



IBM Software Group

Enterprise Modernization: Revolutionizing the economics of enterprise application development and maintenance

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Agenda

Software Delivery Challenges

IBM Rational Enterprise Modernization Solutions

Revitalize Applications

Empower People

Unify Teams

Exploit Infrastructure

How to Get Started?



Businesses are challenged to deliver innovation

80%



64%

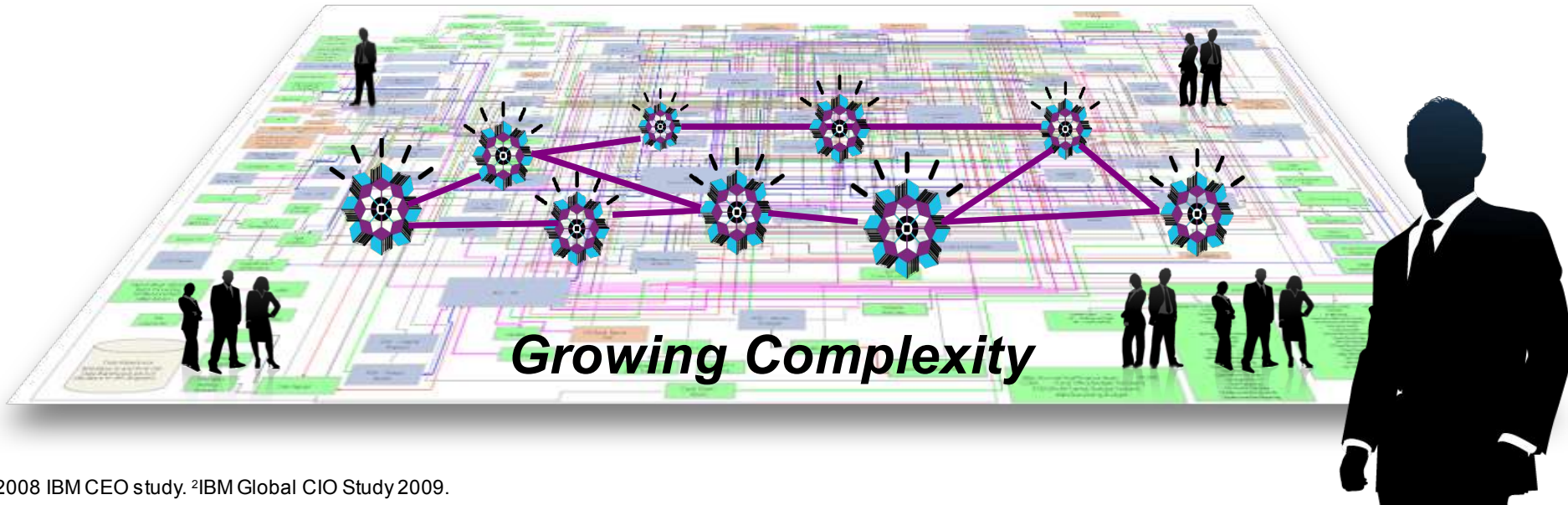


3x

CEOs anticipate turbulent change and bold moves.¹

of CIOs work with senior business executives to drive innovation.²

increase in the gap between leaders' need and their ability to deliver it.¹



¹2008 IBM CEO study. ²IBM Global CIO Study 2009.

Many companies consider IT an inhibitor to innovation and a source of inflexibility



“The message for IT is clear; business needs and expects greater agility from IT. A new approach to IT delivery models and sourcing options is required that allows IT organizations to be more responsive to the needs of the business.”

Gartner, October 14, 2008, “Changing the Cost Structure of IT Will Become a Business Imperative for Most CIOs”

Challenges to achieving greater value from your IT

Applications



"We don't understand the effort, risk and impact of modernizing our legacy applications."



People



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



Teams



"Our teams on different platforms are struggling to communicate. How do we collaborate in the context of our work?"



Infrastructure

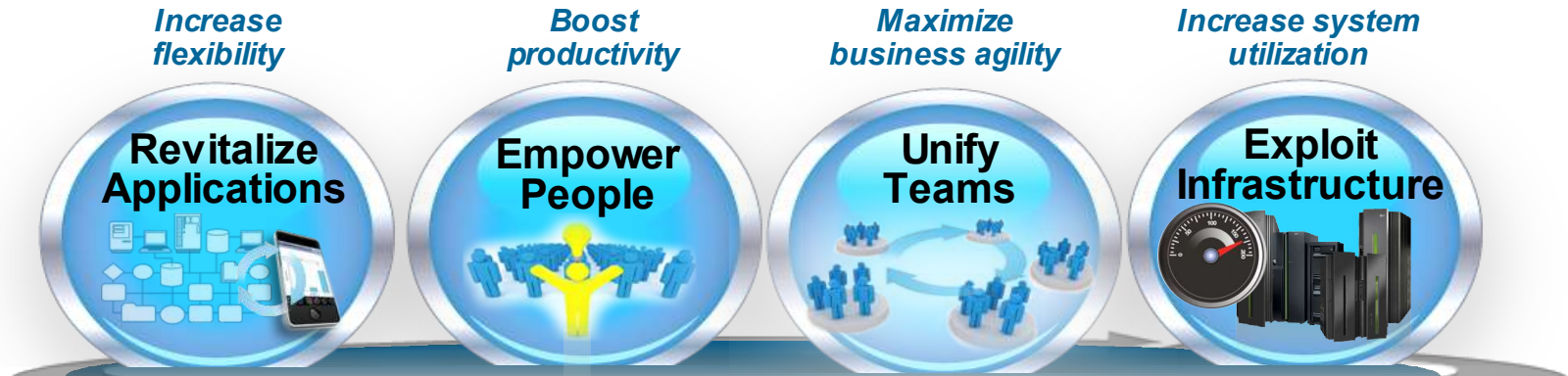


"We need a cost effective way to improve our infrastructure efficiency and free up capacity to handle more volume"



IBM Rational Enterprise Modernization solutions can help

Optimize your applications, people, team and infrastructure investments



- § **Increase flexibility** by revitalizing existing application portfolios
- § **Boost productivity and accelerate innovation** with modern skills
- § **Maximize business agility** by bridging organizational silos
- § **Increase system utilization** by leveraging hardware capabilities

Rational Software Delivery Platform *powered by*



Increase flexibility by revitalizing existing application portfolios

Increase flexibility

Revitalize Applications



Boost productivity

Empower People



Maximize business agility

Unify Teams



Increase system utilization

Exploit Infrastructure



Business intelligence for applications

Enterprise architecture and portfolio management

SOA tools for all platforms and languages

Operational reuse

User interface modernization

Application transformation tools and services

Quality across the organization

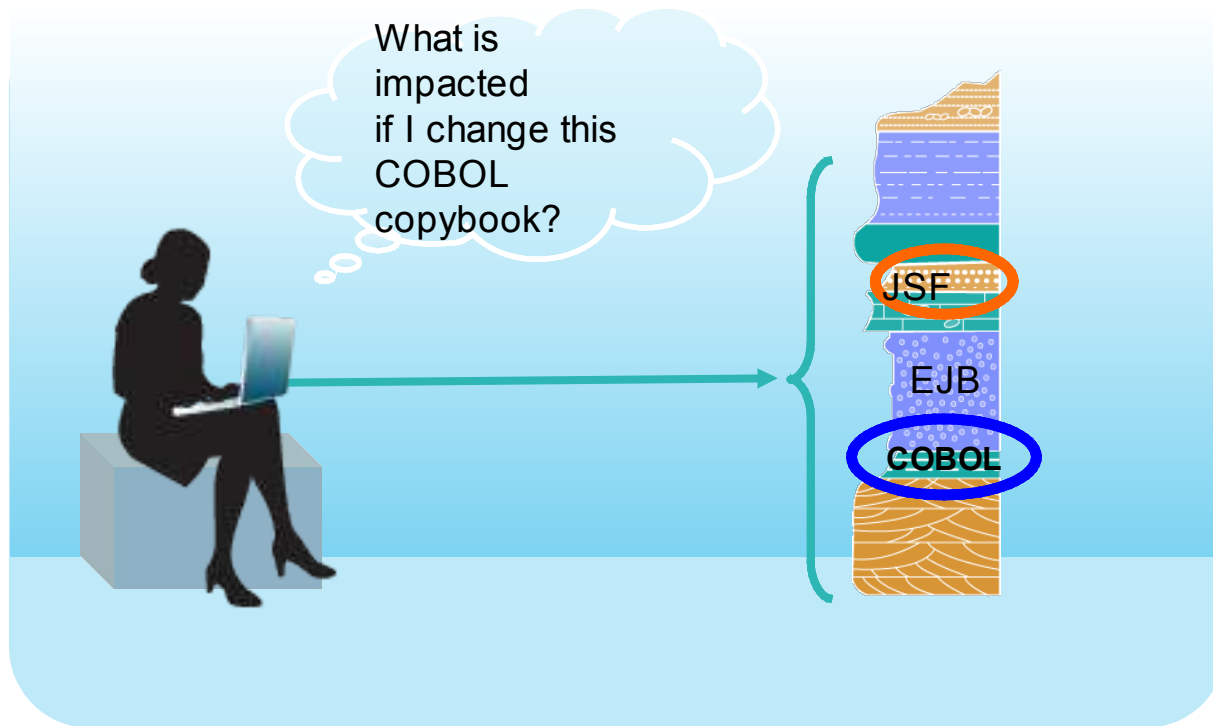
Rational Software Delivery Platform





Enterprises want to...

Understand the impact and cost of change to their IT systems



But...

They have no business intelligence inventory of their application assets, relying instead on manual and error-prone processes and incomplete knowledge. They must compensate with more extensive planning and extra testing.



