

IBM Client Center

Business Solution Center

Global Industry Solution Center La Gaude
European IBM Innovation Center



The IBM PureApplication System

The Modern way to deploy Business Solutions

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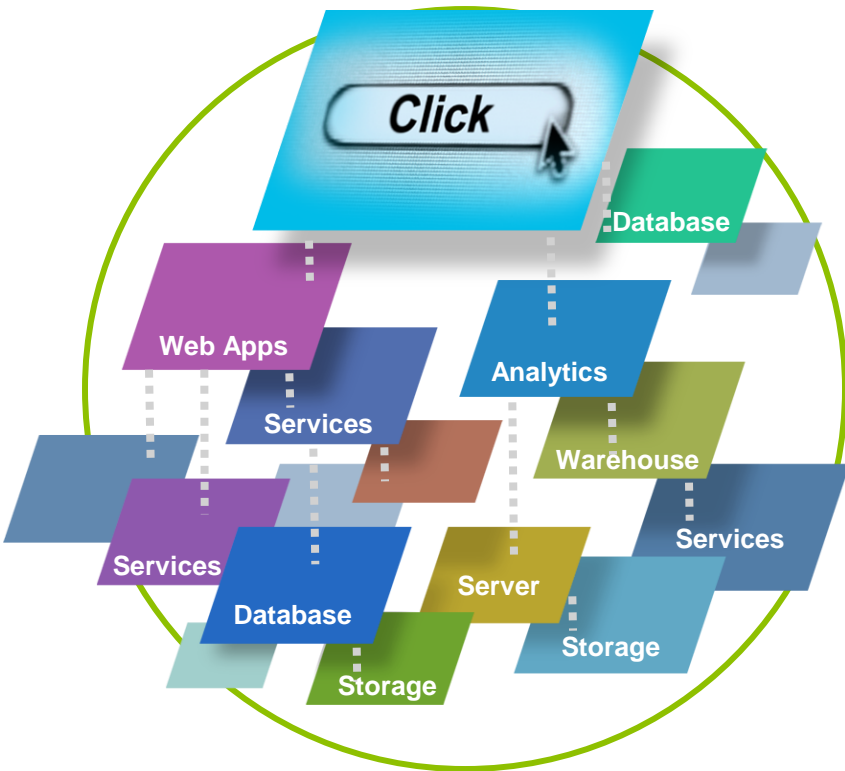
Solutions Pattern Architect - Business Solutions Center, IBM La Gaude



Agenda

- 1. Benefits of the IBM PureApplication Patterns**
- 2. A pattern for the IBM Customer Profitability Analytics solution**
- 3. Demonstration**
- 4. A pattern for an IBM Customer Centricity solution for Insurance**

The growing IT complexity is unsustainable



Specify/Design: Takes 30 days for an IT infrastructure system

Procure: Software and hardware ordered separately taking 5-20 days

Integrate: Components arrive as “bag of parts” to be assembled and integrated on site

Test: Takes 30-60 days for a dev & test environment

Deploy: Can take weeks to months

Customize/Tune: Meeting SLAs requires customization and ongoing tuning

Manage: Managing assets, development, provisioning, and monitoring with multiple tools is time consuming

Scale: Lack of dynamic elasticity results in cumbersome re-allocation or resource addition

Maintain: Separate updates/fixes require separate testing

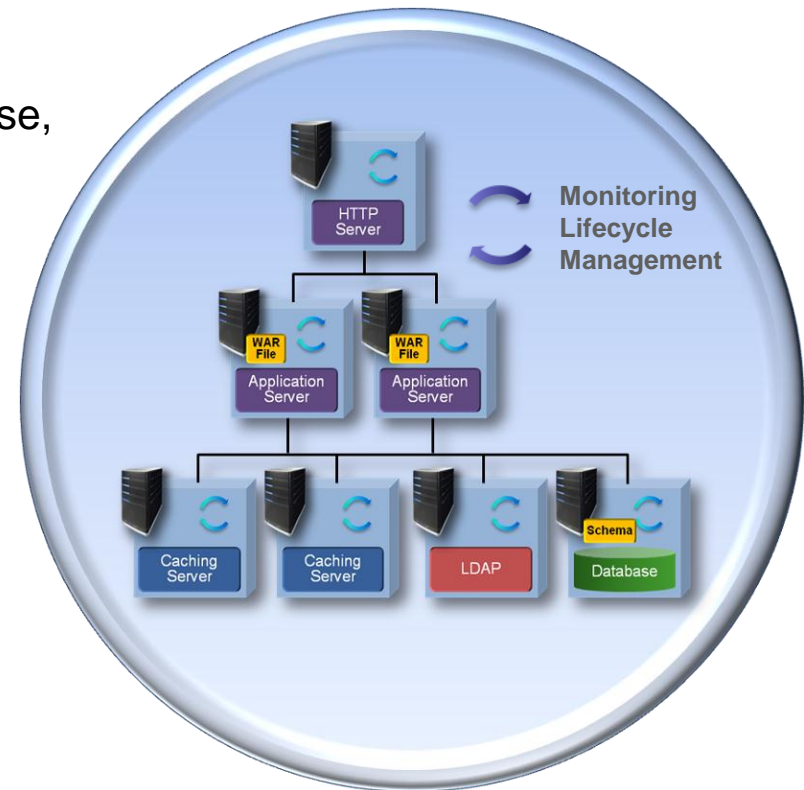
Upgrade: Months to plan, procure, test; potential days of downtime

Decommit: Complex impact analysis, months to plan, and execute

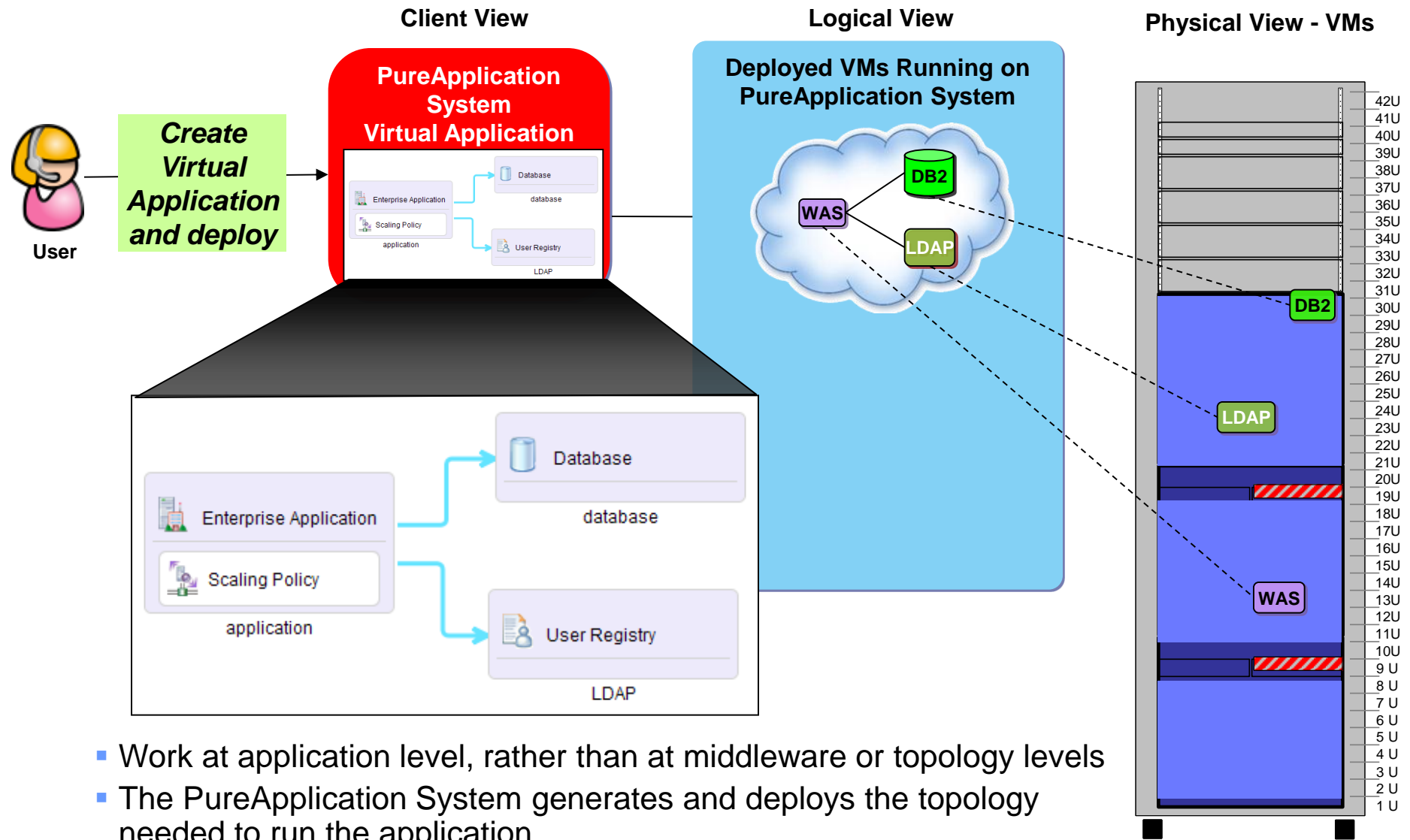
Patterns of Expertise: Proven and Deployable packaging of applications and entire solutions.

