost reduction in managing and maintaining existing application portfolio</p> <p><i>Increase Application Flexibility</i></p>	<p><b>22-37%</b> improvement in developer productivity with modern tooling</p> <p><b>Boost Individual Productivity</b></p>
<p><i>Maximize Team Productivity</i></p> <p><b>15 to 20%</b> decrease in development cycle time through common team infrastructure for collaborative application lifecycle management</p>	<p><i>Optimize System Utilization</i></p> <p><b>20 to 60%</b> improvement in application performance with latest compilers for IBM Systems</p>





# Enterprises want to...

**Increase productivity of their "backend" development staff, as well as attract new employees to this work**

```

File Edit Edit_Settings Menu Utilities Compilers Test Help
EDIT      DDS0001.TEST.COBOL (BNCHS601) - 01.07      Columns 00001 00072
***** Top of Data *****
000001    IDENTIFICATION DIVISION.
000002    PROGRAM-ID.    BNCHS601.
000003    AUTHOR.    JON SAYLES.
000004    INSTALLATION. COBOL DEV Center.
000005    DATE-WRITTEN. 01/23/88.
000006    DATE-COMPILED. 01/23/88.
000007    SECURIY.    CONFIDENTIAL PATIENT DATA.
000008
000009    *****
000010    *****
000011    *REMARKS.
000012    *
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File Edit Edit_Settings Menu Utilities Compilers Test Help
VIEW      DDS0001.TEST.COBOL (BNCHS602) - 01.02      Columns 00001 00072
000256    100-MAINLINE.
000257
x88858    MOVE "100-MAINLINE" TO PARA-NAME.
000259    * DISPLAY "100-MAINLINE".
000260    * Validate patient type and insurance coverage
000261    PERFORM 300-FIELD-EDITS THRU 300-EXIT.
000262
000263    IF RECORD-ERROR-FOUND
000264    ADD +1 TO RECORDS-IN-ERROR
000265    PERFORM 710-WRITE-TRMTERR THRU 710-EXIT
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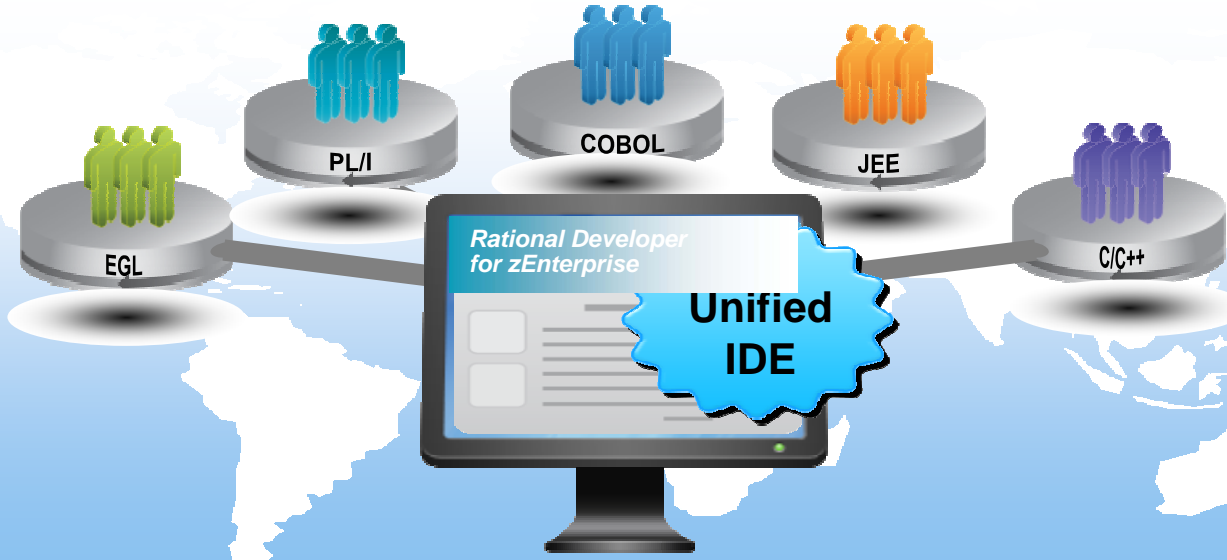
