



**Smarter Solutions for a  
Smarter Government.**



# Welcome to the Smarter Government Briefing Series

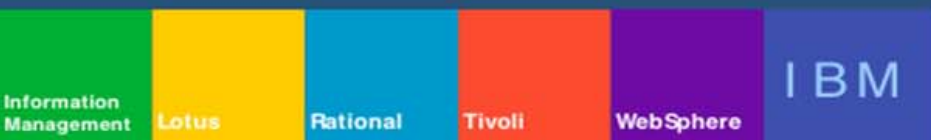
## 5<sup>th</sup> Session - Tuesday, November 30

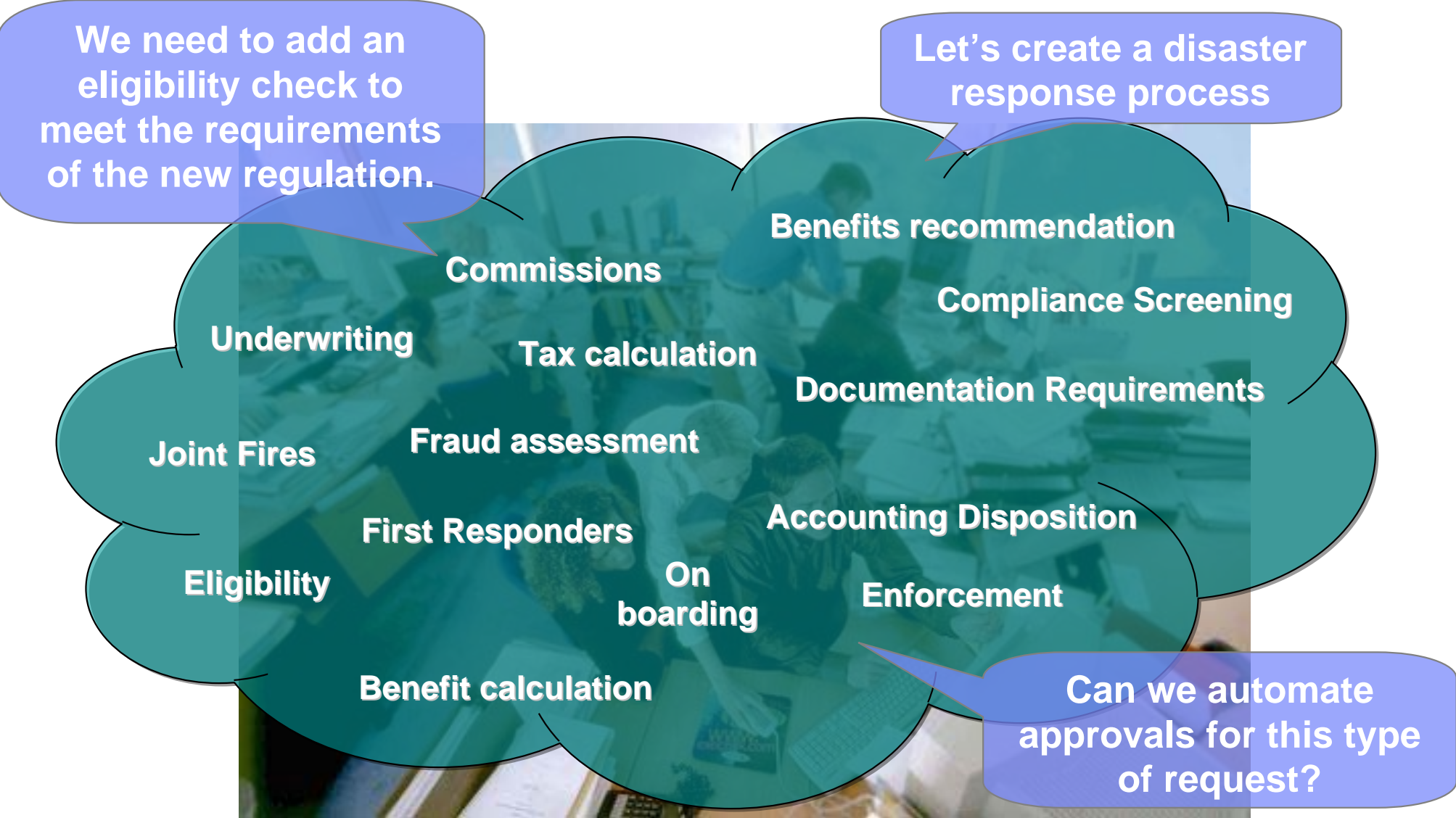
### Smarter Business Rule and Process Management