What is a Pattern?

- The pre-defined architecture of an application
- For each component of the application (i.e. database, web server, etc)
 - Pre-installation on an operating system
 - Pre-integration across components
 - Pre-configured & tuned
 - Pre-configured Monitoring
 - Pre-configured Security
 - Lifecycle Management
- In a **deployable form**, resulting in **repeatable deployment with full lifecycle management**
 - Configurable parameters to integrate within your applications and databases



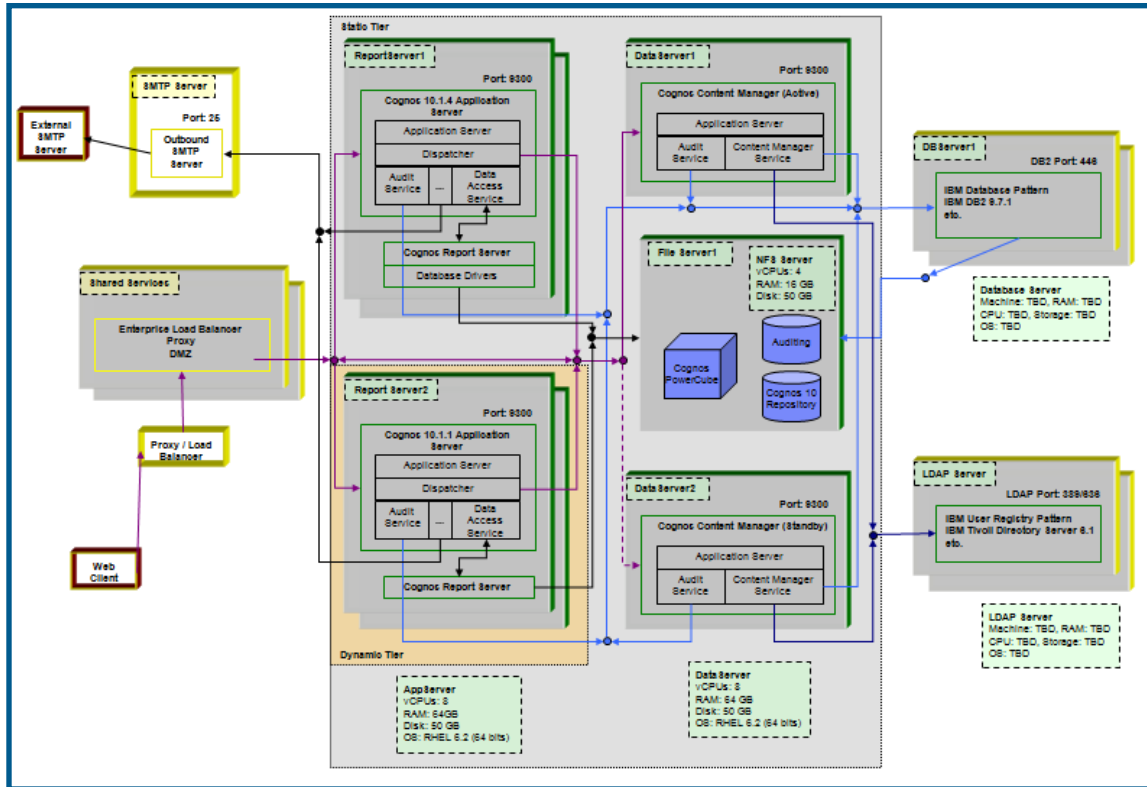
Virtual Application Patterns



- Work at application level, rather than at middleware or topology levels
- The PureApplication System generates and deploys the topology needed to run the application

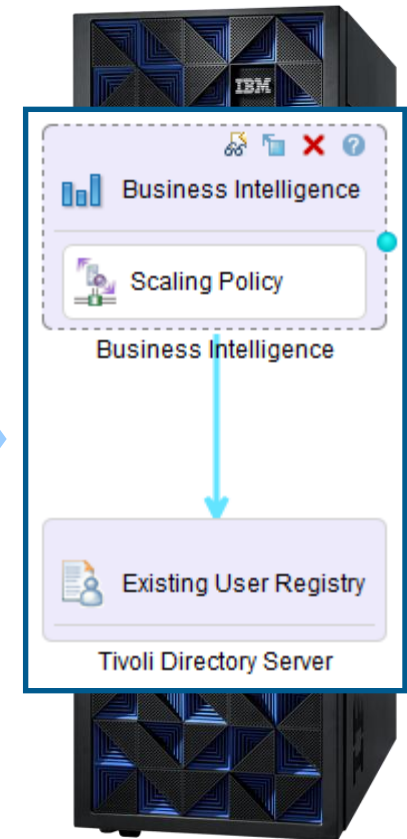
Example: PureApplication System + IBM BI Pattern

The hard way



Weeks of manual effort
250+ opportunities for errors

The new Way



30 minutes with Pattern:
0 Errors

I - The Customer Profitability Solution Pattern



Agenda

- **Customer Profitability Analytics (CPA) Solution**
 - Solution overview
 - Demonstration
 - Functional architecture

- **CPA Solution pattern on IBM PureApplication System**
 - Deployment Demonstration
 - Technical architecture
 - Business benefits and value

IBM Solution: IBM Customer Profitability Analytics



Analyze historical information (finance, marketing, sales) and customer attribute data to:

- Predict customer propensity to buy
- Develop lifetime value models
- Create account retention strategies
- Predict behavior patterns

Business Outcomes

- Increase profitable growth by 15-20% for Mass Market/ Retail customer base
- Improve retention & increase wallet share of profitable customers
- Reduced servicing costs by matching service levels to customer value