Solution: Business intelligence for applications

Restore lost application knowledge via technical analysis

Application Artifacts

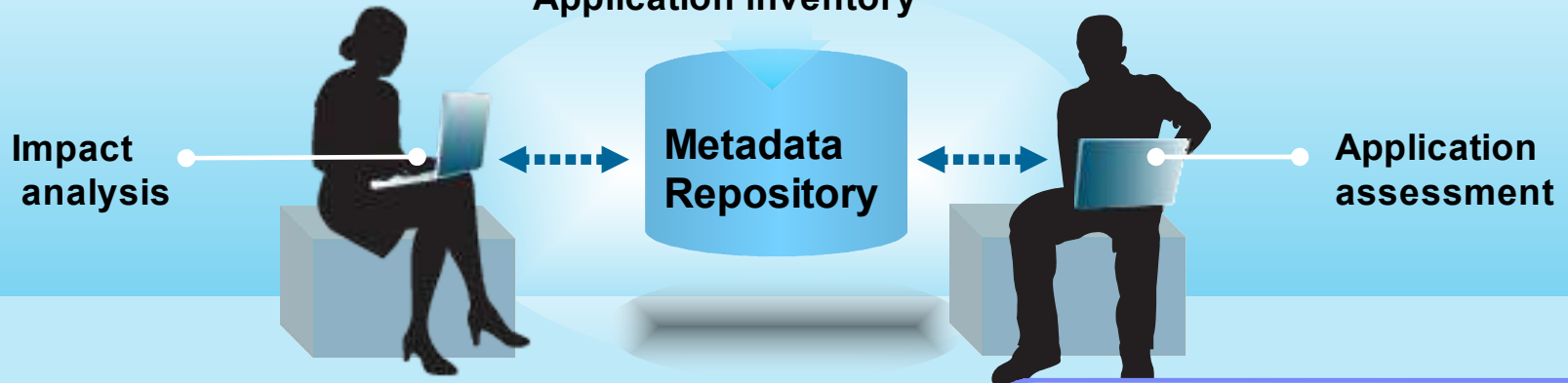
Mainframe

- § COBOL
- § PL/I
- § DB2
- § IMS/DC
- § CICS
- § Job Control Language
- § High-level Assembler (HLASM)

Distributed

- § Java
- § WebSphere
- § HTML
- § WSDL
- § Enterprise Archive (EAR)
- § Web Archive (WAR)
- § C++

Application inventory



Rational Asset Analyzer
WebSphere Studio Asset Analyzer

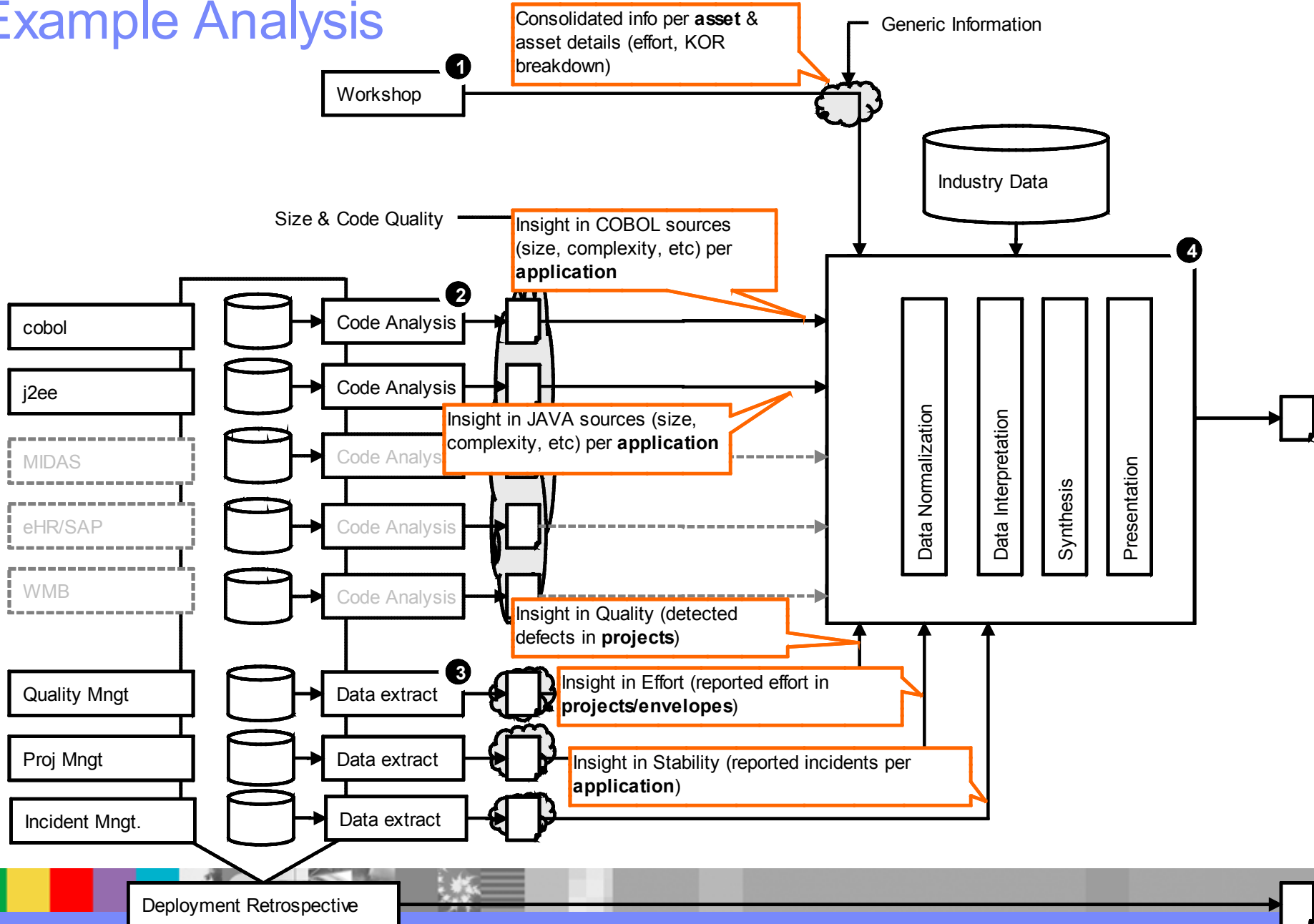
Application Health Assessment

Delivering...

Reduced risk by quickly determining the full impact of proposed changes and lowered costs via dead code elimination, optimal planning, focused testing and faster development



Example Analysis



Example: Derived maintenance related FTE's for the COBOL technology domain whereby IS & I&O activities are combined

Breakdown (LOB - Asset)	FP	FPmnt	FTE	FTEws	FTEws
- No Asset Match, No LOB match -	913.190,6	150.747,5	109,2		
CF	65.768,3	9.398,9	6,8	10,1	84,0
-No Asset Match, only LOB match -	21.498,2	4.381,6	3,2		
Accounting (Bismarck-ASI-ABS)	20.208,9	1.769,9	1,3	3,3	
Customer Profitability	135,7	47,8	0,0	3,0	
FIAMS	13.461,8	1.101,2	0,8	0,8	
Referential (Taux/Cours)	4.421,8	947,2	0,7	0,3	
Reporting (BLIC; NSA-FPR-Fin Rep; POPA)	6.042,0	1.151,2	0,8	2,7	
MB	24.797,1	3.097,5	2,2	2,0	102,9
-No Asset Match, only LOB match -	4.073,0	1.210,9	0,9		
GUIDE	20.724,1	1.886,6	1,4	2,0	
OPS	428.162,7	96.754,4	70,1	20,6	45,9
-No Asset Match, only LOB match -	49.041,3	9.616,3	7,0		
Card management & authorization	9.711,6	2.015,5	1,5	1,5	
CINQ	203,7	79,8	0,1	0,7	
Customers core systems BE and Ficus	44.809,6	11.841,9	8,6	3,6	
Estates Management	2.299,6	495,6	0,4	0,5	
MX, STARS, CODA	32.069,9	4.249,1	3,1	1,9	
Securities accounting & custody	141.522,9	35.842,3	26,0	5,5	
Securities referentials	52.700,8	12.340,3	8,9	2,1	
Securities Transactions	58.352,9	15.871,5	11,5	3,3	
TIS and PCV and CGS	37.450,2	4.402,0	3,2	1,5	
PB					11,4
-No Asset Match, only LOB match -					
RB	49.304,3	9.772,3	7,1	11,6	32,8
-No Asset Match, only LOB match -	7.253,4	846,4	0,6		
Commissielonen zelfstandigen	2.698,0	679,3	0,5	2,0	
Diamonds (SAS)	1.049,3	257,9	0,2	2,6	
NFE CDM	23.438,4	4.945,0	3,6	0,3	

Enterprises want to...

Reuse existing assets to reduce duplication and speed time to market



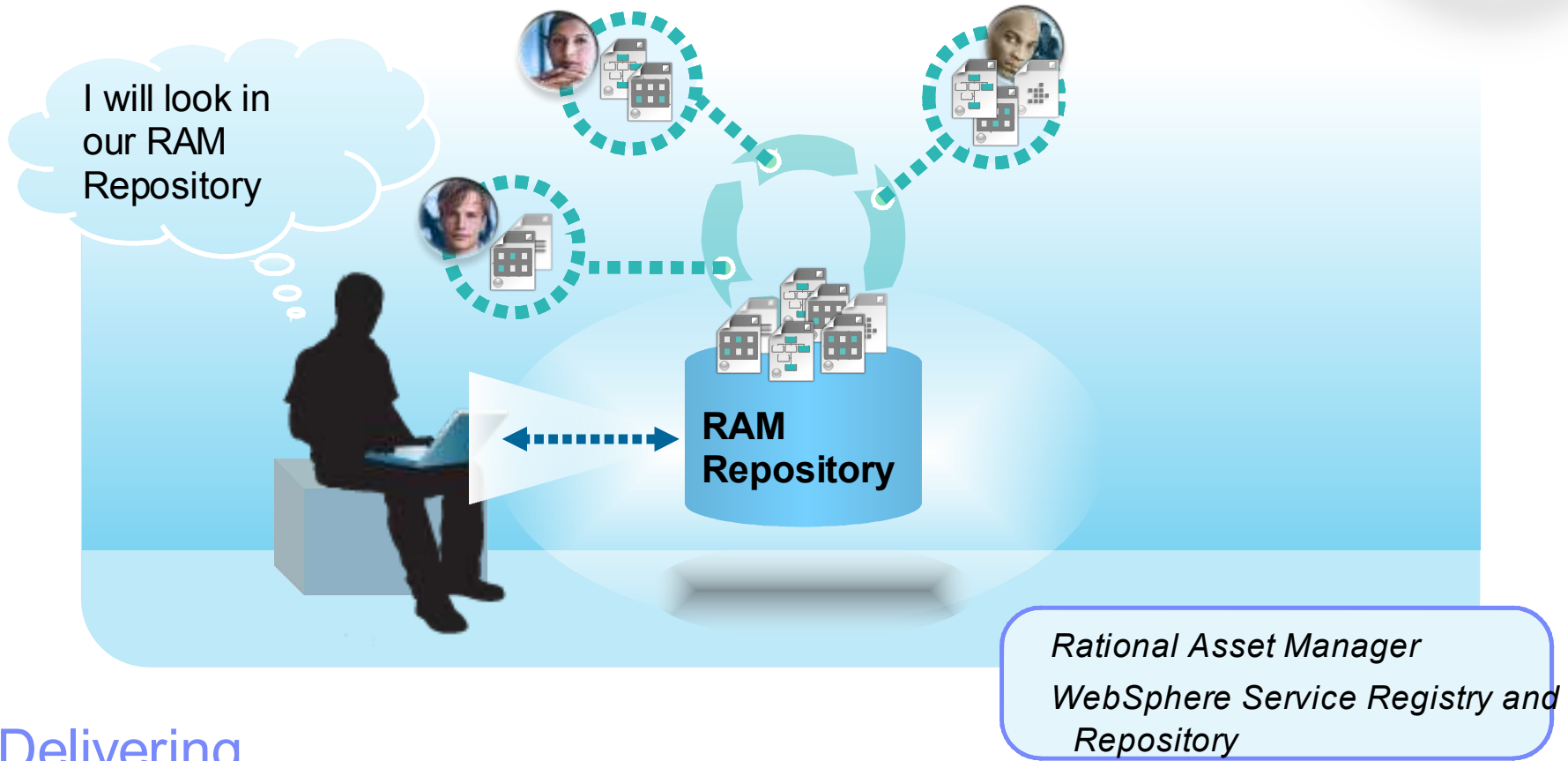
But...

