



Enabling Solutions for a Smarter Planet with System z

The future runs on System z

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Building a Smarter Planet

Thinking and acting in new ways to make our systems more efficient, productive and responsive

New Intelligence

Data is exploding and it's in silos"

I Need Insight

Smart Work

New business and process demands"

I Need to Work Smart



Green and Beyond

"Our resources are limited"

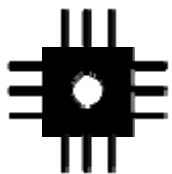
I Need Efficiency

Dynamic Infrastructure

"My infrastructure is inflexible and costly"

I Need to Respond Quickly

The time to act is NOW!



Our world is becoming
INSTRUMENTED



By 2010, 30 billion RFID tags will be embedded into our world and across entire ecosystems



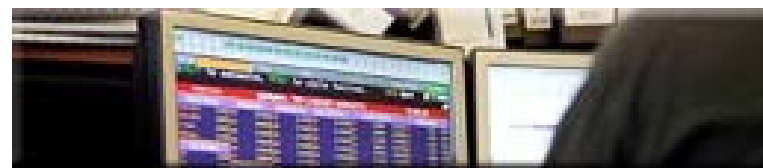
Our world is becoming
INTERCONNECTED



An estimated 2 billion people will be on the Web by 2011 and a trillion connected objects – cars, appliances, camera, roadways, pipelines – comprising the “Internet of Things”

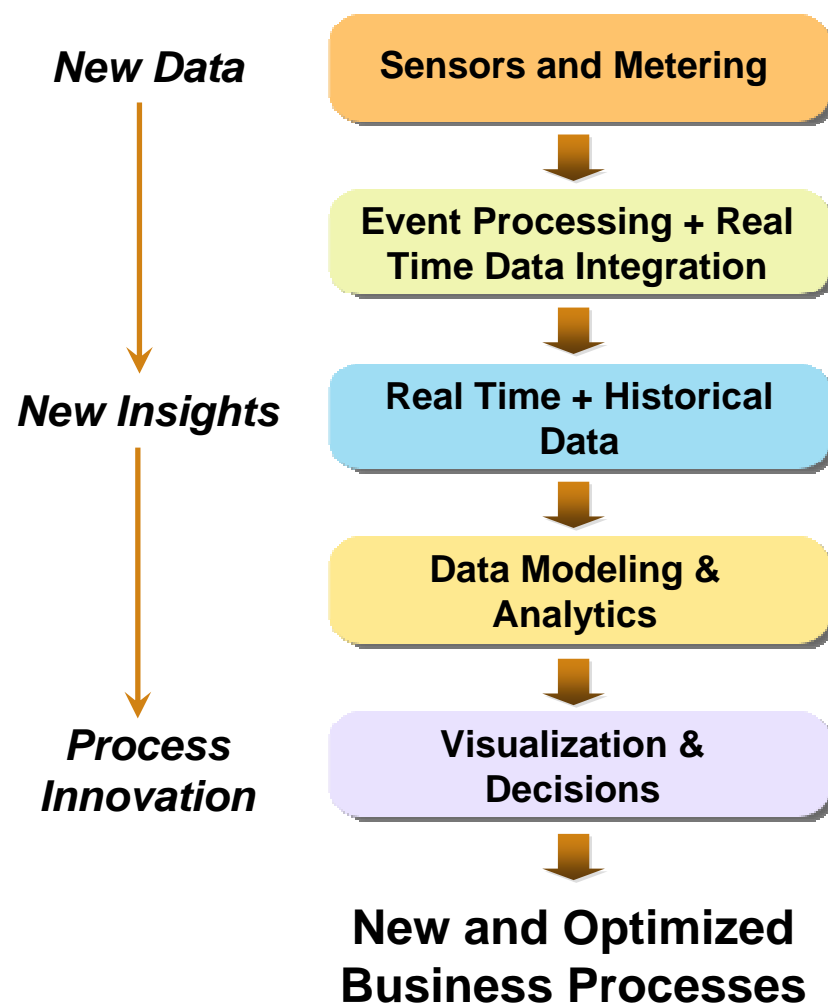


All things becoming
INTELLIGENT



Every day, 15 petabytes of new information are being generated. This is 8x more than the information in all U.S. libraries

What Does It Mean to Be Smarter?