Product Components

IBM Cognos BI

IBM Cognos TM1

IBM SPSS

IBM Data
Warehouse

**Let's see that Business
Solution in Action**

***Demonstration
Screenshots***

Customer Profitability Analytics

Select a Region

- Northeast
- Southeast
- Northwest
- Southwest

Finish

Retail Bank Profitability as of Nov 2010

	2009	2010	Variance	Var %
Interest Income	\$1,122,180,185	\$1,386,874,860	\$264,694,676	23.59%
Interest Expense	\$110,871,683	\$115,437,124	\$4,565,440	4.12%
Cost of Funds Charges	\$464,649,891	\$559,345,144	\$94,695,253	20.38%
Cost of Funds Credit	\$129,732,516	\$124,276,957	(\$5,455,559)	-4.21%
Net Interest Margin	\$676,391,127	\$836,369,550	\$159,978,423	23.65%
Loan Fees	\$276,009,348	\$327,898,397	\$51,889,048	18.80%
Provision for Losses	\$124,852,896	\$140,594,404	\$15,741,508	12.61%
Other Income	\$1,855,344,687	\$2,051,587,101	\$196,242,414	10.58%
Total Revenue	\$2,807,745,162	\$3,215,855,047	\$408,109,885	14.54%
Operating Costs	\$1,821,832,058	\$1,908,960,523	\$87,128,466	4.78%
Net Income before Taxes	\$881,060,208	\$1,166,300,120	\$305,239,912	35.45%
Taxes	\$301,371,073	\$408,205,042	\$106,833,969	35.45%
Net Income after Taxes	\$559,689,135	\$758,095,078	\$198,405,943	35.45%
Net Interest Margin %	2.32%	2.49%	0.16%	6.75%

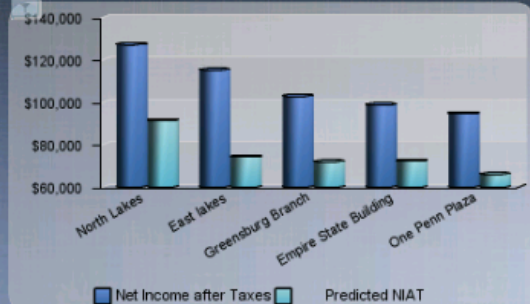
KPI by Regions

Net Income after Taxes

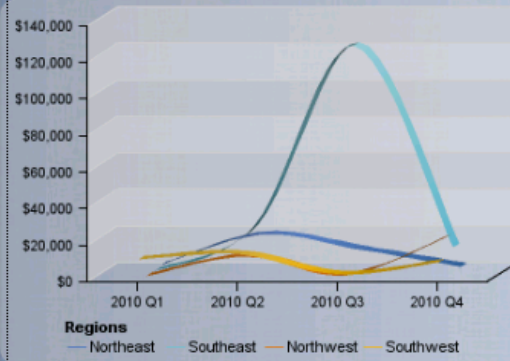


■ Northeast ■ Southeast ■ Northwest ■ Southwest

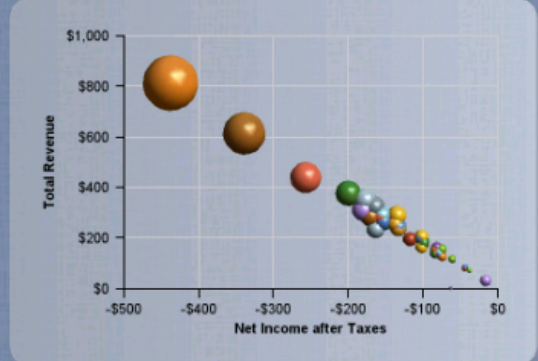
Top 5 Branch Locations



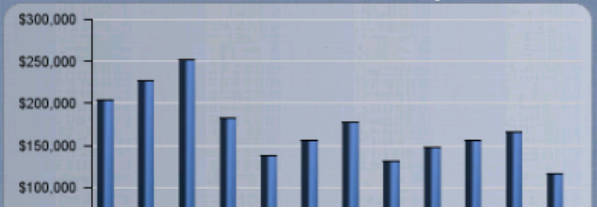
Charge Offs/Write Offs



Consumer Deposit Portfolio by Branches



Credit Product Profitability



Retail Snapshot

Metrics

No grouping

Metric	Actual	Target	Time Period
Net Income After Taxes	US\$225,662,833	US\$209,868,435	Nov 2010

Retail Reports

Name	Actions
Predicted Profitability	[Print] [Refresh] [Zoom]
Top Ten Retail	[Print] [Refresh] [Zoom]
IBM Cognos Active Report - Customer Segment Revenue	[Print] [Refresh] [Zoom]

Predicted Profitability for Northeast

- Northeast
- Southeast
- Northwest
- Southwest

Unprofitable
 Profitable

[Select all](#) [Deselect all](#)

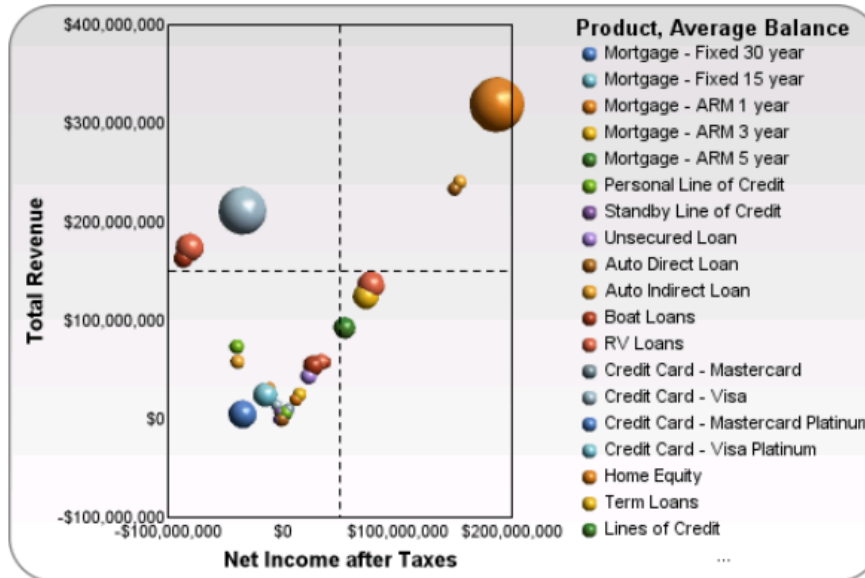
Finish

Region	Profit Center	Household	Customer ID	HPP	FICO	Actual NIAT	Predicted NIAT	Actual NIAT vs Predicted NIAT	
Northeast	42nd Street	319760	32101398	▲	513	\$10,874,219	\$14,938,803		
			32101419	▼	606	\$1,498,327	(\$1,656,731)		
			32101504	▲	469	\$4,430,172	\$10,357,337		
			32101517	▼	505	\$9,264,033	\$5,436,782		
	319760 - Total						\$25,866,752	\$29,076,191	
	319763			32101602	▲	563	(\$2,977,834)	\$7,870,774	
				32101701	▼	359	\$29,310,980	\$18,577,247	
				32101715	▲	650	\$10,918,495	\$13,969,821	
	319763 - Total						\$37,251,640	\$40,417,842	
	42nd Street - Total						\$63,118,392.35	\$69,494,033	
	Chelsea Branch	319783		32103610	▼	449	\$37,842,394	\$11,585,817	
				32103687	▼	492	\$13,989,457	\$4,367,621	
32103809				▲	675	(\$9,372,188)	(\$1,009,141)		
319783 - Total						\$42,459,663	\$14,944,298		
319784				32103904	▲	655	\$9,004,252	\$14,104,131	
				32103989	▲	505	\$9,208,121	\$15,449,154	
				32103997	▲	599	(\$15,563,933)	(\$2,124,250)	
				32104013	▲	676	\$7,403,198	\$15,661,017	
319784 - Total						\$10,051,639	\$43,090,053		
Chelsea Branch - Total						\$52,511,301.38	\$58,034,350		
Chinatown Branch	319785		32104297	▲	699	\$8,323,238	\$13,168,770		

Product Profitability for Commercial Banking

+

X-Axis Measure	Y-Axis Measure	Bubble Size Measure	Chart View
Net Income after Taxes	Total Revenue	Average Balance	<input checked="" type="radio"/> Product <input type="radio"/> Customer