# But...

*They have antiquated development tools which deliver low productivity and are repulsive and unfamiliar to younger staff*



## Solution: Comprehensive, multiplatform IDEs

**Upgrade to modern Eclipse-based tools to develop and maintain enterprise applications spanning multiple platforms, languages, and technologies**



- ✓ Modern tools with which to attract new talent
- ✓ 22-37% improvement in developer productivity<sup>1</sup>
- ✓ 50-80%<sup>1</sup> reduction in host CPU usage for compiles

*“Our team now develops, debugs and tests with more confidence, and it is clear that more and more people here will be using Rational Developer for System z.”*

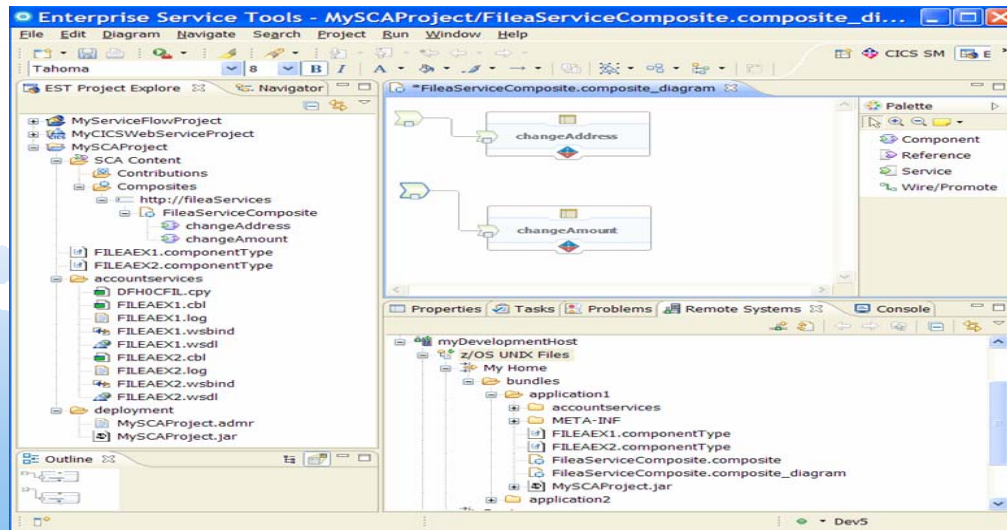
— Almut Geiger, product specialist at HVB IS





## Solution: Comprehensive, multiplatform IDEs

**Upgrade to modern Eclipse-based tools to develop and maintain enterprise applications spanning multiple platforms, languages, and technologies**



- Rational Developer for System z
- Rational Developer for zEnterprise
- Rational Developer for Power Systems
- Rational Business Developer
- Rational Programming Patterns for System z
- Rational Application Developer

*“Our team now develops, debugs and tests with more confidence, and it is clear that more and more people here will be using Rational Developer for System z.”*

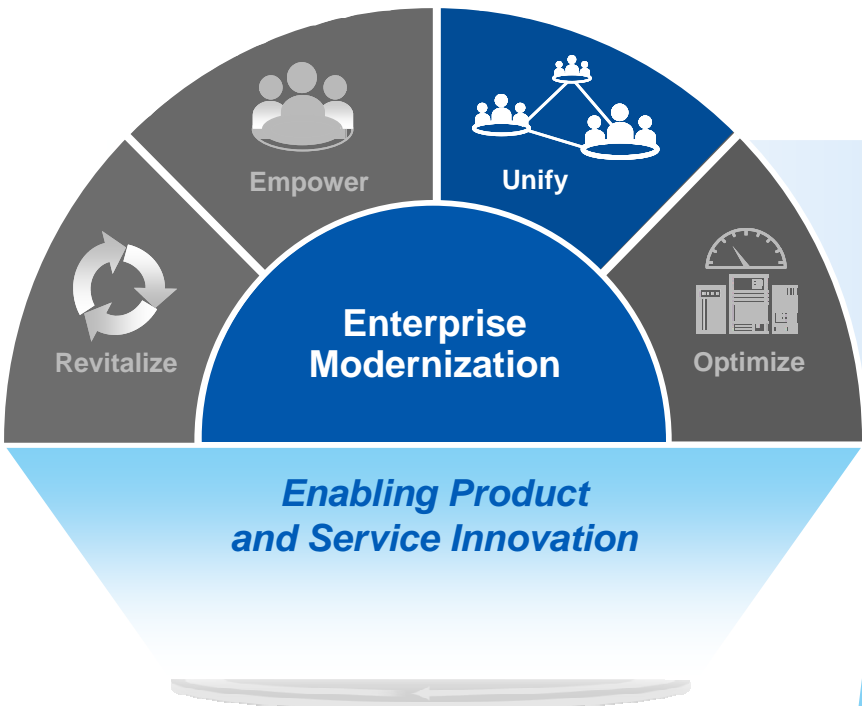
— Almut Geiger, product specialist at HVB IS



# IBM Enterprise Modernization

**An incremental and continuous approach to achieve greater value and performance from your IT investments**

- Consolidated team infrastructure
- Agile team infrastructure

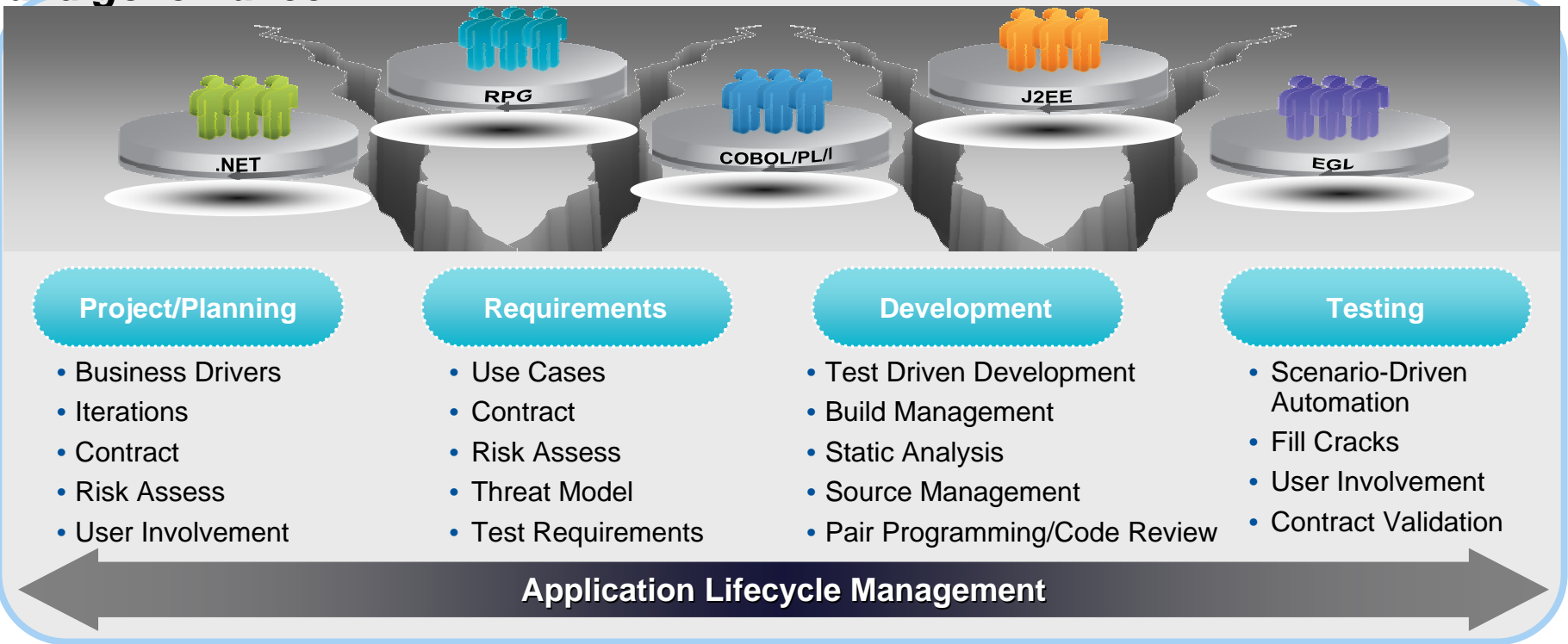


<p><b>20 to 35%</b> cost reduction in managing and maintaining existing application portfolio</p> <p><i>Increase Application Flexibility</i></p>	<p><b>22-37%</b> improvement in developer productivity with modern tooling</p> <p><i>Boost Individual Productivity</i></p>