- Data collection
- Data Integration
- Comparison of historical data, with newly collected data
- Data modeling and analytics to create insights from data to feed decision support and actions

Leading businesses today are benefiting from new sensor data when combined with IBM's business process management, event processing and business optimization capabilities

IBM is helping clients from many industries implement Smarter Industry Solutions



Smarter Roads



Smarter Oil & Gas



Smarter Food



Smarter Healthcare



Smarter Utilities



Smarter Retail



Smarter Telco



Smarter Supply Chains



Smarter Public Safety



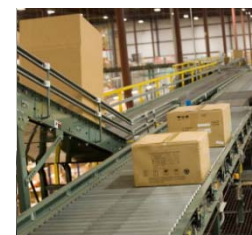
Smarter Money



Smarter Transportation

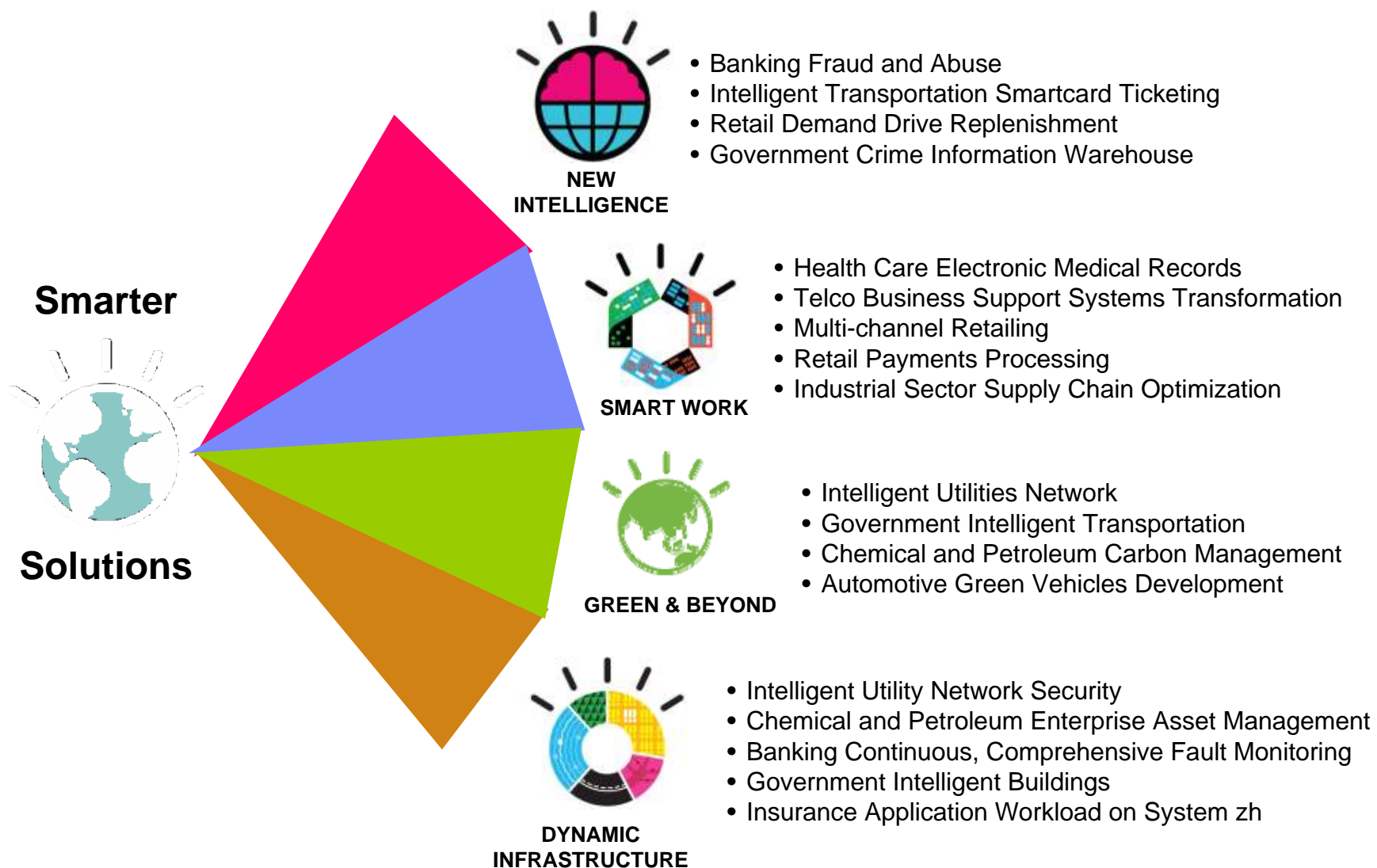


Smarter Cities



Smarter Products

Examples of IBM Smarter Industry Solutions



Software is critical to enabling Smarter Solutions

- Software is increasingly viewed as a *strategic business asset*
- *Software* necessary to:
 - Deliver a more energy efficient world
 - Take advantage of information base explosion
 - Communicate with a trillion devices
 - Drive on-going product differentiation
 - Serve new global markets
- Leaders everywhere are deploying *increasingly intelligent* software, systems and products
- Accelerating innovation and enabling effective change is highly dependent on the ability to *manage effective software delivery*



Innovation for a Smarter Planet

IBM Software unleashes the power of System z for the most demanding Smarter Industry Solutions

- Build, deploy and run applications in a *proven, secure and flexible* environment
- *Modernize mainframe applications* and information for new business processes
- Integrate and transform any data and content to *deliver information when and where you need it*
- Deliver a *point of personalized interaction* with applications, content, processes and people
- Improve business responsiveness with *end-to-end integration* across and beyond the enterprise

Information Management

Lotus. software

Rational. software

Tivoli. software

WebSphere. software

RioCard lowers costs and improves satisfaction with Smarter Ticketing on z!



Client Challenges

Issuing, checking, and validating tickets for ten million travelers a day was becoming increasingly expensive, complicated and frustrating for passengers