*Stephane Marouani*  
Country Manager  
IBM WebSphere BPM  
Australia

*Shaun Ryan*  
IT Program Director  
TAC and WorkSafe  
Victoria

## IBM Software Industry Solutions





**And Changing Frequently**

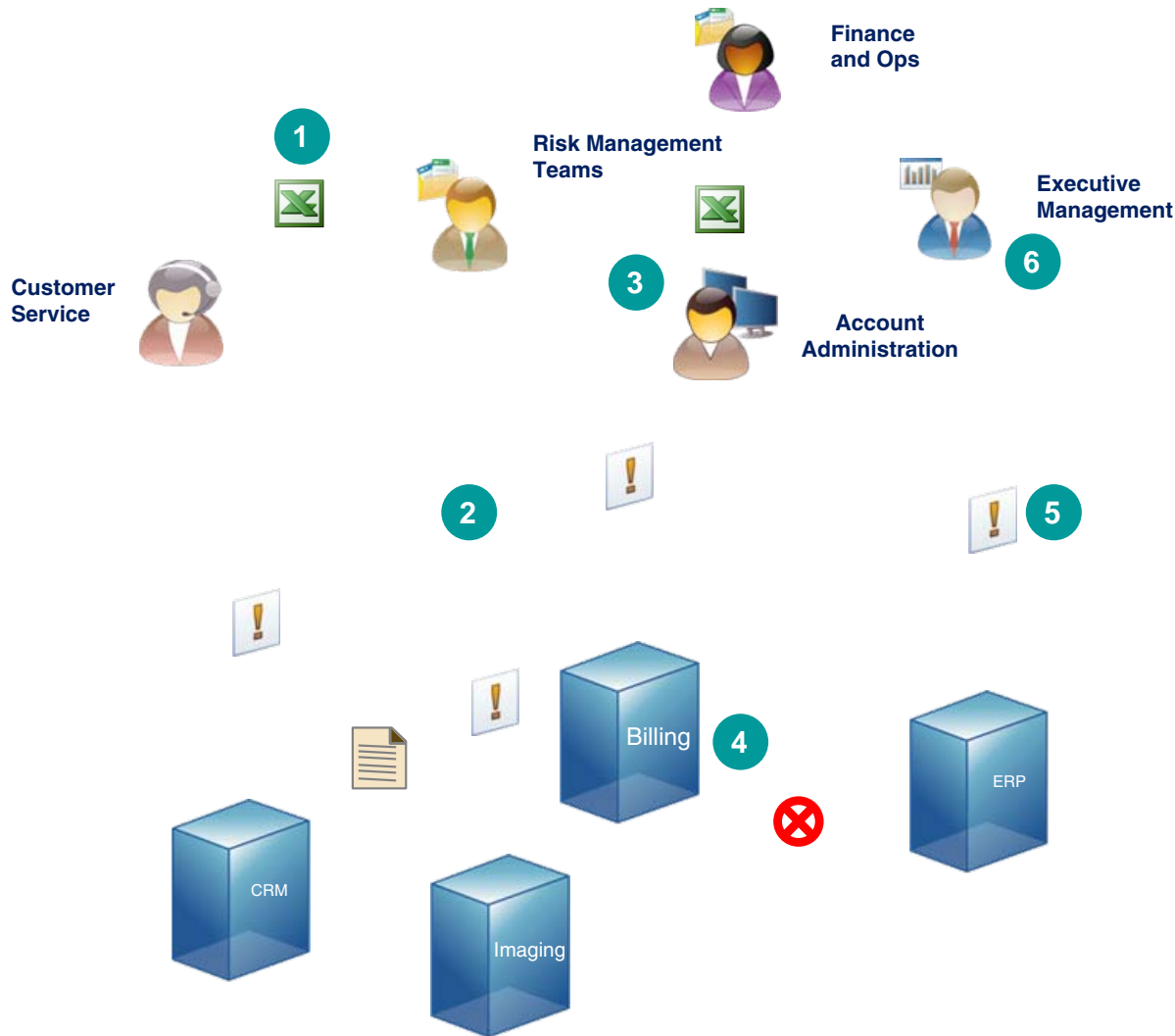


- ⑩ Reduces organisational agility
  - ⌘ Difficulties in responding to evolving business conditions and comply with new regulations
- ⑩ Reduces employee productivity
  - ⌘ Manual intervention required to deal with complexities of operations
- ⑩ Increases load on IT
  - ⌘ Keeping applications/systems updated & current across the enterprise consumes time and resources



- ⑩ Processes are Inefficient and Poorly Aligned
- ⑩ Missed Requirements Are Not Obvious, but Are Costly
- ⑩ Business and IT Struggle to Communicate Effectively
- ⑩ Paper-Based Processes lack consistency and traceability
- ⑩ Business is Too Reliant on IT for Simple Solutions
- ⑩ Many Disparate Existing Systems to Integrate
- ⑩ Difficult to Enable and Enforce Change
- ⑩ Problems are Not Immediately Apparent
- ⑩ Business and IT Errors Cannot Be Easily Resolved
- ⑩ Testing Requires Many Tools and Environments
- ⑩ Deployments are Complex

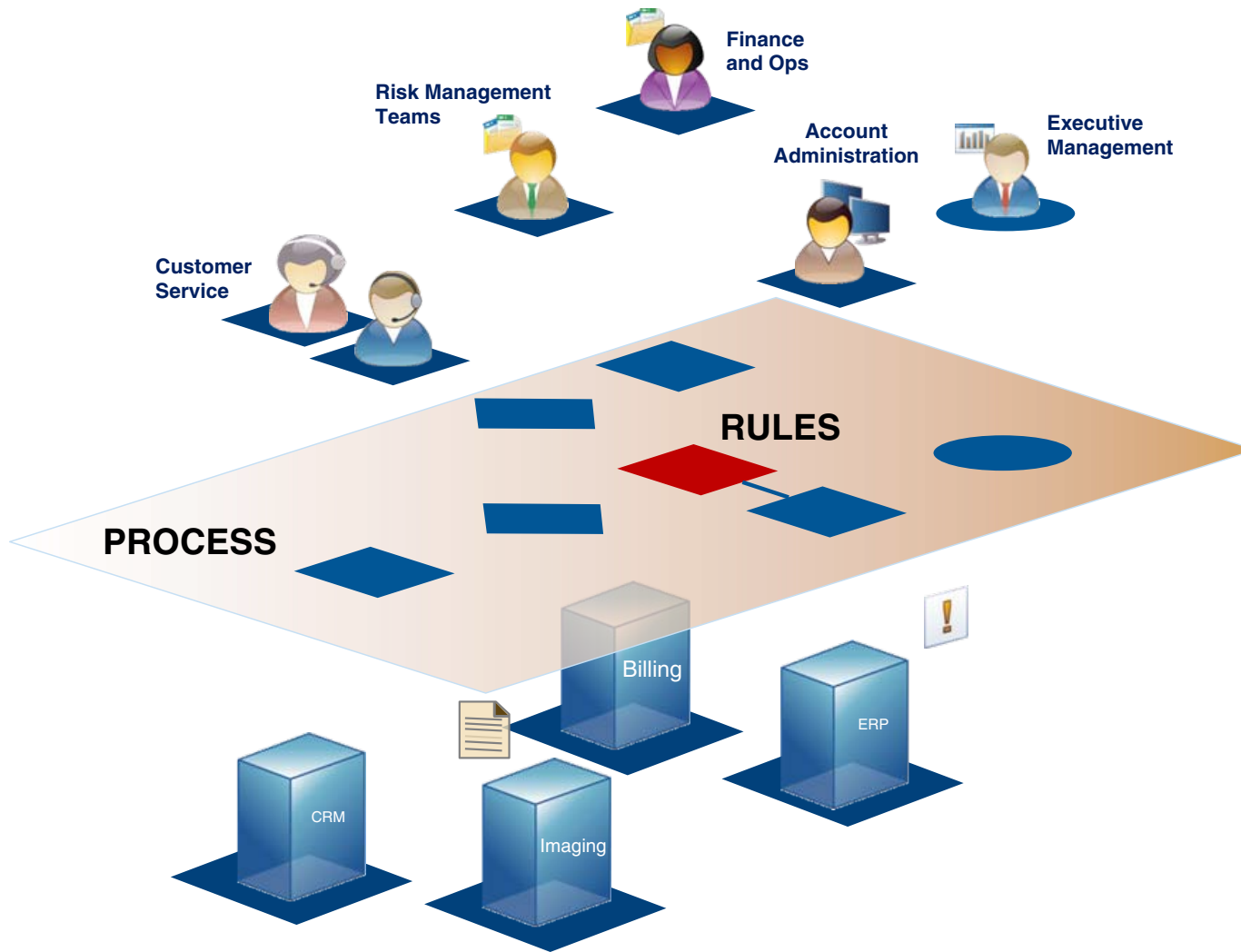




- 1 Informal Tasks and Communication (ex Paper or email)
- 2 Inefficient Working Environment Spans Systems
- 3 Inconsistent Prioritisation and Decision Making
- 4 Incomplete or Inaccurate Data Flow Between Systems
- 5 Lack of Control Over System and Business Events (Exceptions)
- 6 Poor Visibility Into Process Performance

Customer Problems:

- Cannot Grow Efficiently
- Poor Customer Satisfaction
- Limited Visibility



- 1 Automate workflow & decision making
- 2 Reduce errors and improve consistency
- 3 Standardize resolution across geographies
- 4 Leverage existing systems and data
- 5 Monitor for business events and initiate actions
- 6 Real-time visibility and process control

Customer Benefits:

Reduction in Manual Work, Errors

Faster, More Consistent Issue Resolution

Easier to Manage the Business



## Government Pains

- ⑩ Poor coordination between safety and security personnel

## Smarter Business Outcomes:

- ⑩ Real-time, coordinated deployment of police, fire and ambulatory emergency response teams and assets
- ⑩ Automated deliver of crucial information to the right teams



## Why smarter Processes?

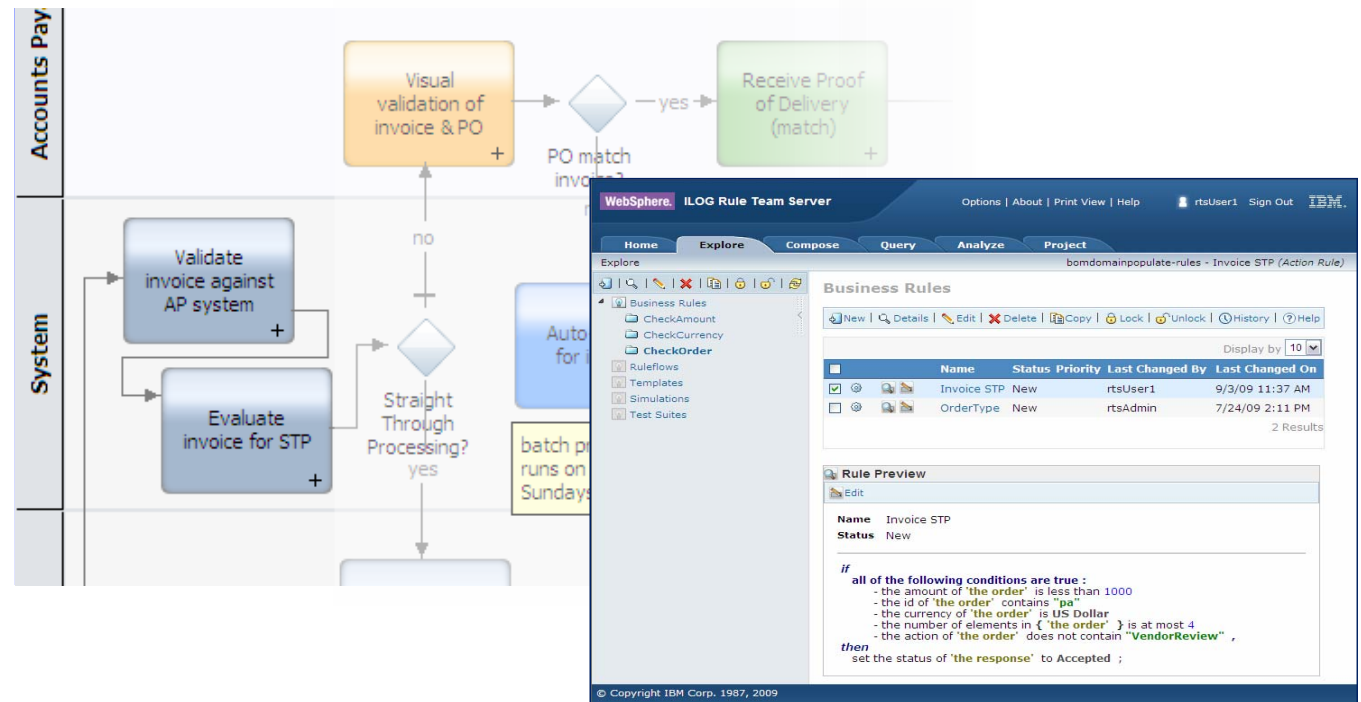
Automate processes across disparate IT systems and mobile devices in a secure environment with extremely high availability and reliability

## Process Management

- 10 Defines and orchestrates the end-to-end process
- 10 Combines automation with user interaction
- 10 Is fundamentally concerned with **operational efficiency** of the organisation

## Rules Management

- 10 Defines and executes specific decision points in processes and applications
- 10 Is focused on automating and improving decisions
- 10 Is fundamentally concerned with the **operational intelligence** of the organisation





## WebSphere BPM

*Comprehensive platform for rapid development and management of business process applications*

- **Simplicity & sophistication** – user experience allows business users to engage more fully in process design and improvement
- **Lower implementation cost, effort, and risk** – than other BPM alternatives
- Built-in **Performance Data Warehouse, Optimizer** – for automatic tracking, analysis, and optimization of process applications
- Designed to scale easily to multi-project, multi-version **enterprise BPM programs**

## WebSphere BRM

*Enterprise BRMS that supports management and sharing of strategic rules and business policies across applications*

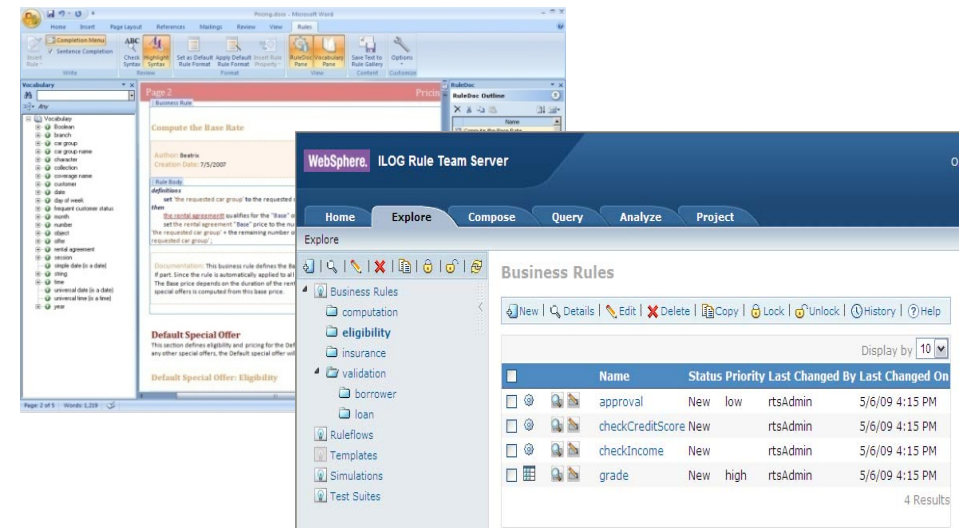
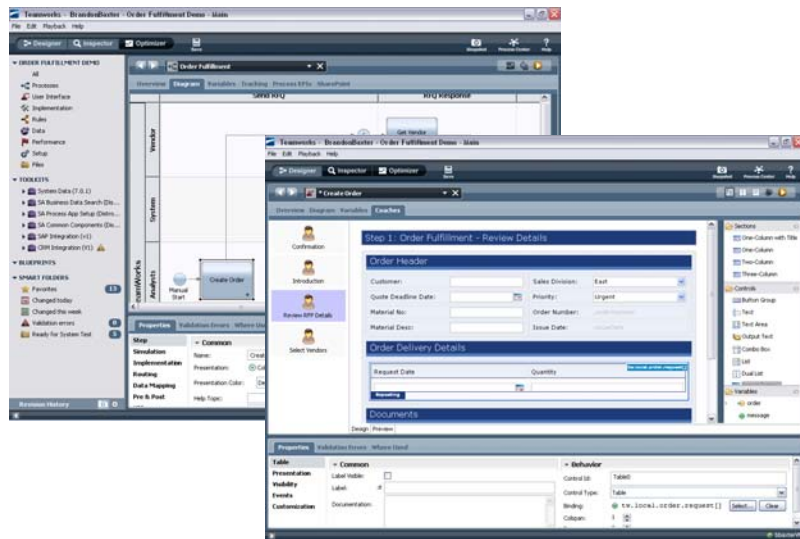
- **Powerful decision automation** – designed to scale, supporting evaluation of very large rule sets
- **Simplified rule maintenance** – can be done simply using web or Microsoft Office, independently of client applications
- Built-in **usage tracking and reporting** enables better management of complex rule sets