<p><b>Maximize Team Productivity</b></p> <p><b>15 to 20%</b> decrease in development cycle time through common team infrastructure for collaborative application lifecycle management</p>	<p><b>Optimize System Utilization</b></p> <p><b>20 to 60%</b> improvement in application performance with latest compilers for IBM Systems</p>



## Enterprises want to...

**Deliver to market faster and cheaper by exploiting agile and test-driven development practices, effectively tracking end-to-end requirements, reducing team infrastructure costs and increasing cross-geo collaboration and governance**



## But...

*They have “islands” of development, each with different tools and processes that do not support real-time collaboration, integration, comprehensive oversight, or lifecycle traceability, all of which results in reduced quality and slower time to market*





**Solution: Collaborative application lifecycle management**  
**Deploy new, common team infrastructure for source control, change management and build that empowers your team with integrated collaboration, process automation and reporting**



✓ Decreases development time by 15 to 20 percent

*“Building an agile development team requires a multiplatform approach, and Sodifrance uses Rational Developer for System z and Rational Team Concert for System z to help application teams synchronize their efforts and improve collaboration. Rational on System z offers a powerful and valuable combination for any company that wants to boost its development team’s productivity.”*

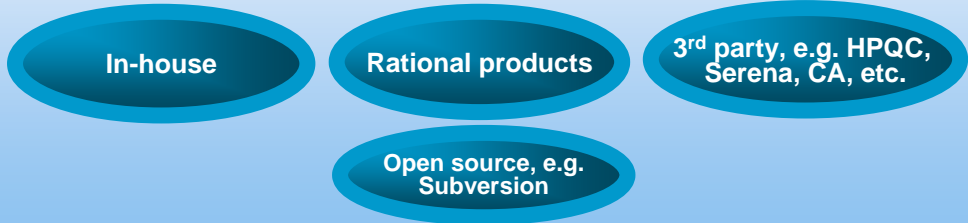
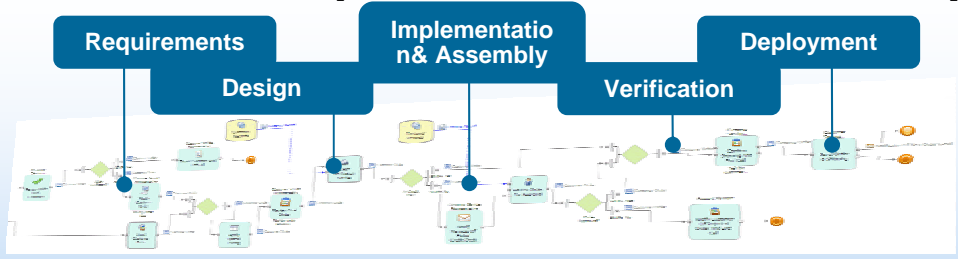
— Hugh Smith, Project Manager, Sodifrance





# Solution: Collaborative application lifecycle management

**Deploy new, common team infrastructure for source control, change management and build that empowers your team with integrated collaboration, process automation and reporting**



