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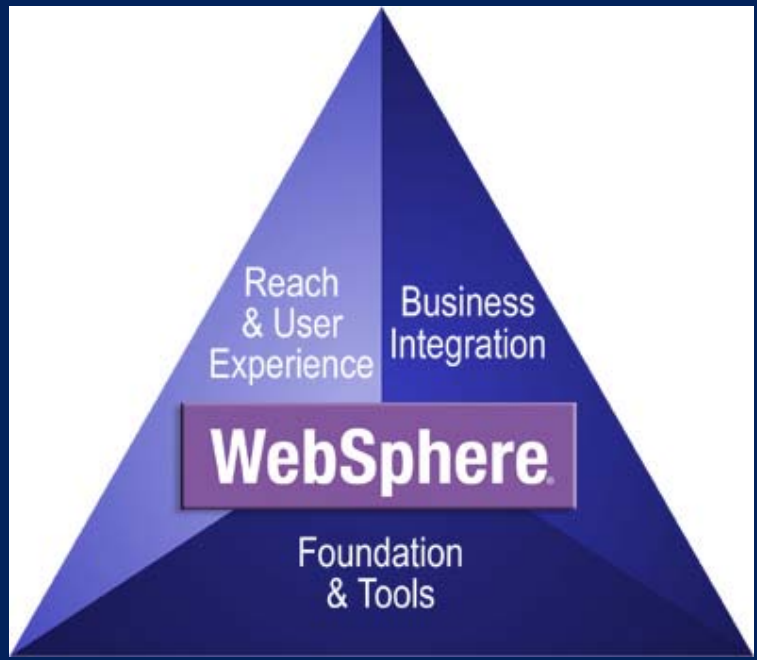
e business software

Financial Services Business Integration



John Adcock, Manager Financial Services, WebSphere Business Integration

tel: 07710 317 168

Imperatives for BANKS

- Cost reduction
- Revenue growth
- Risk reduction
- Customer focus
- Customer retention
- Optimise ROI from mergers and acquisitions with scale based cost savings and rapid business unit integration
- Wealth Management

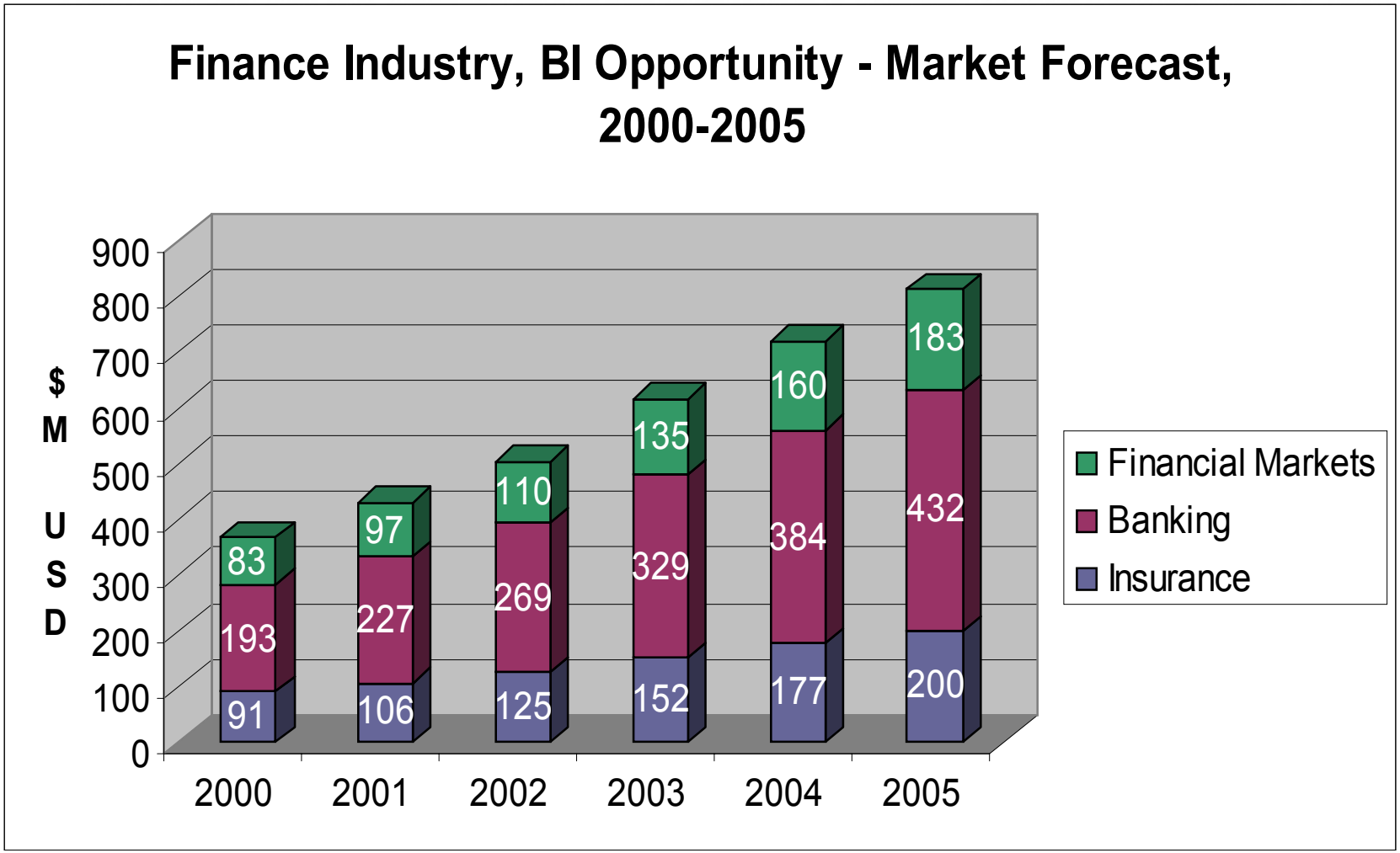
Imperatives for FINANCIAL MARKETS

- Margin
- Speed to market
- Faster support of new customers
- Strategy execution
- Overheads reduction
- Risk reduction
- Customer retention

Imperatives for INSURERS

- Survival
- Increase size and performance – at the same time
- Reduce Costs
  - Policy admin & claims management
- Customer Management
  - Understand key buying factors
  - Increase retention of profitable Customers
- Optimise ROI from mergers and acquisitions with scale based cost savings and rapid business unit integration
- Create value

The BI opportunity is large and growing rapidly



Source: GMV2H01 (for Total Business Integration Opportunity by Year); Detailed segment figures are derived

Straight-Through Processing (STP) Is a Top Issue

Top 2002 Strategic IT Initiatives In Wholesale Financial Services		
Rank		**Initiative**
1		Credit Risk
2		Enterprise Business Process Management Integration
3		Return on IT Investments
4		Straight-through processing (STP)
5		Regulatory Changes
6		Knowledge Management
7		Portal solutions and self-service
8		Security
9		Outsourcing and packaged applications
10		Financial institutions as IT solution providers

Source: Meridian Research, 2002

Retail Brokerage 2002 Software Spending Priorities	
Rank	**Project**
1	Back Office, Correspondent Clearing, and Custody
2	Core Processing
3	Trading Tools, Analytics, and Broker Workstations
4	Content, Decision Support, Advice, and Planning
5	Other
6	Delivery Channels
7	CRM

Source: Tower Group, 2002

Asset Management Top IT Projects for 2002	
Rank	**Project Description**
1	Automated link between front and back office applications (Internal STP)
2	STP (External)
3	CRM
4	Performance measurement
5	Client reporting
6	New accounting system
7	Portfolio management system
8	Windows XP workstations
9	E-business
10	Improved front office system
11	Disaster recovery plan
12	Order management system