Solution

A complete electronic ticketing system based on a reusable, rechargeable smartcards

Validation points on buses, in the subway and in train stations able to read over 2 million passes daily



"The IBM System z, DB2 and WebSphere solution has helped us to deliver lower ticketing costs and better manage information, meeting all our goals for the RioCard program. "

Arthur Soares, Fetranspor

Smarter Business Outcomes

- Cut ticketing costs by 1.5% and saves \$500,000 monthly
- Faster ticketing and travel for passengers
- Revenue distributed to the 239 companies that comprise Fetranspor in 24 hours versus 3 to 4 days

Airbus deploys a highly instrumented Smarter Supply Chain



Client Challenges

- Need to ramp production to meet demand
- Manage production across multiple locations worldwide
- Ability to execute strategic shifts in business

Solution

Value Chain Visibility Initiative leveraging RFID technology to create a corporate wide end-to-end approach across all business units



Smarter Business Outcomes

- Automated 100% of data entry, resulting: 75% reduction in physical handling
- Reduced inventory levels through better visibility and more reliable automated processes
- Optimization of external and internal deliveries throughout the supply chain
- Integration of parts tracking into aircraft parts lifecycle management processes

MVV Energie improves electrical grid efficiency

Client Challenges

Due to the rise of alternative energy (e.g., solar and biomass), MVV needed to manage a variety of different energy sources

Lacked a real-time monitoring and management system to track availability of energy across the city

Solution

Created a virtual marketplace that would offer unfettered access to make trades and purchases of not only energy, but also associated services (e.g., distribution and trading) with other organizations



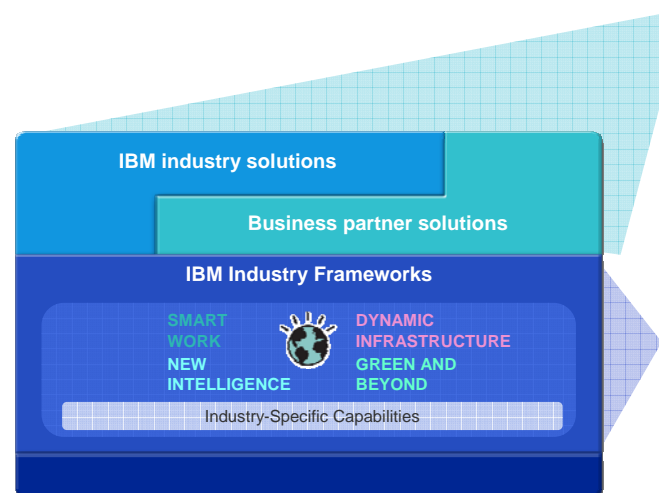
Smarter Business Outcomes

- Delivers increased transparency within the grid, allowing energy companies to better monitor power levels and set appropriate prices
- Keeps users informed regarding available energy, enabling them to better control usage and avoid high cost overages
- Improves overall grid efficiency and lowers costs and waste by cutting energy usage by five to 7%