## Delivering...

- Single integrated platform for managing delivery of multiplatform projects
- New support for advanced dependency analysis and build capabilities for z/OS
- New integrated ISPF client for z/OS source edit, compile and debug

All your tools tightly linked and working for you on one platform: *Jazz*

- Rational Team Concert
- Rational Requirements Composer
- Rational Quality Manager
- Rational Build Forge

*“Building an agile development team requires a multiplatform approach, and Sodifrance uses Rational Developer for System z and Rational Team Concert for System z to help application teams synchronize their efforts and improve collaboration. Rational on System z offers a powerful and valuable combination for any company that wants to boost its development team’s productivity.”*

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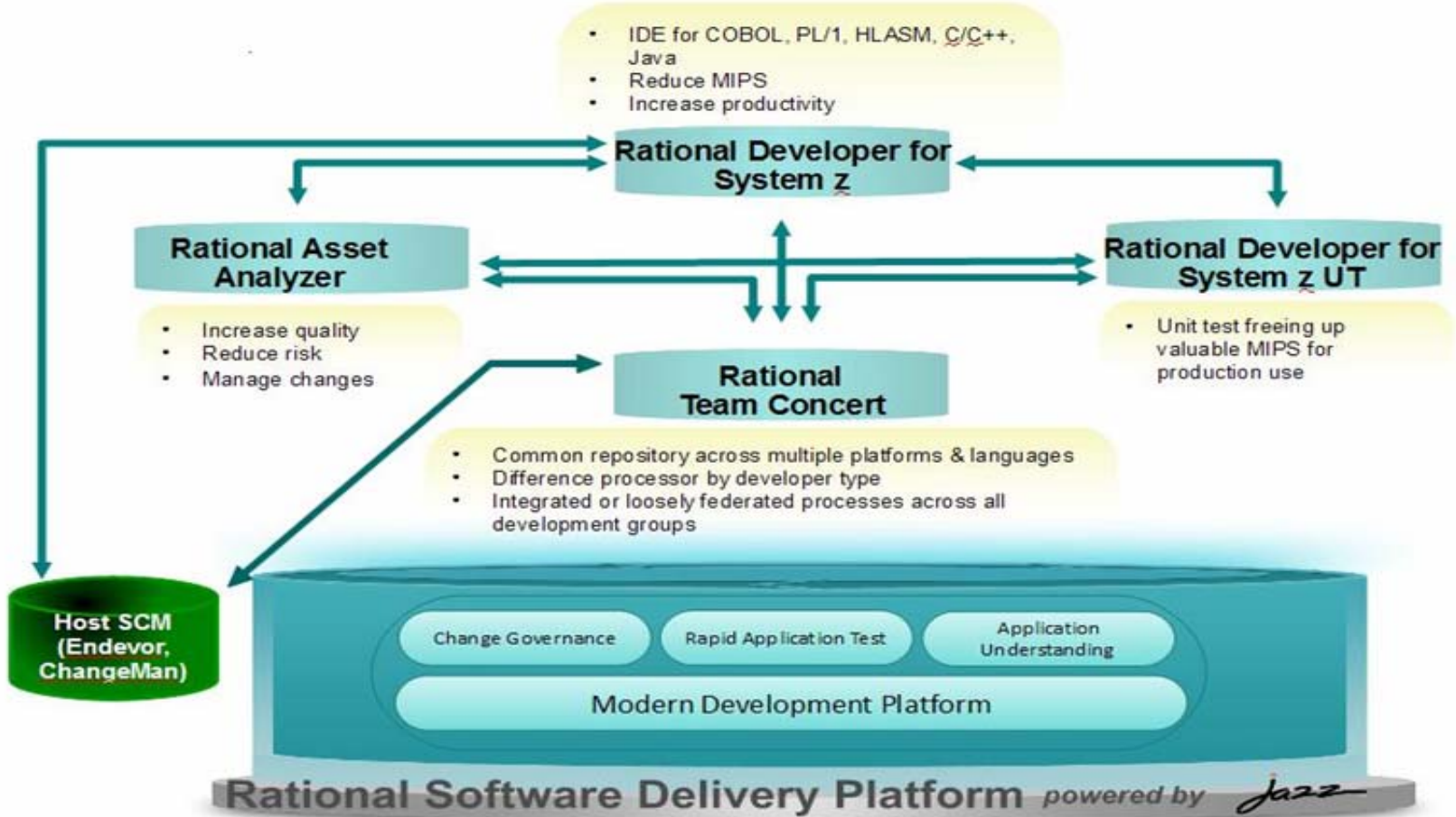


# Enterprise Modernization for Developers Prescriptive Solution

*Modern, integrated, and collaborative application lifecycle management infrastructure*

Foundation to:

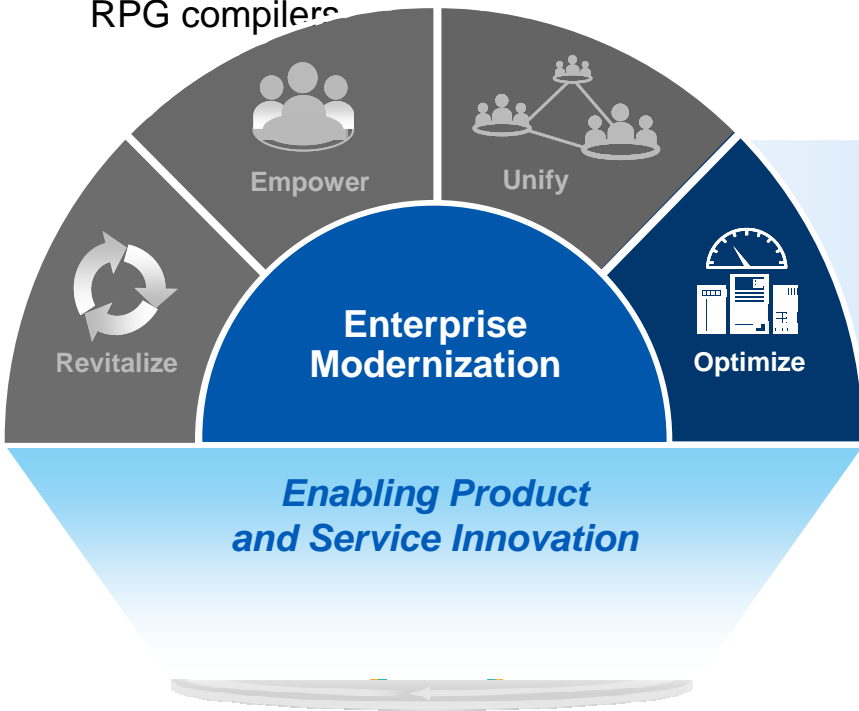
- ✓ Establish a modern development platform based on a high-productivity tool set
- ✓ Simplify initial install and configuration via specific project plan and checklists
- ✓ Provide common use case scenarios & integrations



# IBM Enterprise Modernization

**An incremental and continuous approach to achieve greater value and performance from your IT investments**

- Free up production MIPS
- Exploit new advanced optimization technology in C/C++, Java, COBOL, PL/I, Fortran and RPG compilers



**20 to 35%**  
cost reduction in managing and maintaining existing application portfolio

**30 to 50%**  
cost reduction in renewal/re-architecture

*Increase Application Flexibility*

**22-37%**  
improvement in developer productivity with modern tooling

**50-80%**  
reduction in host CPU usage

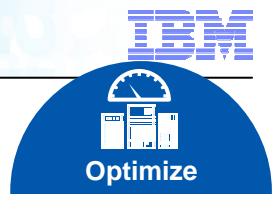
*Boost Individual Productivity*

*Maximize Team Productivity*

**15 to 20%**  
decrease in development cycle time through common team infrastructure for collaborative application lifecycle management

*Optimize System Utilization*

**20 to 60%**  
improvement in application performance with latest compilers for IBM Systems



Enterprises want to...