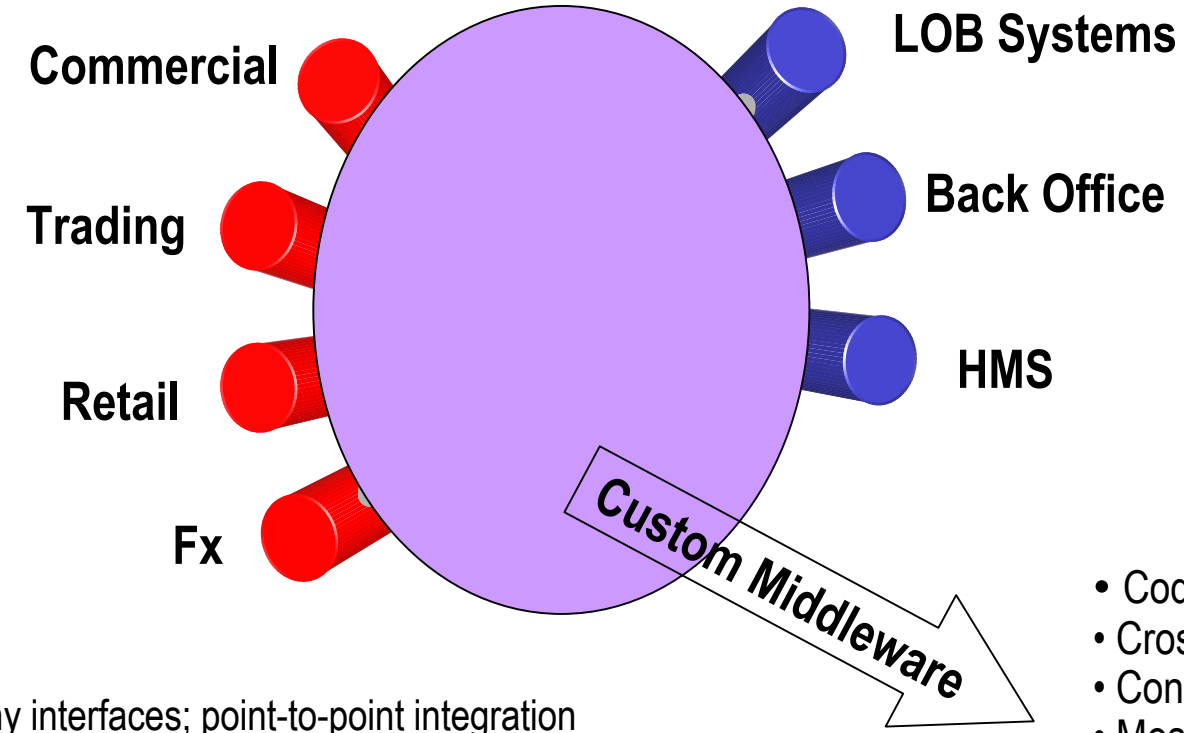
Source: Cap-Gemini-Ernst & Young 2002

Industry analysts agree that achieving Straight Through Processing demands focus on business processeses

	Instl. B/D	Retail B/D	Asset Manager
1. Modify internal processes to ensure compliance with compressed settlement deadlines	$1510M	$440M	$790M
2. Identify and comply with accelerated deadlines for submission of trades to the clearing and settlement systems	$105M	$75M	
3. Amend DTCC's trade guarantee process that guarantee is provided on trade			
4. Report trades to clearing corporation in locked-in format and revise clearing corporation output			
5. Rewrite current real-time CNS to enhance speed and efficiency			
6. Reduce reliance on checks and use alternative means of payment		$385M	
7. Immobilize shares prior to conducting transactions		$155M	
8. Revise the prospectus rules and procedures for IPOs	$80M	$160M	
9. Develop an industry matching utilities and linkages for all asset classes	$90M		$195M
10. Standardize reference data and to standardized industry protocols	$1580M		$675M
TOTALS	**$3.4B**	**$1.2B**	**$1.7B**

Source: SIA Business Case

Problem Statement



- Many interfaces; point-to-point integration
- Rules embedded in Applications at each end of each flow; data mapped directly from one application to another
- Local information, huge databases, no global view
- Costly, unscalable, difficult to implement and maintain

- Codes/decodes
- Cross-reference
- Connection pooling
- Message comp/decomp
- Micro/macro workflows
- Data integrity
- Failover
- Transaction Integrity
- Timeouts and compensation

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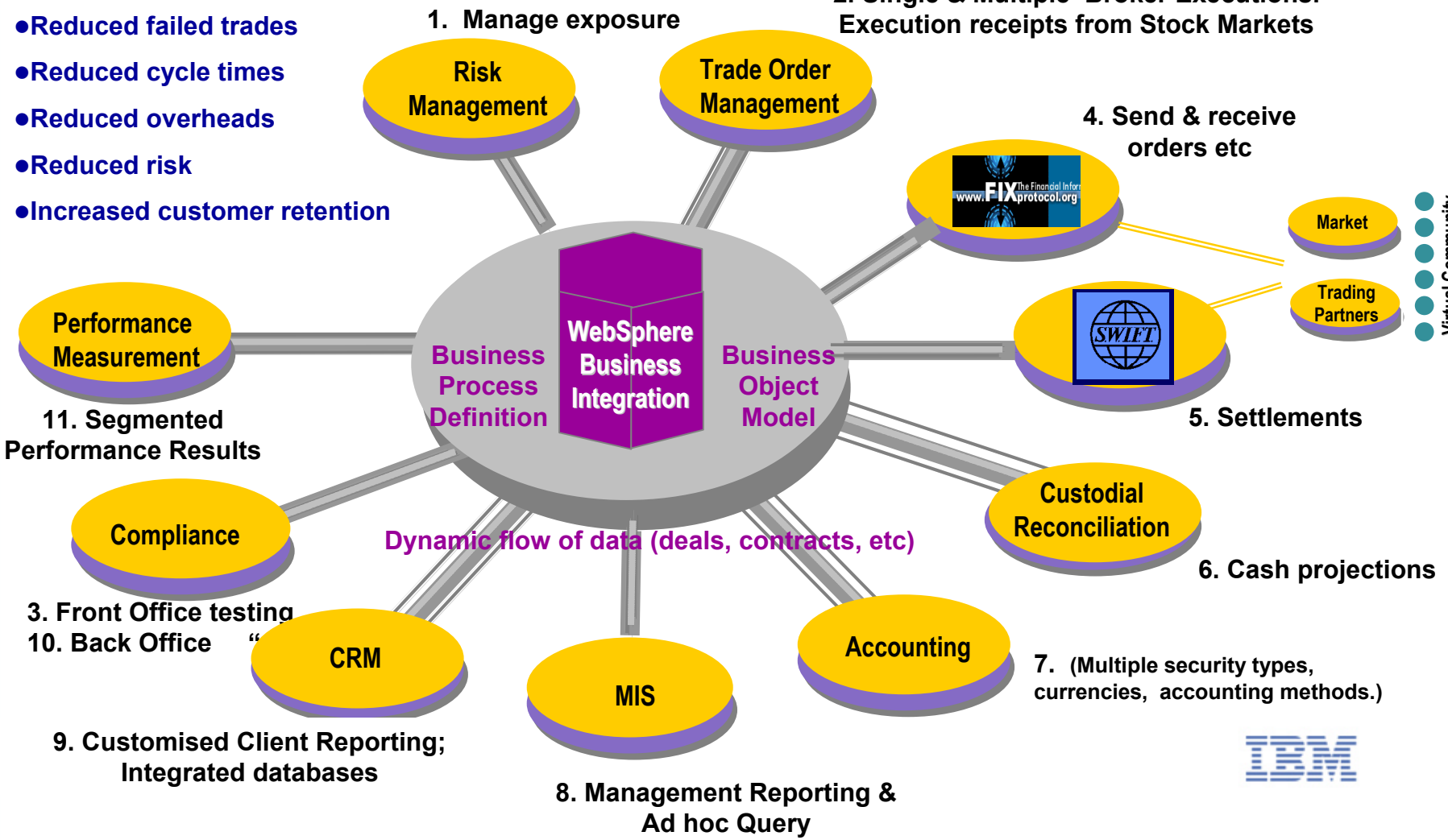
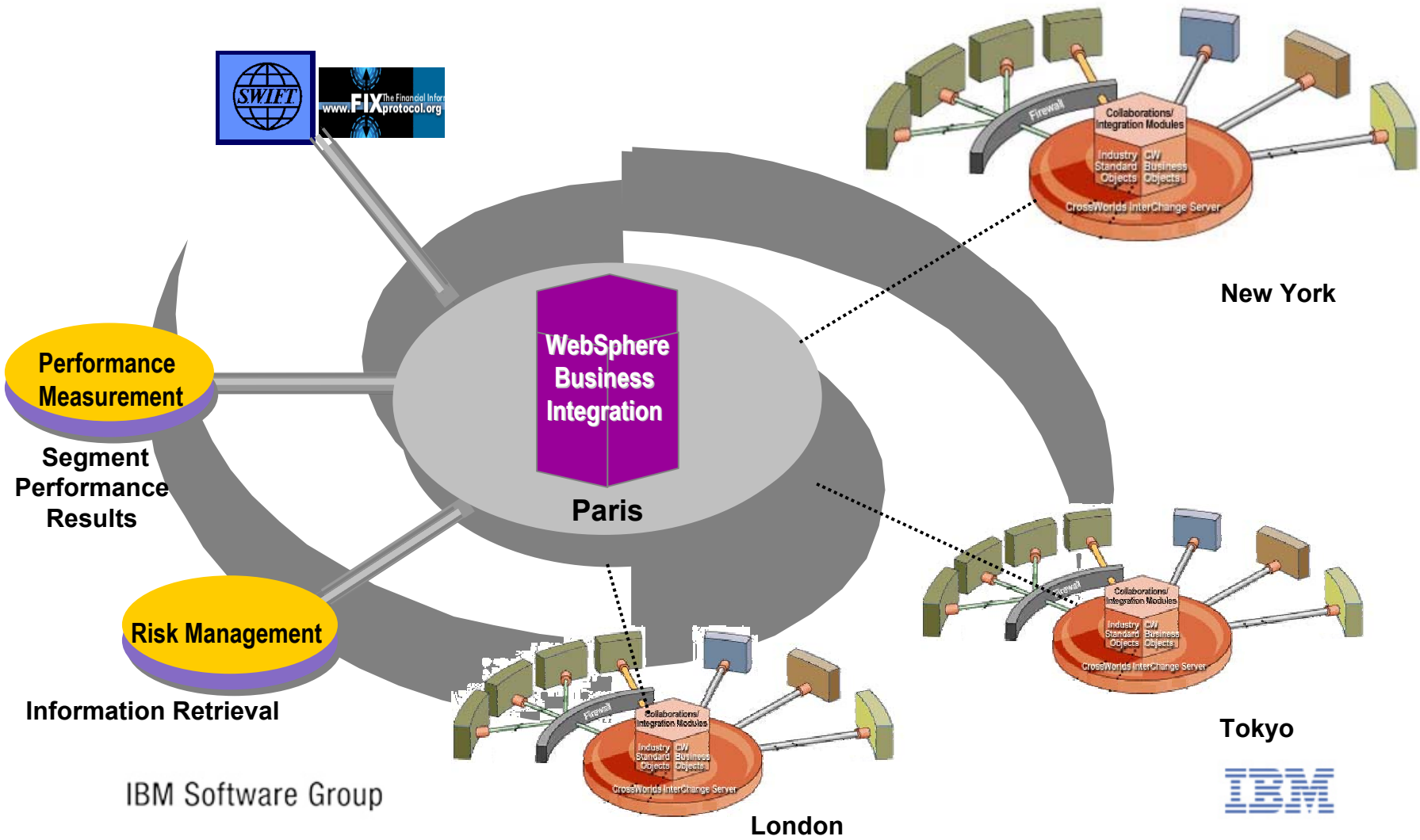
Capital Markets: Unify Front, Middle and Back Office Processes