**IBMBPM + BRM together provide a  
scalable enterprise platform for smarter, simpler, faster process improvement.**

## Process Owners & Analysts



## Policy Managers & Analysts



## Processes using IBM BPM

- 100% graphical design
- “Picture is the process”
- Designed for business engagement / collaboration

## Rules using IBM BRM

- Business-friendly Office based rule editing
- Team Server for sharing & collaboration

## Smarter.

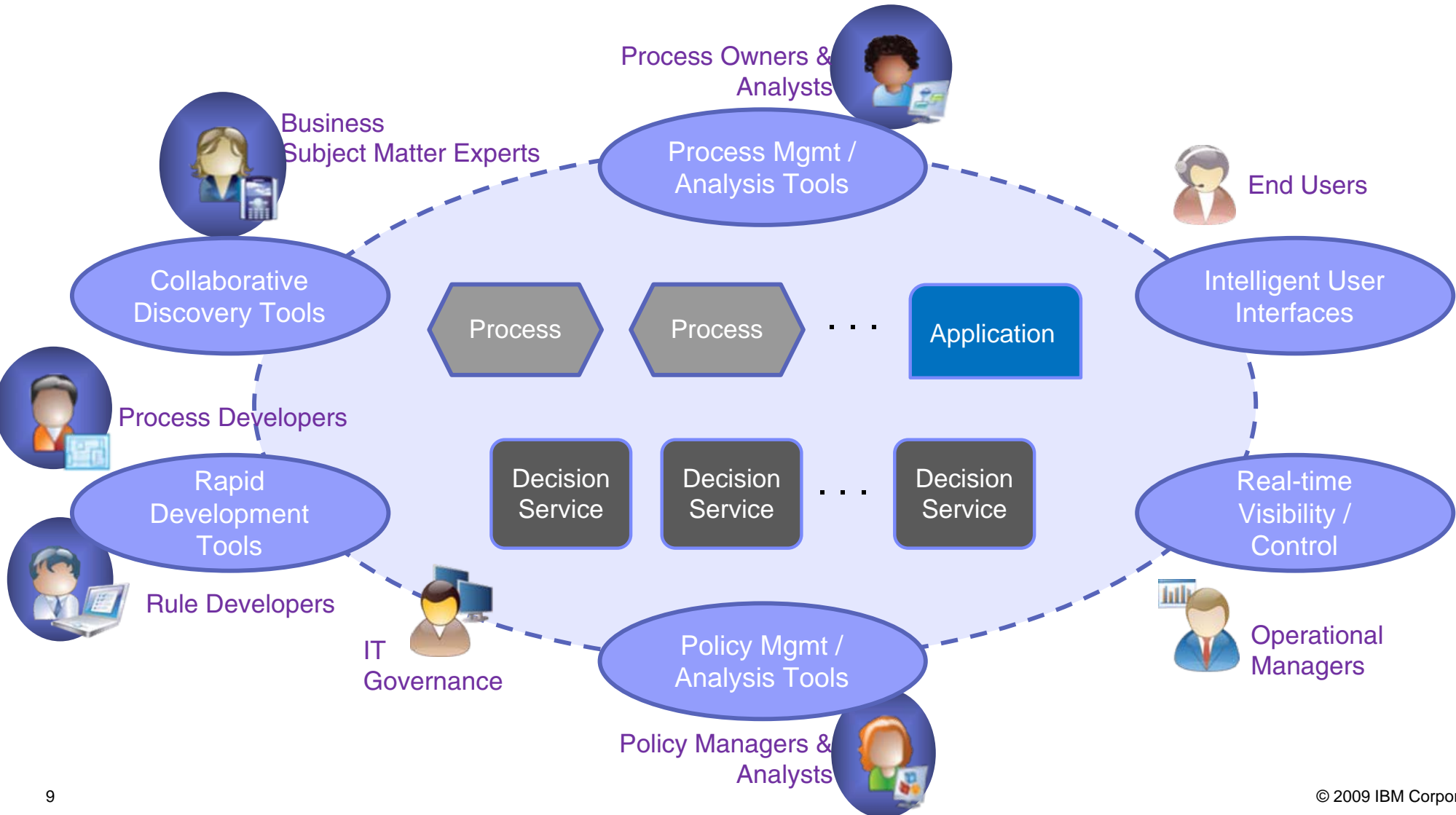
*Intelligent user interfaces and rules-driven decision automation.*

## Simpler.

*Graphical, business-friendly tools allow everyone to participate easily.*

## Faster.

*Rapid build, reuse, analysis, and change - with strong governance.*



## *Critical for a long-term process improvement program*

### ***Different roles can drive process and rules management***

- ⑩ Process improvement team: process owners, analysts, developers
- ⑩ Policy managers & analysts (e.g., pricing, eligibility, risk/compliance specialists)

### ***Processes and decision services can be deployed independently***

- ⑩ Implementation can be done in parallel or staged according to priorities

### ***Process and decision changes can have separate lifecycles and governance requirements***

- ⑩ Decision changes tend to be more frequent
- ⑩ Externalizing rules allows processes to remain more stable and streamlined

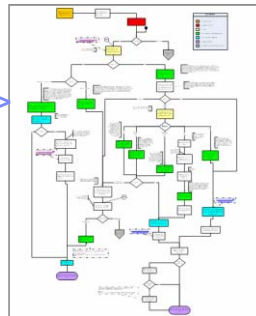
### ***Decision services can be shared and reused across processes and other applications***

- ⑩ Change once, apply everywhere
- ⑩ Ensure decision consistency when required by policies or regulations

## Situation

- ⑩ High turn-over & high volume call center
  - ☞ 15M calls/month handled by 35,000 CSRs
  - ☞ Average CSR employment is 6 months
  - ☞ Average training time per CSR is 1 week
  - ☞ CSR must work across 15 different systems
- ⑩ High error rate, high level of frustration
  - ☞ 3M of those calls take up 80% of the total time due to their complexity
  - ☞ 115 complex inquiry guides