**Reduce application development MIPs usage and increase development autonomy**

**Application Development**



**Operations**



**Cost**

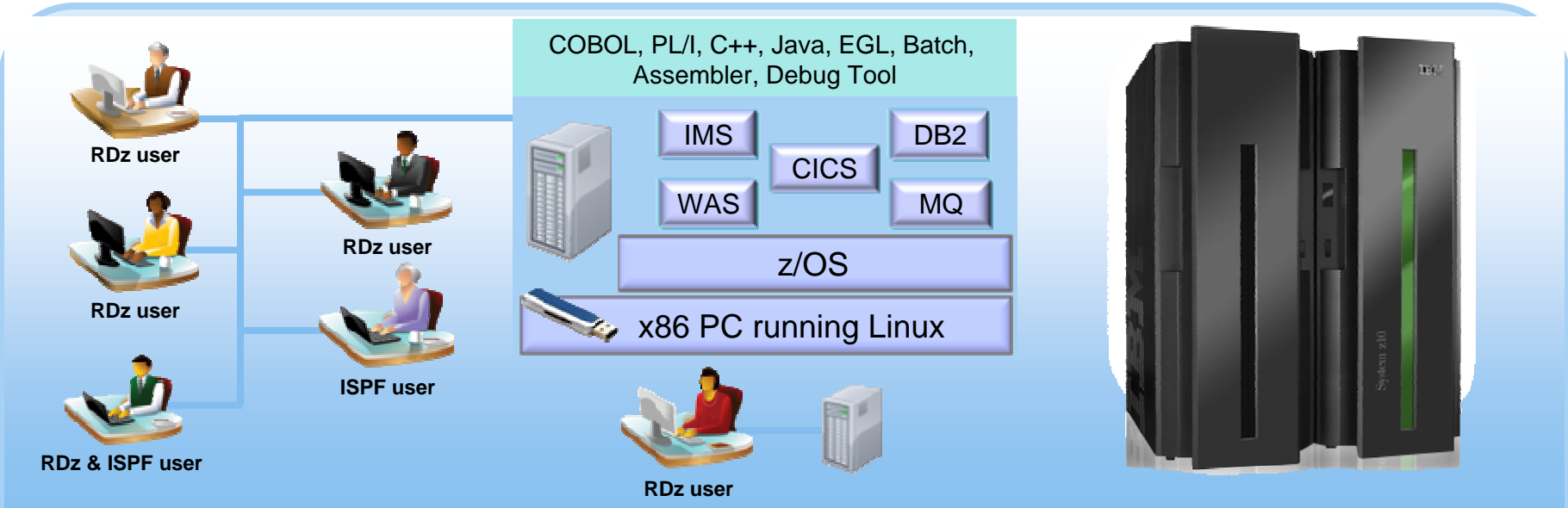


**But...**

*Testing requires System z MIPs and negotiation for time with the production team*



# Solution: Test mainframe applications on x86 Linux server



- ✓ Liberate developers to rapidly prototype new applications
- ✓ Free up mainframe development MIPS for production capacity
- ✓ Reduce costs by improving new and existing developer productivity

Rational Developer for System z Unit Test Feature

*“RDz Unit Test gives our developers the ability to have their own z/OS environment to prototype, compile, debug and test while our customers make the necessary changes to their test, QA and production environments... This shortens our time to delivery, shortens our project cycles, makes our customers happy and increases our margins... At the price... it’s a no brainer.”*

— Eric Simone, CEO, ClearBlade





**Enterprises want to... Maximize application performance on existing hardware to reduce capital expenses....**  
**But... They have back-level compilers or are not fully using optimization**



- IBM XL C/C++ for AIX and Linux
- IBM XL Fortran for AIX and Linux
- IBM COBOL for z/OS, AIX
- IBM PL/I for z/OS, AIX

**Solution: Advanced compiler technology**

*Exploit new advanced optimization technology in C/C++, Java, COBOL, PL/I and Fortran compilers... Delivering... Lower capital outlays by increasing capacity, and improved performance of application suite*

# Why is MLC software revenue important to IBM, SWG and You?

## Revenue

- MLC revenue for CICS/IMS/DB2 Runtimes and Mainframe Compilers accounts for substantial income every year for IBM and SWG. From a senior executive : **‘It keeps the lights on’**

## Currency

- Do you have a cell or mobile phone?
  - Is it a “Smart” phone?
    - Yes? Can you install some of the latest apps on it? Can you use it to get directions or does it have a speech recognition “personal assistant” that talks to you (like the latest Apple iPhone 4S)?
    - No? You have to have either the latest model or the next to latest model to get the latest features or fun apps.
- Think of zMLC software as your cellphone and all those fun apps like the tools you sell.
  - If your customer is not on the latest or next to latest release of runtimes and compilers, you can not sell them many of the newest tools in your portfolio.