- Rapid ROI
- Faster to market
- Faster support of new customers
- Improved strategy execution
- Reduced failed trades
- Reduced cycle times
- Reduced overheads
- Reduced risk
- Increased customer retention



Global Performance Improvement



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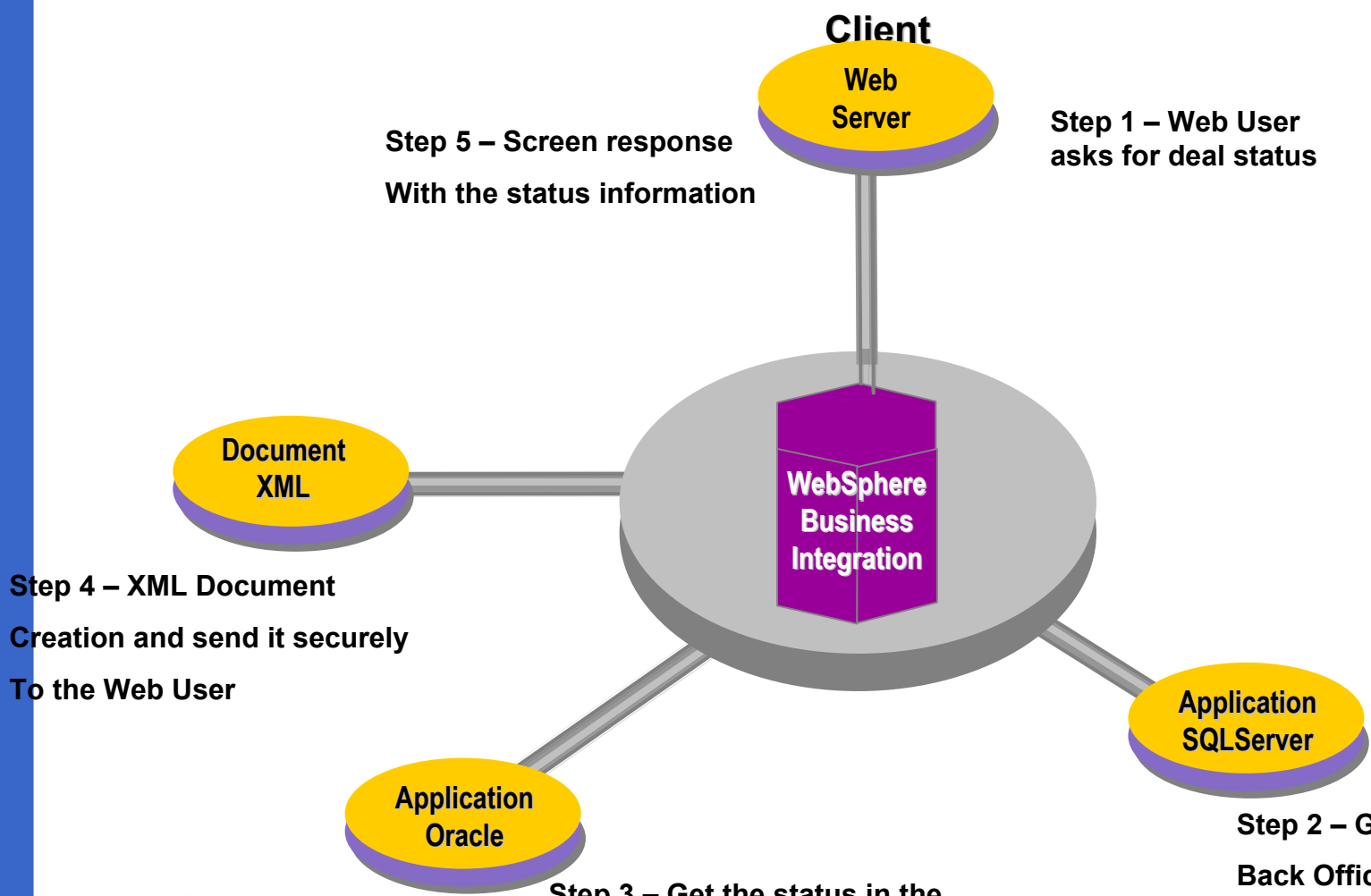
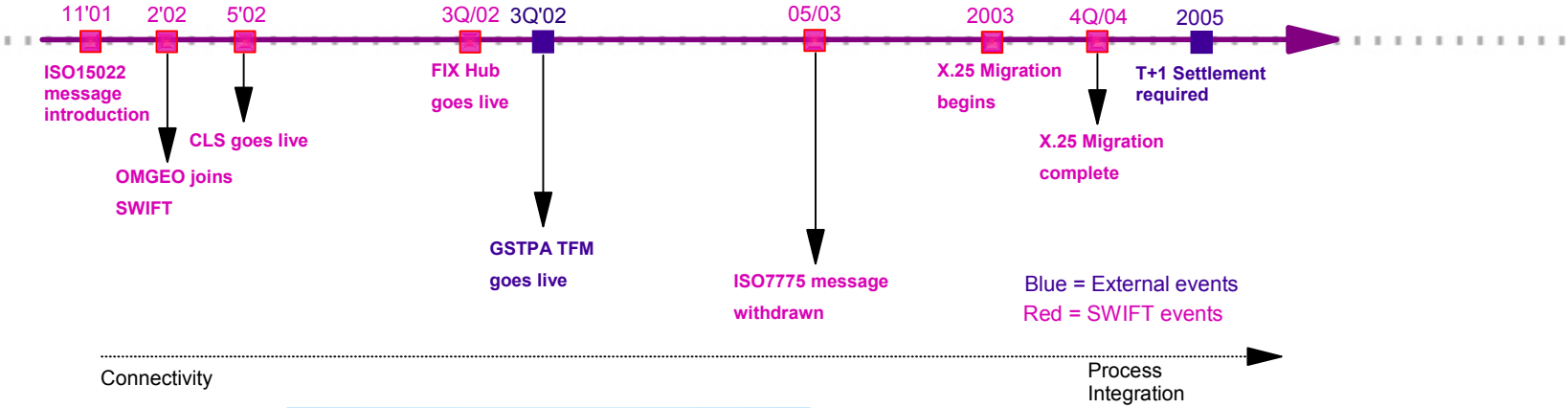
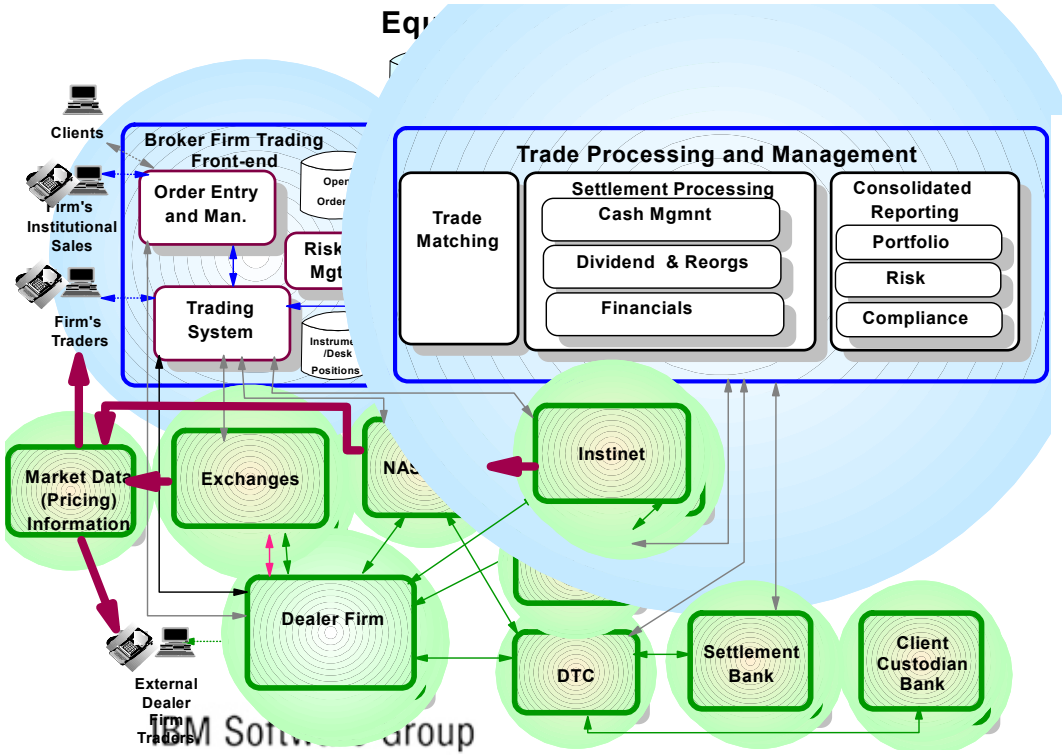
Deal Status Inquiry