Bill Reprint Inquiry Guide >



...and we have not even talked about stores!  
(another 30,000 reps)

## Process Management

- ⑩ Improve operational efficiency & accuracy
- ⑩ Simplify complex human-centric processes
  - ☞ High error rate
  - ☞ Many different touch points / user interfaces
  - ☞ Low amount of self-service available
  - ☞ Large manuals
- ⑩ Allow business to take control of process definition & maintenance

## Rules Management

- ⑩ Centralize & share operational intelligence
- ⑩ Automate decisions, simple and complex
- ⑩ Allow business users to author, manage & test their business rules
- ⑩ Enforce strict rule governance, while allowing business & IT collaboration
- ⑩ Allow for rule reuse across inquiry guides

## Projected Benefits– Greater than \$210M cost reduction over 3 years!

Customer Satisfaction



- ⑩ Improve first call resolution
- ⑩ Improve Agent effectiveness
- ⑩ Reduce number of transfers
- ⑩ Reduce call escalations

Operational



- ⑩ Future flexibility – rules and processes changed in hours!
- ⑩ Ability to deploy for self-service (web, mobile and IVR)

Cost Savings



- ⑩ Call center cost reduction - **Yearly call reduction benefits of over \$70M**
- ⑩ Ongoing cost reduction – reduced Business & IT maintenance

## Worldwide Customers Snapshot

- ⑩ VWA (Victoria)
  - 📄 Claims
- NSW Police
  - Case Correlation
- Junta de Castilla y León (Spain)
  - Social Benefits Eligibility
- Department of Work and Pensions (UK)
  - Pension Eligibility & Calculation
- Welsh Assembly Government (UK)
  - Subsidy Eligibility and Calculations
- Caisse Nationale des Industries Electriques et Gazières (France)
  - Pension Calculation & Payments
  - Pension Calculation
- ⑩ Caisse Nationale de l'Assurance Maladie (France)
  - 🌀 Social Benefits and Tax Calculations
- ⑩ Statens Pensjonskasse (Norway)
  - 🌀 Pension Calculation
- ⑩ Korea Ministry of Finance (Korea)
  - 🌀 Fraud & Compliance Management
- ⑩ SAT Tax Mexico (Mexico)
  - 🌀 Tax Management
- ⑩ Companies House (UK)
  - 🌀 Data Validation

## US - State/Local Customers Snapshot

- ⑩ City of Chicago
  - ☞ Health Event Surveillance System (CHESS)
- ⑩ District of Columbia \*
  - ☞ Human Services Modernization Program
    - ⑩ Interview for Benefits: Online benefits determination
- ⑩ New York City Housing Authority \*
  - ☞ Property / Tenant Management
- ⑩ State of California
  - ☞ Statewide Automated Welfare System Consortium (C-IV)
  - ☞ Public Employees Retirement System (CalPERS)
- ⑩ State of Colorado
  - ☞ State Children Healthcare Insurance Program
- ⑩ State of Kentucky \*
  - ☞ Public Employee Retirement Benefits Administration
- ⑩ State of Montana
  - ☞ Medicaid eligibility modernization
- ⑩ State of Nevada \*
  - ☞ Welfare Eligibility, Claims Management
- ⑩ State of Pennsylvania \*
  - ☞ Department of Motor Vehicles: Registration Compliance
- ⑩ State of Virginia
  - ☞ State Children Health Insurance Program (SCHIP)