They do not have the infrastructure to establish a reuse culture



Solution: Operational reuse

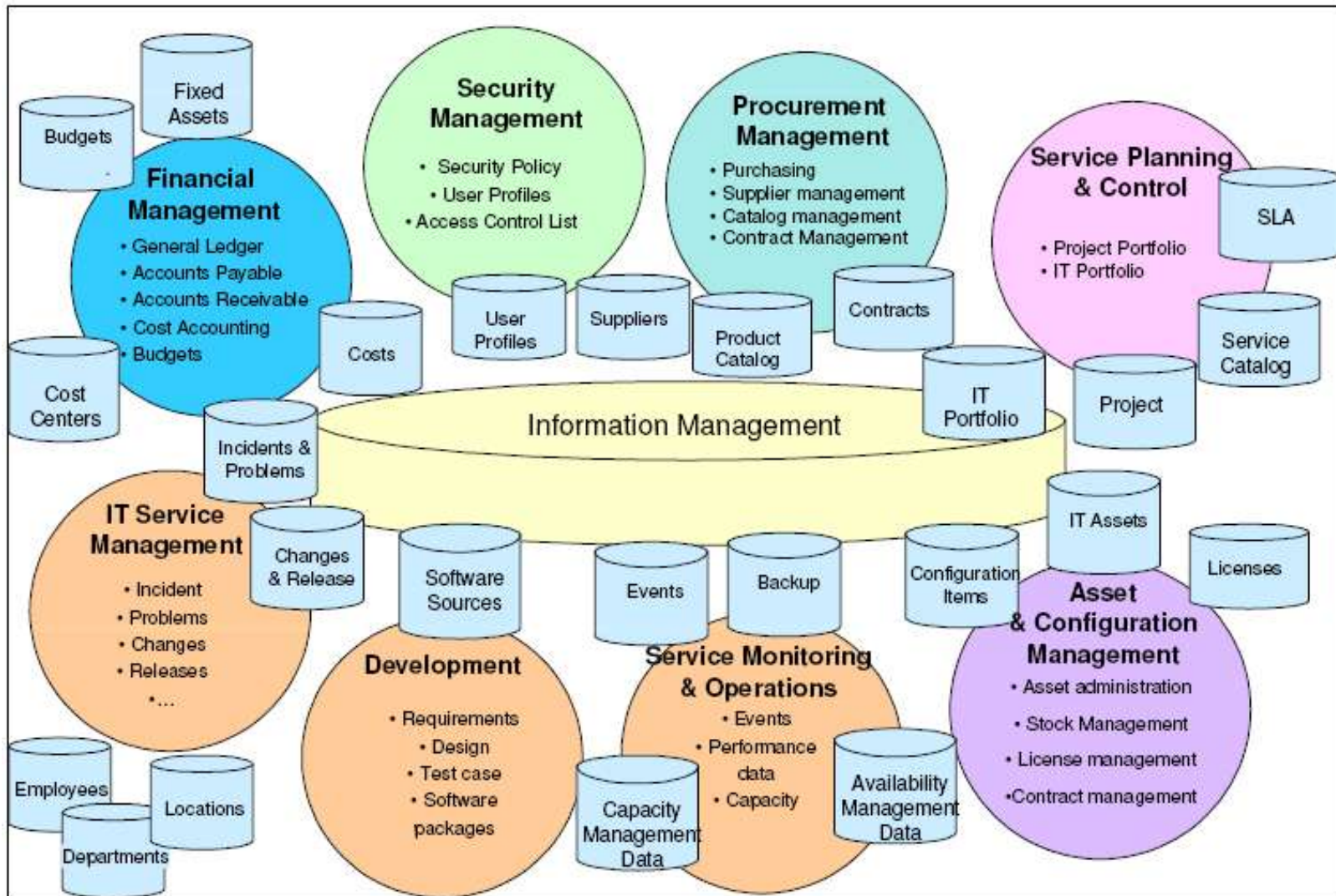
Instill proactive asset management of all IT artifacts into the organization's processes and culture by deploying a reuse infrastructure



Delivering...

Greater reuse, development efficiency, faster time-to-market, and higher quality

Example: Accessing islands of information



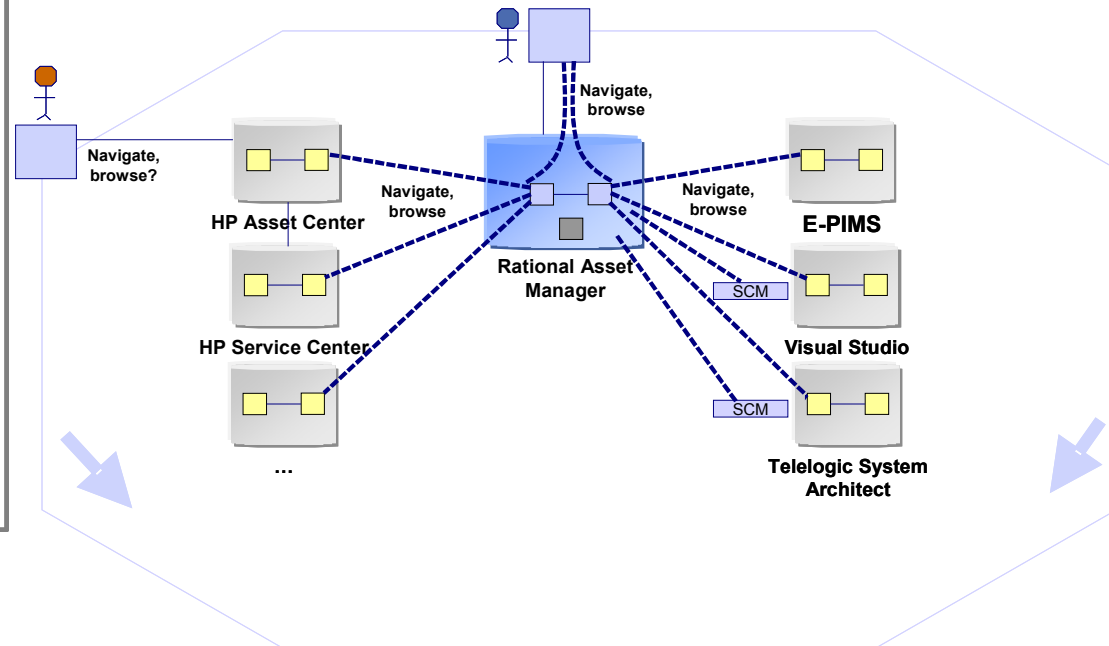
Example: A Knowledge Management System that improves service quality, adaptability and agility, RAM is the core component is this solution

Knowledge Management System (KMS) will provide ability to use data collected by the IT processes “dynamically”, turning embedded information into knowledge.

IT Knowledge Management

- Through structuring of information, the KMS creates new value from IT data
- § The KMS is a key enabler for the improvement of IT processes by addressing challenges in data accumulation, currency and accessibility
- § KMS is aimed to support processes across the entire IT domain and multiple Suppliers

IBM's Rational Asset Manager is the core component of KMS





Enterprises want to...

Provide a range of appealing, more intuitive user interfaces to increase employee productivity and boost customer satisfaction

```
Session A: [24 x 80]
File Edit View Communication Actions Window Help
Client Inquiry - calls LAB3P01 (LAB3BMS)

Customer number: 004
Last Name: Silva
First: Lula da
Address: Palacio do Planalto
City: Brasilia
State: DF
Country: BRAZI

Type customer Number Between 1 and 10 or 99 to END

Customer retrieved successfully
```



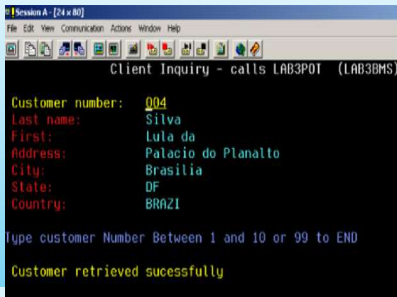
But...

The cost of replacing or re-writing these applications is prohibitive, and they may not have the necessary web and UI technology skills



Solution: User interface modernization

Deploy the ideal UI for your application, from quickly creating a modern Web UI out of an existing green screen application to customizing a highly interactive, graphical Web 2.0 UI



- Rational EGL*
- Host Access Transformation Services*
- Rational Developer for System z*
- Rational Developer for Power System*
- Rational Business Developer*
- Rational Application Developer*



Delivering...

Greater customer satisfaction, lower employee training costs, and fewer errors from more modern and compelling UIs



Enterprises want to...