	Net Income after Taxes	Total Revenue	Avg Balance
Mortgage - ARM 1 year	\$186,407,154	\$319,081,027	\$72,072,327,010
Commercial Interest Checking	(\$35,739,525)	\$211,320,796	\$60,397,588,460
Mortgage - Fixed 30 year	(\$35,625,553)	\$5,024,409	\$28,047,528,816
Commercial Money Market	(\$81,829,557)	\$174,210,566	\$27,987,057,678
Loan Participations	\$76,495,343	\$136,232,135	\$26,991,896,419
Mortgage - ARM 3 year	\$71,963,196	\$124,769,829	\$24,696,372,055
Mortgage - Fixed 15 year	(\$15,755,013)	\$24,825,155	\$22,637,119,028
Mortgage - ARM 5 year	\$53,397,633	\$92,679,695	\$17,805,842,463
Asset Based Lending Lines	\$26,264,679	\$54,278,518	\$16,029,689,361
Money Market Accounts	(\$87,479,741)	\$163,226,078	\$13,277,247,215
Bid Lines of Credit	\$22,097,065	\$43,657,644	\$9,186,967,997
RV Loans	\$33,080,373	\$58,171,871	\$7,896,025,679
Commercial Paper Back-up Lines	(\$1,518,286)	(\$12,049)	\$6,478,179,335
Foreign Exchange Lines	\$1,787,045	\$6,244,136	\$6,404,875,828
Savings - High-Yield Money Market	(\$40,776,149)	\$73,447,100	\$6,080,377,094
Term CD's	(\$40,084,153)	\$58,224,628	\$5,380,348,391
Auto Indirect Loan	\$154,022,514	\$240,918,337	\$4,779,218,842

Customer Profitability Analytics Metr

Scorecards

- Scorecards
 - All Metrics
 - Commercial Banking Executive
 - Commercial Snapshot
 - Retail Banking Executive

Scorecards > Commercial Banking Executive >

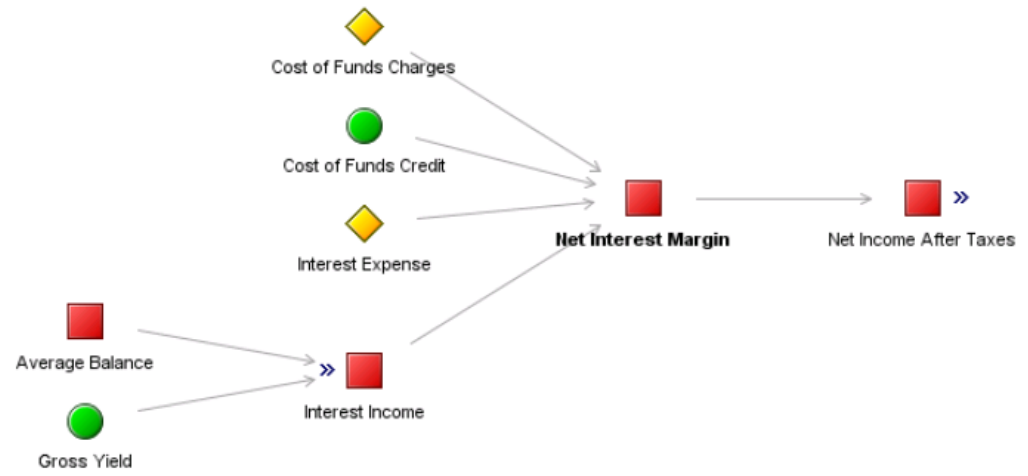
Metric Types > Net Interest Margin

Net Interest Margin

- History
- Actions
- Reports
- Diagrams
- Details

	Actual	Target	Variance	Variance %	Last updated
	US\$72,224,762	US\$75,058,019	-US\$2,833,257	-4%	May 31, 2011