## IBM Rational Compilers for System z

*An incremental and continuous approach to achieving greater value and performance from your customer's CICS, DB2 and IMS applications*

Key Message	Capability	Benefit
<b>Improve application performance</b>	Improved application performance on existing and new hardware, exploit the latest hardware features	Maximize application performance, scalability and free up MIPS for other applications
<b>Reduce cost</b>	Low cost service-enablement of existing applications to SOA and Web	Reduce cost, risk and improve time to value
<b>Capitalize on middleware investments</b>	Low risk migration of existing applications to newer versions of the Compilers	Integration flexibility, productivity and ease of deployment
<b>Develop new applications faster</b>	High developer productivity with modern compilers, tools and middleware technologies	Improve developer productivity, reduce maintenance costs and attract new skills

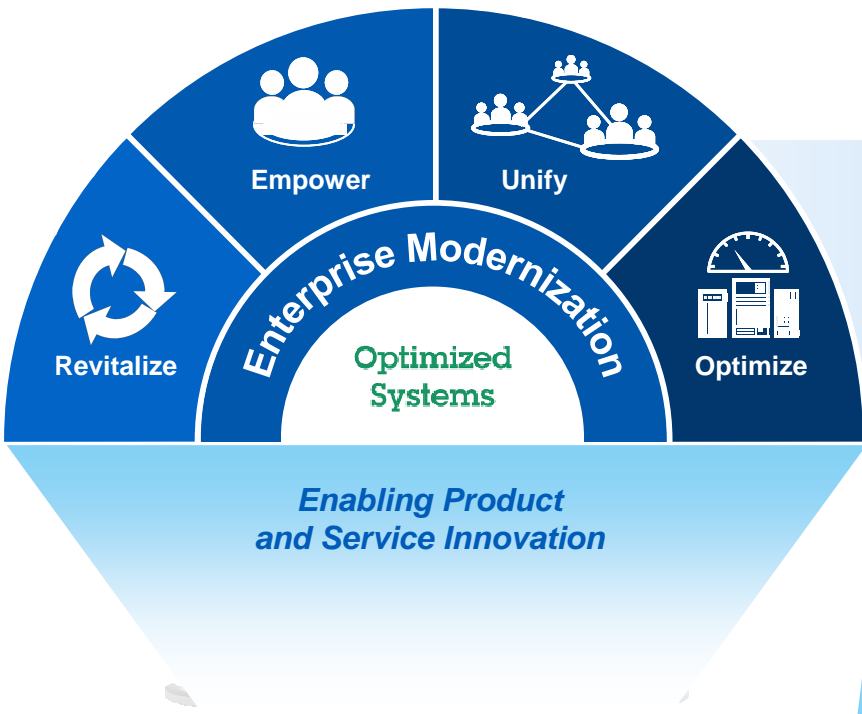
**Offerings include:**

- Enterprise COBOL for z/OS**
- Enterprise PL/I for z/OS**
- XL C/C++ for z/OS**

**Product Manager – Roland Koo [rkoo@ca.ibm.com](mailto:rkoo@ca.ibm.com)**

# IBM Enterprise Modernization

**An incremental and continuous approach to achieving greater value and performance from your IT investments**



**20 to 35%<sup>1</sup>**  
 cost reduction in managing and maintaining existing application portfolios

**Increase Application Flexibility**

**22-37%<sup>3</sup>**  
 improvement in developer productivity with modern tooling

**Boost Individual Productivity**

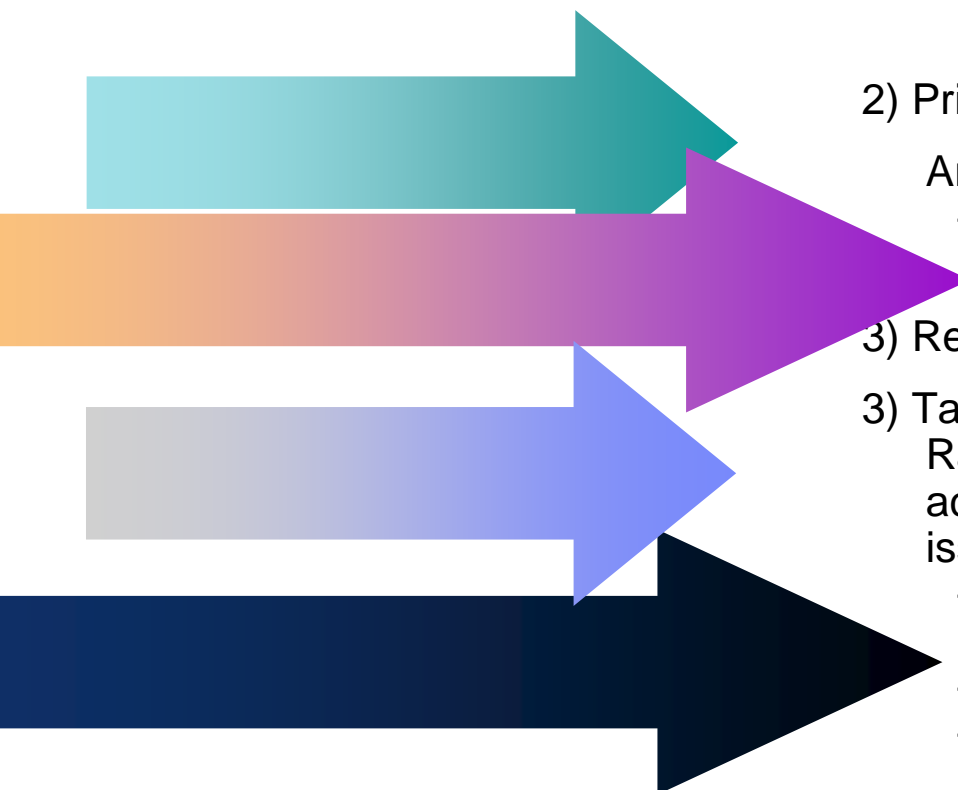
**15 to 20%<sup>5</sup>**  
 decrease in development cycle time through common team infrastructure for collaborative application lifecycle management

**Maximize Team Productivity**

**20 to 60%<sup>6</sup>**  
 improvement in application performance with latest compilers for IBM Systems

**Optimize System Utilization**

## Call to Action

- 
- 1) Identify z customers in your territory which, if any, Rational EM offerings they have already purchased
    - Contact [Michelle Cordes](#) or [Mike Farland](#) for System z customer details
  - 2) Prioritize your customer list
    - Are they continuing to invest in their z box?