Reduce tool support costs and move to modern platforms, languages, and tools for their multi-platform application development



**Software AG Natural/Adabas
CA Ideal/Datacom and CoolGen
RPG, COBOL, and Synon
Green screen text UIs**



- System z – CICS
- System z – IMS
- System z – Linux*
- System z – Batch
- System z – WAS*
- System z – VSE
- IBM i - WAS
- IBM i - Native
- AIX
- HP - UX
- Solaris
- Linux
- Windows

*Eligible to run on IFL and zAAP

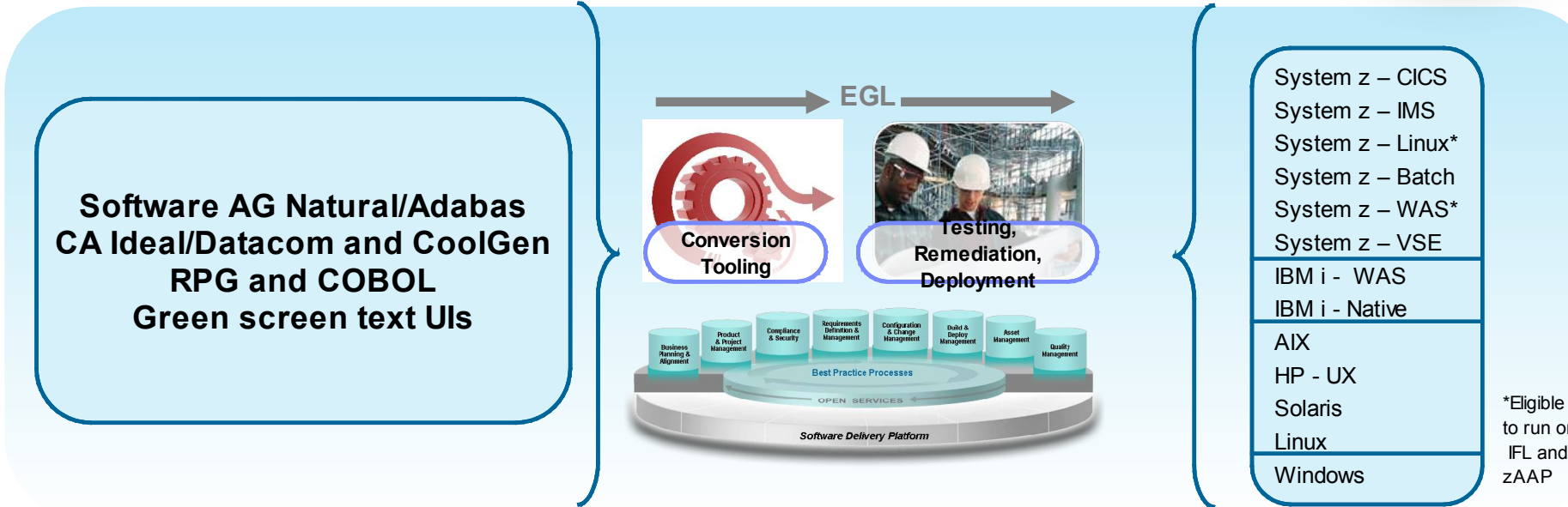
But...

They 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



Delivering...

Greatly reduced development platform support costs, and more flexible, integrated development environment for making future application enhancements

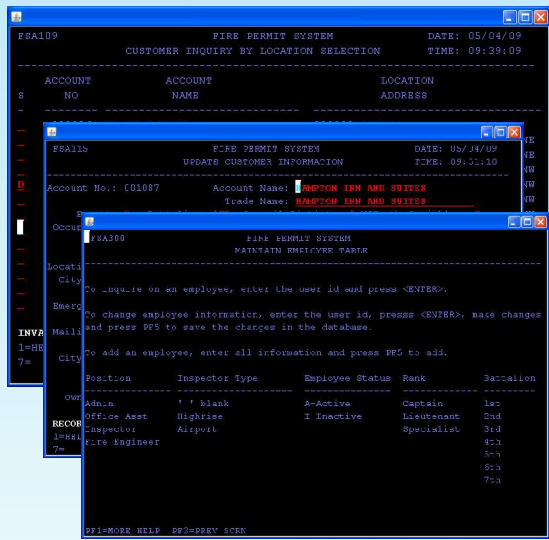
- Rational Migration Extension for Natural*
- Rational Migration Extension for CA*
- Rational Migration Extension for Rich UI*
- Rational Migration Extension for IBM i*





UI Modernization with RME for Rich UI

Original Screens



Standard Transformation



Enhanced Transformation



- ✓ One to one screen to EGL RUI
- ✓ UI patterns mapping (list, detail, headers, message, etc)

- ü Combined UIs, improved flow, resizable panels, etc
- ü Combo boxes, radio buttons, date pickers, tabs, etc
- ü Mash-ups and integration with other systems



Boost productivity and accelerate innovation with modern skills

Increase flexibility



Boost productivity



Maximize business agility



Increase system utilization



Modern IDEs for all platforms and languages

Modern business language

Enterprise training programs, communities and resources

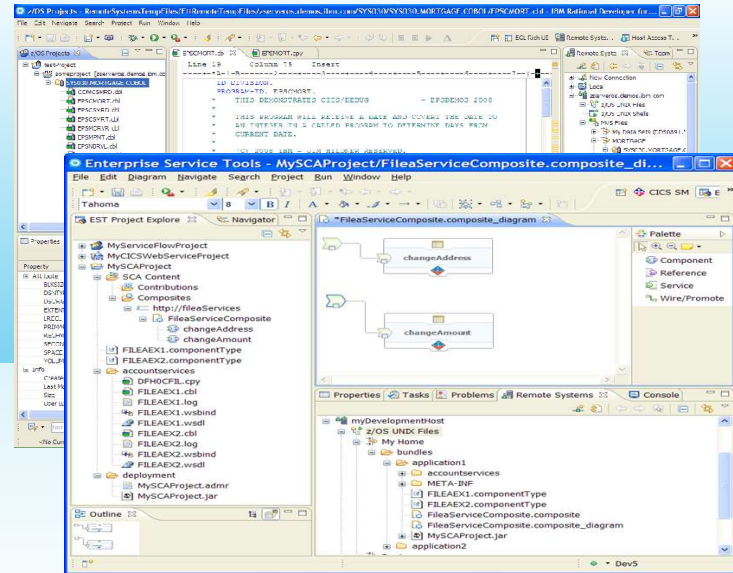
Rational Software Delivery Platform *just by*





Enterprises want to...

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



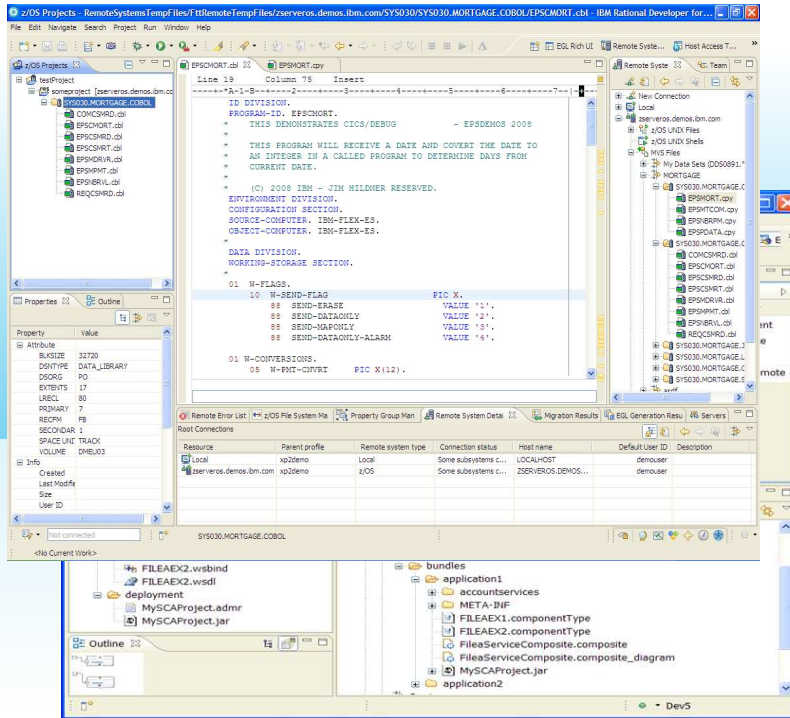
But...

They have antiquated development tools which deliver low productivity and are difficult to accept for younger staff



Solution: Comprehensive, multi-platform 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 Power System **NEW!**
Rational Application Developer
Rational Business Developer
 System z Solution Edition for Application Development

Delivering...

50%-80%¹ reduction in host CPU usage with workstation syntax checking, ~15% improvement in developer productivity¹, and modern tools with which to attract new talent

¹ Aggregation of results from a productivity study conducted by IBM System z customers

The original System z development environment

ISPF has provided consistent tooling for decades...but it is limiting



Challenges...

- § Constant connection to mainframe is required
- § Development shares processor with production use; gets lower priority
- § Inability to create cross platform components
- § ISPF green screen UI is unappealing to new hires
- § MIPS used for development vs. production

Today's mainframe development environment with a modern IDE (and still some ISPF)



Modern IDEs add value

- § Higher productivity; more attractive for new developers
- § Ability to offload some development MIPS
- § Integration with complete application lifecycle tools

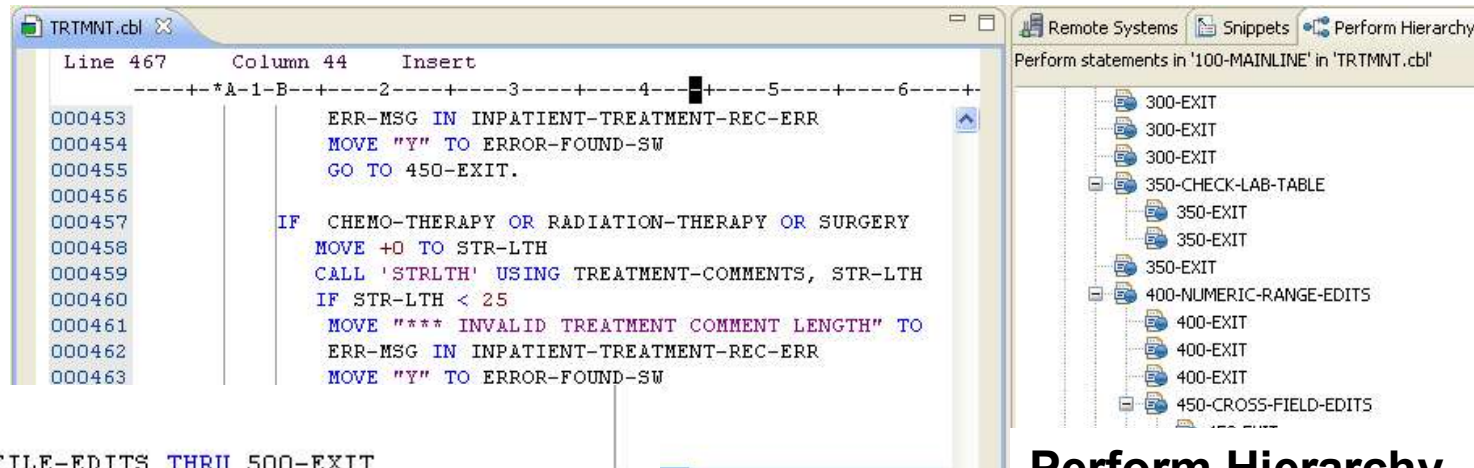
But challenges remain:

- § Business pressures to reduce development MIPS further
- § Test delays caused by dependencies on operations team, thus hurting productivity

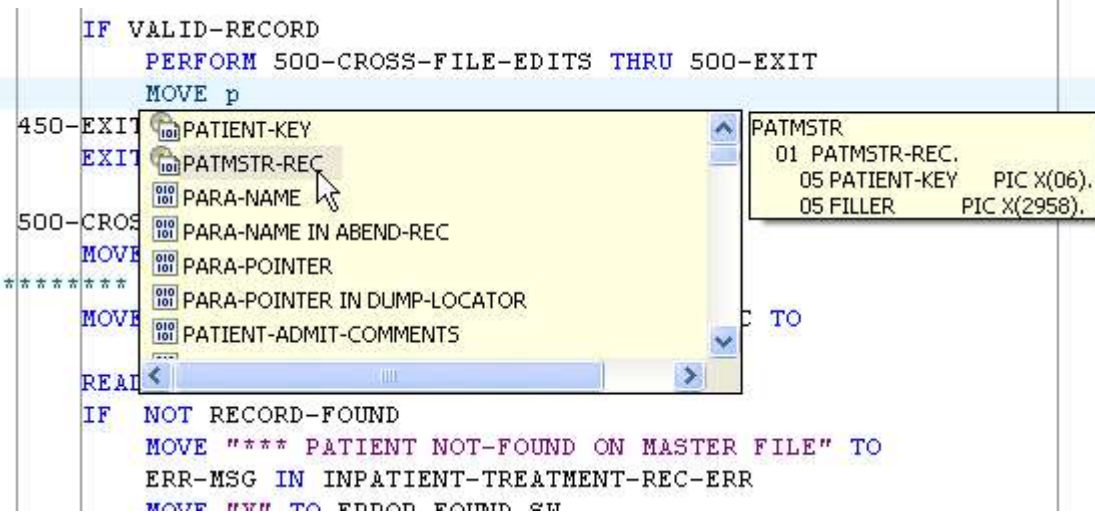
Why should an ISPF developer use RDz?

1. It makes my job easier:

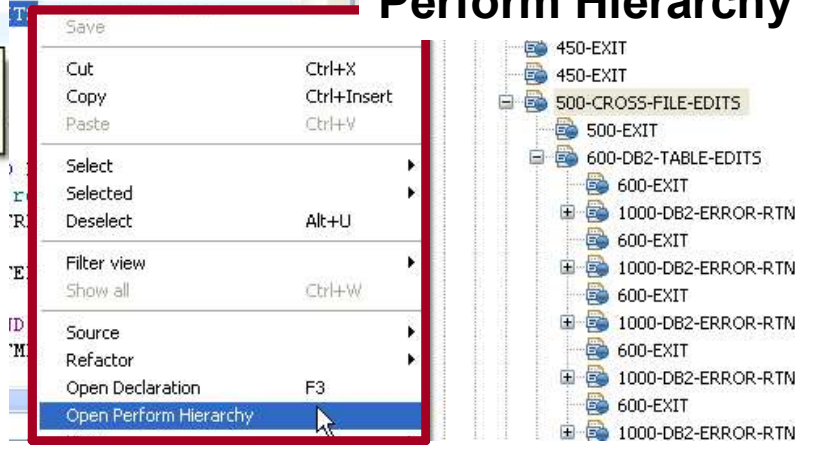
- ▶ I can do things with RDz tools that I have to do manually with ISPF



Content Assist



Perform Hierarchy



Why should an ISPF developer use RDz?

2. It makes me more productive:

- View and work with source files – optimally

- Use Wizards to build Web Services and Stored Procedures

The screenshot displays the IBM RDz development environment. On the left, the 'EST Project Explorer' shows a project structure with folders like 'RemoteSource', 'cobol', 'empot24', and 'eotcust'. A 'New' wizard menu is open, highlighting 'Web Services for CICS Project'. The main area shows two source code editors: 'TRTMNT.cbl' and 'TREATMNT.cpy'. The 'TRTMNT.cbl' editor shows COBOL code with line numbers 400-448. The 'TREATMNT.cpy' editor shows COBOL code with line numbers 000001-000020. The 'PATMSTR.cpy' editor shows COBOL code with line numbers 000001-000020. The code in the editors includes conditional logic and data declarations.

```

TRTMNT.cbl
Line 440      Column 57      Insert
-----*A-1-B-----2-----3-----4-----5-----6-----
000408      IF (ANCILLARY-CHARGE > 900
000409      OR  ANCILLARY-CHARGE < 1.01)
000410
000411      MOVE "*** INVALID ANCILLARY CHARGES" TO
000412      ERR-MSG IN INPATIENT-TREATMENT-REC-ERR
000413      MOVE "Y" TO ERROR-FOUND-SW
000414      GO TO 400-EXIT.
000415
000416      IF VALID-RECORD
000417      PERFORM 450-CROSS-FIELD-EDITS THRU 450-EXIT.
000418
000419      400-EXIT.
000420      EXIT.
000421
000422      450-CROSS-FIELD-EDITS.
000423      MOVE "450-CROSS-FIELD-EDITS" TO PARA-NAME.
000424      ***** Specific requirements for certain procedures
000425      IF MRI OR CAT OR CHEMO-THERAPY OR RADIATION-THERAPY
000426      OR SURGERY OR LAB-TESTS
000427      IF MEDICATION-COST = ZERO OR
000428      ANCILLARY-CHARGE = ZERO
000429      MOVE "*** INVALID $$ AMOUNTS FOR PROCEDURES" TO
000430      ERR-MSG IN INPATIENT-TREATMENT-REC-ERR
000431      MOVE "Y" TO ERROR-FOUND-SW
000432      GO TO 450-EXIT.
000433
000434      000413 TO ORAL-ADMIN OR INTRAVENOUS-ADMIN OR INJECTION
000435      000414 00-E 01 INPATIENT-TREATMENT-REC. ENT-TREATMENT-REC = ZI
000436      000415      ...
000437      05 TREATMENT-MODE PICX(03). ITS FOR PROCEDURES" TO
000438      88 ORAL-ADMIN VALUE "ORA" ENT-TREATMENT-REC-ERR
000439      GO TO 450-EXIT.
000440
000441      NOT OTHER-TREATMENT
000442      IF TREATMENT-NURSE-ID = SPACES OR
000443      SUPERVISOR-NURSE-ID = SPACES
000444      MOVE "*** INVALID NURSING ENTRIES" TO
000445      ERR-MSG IN INPATIENT-TREATMENT-REC-ERR
000446      MOVE "Y" TO ERROR-FOUND-SW
000447      GO TO 450-EXIT.
000448
000449      NOT (OTHER-TREATMENT AND LAB-TESTS)
000450      IF TREATMENT-COMMENTS = SPACES
000451      MOVE "*** INVALID TREATMENT COMMENTS" TO
000452      ERR-MSG IN INPATIENT-TREATMENT-REC-ERR
000453      MOVE "Y" TO ERROR-FOUND-SW
000454      GO TO 450-EXIT.
000455
000456      000429 ** IF GO TO 450-EXIT.
000457      000430 IN
000458      000431 TO
000459      000432 150 E
  
```

```

TREATMNT.cpy
Line 1      Column 1      Insert
-----*A-1-B-----2-----3-----4-----5-----6-----
000001      ** DAILY PATIENT/TREATMENTS FILE
000002      01 INPATIENT-TREATMENT-REC.
000003      05 RECORD-TYPE PIC X(01).
000004      88 TRAILER-REC VALUE "T".
000005      05 PATIENT-ID PIC 9(6).
000006      05 TREATMENT-DATE-TIME.
000007      10 TREATMENT-DATE PIC X(08).
000008      10 FILLER PIC X.
000009      10 TREATMENT-TIME PIC X(08).
000010      10 FILLER PIC X(09).
000011      05 BED-IDENTITY PIC X(4).
000012      05 PRIMARY-DIAGNOSTIC-CODE PIC X(5).
000013      05 MEDICATION-ID PIC X(8).
000014      05 TREATMENT-MODE PIC X(03).
000015      88 ORAL-ADMIN VALUE "ORA".
000016      88 INTRAVENOUS-ADMIN VALUE "INV".
000017      88 INJECTION VALUE "INJ".
000018      88 MRI VALUE "MRI".
000019      88 CAT VALUE "CAT".
000020      88 CHEMO-THERAPY VALUE "CHH".
  