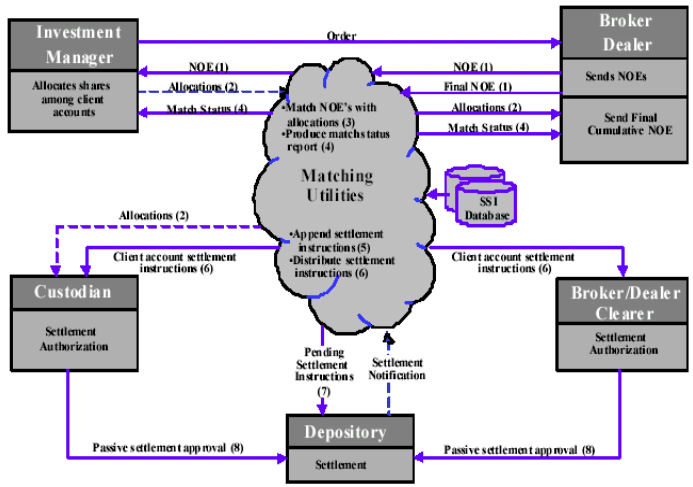
Straight Through Processing: $19B industry challenge





GSTPA & OMGEO Virtual Matching Utilities (VMUs) - "New" Elements In The Trade Settlement Process

Proposed institutional transaction processing model - SIA T+1



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WBI SWIFT Adapter: critical mapping features

- Provides default mappings between ISO 7775 & ISO15022
- User Interface displaying source and target messages
  - User able to modify and extend rules within the documented range of mapping functionality
- Driven by mapping logic stored using BO definitions
- Flexibility to capture customer specific usages
- Pre-built Maps

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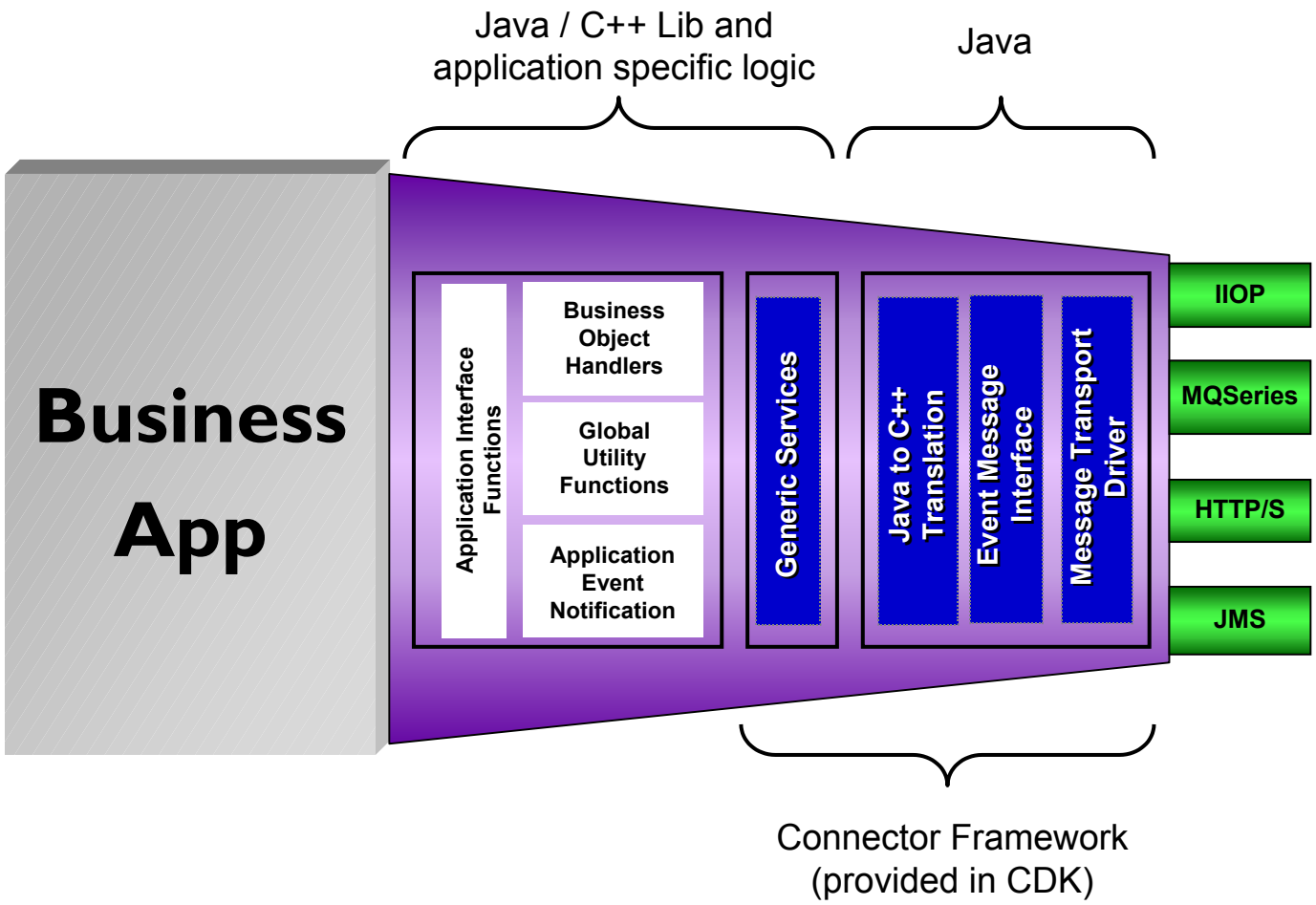
IBM provides a very strong list of pre-configured adapters