Impact Diagram Functional impacts Show actions



- My Folders
- Scorecards
- Metric Types
- Strategies

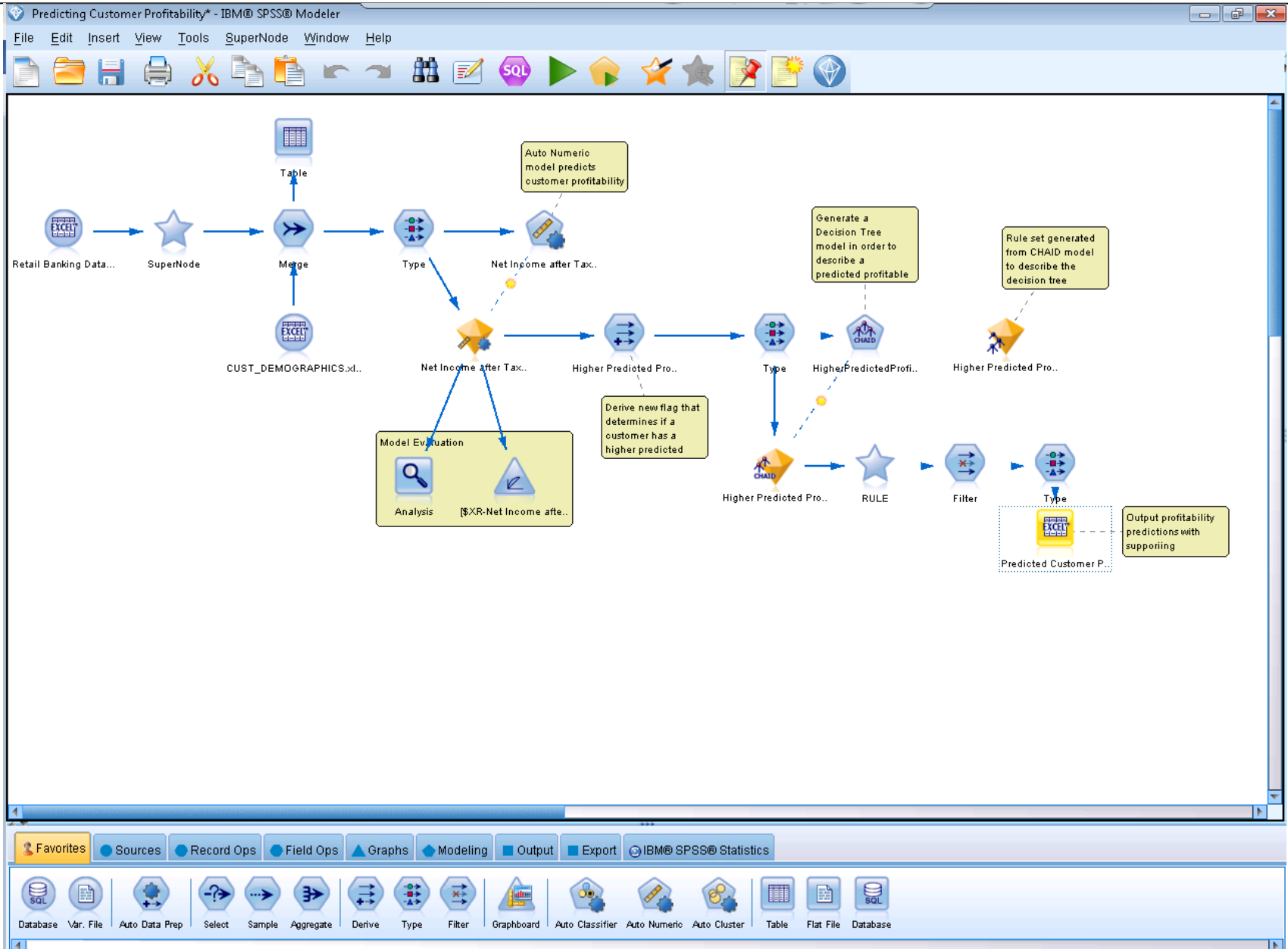
Available Diagrams



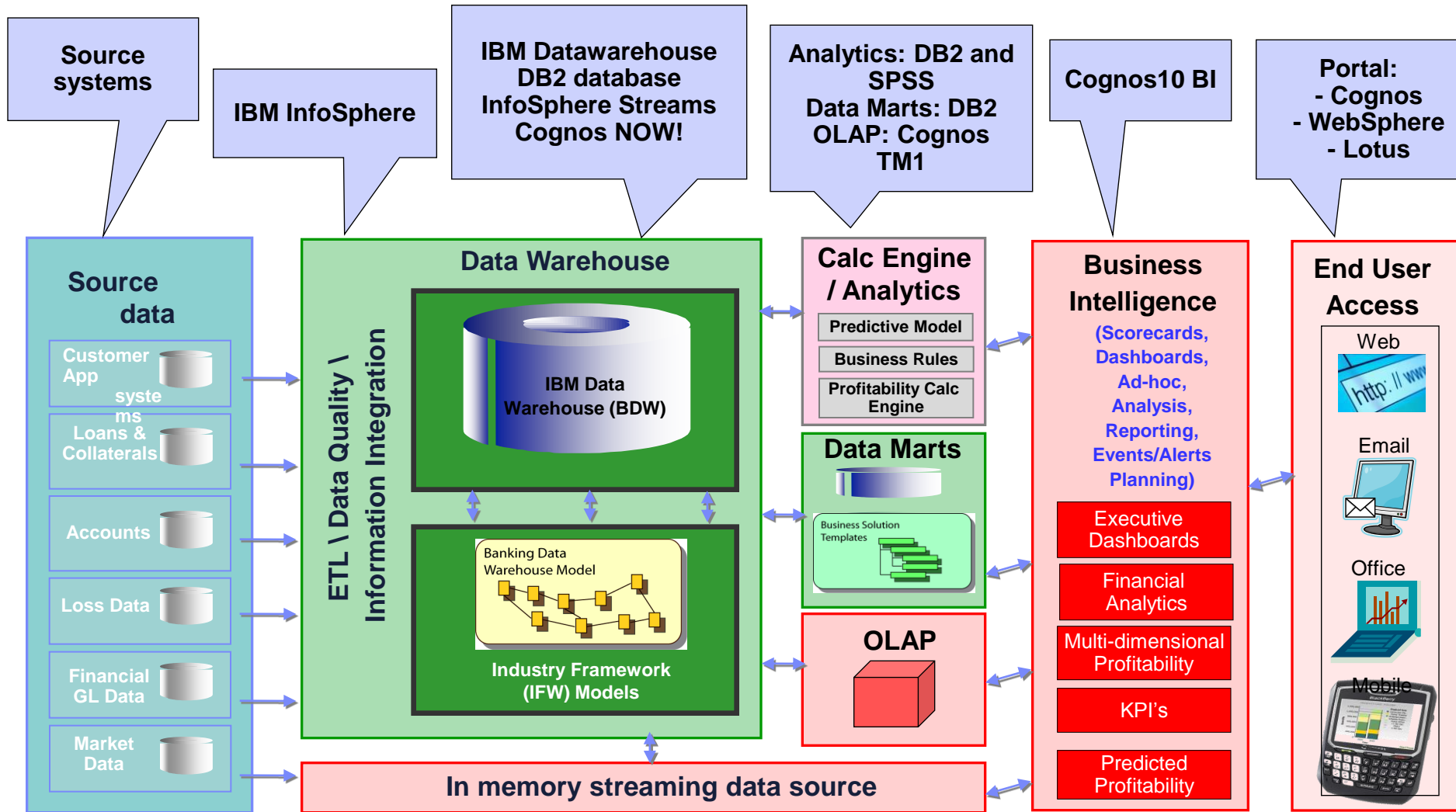
Top View - Bank Holding Co **Retail Scenario** Cost of Funds Rate for Deposit Credit Risk Factor Table Unit Costs Table Operational Risk Factor Cost of Funds Rate Table

Rows: Measures [Measures] Columns: Retail Bank [Entity] Segments [Segments] Context: All Indicators [Collateral Indicator] All Tenors [Tenor] All Industries [Industry] All Risk Ratings [Risk Rating] » 3

	Wildwood branch			
	Total Segments	Mass Market	Wealth Accumulator	Affluent
Interest Income	\$103,882,637.68	\$31,766,751.85	\$40,097,053.29	\$32,018,832.54
Interest Expense	\$4,456,111.41	\$1,775,458.20	\$344,080.31	\$2,336,572.90
Cost of Funds Charges	\$56,409,395.40	\$16,985,565.51	\$23,188,829.97	\$16,234,999.92
Cost of Funds Credit	\$5,098,395.52	\$1,982,202.41	\$634,449.42	\$2,481,743.69
Net Interest Margin	\$48,115,526.39	\$14,987,930.55	\$17,198,592.44	\$15,929,003.41
Loan Fees	\$25,534,532.84	\$7,497,223.00	\$8,053,358.91	\$9,983,950.93
Provision for Losses	\$9,582,177.55	\$4,952,964.12	\$4,023,297.73	\$605,915.70
Other Income	\$117,915,680.81	\$60,803,901.68	\$28,012,244.29	\$29,099,534.84
Total Revenue	\$191,565,740.04	\$83,289,055.23	\$53,264,195.64	\$55,012,489.17
Net Income after Taxes	\$58,883,273.22	\$27,012,725.15	\$21,661,553.43	\$10,208,994.65
Net Interest Margin %	2.03%	2.07%	2.45%	1.68%



CPA Solution: Functional Architecture



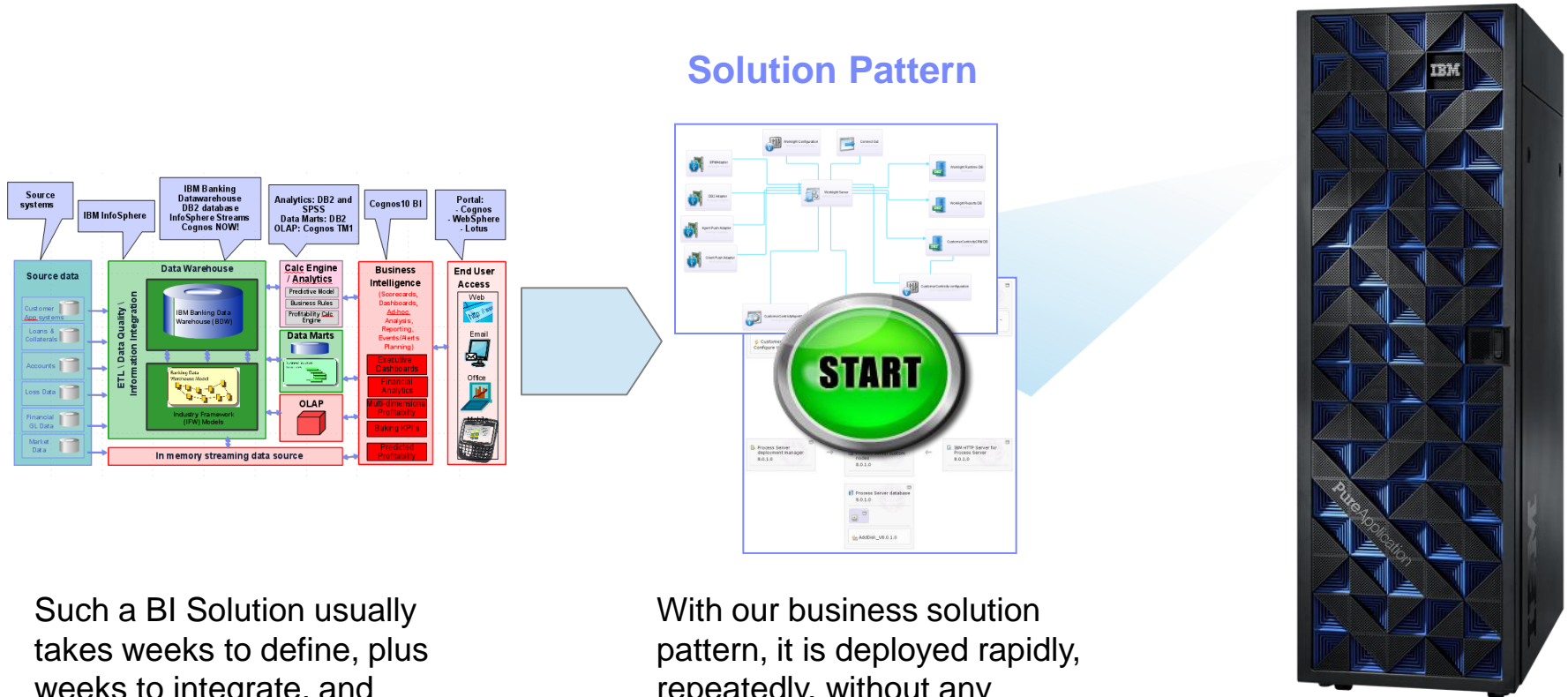
Agenda

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 - Solution overview
 - Demonstration
 - Functional architecture