IBM Industry Frameworks help you deploy Smarter Industry Solutions

- Increased flexibility
- Faster time to value
- Reduced risk
- Industry-specific skills and offerings
- More modular offerings and solutions
- Cost containment

Industry Solution
addresses a business issue through industry and subject matter expertise



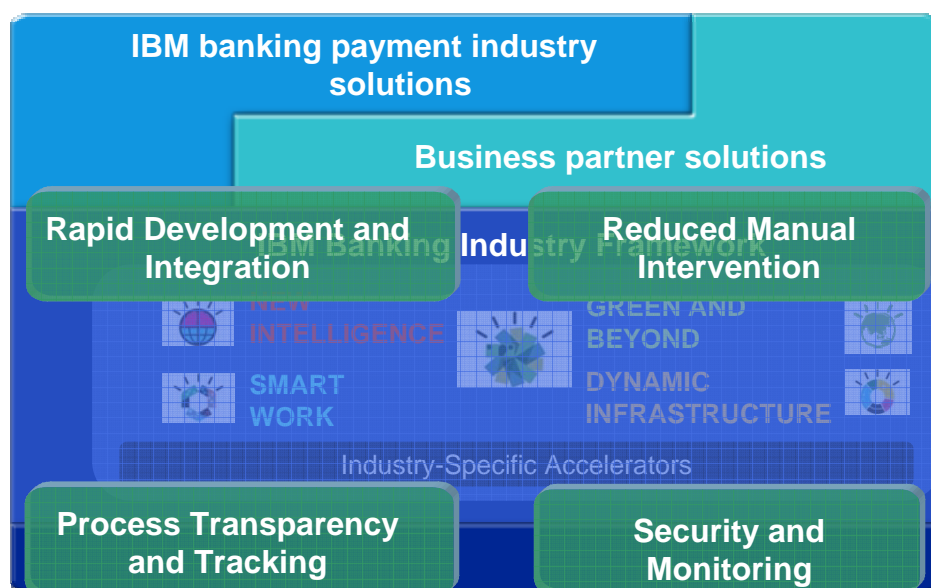
Industry Framework
a software platform based on business specific usage patterns



Delivering the business value of IBM software for your project's requirements

Frameworks provide IBM market-leading middleware capabilities in an industry context

While creating an agile foundation for future growth



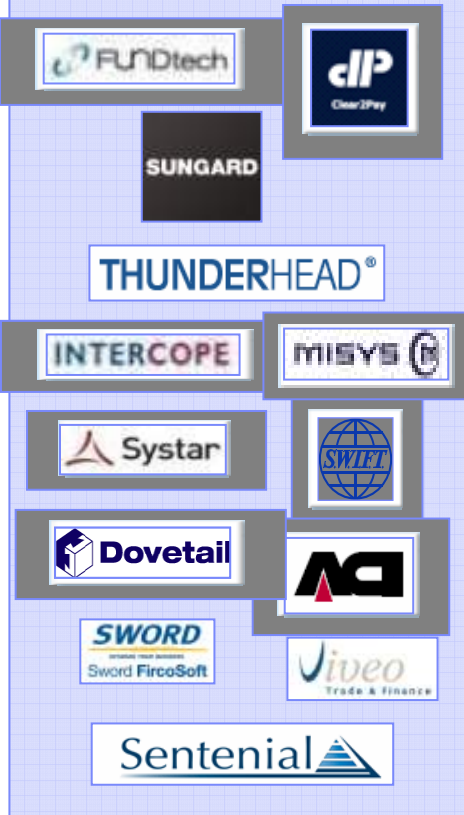
IBM Payment Framework For Financial Services

A framework provides...

- An approach to align technology with business needs
- Solution accelerators to speed deployment
- Re-usable implementation patterns to lower risk
- Support for adoption of open and industry standards
- A choice of business applications and services from IBM business partners

Frameworks are implemented through projects

Example – Banking Payments Projects

SEPA Compliance	<ul style="list-style-type: none"> Restructure payments operations to comply with the European SEPA Direct Debit and SEPA Credit Transfer schemes 	Framework Partners 
SWIFTNet Modernization	<ul style="list-style-type: none"> Modernize and upgrade your SWIFTNet operations for more efficient processing of high volume payments messages 	
Payments Process Efficiency	<ul style="list-style-type: none"> Drive efficiency in payments processing with business process management 	
Corporate Services	<ul style="list-style-type: none"> Integrate with your corporate customers' treasury operations to reduce working capital requirements and improve supply chain management 	
Retail Payments	<ul style="list-style-type: none"> Migrate to a modern, more secure platform for ATM, mobile, and card switch functionality 	
Digital Payments Conversion	<ul style="list-style-type: none"> Migrate from paper-based to digital processing capabilities to reduce costs 	

Allowing System z clients to tackle smaller pieces of an industry solution with a faster payback!