URL: http://www-3.ibm.com/software/integration/wbiadapters/

Business Application Adapters	• SAP • Baan • Oracle • JDE • Peoplesoft • QAD • Clarify • Siebel • Remedy • Vantive • Trology	• Ariba • BroadVision • CommerecOne • IBM WebSphere • SAP BBP • i2 • Manutistics • Numetrix/JDE • Kenan • Metasolv • Portal	• SWIFT • FIX • GSTPA* • OMGEO* • CLS* • FIX over SWIFT* * In development
Technical Adapters	• RosettaNet • CIDX • CICS • IMS • AS/400 • COM • CORBA • e-mail • text • HTTP • MQSI • JDBC • ODBC • Oracle • RDBMS	• HTTPS • FTP/POP • SMTP • MQSeries • VAN Connectivity • S/MIME • SSL • MDN • Digital Certificates • S/Key • Private/Public Key Encryption	

Adapter Development Kit



Object Discovery Tools help to find the right data in an application

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Integration situations can involve many types of applications and databases, and many types of integration functionality

Applications or Databases		WBI Core Integration Functionality
Business Apps	• Packages • Mainframe • App Server Apps • Misc Proprietary	Communication using standard protocols Queuing Pre-configured adapters Message handling Transformation & Routing Process management Process templates & Bos Workflow Automated interactions with external business partners Monitoring, Analysis, Feedback
Business Databases	• Data Warehouse • Oper Data Store • Misc. Bus Databases	
People-oriented Apps	• App Access Portals • Enterprise Info Portals • Workflow Tasklists • Small Devices • Personal Productivity	
Web Servers & Gateways	• B2B • Misc(E.G. wireless)	
Other Middleware	• Directory • Security • System Management	

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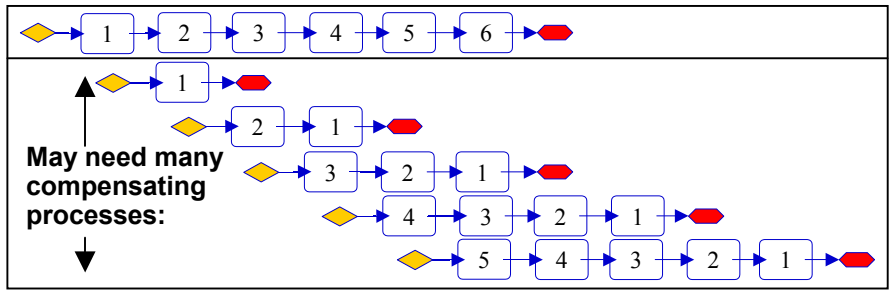
Process Management: Functionality that controls sequences of activities as one unit of work

- **Sequence Control**: Controls the sequence for many activities according to business rules, including controlling parallel processes that may have interdependent activities
- **Data and Process Isolation**: Ensures that a process finishes before other processes can affect the data that is being used
- **Failure Detection**: Senses and reacts to processes that are not able to complete
- **State Management**: Maintains history of changes to objects and app data, to enable "backwards navigation" through many possible return paths
- **Automated Recovery**: Automates the adjustment of affected applications/data to an acceptable condition if a process fails (rollback or compensation)
- **Flexible Sub-process Ownership**: Isolates portions of the process for control by specific owners (E.G. two companies control their own portions of one overall process)
- **Long-duration Activities**: Keep a process in suspension for a long-duration activity, as may be needed for people-oriented workflow, and process-intensive B2B interactions

Process Tooling

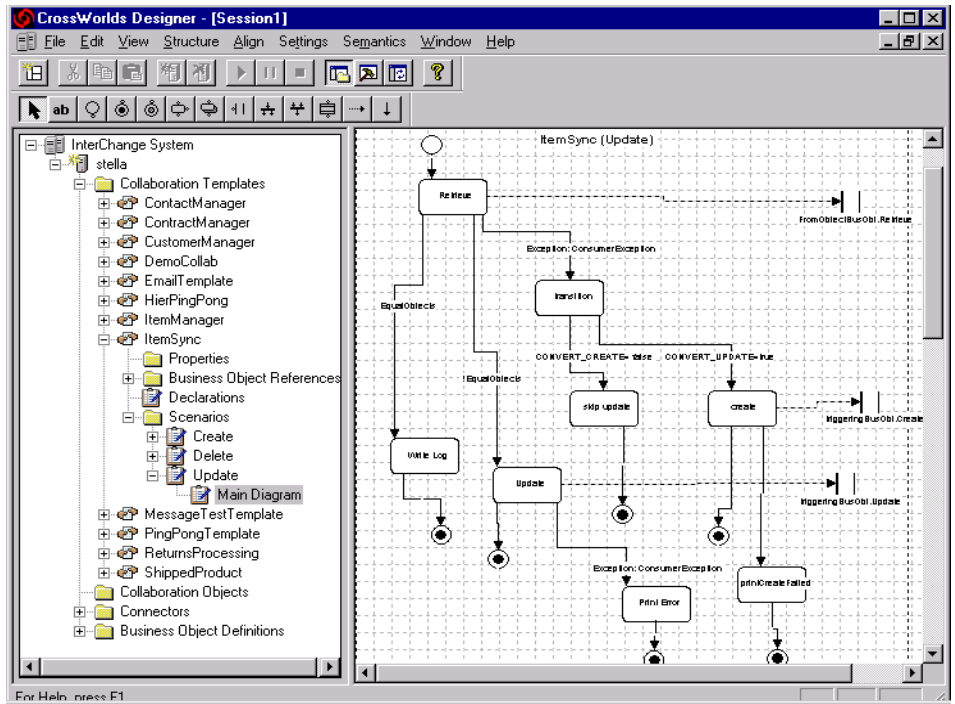
To make the best use of Process Management functionality, tools are needed to build, organize, modify, and re-use complex process designs

- Processes, and especially compensations, can be very design-intensive
- Need friendly tools to easily create, store, and modify designs for complex processes
- Need the ability to save and organize complex process designs as re-usable templates



Process Flow Designer

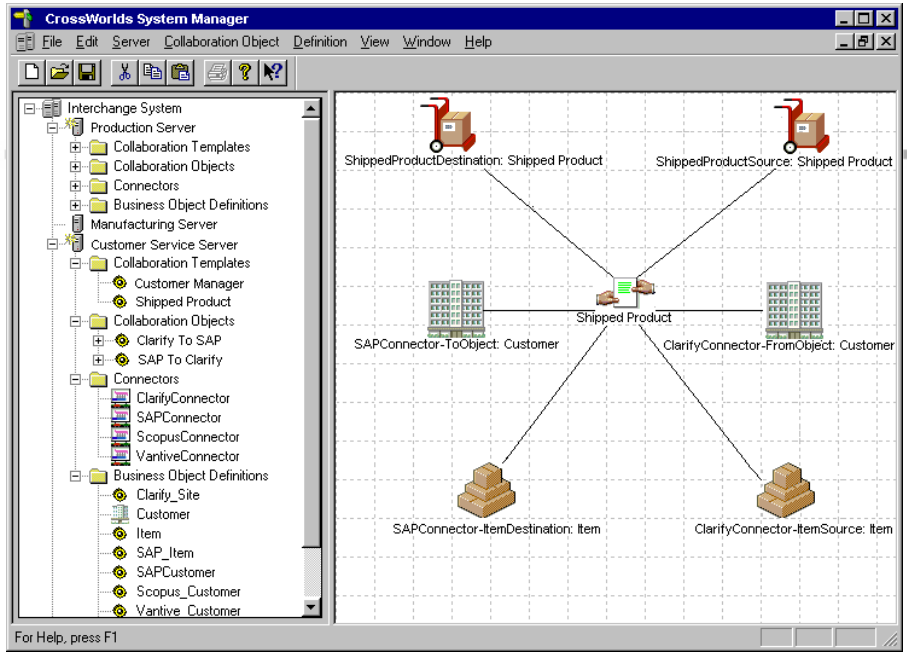
- Uses UML to design complex processes
- Scenarios “painted” into existence
  - Sub-diagram support
  - Iteration Support
  - Heterogeneous entity support
- Complete Java code generation
- Custom Code support in Java without touching generated code
- Multiple Scenario Support
- Multiple event “trigger” support