```

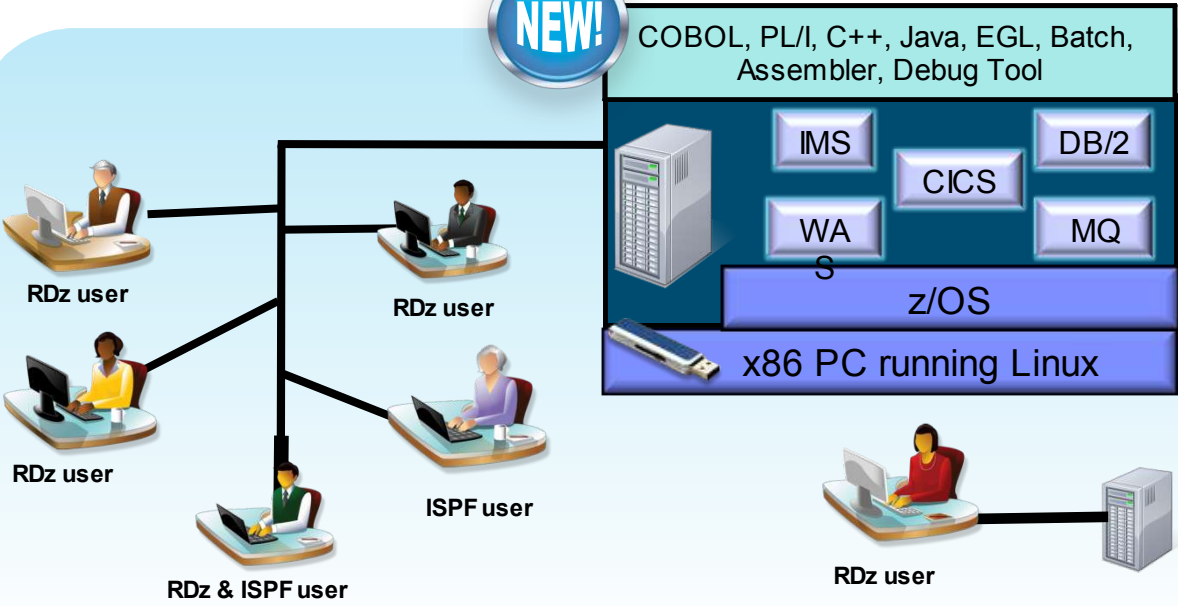
```

PATMSTR.cpy
Line 1      Column 1      Insert      Browse
-----*A-1-B-----2-----3-----4-----5-----6-----
000001      ** COPY PTMSTR.
000002      ** VSAM FILE
000003      01 PATIENT-MASTER-REC.
000004      05 PATIENT-ID PIC X(6).
000005      05 PATIENT-TYPE PIC X(1).
000006      88 INPATIENT VALUE "I".
000007      88 OUTPATIENT VALUE "O".
000008      88 VALID-TYPE VALUES ARE "I", "O".
000009      05 PREVIOUS-PATIENT-IND PIC X(01).
000010      88 PREV-PATIENT VALUE "Y".
000011      88 NOT-PREVE-PATIENT VALUE "N".
000012      88 VALID-PREV-IND VALUES ARE "Y", "N".
000013      05 PRIMARY-STAY-WARD-NBR PIC X(4).
000014      88 INTENSIVE-CARE VALUE "0010".
000015      88 OBSTETRICS VALUE "2010".
000016      88 PEDIATRICS VALUE "1010".
000017      88 ONCOLOGY VALUE "0011".
000018      88 CARDIO-THORACIC VALUE "0110".
000019      88 GENERAL VALUE "0000".
000020      88 VALID-WARD VALUES ARE
  
```



Announcing the RDz Unit Test Feature

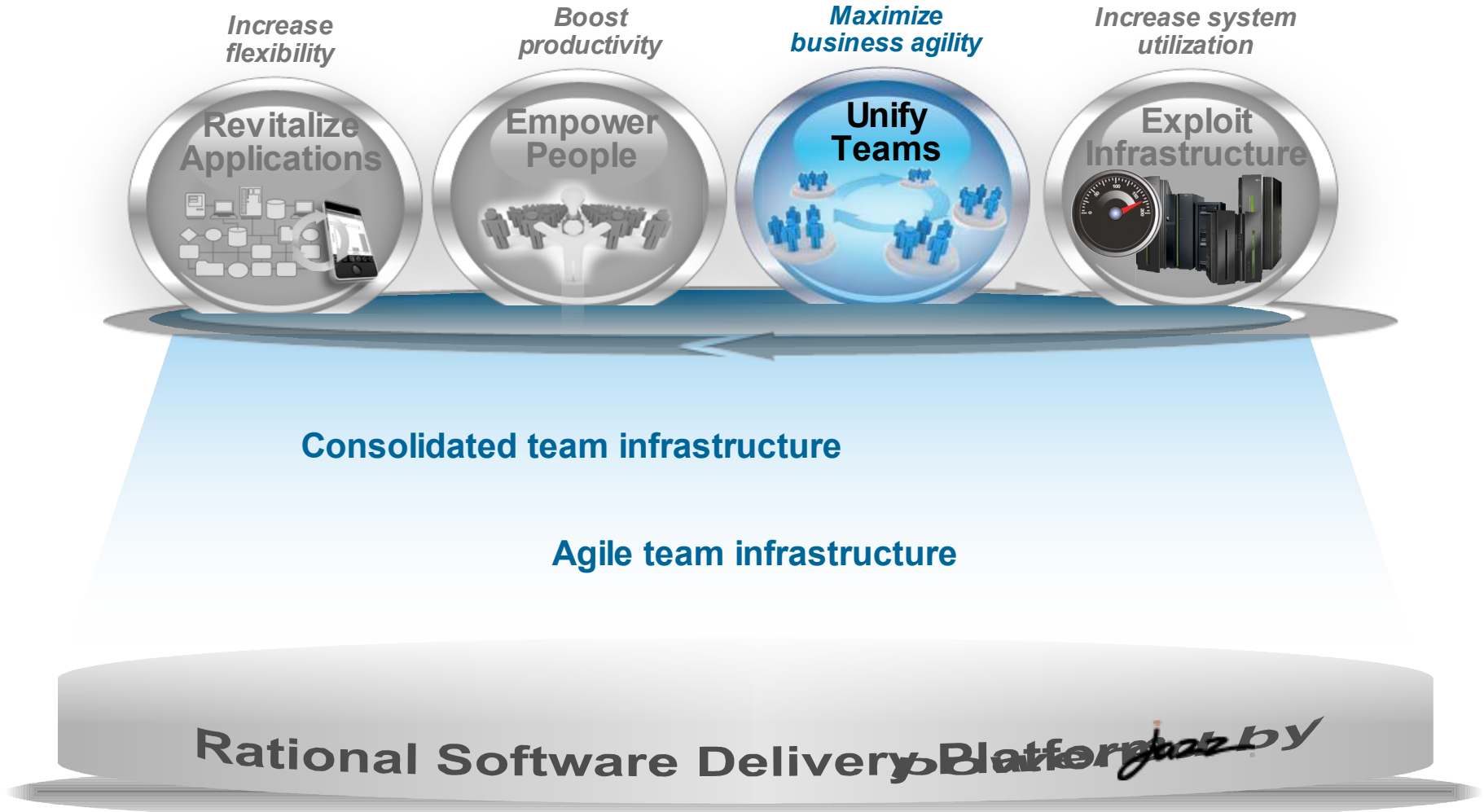
System z environment for testing on x86 Linux systems



- § Liberate developers to rapidly prototype new applications Develop and test System z applications anywhere, anytime
- § Free up mainframe development MIPS for production capacity
- § Eliminate costly delays by reducing dependencies on operations staff

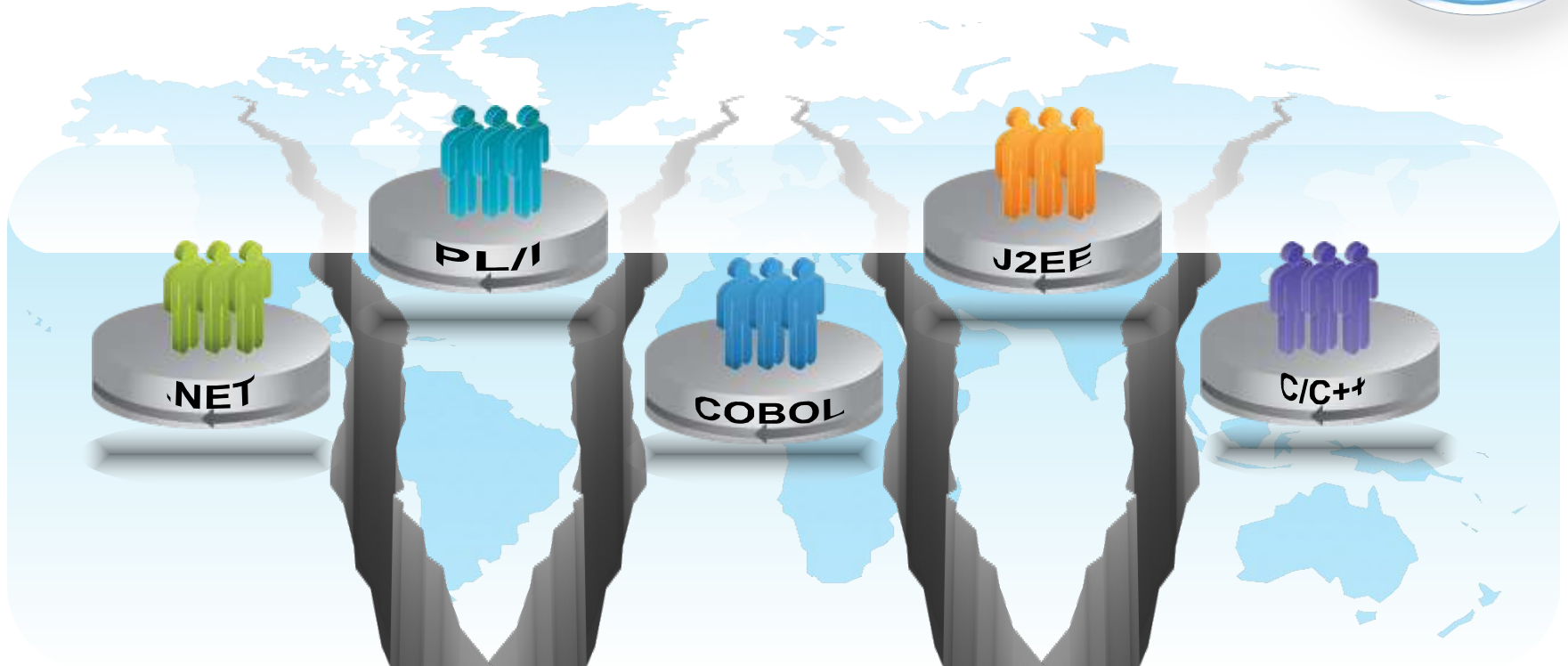
Note: This Program is licensed only for development and test of applications that run on IBM z/OS. The Program may not be used to run production workloads of any kind, nor more robust development workloads including without limitation production module builds, pre-production testing, stress testing, or performance testing.

Maximize organizational agility by unifying development teams



Enterprises want to...