- **CPA Solution pattern on IBM PureApplication System**
 - Deployment Demonstration
 - Technical architecture
 - Business benefits and value

Demonstration of the pattern for the CPA Solution

This pattern can be automatically deployed on the IBM PureApplication System in 30 minutes. The solution is then ready to use, this is what we are going to demonstrate:



Such a BI Solution usually takes weeks to define, plus weeks to integrate, and months to deploy and test

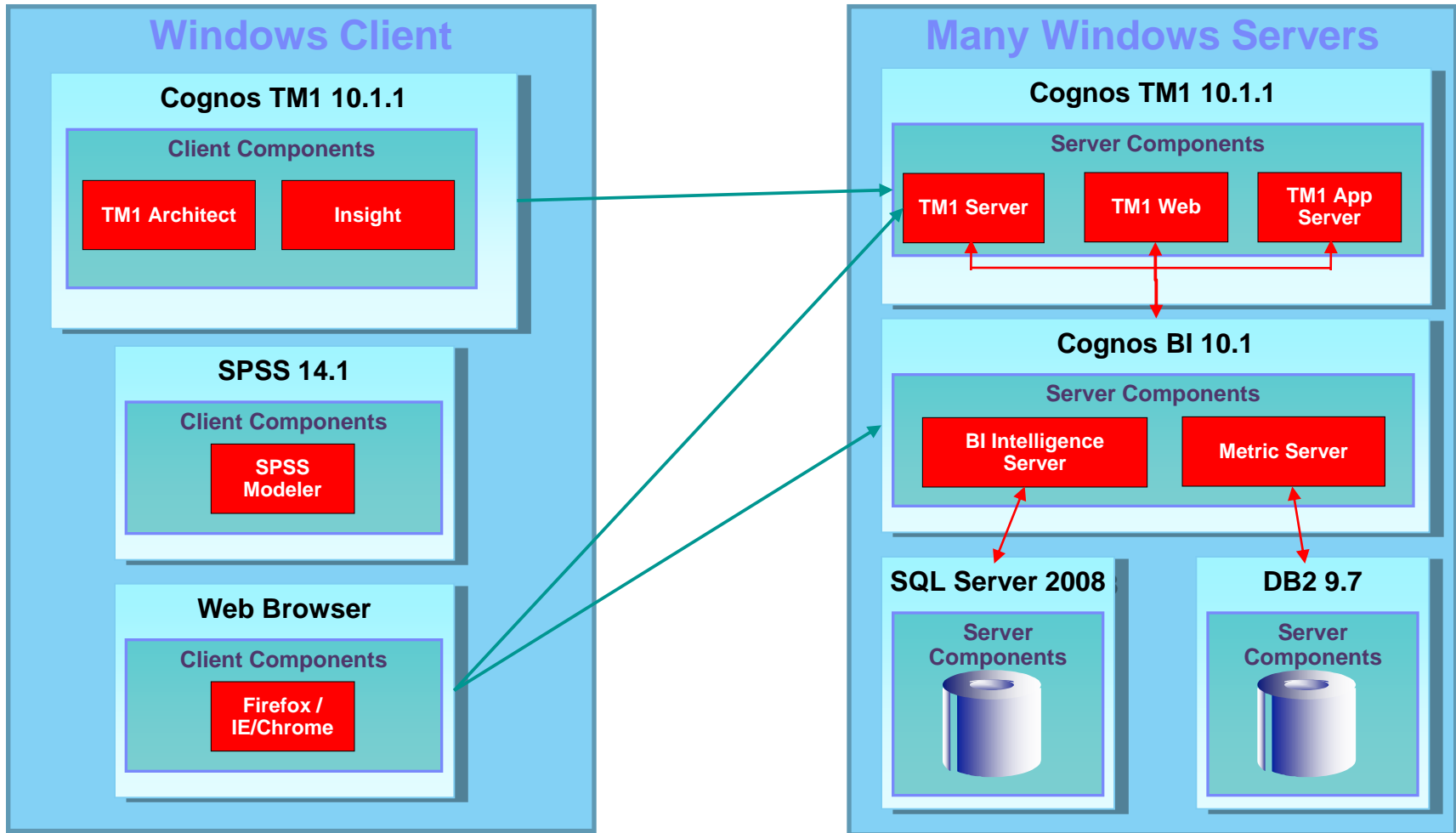
With our business solution pattern, it is deployed rapidly, repeatedly, without any error...

Let's see how the Solution Pattern deploys on the IBM PureApplication System

Recorded Video of Live Demonstration

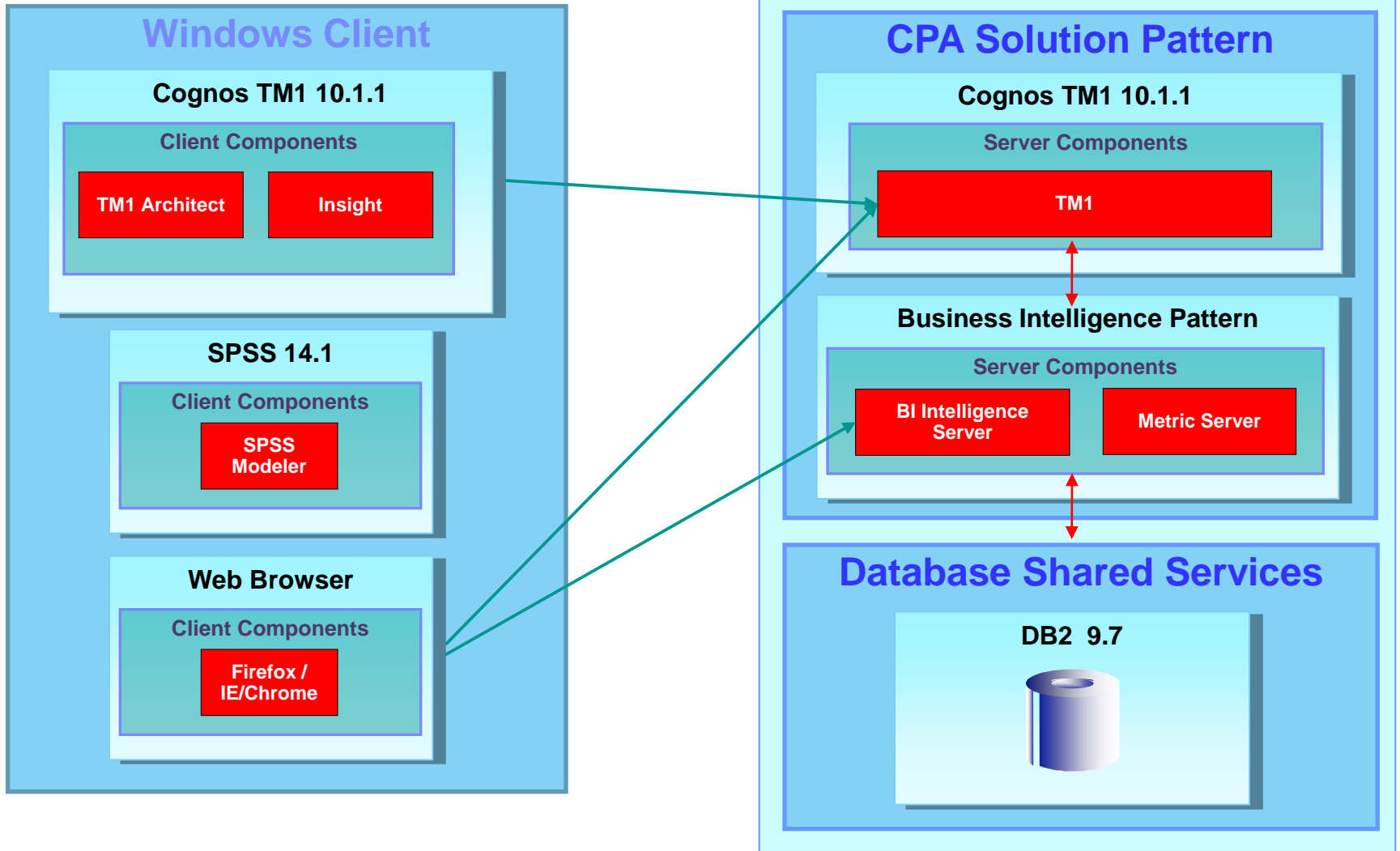
Solution architecture on traditional systems:

Requires lots of Software and many Servers to be integrated



Solution Pattern Architecture:

The Pattern encapsulates all the Servers



II – The Customer Centricity solution pattern for Insurance



Solution Overview

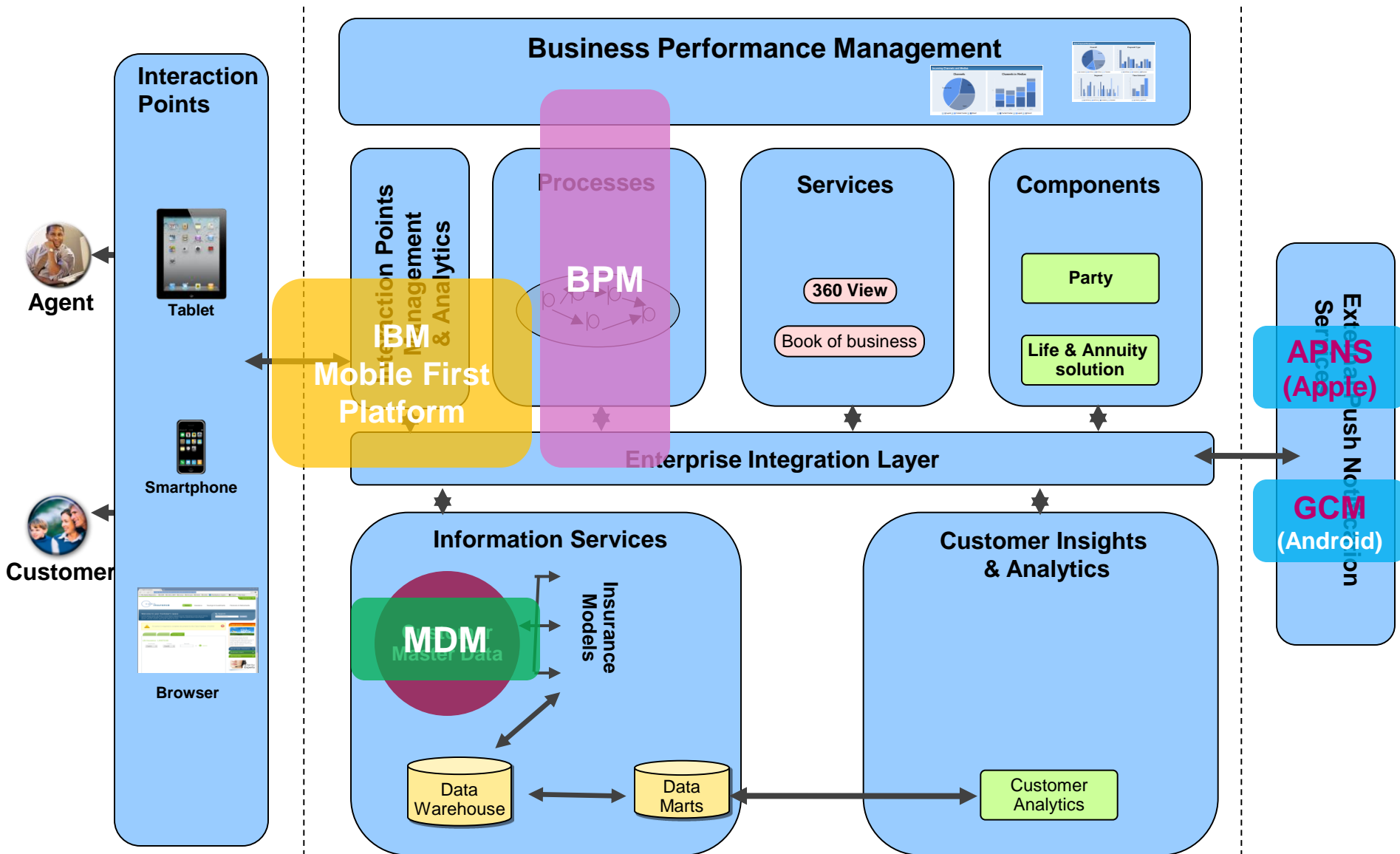
▪ **Business Objectives and Challenges**

- Maximize the value of the customer relationships
- Embrace new channels of interaction: mobile devices, social media, etc.
- By “omni-channel”, not just multi-channel
- Exploit every single interaction, that happened in the past, that happens now, that you can anticipate

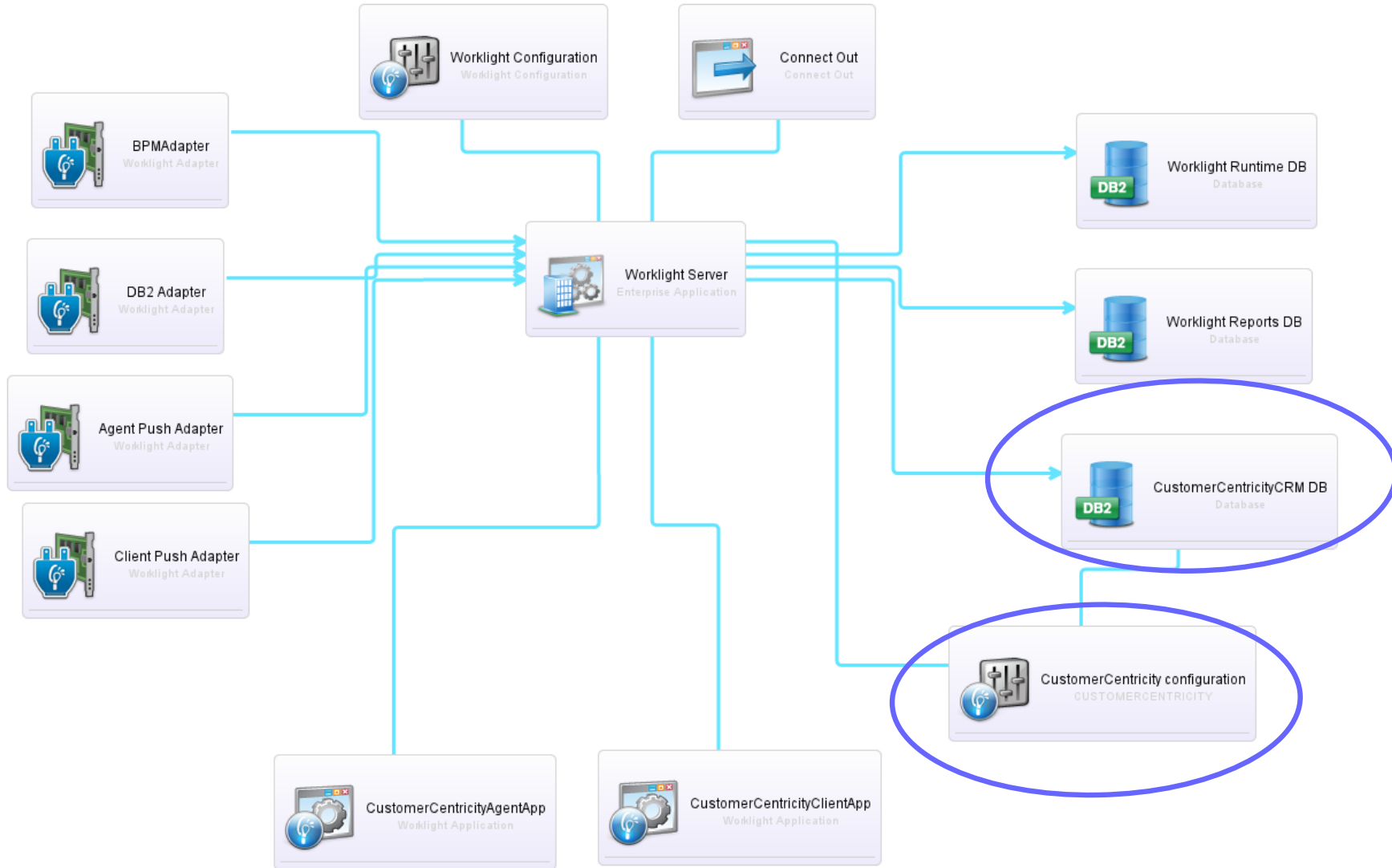
▪ **The IBM Solution for Customer Centricity**