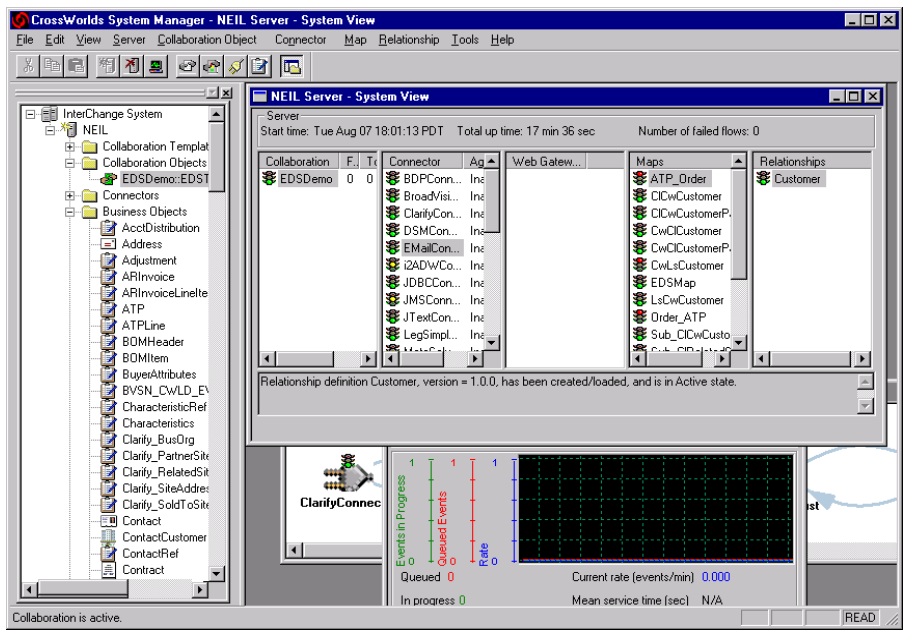


System Management Tooling

System Manager

- Graphical utilities to manage and monitor a distributed integration solution from a central location
  - Adapters
  - Servers
  - Processes
- SNMP Support for external systems management
- Tivoli System Management Support





NORWICH UNION

www.norwichunion.com

The challenges and rewards of implementing online Wealth Management solutions

norwichunion.com - context

- Aviva is an international parent holding company covering businesses in 50 countries with assets > $200bn dollars
- Norwich Union is the UK sub brand of Aviva and is one of the top UK 20 companies by size value
- ‘norwichunion.com’ provided the Wealth Management functions within the Norwich Union Life company
- Norwichunion.com is now the Norwich Union company web brand

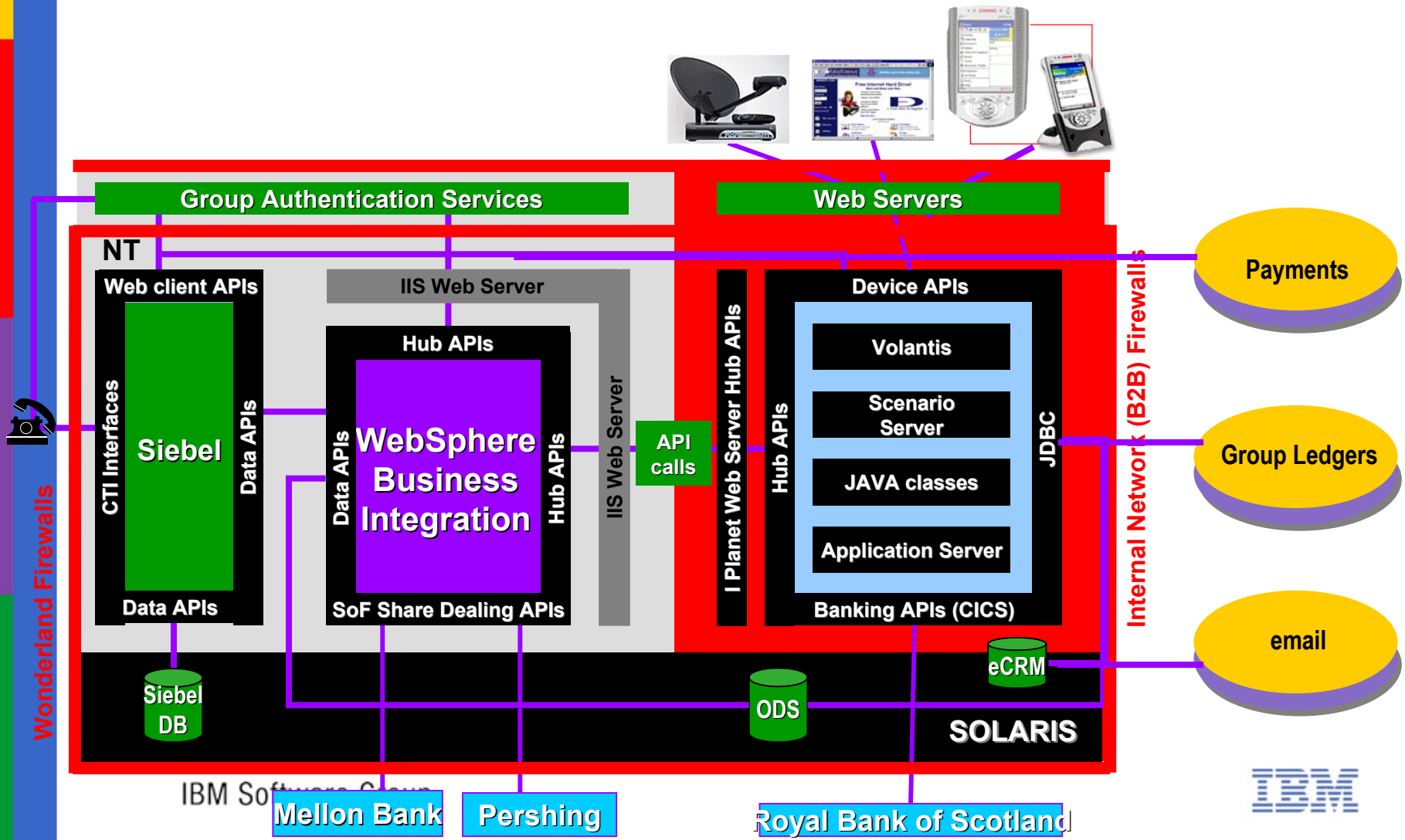
Wealth Management - goals

- **To be the wealth Management provider of choice**
- **To integrate an increasing range of informational and transactional online financial services into a single experience – 'Virtual advisory services', Supermarket of funds, Share Trading, Deposit accounts, Loans …**
- **To provide a new financial services channel to market**