Banking Payments Example on with ACI

System z Retail Payments Project

Client Issue

- Financial institutions need to ensure that high-volume electronic payments are processed reliably and safely, 24 hours a day

Solution

Comprehensive electronic payments processing solution:

- Improves ROI by leveraging resources-both human and infrastructure-through system rationalization
- Speed time to market for product and service introductions
- Enhance efficiencies with integrated, enterprise-wide solutions
- Provide high availability and scalability to meet increasing demands



Framework Components

- IBM SOA Foundation Products (WMB, WPS, WTX)
- WebSphere Monitor
- IFW
- DB2 pureXML (ISO 20022 Pack)
- Tivoli CAM for SOA, Omegamon
- Rational Software Architect, RSM
- z/OS

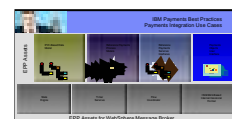


Example Payments & Securities Accelerators



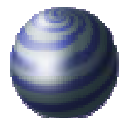
WebSphere Business Integration for Financial Networks

Product that provides a single window to SWIFTNet services and reliable processing of high volume messages



EPP Assets

Assets that, when used in combination with SWG services and other framework products, allow you to build an enterprise payments hub that provides transaction-level visibility to payments



WTX Industry Packs

Industry packs used with WebSphere Transformation Extender that enable data transformation to industry standards (e.g., NACHA, SWIFT, FIX)



IFW / BDW Process & Data Models

Common banking process and data models to help speed definition of requirements and implementation



pureXML™ Payments Bundles

Industry bundles used with pureXML that provide efficient XML data management to industry standards (e.g., SWIFT, FIX, FpML, TWIST)



WebSphere Banking Payments Pack

SOA-based services templates that allow you to develop business services faster for payments processes, speeding application development

Payments Hub will deliver efficiency and time-to-market for Major Canadian Bank



Client Challenges

Inefficient Silo'd payment process and channels impedes the bank's ability to speed new services to market

Solution

Leverage the power and scalability of the System z to implement a payments hub for their Retail and Wholesale Payments business that modernizes their current point-to-point solutions



Smarter Expected Outcomes

- Speed new services to market (Example - Global Remittances for retail clients)
- Ability to quickly deliver higher profit customized wholesale payment services
- Adopt to Payment Standards and new bank policies fast and efficiently
- Increased transaction visibility, transparency and tracking
- An infrastructure to progressively modernize there 25 year old legacy applications

System z can help integrate and deliver vital customer data where and when its needed

Customer Care & Insight Projects

Customer Information Optimization	<ul style="list-style-type: none"> Create common data definitions, a common data warehouse, and integrate sources of disparate data to create an enterprise view of the customer
Customer Insight Optimization	<ul style="list-style-type: none"> Use business analytics to optimize insight at the point of interaction and better understand customer needs and preferences
Service Process Optimization	<ul style="list-style-type: none"> Leverage customer insight to optimize service processes including case management, dispute management, and event-based decision-making
Sales Process Optimization	<ul style="list-style-type: none"> Leverage customer insight to optimize sales processes such as account opening, lending, cross/up-selling, and dynamic product bundling
Marketing Process Optimization	<ul style="list-style-type: none"> Leverage customer insight for customer segmentation, targeted marketing communications and campaign management
Compliance Process Optimization	<ul style="list-style-type: none"> Leverage customer insight for customer identification, and customer preference processes
Multi-Channel Transformation	<ul style="list-style-type: none"> Transform your front office channels including branch, internet, call center, kiosk, ATM and mobile



Industry Framework capabilities for Customer Care and Insight *reduce project risk* and *shorten time-to-value*

Example Customer Care and Insight Accelerators



Banking Data Integration Accelerators

- Detailed design templates for accelerating data warehouse development



Banking Performance Blueprints

- Pre-defined data, process and policy models for enterprise planning, and financial management and control