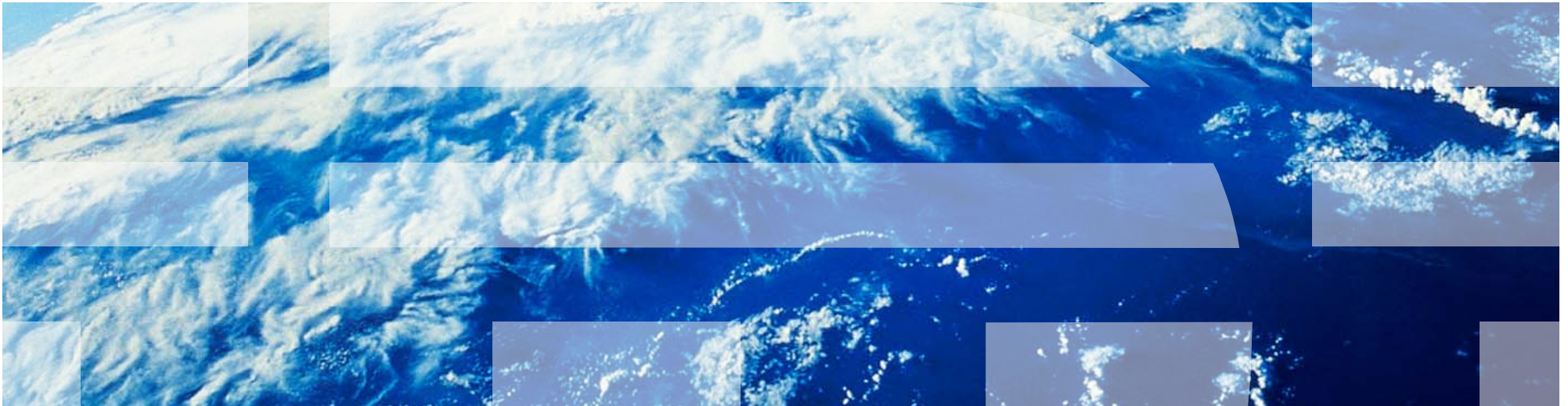
\* Joint deal with IBM GBS





# Usage of IBM BPM and BRM

Shaun Ryan – *IT Program Director TAC WorkSafe Victoria*

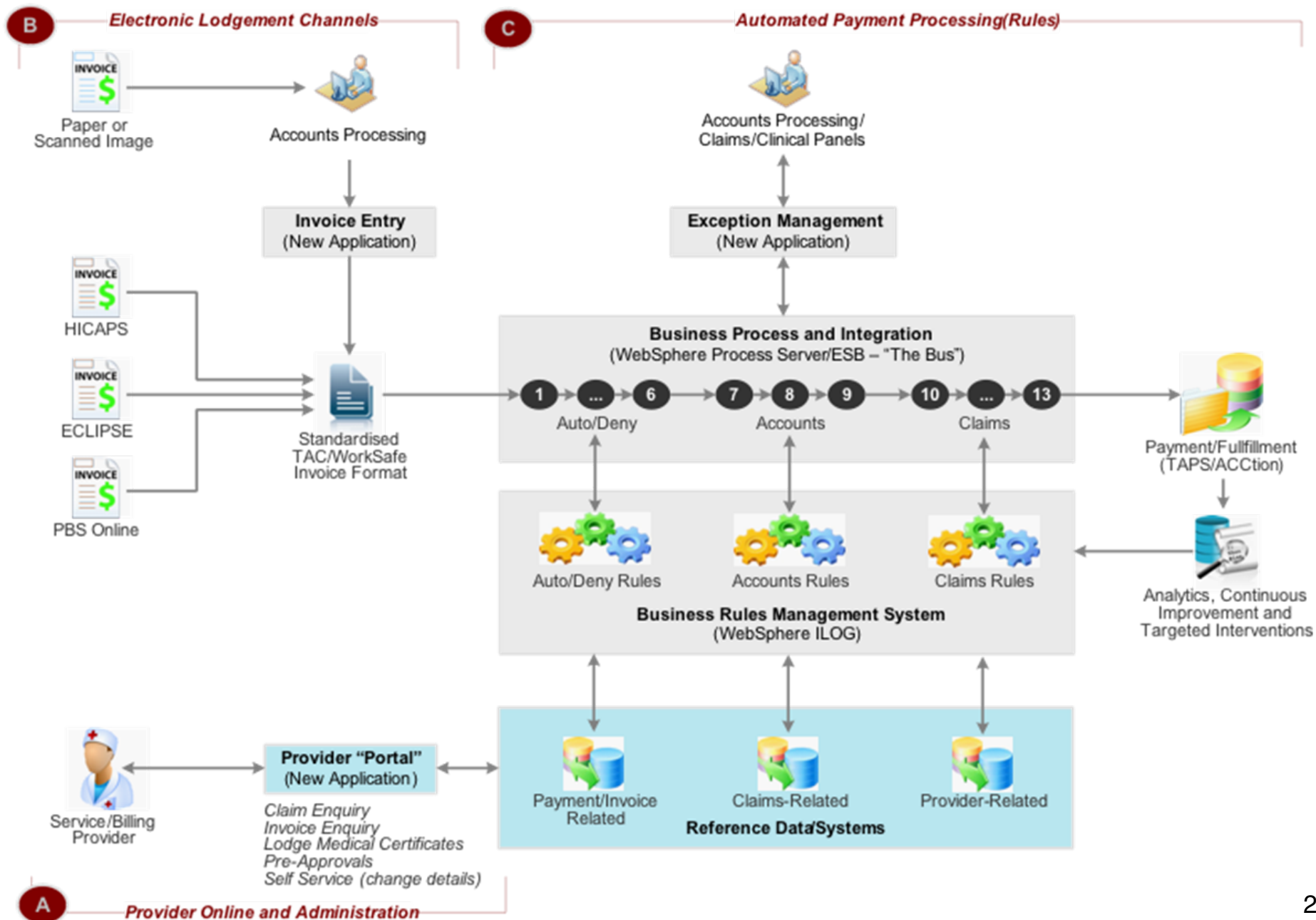


# Agenda

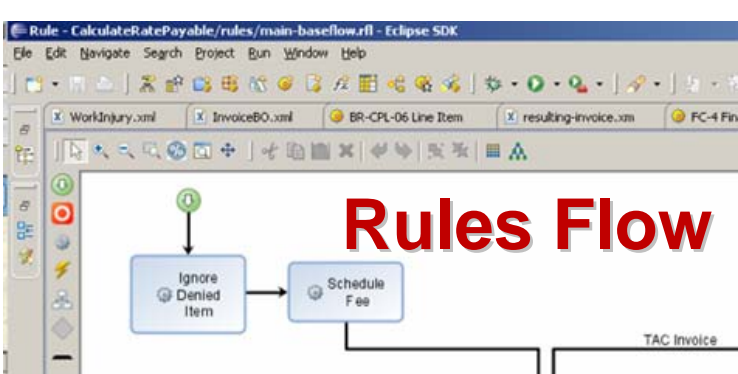
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- ⑩ **Introduction to the TAC and WorkSafe**
- ⑩ **TAC and WorkSafe IT Strategy**
- ⑩ **The Treatment Payments and Connectivity (TPC) program – “Tempus”**
  - ⑩ Strategic and IT drivers
    - ⑩ Business efficiency, flexibility, agility, re-use, speed of change, automation, transformation
  - ⑩ External factors (catalyst for action)
    - ⑩ Reducing fraud, auditability
  - ⑩ Architecture approach to leverage BPM and BRMS
  - ⑩ Proof of technology and business-led engagement
  - ⑩ Change management – restoring the balance between the business and IT
    - ⑩ Managing expectations
  - ⑩ Building organisation capability and governance (not just rules), increasing maturity
  - ⑩ Key benefits: rules flow, rules authoring, rules decision tables
- ⑩ **Future use of ILOG BRMS within TAC and WorkSafe**
  - ⑩ Online services
  - ⑩ Premium underwriting
  - ⑩ Claims risk assessment and triage

# Tempus Conceptual Solution



# ILOG Rules Flow, Rules, Decision Tables



**Rules Flow**

```

Business Rule: possibleDuplicateCheckWithInInvoice

General Information
Name: possibleDuplicateCheckWithInInvoice
Category Filter: Categories: Any, Edit

Documentation

Code

definitions
set 'otherItemsInvoice' to an invoice line item in the invoice line items of 'the current Invoice' where
the invoice line number of currentLineItem does not equal the invoice line number of this invoice line item ;

if all of the following conditions are true :
- the service start date of currentLineItem is the service start date of otherItemsInvoice
- service line item number of currentLineItem is
service line item number of otherItemsInvoice
- it is not true that (the status of currentLineItem is 'Denied' or the status of currentLineItem is 'Credited' )

then
print ' Matched Current Item Num = ' + service line item number of currentLineItem;
print ' With Other Item Num added dd02 = ' + service line item number of otherItemsInvoice ;

add invoice line item exception with
severity: 'Review',
invoice id: the invoice reference
system: 'TPC',
line item no: the invoice line item number of currentLineItem
and reason code: 'DD02' into
  
```

**Rules**

Decision Table

Invoice Item	Exclusions	min	max	after min	after max	Check A
1		30,001	30,216	1	14	Accepted, Ir
2		30,224	32,218	1	14	Accepted, Ir
3		32,504	34,518	1	14	Accepted, Ir
4		34,527	38,393	1	14	Accepted, Ir
5		38,415	39,012	1	14	Accepted, Ir
6		39,018	39,018	1	14	Accepted, Ir
7		39,106	39,112	1	14	Accepted, Ir
8		39,124	39,126	1	14	Accepted, Ir
9		39,128	39,128	1	14	Accepted, Ir
10		39,131	39,131	1	14	Accepted, Ir
11	105	39,134	39,135	1	14	Accepted, Ir
12		39,137	39,323	1	14	Accepted, Ir
13		39,330	41,629	1	14	Accepted, Ir
14		41,629	41,629	1	14	Accepted, Ir
15		41,659	42,615	1	14	Accepted, Ir
16		42,615	42,615	1	14	Accepted, Ir
17		42,647	42,647	1	14	Accepted, Ir
18		42,651	46,528	1	14	Accepted, Ir
19		46,528	47,915	1	14	Accepted, Ir
20		47,915	50,000	1	14	Accepted, Ir
21		50,000	50,000	1	14	Accepted, Ir
22		50,000	50,000	1	14	Accepted, Ir
23		50,000	50,000	1	14	Accepted, Ir
24		50,000	50,000	1	14	Accepted, Ir
25		50,000	50,000	1	14	Accepted, Ir
26		50,000	50,000	1	14	Accepted, Ir
27		50,000	50,000	1	14	Accepted, Ir
28		50,000	50,000	1	14	Accepted, Ir
29		50,000	50,000	1	14	Accepted, Ir
30		50,000	50,000	1	14	Accepted, Ir
31	108	50,000	50,000	1	14	Accepted, Ir
32		50,000	50,000	1	14	Accepted, Ir
33		50,000	50,000	1	14	Accepted, Ir
34		50,000	50,000	1	14	Accepted, Ir
35		50,000	50,000	1	14	Accepted, Ir
36		50,000	50,000	1	14	Accepted, Ir