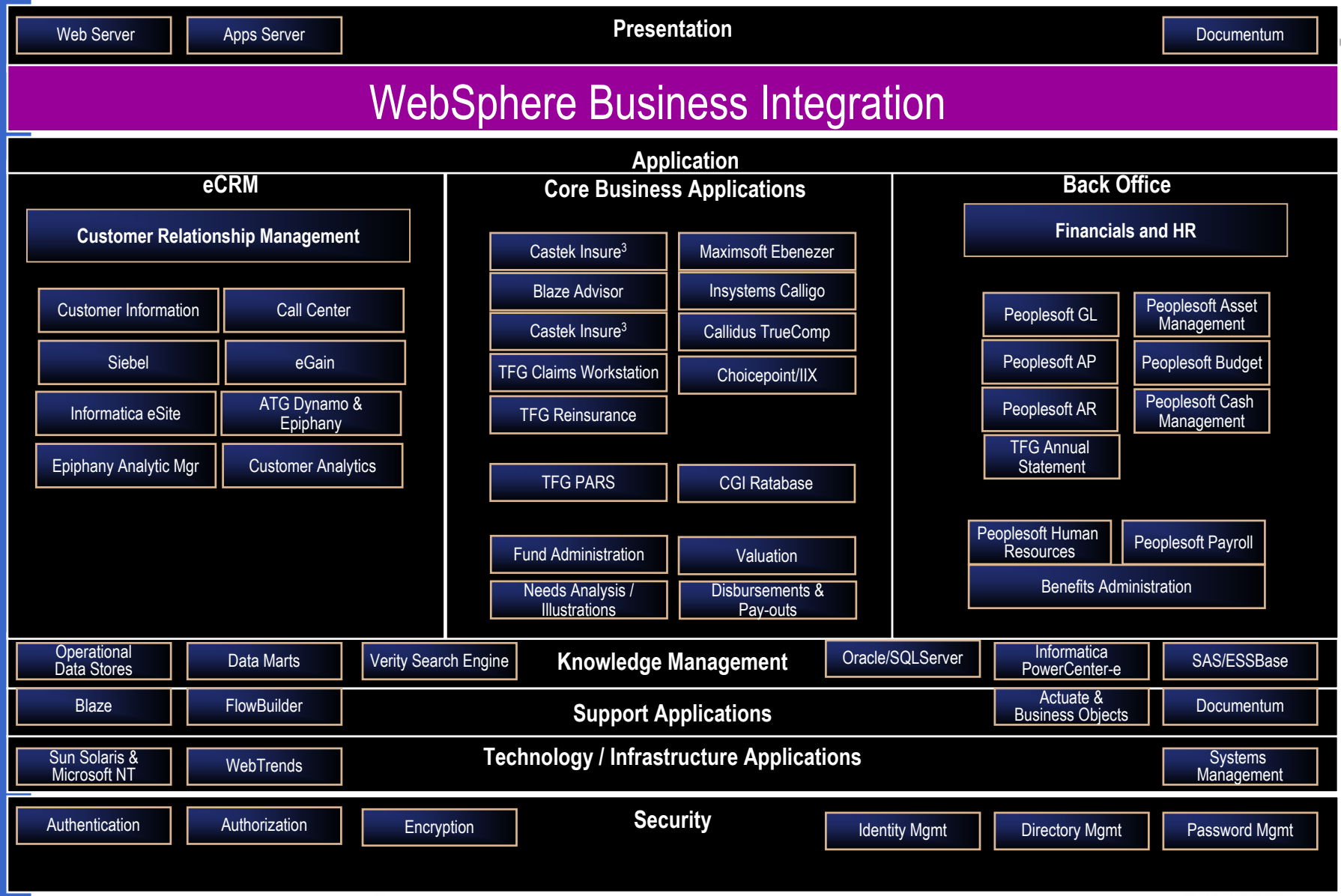
Wealth Management - Challenges

- **‘Plug and play’ business services**
- **Multi-channel access**
- **Rapid personalised user experience**
- **Unpredictable loads**
- **24 x 7 operations**
- **Security**

Wealth Management: WebSphere Business Integration enabled Norwich Union to deliver it for their customers.

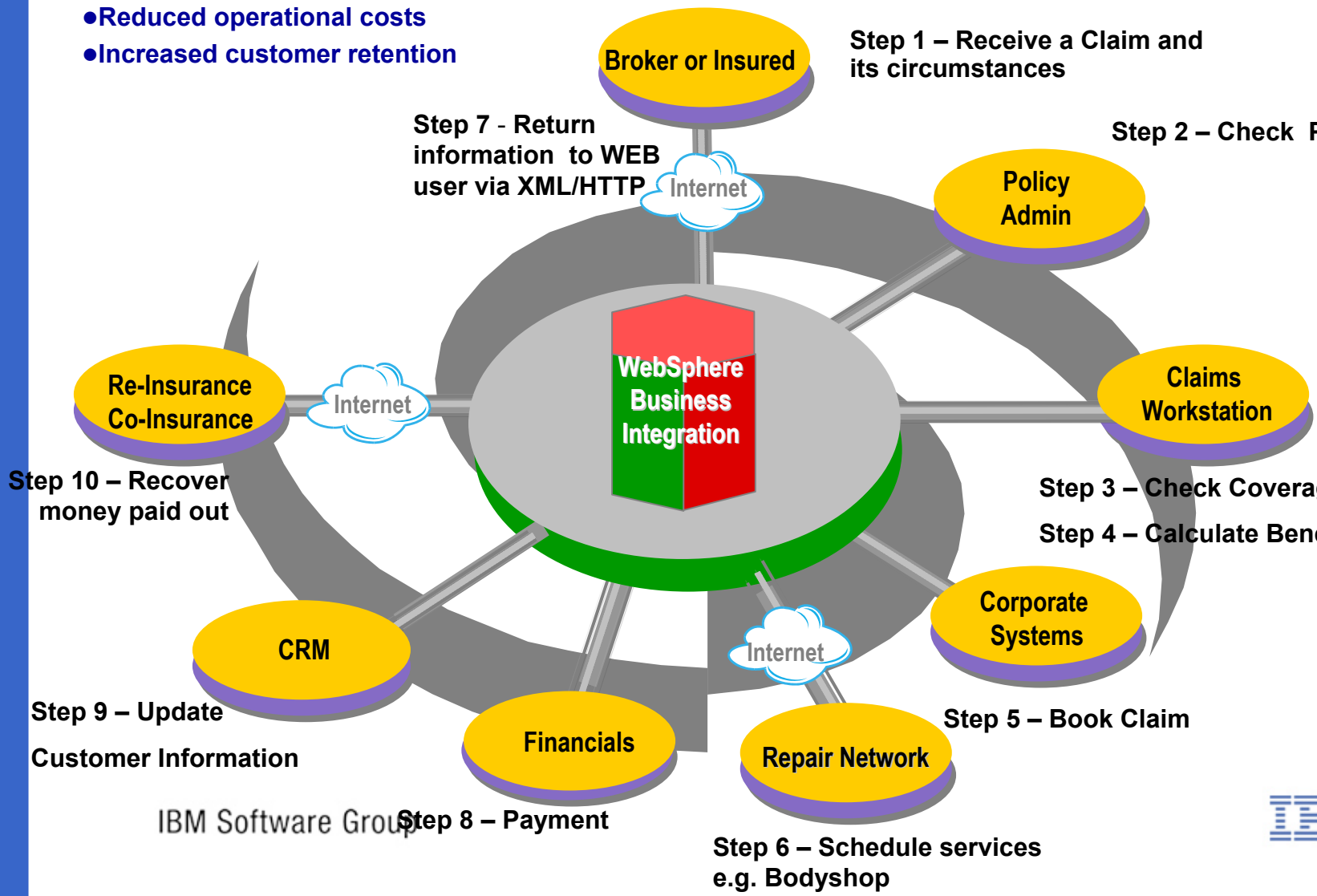


Insurance:


Web Server
Apps Server
Presentation
Documentum
WebSphere Business Integration
Application
eCRM
Customer Relationship Management
Customer Information
Call Center
Siebel
eGain
Informatica eSite
ATG Dynamo & Epiphany
Epiphany Analytic Mgr
Customer Analytics
Core Business Applications
Castek Insure3
Maximsoft Ebenezer
Blaze Advisor
Insystems Calligo
Castek Insure3
Callidus TrueComp
TFG Claims Workstation
Choicepoint/IIX
TFG Reinsurance
TFG PARS
CGI Ratabase
Fund Administration
Valuation
Needs Analysis / Illustrations
Disbursements & Pay-outs
Back Office
Financials and HR
Peoplesoft GL
Peoplesoft Asset Management
Peoplesoft AP
Peoplesoft Budget
Peoplesoft AR
Peoplesoft Cash Management
TFG Annual Statement
Peoplesoft Human Resources
Peoplesoft Payroll
Benefits Administration
Operational Data Stores
Data Marts
Verity Search Engine
Knowledge Management
Oracle/SQLServer
Informatica PowerCenter-e
SAS/ESSBase
Blaze
FlowBuilder
Support Applications
Actuate & Business Objects
Documentum
Sun Solaris & Microsoft NT
WebTrends
Technology / Infrastructure Applications
Systems Management
Authentication
Authorization
Encryption
Security
Identity Mgmt
Directory Mgmt
Password Mgmt