Enable agile, multi-platform and cross-geo collaboration and governance while reducing their team infrastructure costs



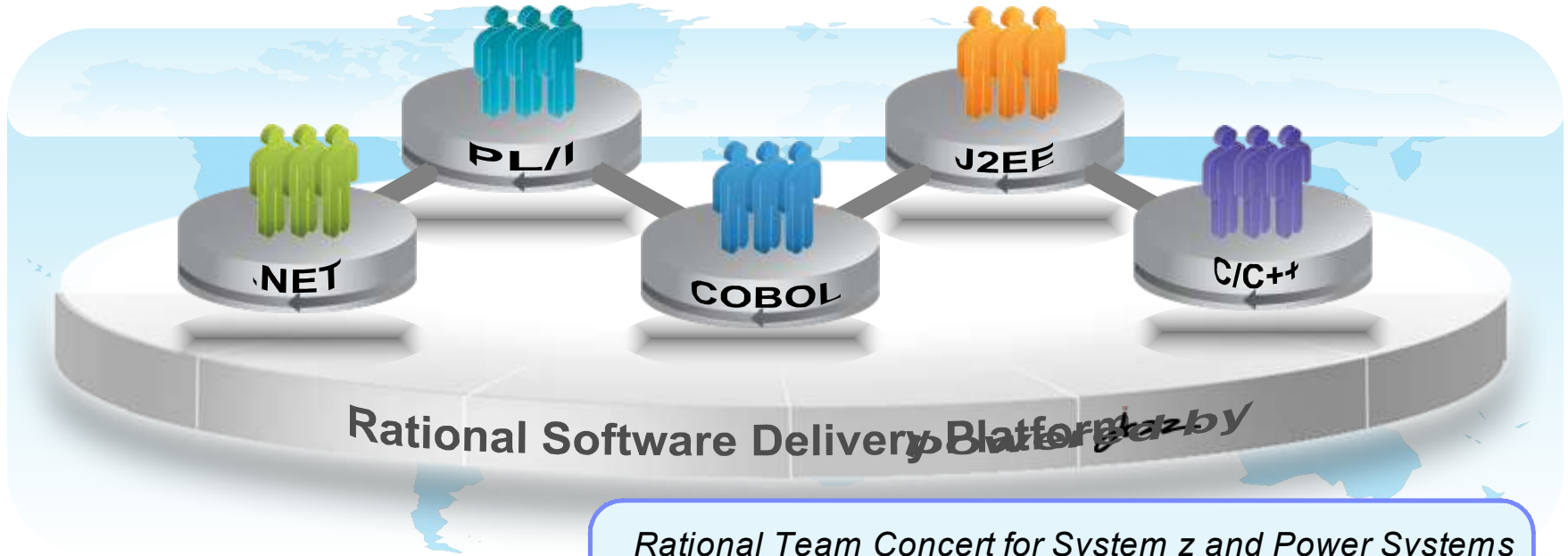
But...

They have "islands" of development, each with different tools, processes and team infrastructure, and they do not support real-time collaboration or integrated, comprehensive oversight



Solution: Collaborative app. 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



*Rational Team Concert for System z and Power Systems
 Rational ClearCase / Rational ClearQuest
 Rational Buildforge*

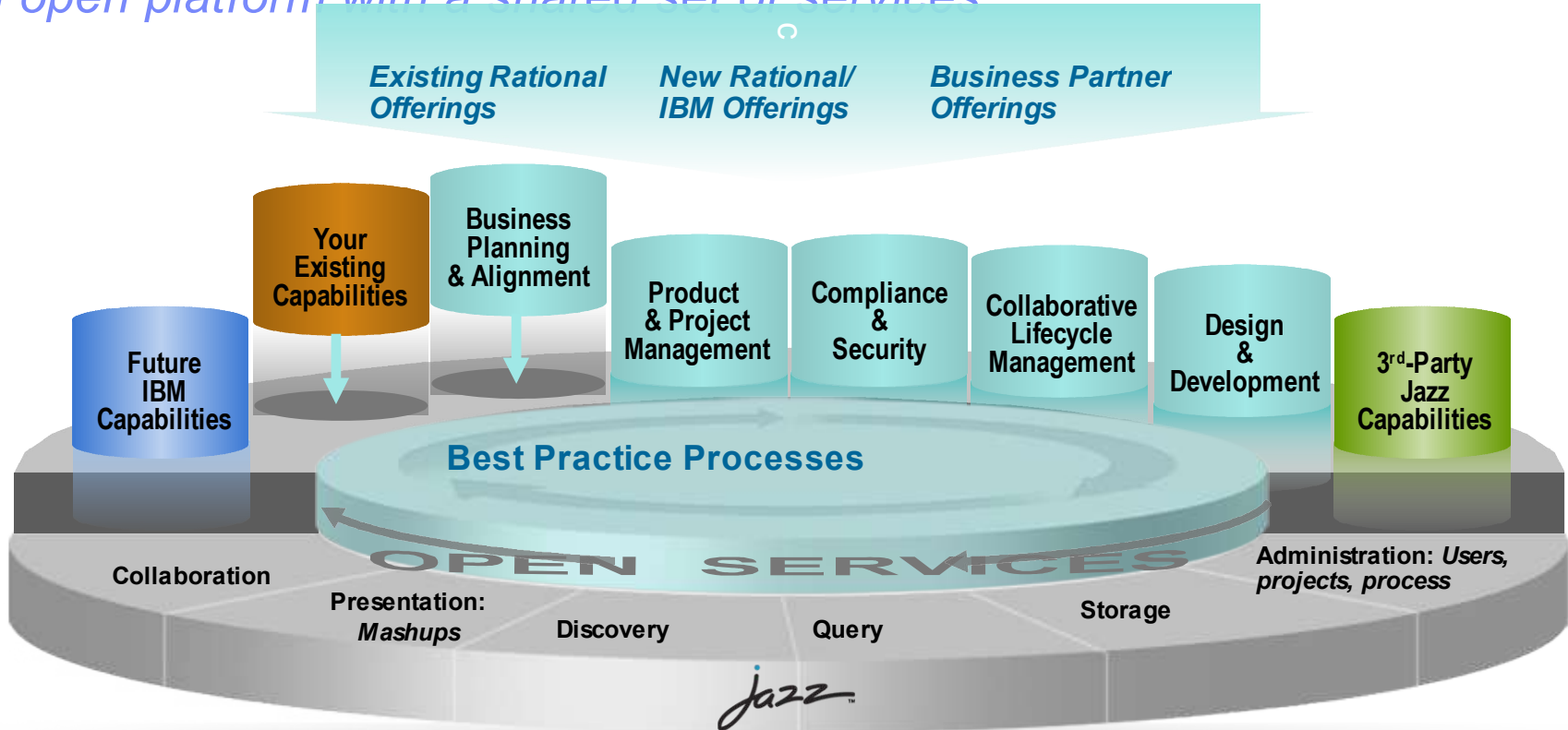
**RTC
 Version 3
 now in
 Beta!**

Delivering...

Improved communication, higher quality, informed decision-making, and more automated, transparent and predictable software development

Rational Team Concert for System z is based on Jazz

an open platform with a shared set of services



Jazz is...

- § A scalable, extensible team collaboration platform
- § A community at Jazz.net, where you can see Jazz-based products being built
- § An integration architecture, enabling mashups and non-Jazz based products to participate



IBM Rational Team Concert for System z

Software innovation through collaboration

§ Collaborate in-context

- 4 Integrated release planning and reporting, source control, document collaboration, work item, build management, chat and process guidance

§ Streamline development

- 4 Out-of-the-box System z, agile or distributed process configurations

§ Automate governance

- 4 Assess project status and trends in real-time with web-based dashboards, metrics and reporting


§ Scale to the enterprise

- 4 Supports teams ranging from a few to thousands of developers and stakeholders

§ Unify diverse teams

- 4 Supports J2EE, .NET, IBM i, System z, co-existence with popular toolsets

Open and extensible on



- ü Collaborate
- ü Automate
- ü Report



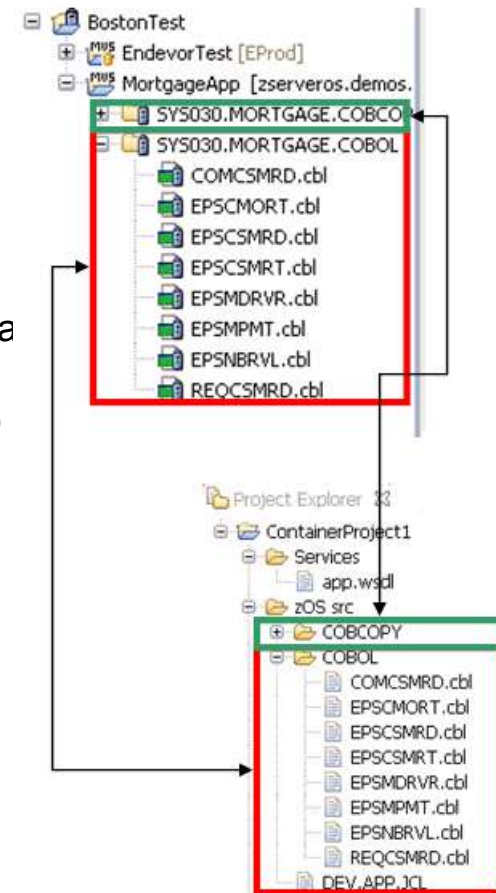
IBM Rational Team Concert

transparent *integrated presence*
 wikis **OPEN** real-time reporting
 chat documents **Web 2.0** *custom*
dashboards automated data gathering
EXTENSIBILITY *Eclipse plug-ins*
 services architecture **FREEDOM TO CREATE**

JAZZ TEAM SERVER

Tight integration with Rational Developer for System z (RDz)

- Rational Team Concert for System z provides
 - ▶ collaboration
 - ▶ process
 - ▶ SCM
 - ▶ Build functions for z/OS
- RDz augments the development productivity & experience
 - ▶ files act as if on the host
 - ▶ Appropriate editors (COBOL, maps, etc.) and functions (content assist, syntax check, etc.)
 - ▶ High value functions (XML enablement, SFM, code generation from models, from UML, etc)
- RDz project in RTCz
 - ▶ RDz projects are a view into the RTCz project
 - ▶ RDz projects provide a working set for the developer
 - ▶ RDz projects are not shared in the SCM



Example: Measured Improvement in Large-scale Test Management and Test Execution

- Large IBM facility at Hursley in UK responsible for WebSphere products
 - Includes WAS and CICS
 - Mature infrastructure products, with focus on quality and reliability
- Goal to increase coordination and governance across the teams to improve performance and delivered quality

Four key requirements:

- Support for the complete development process
- Integrated solution from start to finish
- Low cost on boarding for teams
- Same tooling for both mainframe and distributed platform teams

Rational Team Concert (RTC) provided:

- Consolidated view for defect tracking and team/ project planning providing greater transparency
- Code for tooling products in one repository
- Environment which helped team's move to a more agile mindset
- Improved collaboration, with less emails



The screenshot displays the IBM Jazz SilverLining web console. The main window shows a user story titled "3642: Igor updates the details of an existing user". The story is in a "Done" state. A detailed view of the story is open, showing the following information:

Status	Resolution	Summary
✓ Done	✓ Done	Igor updates the details of an existing user

Details

Type:	Story	Tags:	
Story Points:	5 pts	Owned By:	Unassigned
Completed Story Points:	5	Priority:	Should
Progress:		Implementation Order:	35
Creation Date:	17 December 2009 12:06	Planned For:	Sprint 8
Created By:	Draper, D (Dave)	Resolution Date:	20 January 2010 16:59
Team Area:	UI Team / SilverLining Project	Resolved By:	Draper, D (Dave)
Filed Against:	UI		

Quick Information

- Subscribers (1): DD(
- Parent: 4713

The interface also shows a sidebar with navigation options like "Execution", "Reports", and "Defects". The bottom of the browser window shows the URL: `https://jazz208.hursley.ibm.com:9443/jazz/resource/itemName/com.ibm.team.workitem.Workitem/3642`.