TAC Item Fee System LIST FEE DETAILS

ITEM TYPE*	ITEM NUMBER:	000023	Surgery consultation		
TYPE*	EFFECTIVE FROM DATE	EFFECTIVE TO DATE	FEE AMOUNT	FEE UNIT*	DELETE (Y/N)
TAC	01 11 09	31 10 09	47.85		
TAC	01 11 08	31 10 08	46.35		
TAC	01 11 07	31 10 08	45.00		
TAC	01 11 06	31 10 07	43.40		
TAC	01 11 05	31 10 06	41.60		
TAC	01 11 04	31 10 05	39.70		
TAC	01 11 03	31 10 04	38.65		
TAC	01 11 02	31 10 03	36.95		
TAC	01 11 01	31 10 02	35.30		
TAC	01 11 00	31 10 01	33.75		

```

BROWSE APNDV5.TACX.COBOL (TAPSCM22) Line 00002005 Col 001 080
Command ==> Scroll ==> CSR

*-----*
* DEFINITE DUPLICATE SURGERY SERVICES:
* 1) SAME SERVICE PROVIDER, DIFFERENT ACCOUNTS, SAME ITEM NUMBER,
* SAME AMOUNT BILLED AND THE SERVICE MATCHED TOO IS EITHER
* AUTHORISED OR PAID
* POSSIBLE DUPLICATE SURGERY SERVICES:
* 1) SAME AS DEFINITE CRITERIA BUT SERVICE STILL OUTSTANDING
* 2) SAME AS DEFINITE CRITERIA BUT AMOUNT BILLED DIFFERENT
*-----*

IF WS-SERVICE-TYPE = 'SU' AND
WS-ACCOUNT-NUMBER NOT = ASE-ACCOUNT-NUMBER AND
WS-SERVICE-PROV-ID = ASE-PROVIDER-ID-NUMBER AND
WS-PAYEE-TYPE = ASE-PAYEE-TYPE AND
WS-FROM-DATE = ASE-EFFECTIVE-FROM-DATE AND
(WWS-INTERNAL-ITEM = WS-ITEM-TAC-NUMBER
OR LK-CM65-EQUIV-ITEM-NUMBER = AME-BILLED-ITEM-NUMBER)

F1=Help F2=Split F3=Exit F5=Rfind F7=Up F8=Down F9=Swap
F10=Left F11=Right F12=Cancel
  
```

# Invoice Entry/Exception Management

WorkSafe VICTORIA

Invoice search Jane Smith Insurer Thursday 22nd April 2010 10.00am WorkSafe

\* Denotes mandatory field

\*Claim number  
08 08 053235 Go

Claim details

Injured person Ms Elissa Wilks Date of birth 05 06 74 Address 9 Banool Kilmore Vic 376  
Injury type Dislocated shoulder Date of injury 16 01 08

\*Payee type Provider \*Provider number 0640430F Go

Payee's details

Service provider Prof Leo T Donnan 64 Chapman Street North Melbourne VIC 3051

Invoice details

\*Invoice date 22 06 09 Invoice number 21028 \*Invoice amount \$315.65  
Provider number 009295FJ Service provider Prof Leo T Donnan 64 Chapman Street North Melbourne VIC 3051 Service location Consulting

\*Payment type 20 Payment type description Medical doctor Referr 190531

WorkSafe VICTORIA

Brigit Harlow Insurer Thursday 8th June 2010 12.21pm WorkSafe agent

Claim details

Claim number	Injury type	Body location	Date of birth	Address	Status
06/67828	Traumatic joint, ligament injury not elsewhere onee suscipit purus massa, sed elementu monec susci...	Shoulder Chest Multiple locations	19 01 08	9 Banool Ave Kilmore VIC 3764	Open

Injured person	Employer	Date of injury	Owner
Jenny Harriss	Jim's Earthworks	16 01 08	Jenna Rimkin

Invoice details

Invoice date	Invoice amount	Payment type	Payment type description	Date received
02 06 10	47.85	47.85	Medical doctor	10 04 10

Payee type	Provider number	Service provider	Date entered	Service location
Provider	02 06 10	Prof Leo T Donnan 64 HCapman Street North Melbourne VIC 3051	02 04 10	Consulting

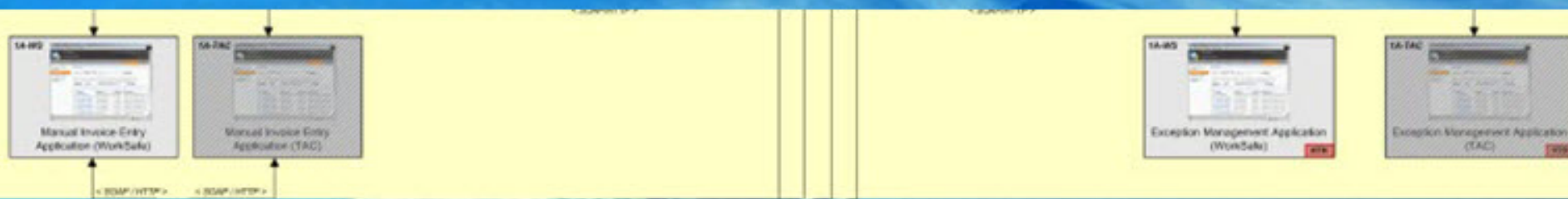
Notes

Lorem ipsum dolor sit amet, consectetur adipiscing elit. In a augue urna, quis lobortis urna. Cras adipiscing tortor sit amet libero vestibulum viverra. Etiam accumsan orci ut sem volutpat posuere. Aliquam in neque et felis aliquet aliquam bibend.