Insurance Claims Process

- Fast, accurate settlements
- Reduced operational costs
- Increased customer retention



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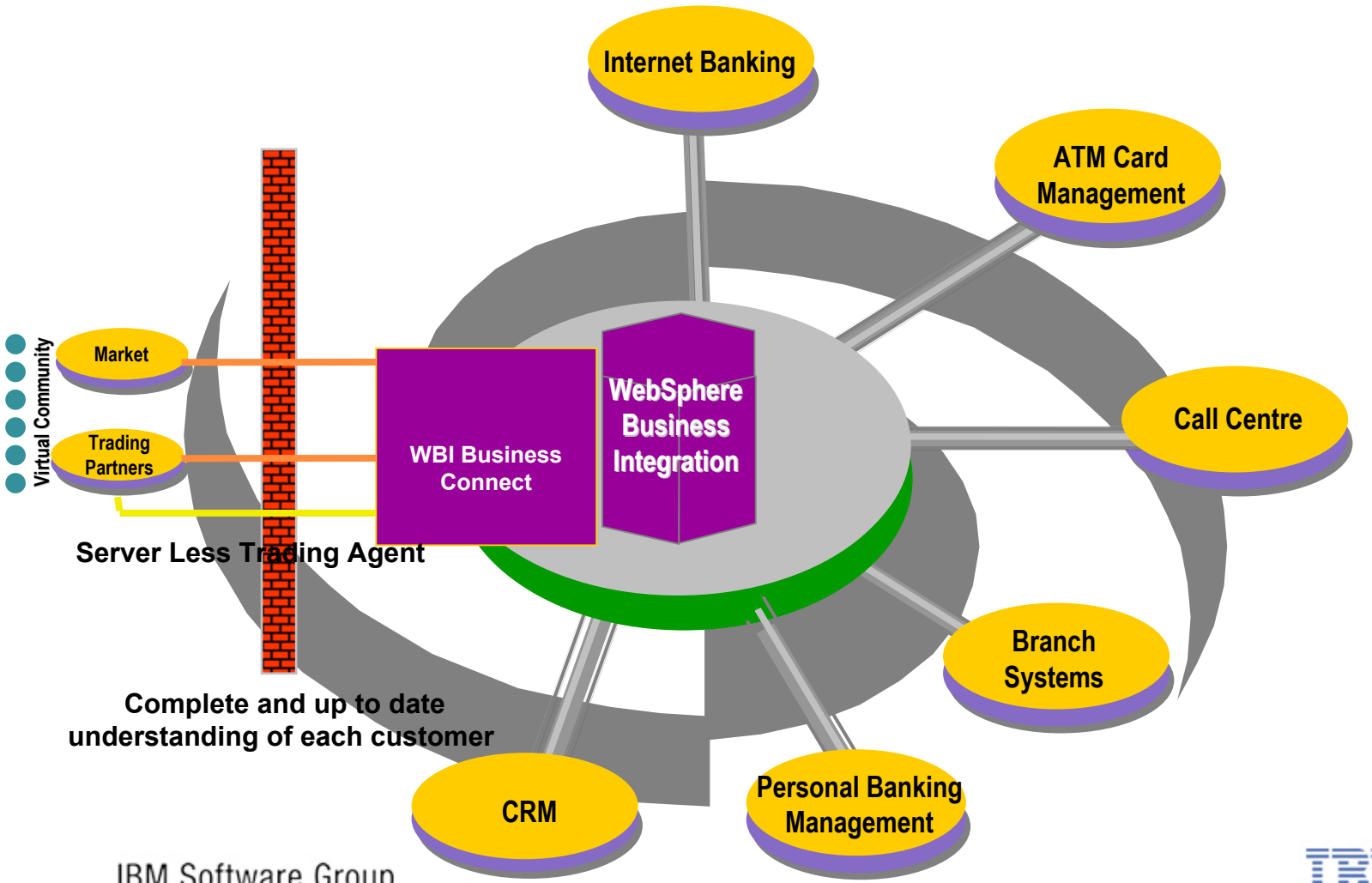
Customer Management: What do Financial Services companies want to do?

- Price products properly / more discerningly
- Sell more products
- Increase profit margins
- Reduce cost to the Company
- Sell to customers who will buy and produce better profits for the Company
- Increase retention rate and cross-sell rate
- Identify who makes the Company money, when - and who does not

What are the key issues?

- How do you fix the best price for customers?
- Who are the valuable customers?
- Why are they profitable and when?
- Which have the propensity to buy more?
- What products do they have already enterprise-wide?
- How do they want to buy and how does this change over time?
- What is their total value - when and how much?
- What are the cross-sell opportunities - when, what channel?

Retail Banking Integrated Delivery Channels



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IBM WebSphere Business Integration enables new Financial Services capabilities

- **Optimise ROI** of global mergers with scale based cost savings, and rapid business unit integration
- **Reduce legacy systems costs** while integrating new capabilities promised by investments in enterprise applications
- **Compete on speed** - reduce cycle times in underwriting, claims, customer acquisition …….
- **Increase profits and retention** through intimate knowledge of customers
- **Fulfill customer expectations** for customized products with low cost 24X7 service and wireless access
- **Develop wealth management solutions** with a financial planning focus
- **Quickly implement new low-cost distribution models** to compete with new market entrants
- **Respond to deregulation**, and new regulations in:
  - **"Straight through processing"; Digital signatures & privacy; Pension restructuring**
- **Leverage standards** to move financial information and participate in emerging B2B exchanges

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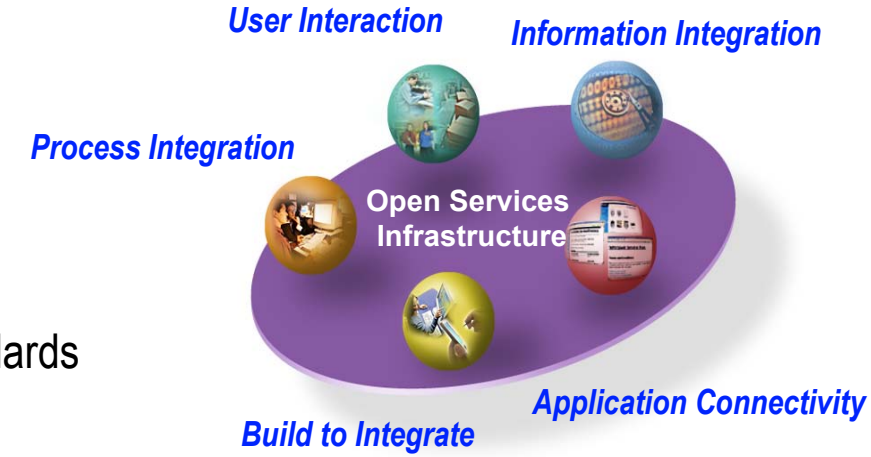
IBM Business Integration Strategy

- **A common programming model for a service-oriented architecture (SOA) based on standards**
  - J2EE for implementation
  - Web Services for access and integration
  - Effective interoperability with other standards based integration platforms
- **Shape our offerings from components that use a single technology infrastructure for runtime, connectivity and tools**
  - WebSphere Application Server (J2EE runtime)
  - WebSphere MQ (Universal connectivity)
  - WebSphere Studio Workbench (Eclipse)
- **Provide integration offerings based on our components to meet customers' desire for choice**
- **Protect customer investments**



- **Facilitate new levels of integration**
- **Promote new levels of reuse**
- **Unify disparate computing paradigms**
- **Link diverse underlying technologies**
- **Provide consistent business/technical vocabulary**
- **Span the software development cycle**
- **Improve time to market**

WebSphere industry focus

Banking

Financial Markets

Insurance

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