- Allow your clients to communicate with you the way they prefer: contact center, smartphone, Web., etc.
- Develop a deep understanding of customer behaviors and preferred interaction points
- Enrich your customer insight by capturing new information and events to be used in smarter analytics and marketing campaigns.
- Provide agents with additional information to up-sell, cross-sell, retain customers, and improve their quality of service

Solution architecture overview – product mapping



Result: a Solution Pattern based on the IBM Worklight and BPM patterns



Business benefits of solution patterns – Key Takeaways

▪ **Pre-tuned solution with business and IT built-in expertise:**

- Pre-defined use cases, data models and data sets
- End to end integrated solution
- Optimized configuration and installation parameters
- Pre-defined solution policies for elasticity, security, and load balancing

▪ **Unified monitoring of the solution**

▪ **Simplified solution lifecycle:**

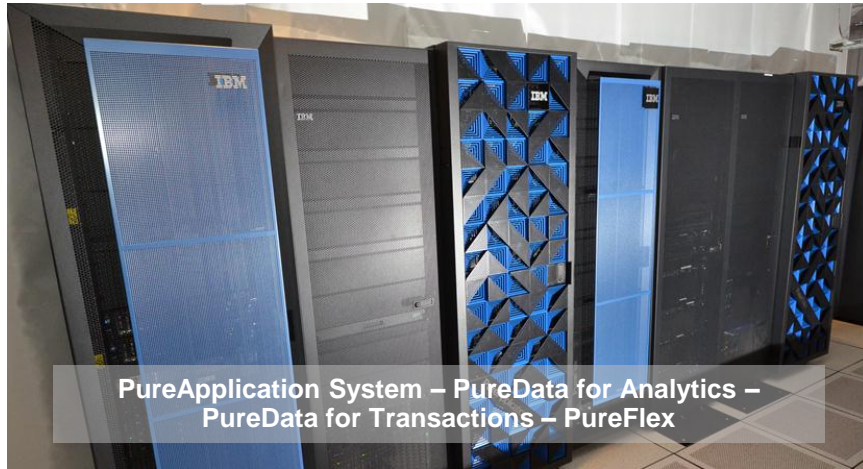
- Environments are created on-demand: dev & test, integration, training, pre-production, production...
- Software Upgrades are automated

▪ **Reusable and incremental answer to your business needs:**

- On demand, one-click, instances of Solution (in minutes)
- Organizational replication: countries, lines of business, entities, subsidiaries, etc.

		Traditional	With PureAS
<i>Increasing speed and flexibility</i>	<i>Test provisioning</i>	<i>Weeks</i>	<i>Minutes</i>
	<i>Change management</i>	<i>Months</i>	<i>Days/hours</i>
	<i>Release management</i>	<i>Weeks</i>	<i>Minutes</i>
	<i>Service access</i>	<i>Administered</i>	<i>Self-service</i>
	<i>Standardization</i>	<i>Complex</i>	<i>Reuse/share</i>
<i>Reducing costs</i>	<i>Metering/billing</i>	<i>Fixed cost</i>	<i>Variable cost</i>
	<i>Server/storage utilization</i>	<i>10-20%</i>	<i>~ 70 %</i>
	<i>Payback period</i>	<i>Years</i>	<i>Months</i>

The Industry Pattern Factory at IBM La Gaude delivers business solutions patterns for your industry



Client / Business Partners sessions

- Client sessions
- Business Partner enablement and work sessions

Assets / Solutions

- All the IBM catalog of software product patterns +
- "Customer profitability Analytics" & "Customer Centricity" business solution patterns implemented & deployable on IPAS
- « Patient care & insight », « Intelligent Advisor » and « IOC » solutions running on Pureflex
- Business solutions running on PureData for Analytics

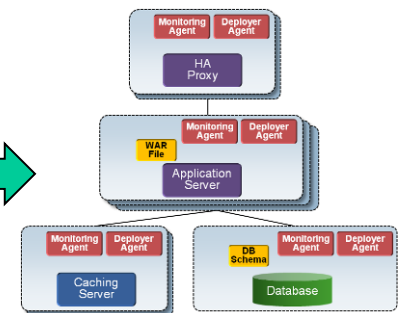
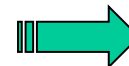
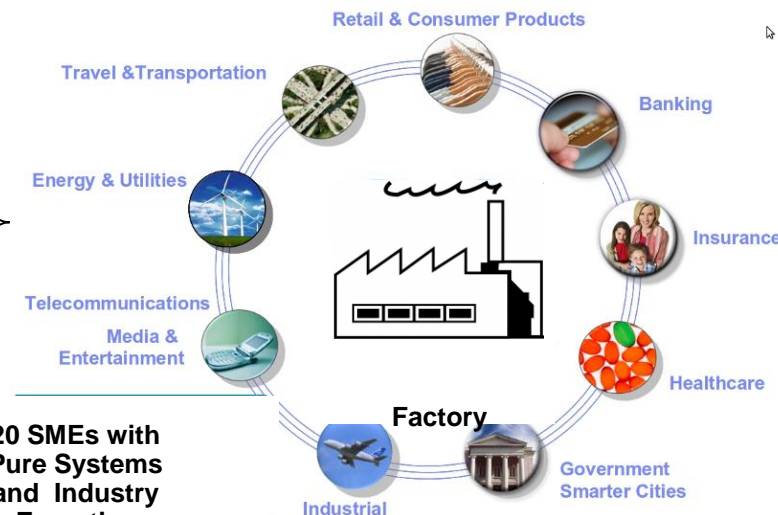
Industry Pattern Factory:

- Delivers reusable patterns for complex business solutions in all industries.



20 SMEs with
Pure Systems
and Industry
Expertise

Global Industry Solution Center – La Gaude – 2013



Business Solutions patterns

Any Question ?

Thank You

United Kingdom

Obrigado

Portugal

Dziękuję

Poland

Dankschen

Austria

Thanks

United States

Takk

Norway

Toda

Israel

Gracias

Spain

Danke

Germany

Bedankt

Netherlands

Tak

Denmark

Dekuju

Czech Republic

Merci

France

Engraziel

Switzerland

Tesekkür ederim

Turkey

Tack

Sweden

Dank u

Belgium

Thank You

United Kingdom

Grazie

Italy

Jag tackar

Finland

Dakujem

Slovakia

Спасибо

Russia