Customer Identification Solution

- Provides business services for accelerating customer on-boarding and maintenance processes



Common Business Language Services Accelerator

- Process and integration models provide a higher order composite services in relation to Master Data Management Server



Account Opening Scenario

- Best practice business and technical patterns for an account opening SOA-based solution



WebSphere Multichannel Bank Transformation Toolkit

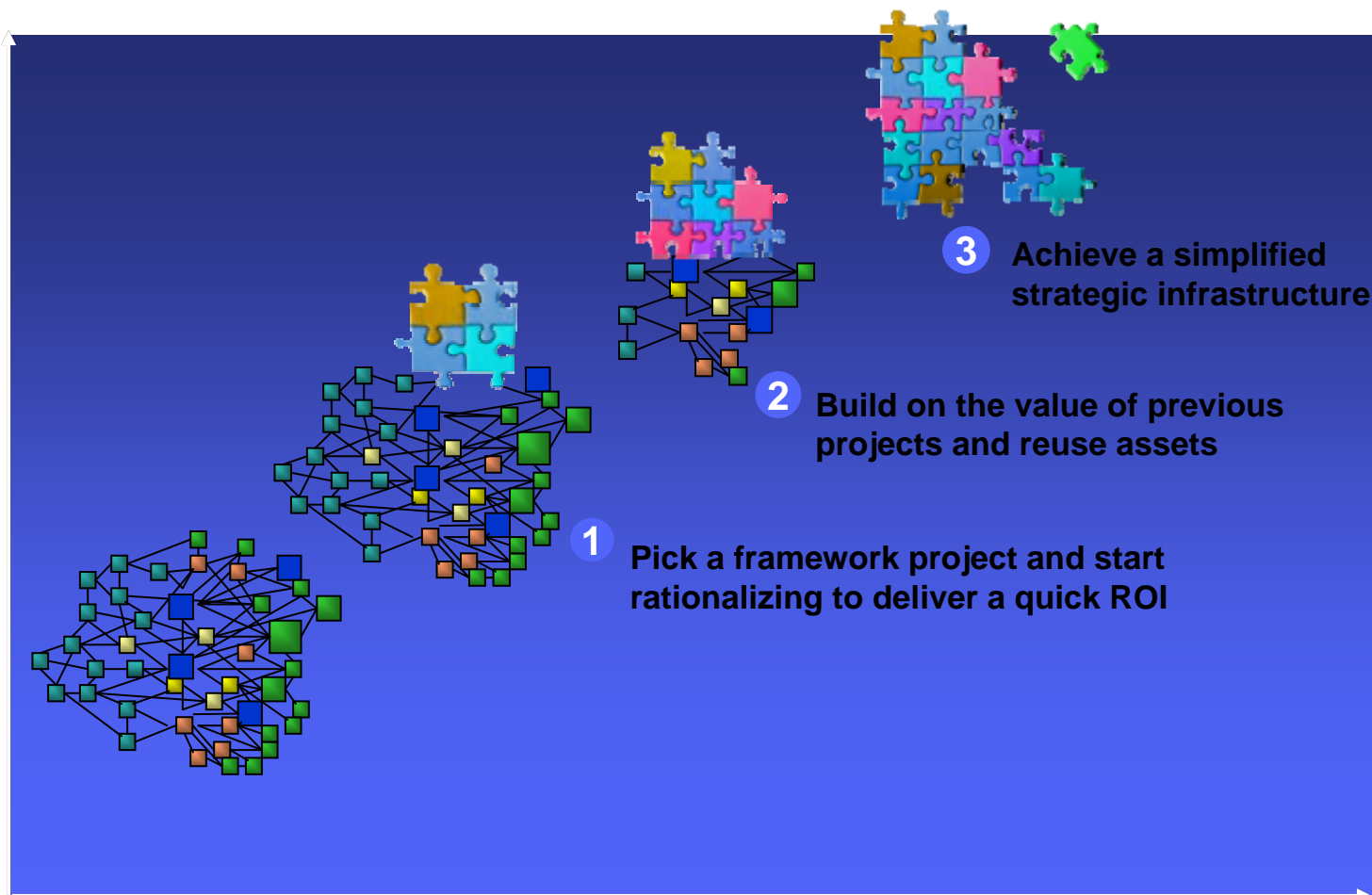
- Proven pattern and capabilities to accelerate the creation of integrated retail delivery applications



Sonata

- Provides a rapid prototype & development environment for an integrated front office desktop