    - Are they already using one of the Rational EM products?
  - 3) Review the IT Innovation Sales play
  - 3) Talk to the other client team members, your Rational counterpart, Business Partner on your accounts, etc. - understand your customer's issues? Is it...
    - Making their existing applications easier to maintain or using them in new ways?
    - Improving developer productivity?
    - Attracting new developers, especially to the mainframe and making them productive?
    - Offloading development MIPS from the mainframe?
    - Improving cross platform development processes?



## Collateral

<b>Sales kits (contain datasheets, whitepapers, ROI tools, presentations, links to demonstrations, etc...</b>	
<b>Product</b>	<b>URL</b>
Enterprise Modernization Accelerator for Developers	<a href="http://w3-103.ibm.com/software/xl/portal/viewcontent?srcID=CGSK&amp;docID=M399704N59912U70#overview">http://w3-103.ibm.com/software/xl/portal/viewcontent?srcID=CGSK&amp;docID=M399704N59912U70#overview</a>
Rational Asset Analyzer	<a href="http://w3-103.ibm.com/software/xl/portal/content?synKey=D927541J59100M64#overview">http://w3-103.ibm.com/software/xl/portal/content?synKey=D927541J59100M64#overview</a>
Rational Developer for System z	<a href="http://w3-103.ibm.com/software/xl/portal/viewcontent?srcID=CGSK&amp;docID=P255209V71720P38">http://w3-103.ibm.com/software/xl/portal/viewcontent?srcID=CGSK&amp;docID=P255209V71720P38</a>
Host Access Transformation Services	<a href="http://w3-103.ibm.com/software/xl/portal/content?synKey=L224380U47165K38#overview">http://w3-103.ibm.com/software/xl/portal/content?synKey=L224380U47165K38#overview</a>
Rational Business Developer	<a href="http://w3-103.ibm.com/software/xl/portal/viewcontent?srcID=CGSK&amp;docID=L133236B45359N85">http://w3-103.ibm.com/software/xl/portal/viewcontent?srcID=CGSK&amp;docID=L133236B45359N85</a>
HACP – Back to Basics	<a href="http://w3-103.ibm.com/software/xl/portal/content?synKey=Q377805P79453H19#overview">http://w3-103.ibm.com/software/xl/portal/content?synKey=Q377805P79453H19#overview</a>
Rational Team Concert for System z	<a href="http://w3-103.ibm.com/software/xl/portal/viewcontent?srcID=CGSK&amp;docID=M975883M88155N33">http://w3-103.ibm.com/software/xl/portal/viewcontent?srcID=CGSK&amp;docID=M975883M88155N33</a>
zCore Sales kit	<a href="http://w3-103.ibm.com/software/xl/portal/content?synKey=P142461L10538F66#overview">http://w3-103.ibm.com/software/xl/portal/content?synKey=P142461L10538F66#overview</a>
Rational Migration Extensions	<a href="http://w3-103.ibm.com/software/xl/portal/content?synKey=A494227R56444E82#overview">http://w3-103.ibm.com/software/xl/portal/content?synKey=A494227R56444E82#overview</a>
Rational Programming Patterns for System z	<a href="http://w3-103.ibm.com/software/xl/portal/content?synKey=K389833N80593Y78#overview">http://w3-103.ibm.com/software/xl/portal/content?synKey=K389833N80593Y78#overview</a>
Enterprise Compilers	<a href="http://w3-103.ibm.com/software/xl/portal/content?synKey=E261443C57120G89#overview">http://w3-103.ibm.com/software/xl/portal/content?synKey=E261443C57120G89#overview</a>
<b>Enterprise Modernization Sandbox</b>	
System z	<a href="http://www.ibm.com/developerworks/downloads/emsandbox/systemz.html?S_TACT=105AGX28&amp;S_CMP=EMSAND">http://www.ibm.com/developerworks/downloads/emsandbox/systemz.html?S_TACT=105AGX28&amp;S_CMP=EMSAND</a>
<b>Other Useful Links</b>	
EM Whiteboard	<a href="http://swglearning.raleigh.ibm.com/whiteboard/swg/rational/enterprise-modernization/index.html">http://swglearning.raleigh.ibm.com/whiteboard/swg/rational/enterprise-modernization/index.html</a>
IT Innovation Sales Play	<a href="http://w3-103.ibm.com/software/xl/portal/content?synKey=F064247R65421P18#overview">http://w3-103.ibm.com/software/xl/portal/content?synKey=F064247R65421P18#overview</a>