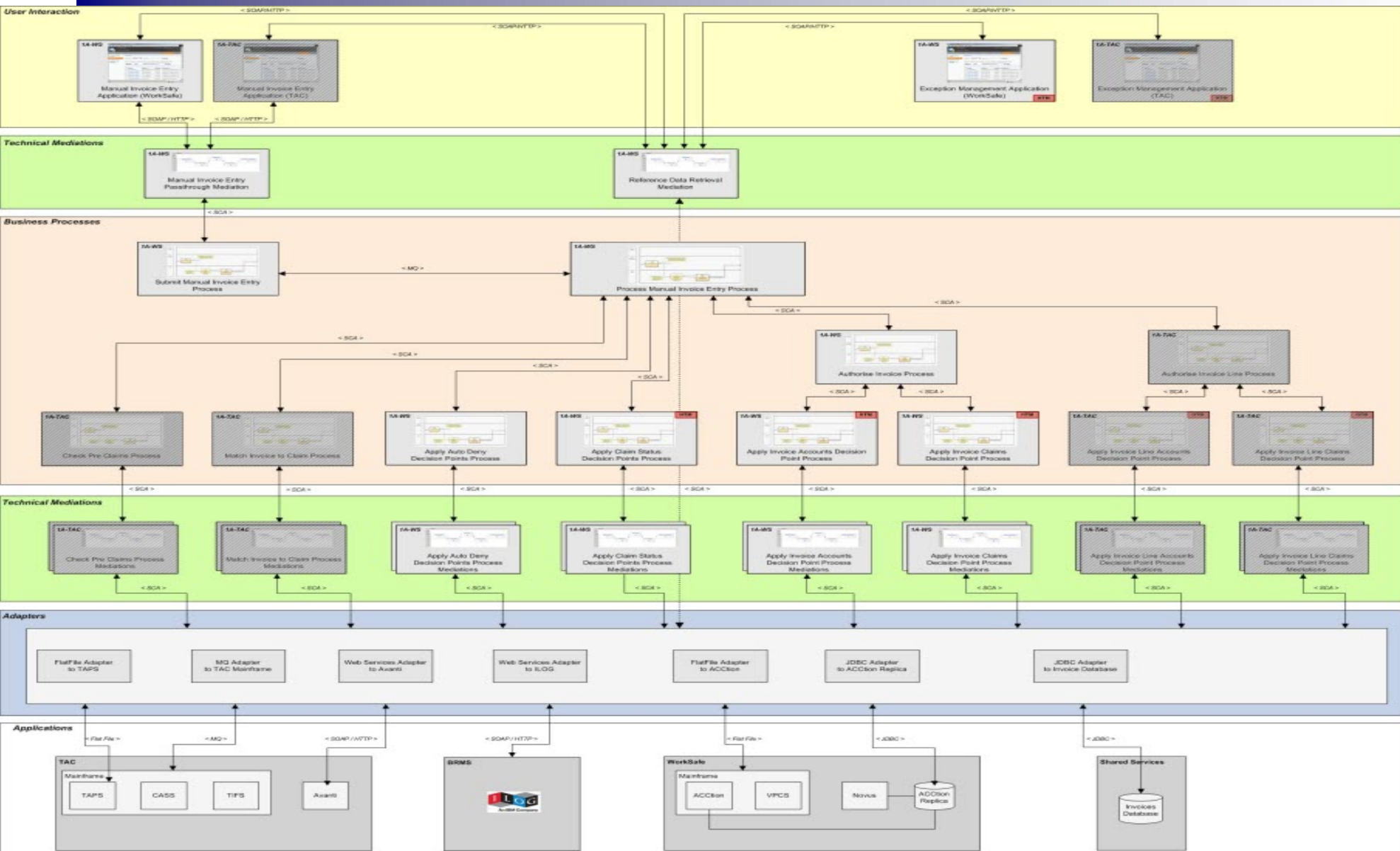
Service limit details

Payment type	Paid to	Maximum	Reserve	Exclusion	From	To	Exclusion	Date last	Status

# Integration Services – Supporting Rules



# Integration Services – Supporting Rules



“Greater efficiency and reduced costs”



End-to-End  
Process  
Automation

“Real-time visibility for smarter decisions and actions”



Transform  
Insight Into  
Action

“Faster and easier response to change”



Adapt and  
Respond  
Dynamically



धन्यवाद

Hindi

多謝

Traditional Chinese

Grazie

Italian

ขอบคุณ

Thai

Gracia

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

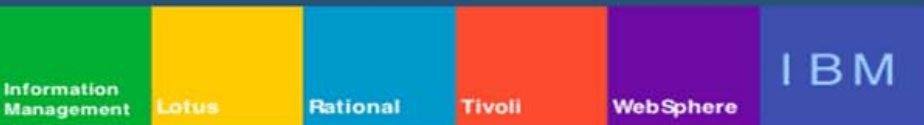
감사합니다



**Smarter Solutions for a Smarter Government.**

**Q and A**

**IBM Software Industry Solutions**



## Myths About Process & Rules Management

# Myth #1:

Every process improvement problem needs a combined BPMS + BRMS solution.

**False.**

*Sometimes you need a BPMS. Sometimes a BRMS.  
Sometimes both. Most likely, both over time.*

**BPM?**

*Travel request  
Leave application*

**BRMS?**

*Claim processing  
Product pricing*

## Myths About Process & Rules Management

### Myth #2:

“All-in-one” / Unified process & rules management is naturally less costly.

False.

*If tooling is difficult to use, cost of delivery is still high.  
And deploying incremental changes may be expensive.*

## Myths About Process & Rules Management

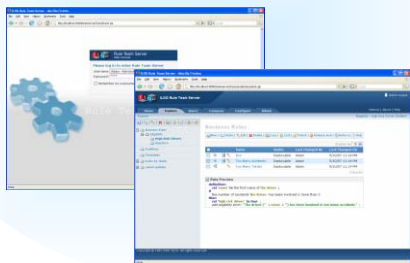
### Myth #3:

Independent process & rules management is naturally more complex.

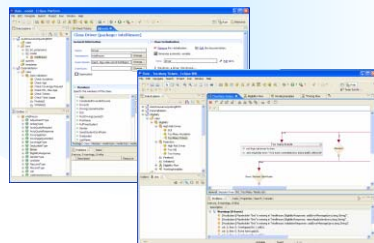
False.

*Ease-of-use, functionality, flexibility, and scalability are keys to simplicity.*

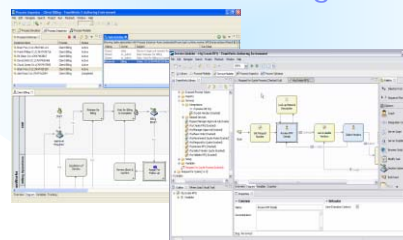
WebSphere ILOG Rule Team Server



WebSphere ILOG Rule Studio



WebSphere Lombardi Edition Authoring



Portal / ScoreBoards



Coaches

Lombardi for Office

WebSphere ILOG Rule Team Server

WebSphere ILOG Rule Studio

WebSphere ILOG Rule Execution Server

Transparent Decision Services

WebSphere Lombardi Edition Process Portal

WLE Authoring Environment

WLE Process

WLE Performance Data Warehouse

Integration components / services

Enterprise Rule Repository

Process Repository

Performance Repository

WLE Process Optimizer