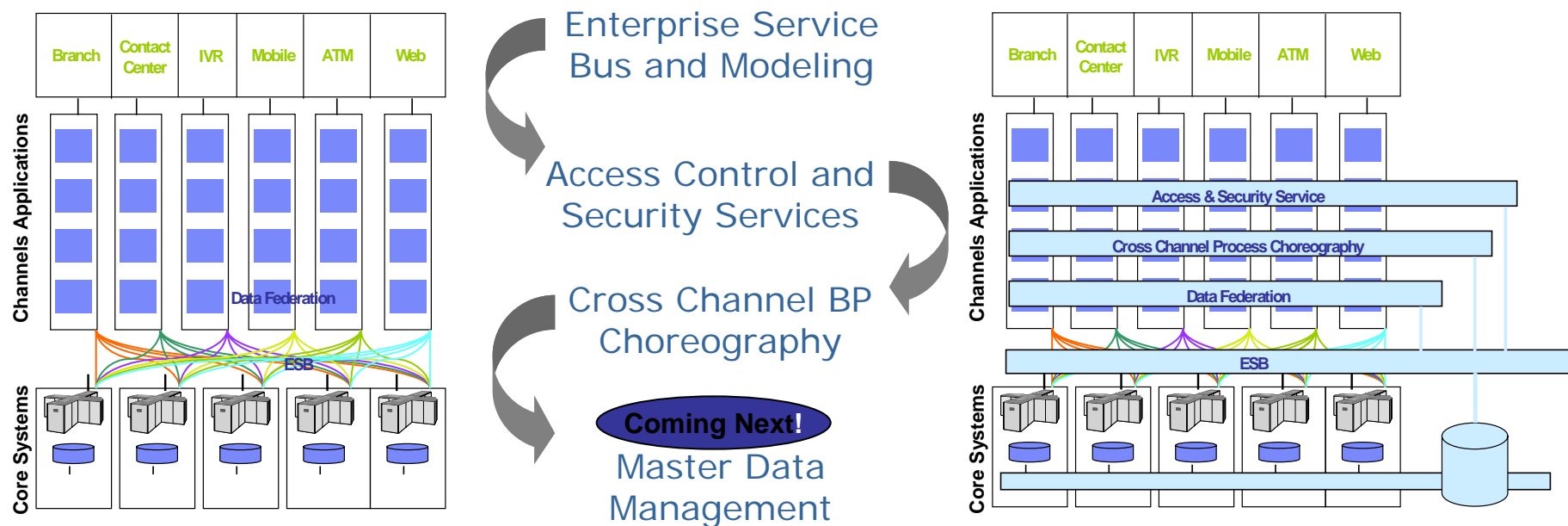
Each project delivers value and enables growth



Increasing reuse and business agility along the way!

BNi Delivering a seamless customer experience

Frameworks enable BNi to continuously build on prior successes....



- 70% faster in IT system development process
- 60% faster in new product *time to market*.
- 70% faster in existing product improvement.
- 50% increase in resource utilization efficiency.
- Well-directed and defined application development.
- Reduction in cases reviewed for fraud and/or errors due to compliance issues.

Industry Frameworks are at work today...