Improve application performance by exploiting modern hardware

Increase flexibility



Boost productivity



Maximize business agility



Increase system utilization



Exploit new advanced optimization technology in C/C++, Java, COBOL, PL/I and Fortran compilers

Rational Software Delivery Platform *powered by*



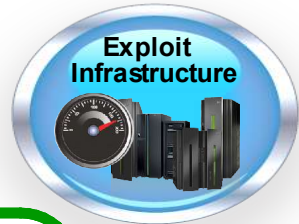
Enterprises want to...

*Maximize application performance on existing hardware
to reduce capital expenses*



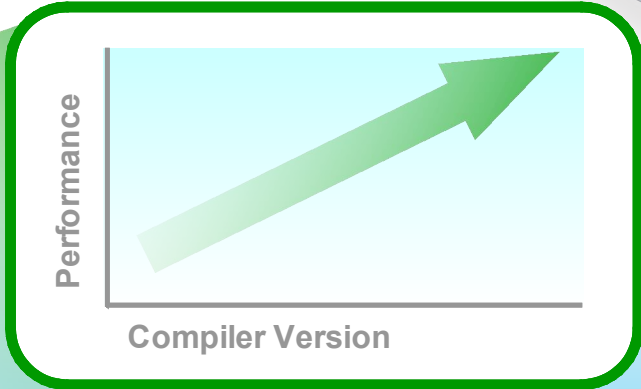
But...

They have back-level compilers or are not fully using optimization



Solution: Advanced compiler technology

Exploit new advanced optimization technology in C/C++, Java, COBOL, PL/I and Fortran compilers



**Same hardware + *NEW* compiler
= Increased Performance**

***NEW* hardware + *NEW* compiler
= Maximum Performance**

- § 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
- § IBM WebSphere® Development Studio (IBM i compilers)

Delivering...

Lower capital outlays by increasing capacity, and improved performance of application suite

Customers are adopting Rational solutions for Enterprise Modernization

**Gained
15% in productivity**

UniCredit modernizes mainframe development and testing with IBM Rational Developer for System z software

More than 200 developers at HVB IS began using IBM Rational Developer for System z software to develop mainframe applications for IBM System z servers.

**Increased
developer productivity
by 15%**

Wipro and its customer chose IBM Rational Business Developer and EGL technology to modernize the application

The new system accesses the customer's existing IBM DB2 information management system running on an IBM System i platform, and now includes IBM WebSphere Application Server software to support a modern, three-tier architecture.

**Reduced
development time by
15-20%**

SoforTe improves productivity for developers and customers with IBM Rational software on System z and Rational Team Concert for System z

SoforTe chose to implement RDz and RTCz on an IBM System z10 Business Class server running z/OS and clients running Microsoft® Windows® clients to provide a modern powerful development environment for its customers.

How to get started?



Sandboxes for SOA, System z and Power

ü Try IBM's latest software for SOA, BPM, System z and Power Systems for free

ü A low risk cloud based approach to try out several new offerings and integrated solutions

<http://www.ibm.com/developerworks/downloads/emsandbox/>

<http://www.ibm.com/developerworks/downloads/soasandbox/>

Rational Cafés



Join our COBOL, RPG, EGL and C/C++ Communities

[→ Learn more](#)

IBM Rational Cafés

ü To help, IBM has implemented solutions that feature community-based knowledge sharing - that give your developers instant, secure access to shared content, and opportunity to interact with IBM experts on topics related Enterprise Modernization

<http://www-949.ibm.com/software/rational/cafe/index.jspa>

To learn more visit:

www.ibm.com/software/rational/announce/modernization/

www.ibm.com/software/rational/announce/power/

The screenshot shows the IBM website for System z application development. The main headline is "Ultimate flexibility and affordability for System z application development" with a green sports car image. The page is divided into several sections:

- What if you could:**
 - Optimize your enterprise assets, skills, and infrastructure investments?
 - Better manage the costs and risks of your modernization efforts?
 - Further reduce the costs of mainframe application development and test?
- Rapid prototyping of z/Os applications**

The new release of [IBM Rational® Developer for System z®](#) revolutionizes the way organizations develop and test mainframe applications.

With the new [Unit Test feature](#), you can quickly deploy a more affordable System z application development and test environment on a low-cost x86 Linux® system.

Find out how [IBM Enterprise Modernization solutions](#) can help you unleash the full potential of your System z platform.

 - Boost productivity. Liberate your developers to rapidly prototype System z applications.
 - Increase flexibility. Build and test new System z applications virtually anytime!
 - Increase utilization. Free up mainframe development MIPS for production capacity.
 - Reduce cost. Experience MIPS savings with our integrated workbench offerings.
- Eclipse open source project for EGL**

In addition to the flexible and affordable System z development offering, IBM has submitted a proposal to the Eclipse Foundation to create an open source project for EGL.

As an established business language, EGL:

 - Speeds innovation. Use [IBM Rational Business Developer](#) and EGL to develop rich business applications faster and with a proven, open business application language.
 - Enables ultimate platform flexibility. Deploy application workload to the environments of your choice both now and in the future with EGL.
 - Helps reduce costs and provides modern tools. Use [Rational Business Developer](#) and EGL to consolidate legacy, expensive, and difficult to staff technologies on a single, open programming language and tooling platform.
- Additional resources to get you started**
 - [IBM Rational solutions for System z](#)
 - [Try the latest System z software in our new and enhanced System z Sandbox](#)
 - [IBM Rational Café Community for COBOL, RPG, C/C++, and EGL developers](#)
- We're here to help**

Easy ways to get the answers you need.

 - Call me
 - Request a quote
 - E-mail IBM

Or call us at: 877-426-3774
Priority code: 109HG03W
- Spotlight**
 - Trials and demos
 - Customer references
 - Webcasts
 - Brochures and articles
 - Resources

Brochure: Slash maintenance costs while incrementally evolving core systems (1.65MB)

Article: What's new in Rational Team Concert for System z, Version 2.0
- Launch webcast**

Revolutionizing today's banking systems
- New e-Kit**

IBM System z can do it
- Online trial**

Rational solutions for System z Sandbox

The screenshot shows the IBM website for Power Systems Software. The main headline is "Power your innovation" with a geometric pattern background. The page is divided into several sections:

- Rationalizing Power**

Today, businesses can do more with less and make the most of their IT investments. As the economy recovers, organizations look for ways to further optimize and extend the value of their IT investments with the least cost and disruption to existing infrastructure.

IBM Rational® solutions for Power Systems™ servers provide organizations with new, cost-effective, and practical optimization opportunities that free resources to build new smarter products and services that deliver business value.

These Rational solutions help accelerate development and delivery of multiplatform applications on IBM AIX®, IBM i, and Linux® operating systems that can help:

 - Improve system utilization by exploiting new POWER7 hardware and existing system capabilities
 - Boost productivity and accelerate innovation with modern development environments
 - Enhance organizational agility by leveraging a common team infrastructure
 - Increase flexibility by better managing and integrating application portfolios
- Increase system utilization.** The IBM Rational high performance compilers for [C/C++](#), [COBOL](#), [Fortran](#), [PLJ](#), and [RPG](#) offer cost savings and utilization from your existing infrastructure. Modern compilers can leverage multi-core and parallelization which improves performance and scalability of your applications.
- Boost productivity.** [IBM Rational Developer for Power Systems Software](#), [IBM Rational Application Developer for WebSphere® software](#), and [IBM Rational Business Developer](#) offer a common developer desktop delivering integrated development tools for AIX, IBM i, and Linux operating systems across multiple languages.
- Maximize business agility.** [IBM Rational Team Concert™ for Power Systems Software](#) offers a common server infrastructure enabling collaborative coordination for development teams for all Power Systems environments.
- Increase flexibility.** [IBM Rational Developer for Power Systems Software](#), [IBM Rational Host Access Transformation Services \(HATS\)](#), and [IBM Rational Migration Extension](#) can help extend the value of existing investments in IBM i, AS/400®, iSeries®, System i®, green screen, RPG, and COBOL applications by exploiting decades worth of business value embodied in these systems.
- Spotlight**
 - Cover Story: IBM VP Scott Heblner - Rationalizing Power
 - IBM Power Systems Announcement: Power your planet
 - Launch webcast on April 15th: Smarter systems for a smarter planet
 - IBM Rational solutions for Power Systems
 - Trials and demos
 - Brochures and articles
 - Key resources
- The time to innovate is now**

Innovate2010

Join us for Innovate 2010, the premier software and product delivery event, June 6 to 10 in Orlando, Florida.

→ Register now!
- Launch webcast on April 15th: Smarter systems for a smarter planet**

→ Register for the webcast
- New e-Kit: Power your Innovation**

→ Register for the e-Kit
- Online Trials: IBM Power Systems Sandbox**

→ Register or sign in to get started



Learn more at:

- IBM Rational software
- Rational launch announcements
- Rational Software Delivery Platform
- Accelerate change & delivery
- Deliver enduring quality
- Enable enterprise modernization
- Ensure Web security & compliance
- Improve project success
- Manage architecture
- Manage evolving requirements
- Small & mid-sized business
- Targeted solutions
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- Leading Innovation
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- IBM Rational Case Studies

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