across clients, industries, partners and geographies

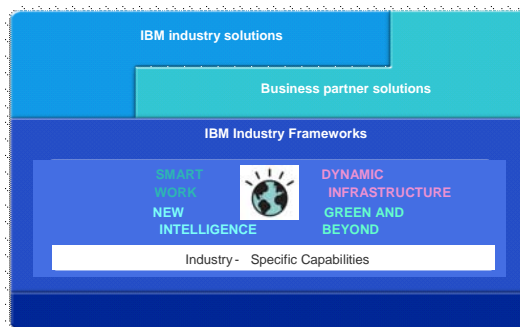
Retail Integration Framework
Retail

Service Provider Development Environment
Telecommunications

Customer Care and Insight Framework
Banking

Product Development Integration Framework
Automotive, Aerospace & Defense

Payments Framework For Financial Services
Banking



Information Integration Framework
Chemicals & Petroleum

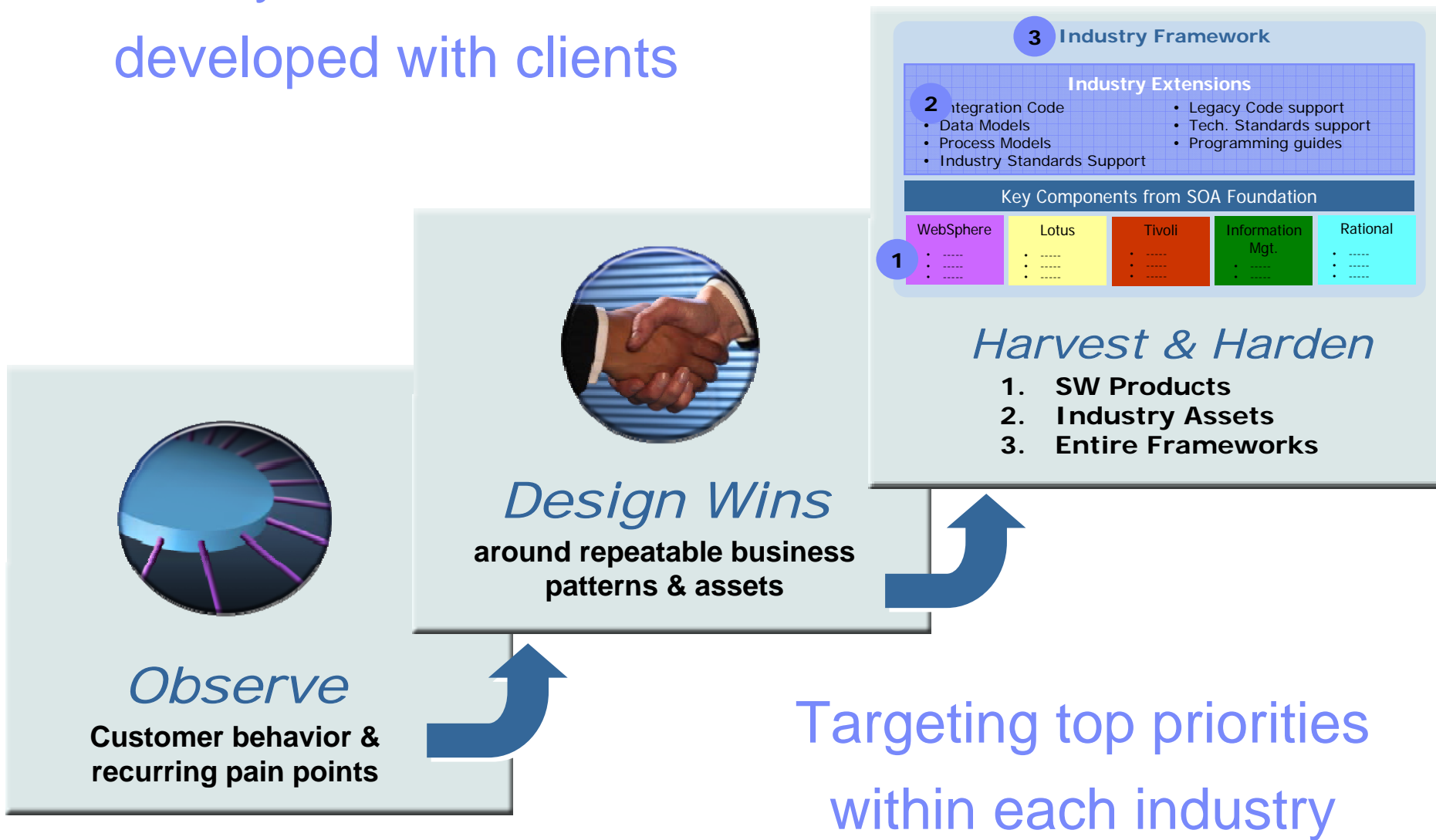
Insurance Process Acceleration Framework
Insurance

Solution Architecture for Energy and Utilities Framework
Energy and Utilities

Health Integration Framework
Healthcare

Network Centric Operations Framework
Government

Industry Frameworks are developed with clients



Guang Dong Hospital leverages Smarter Health Record for *Patient-Centric* care



Client Challenges

Compliance with Chinese medical reform plan that included a resolution to provide universal medical coverage and common care standards to all citizens by 2011

Ability to share or transfer records between five Guang Dong's locations

Solution

An easily shared electronic records system that integrates complex medical information into a standardized, cohesive record bound to individual patients.



"We are committed to maintaining our exacting standards, and IBM's CHAS technology is helping us do just..."

Mr. Lv Yubo, president,
Guang Dong Hospital

Smarter Business Outcomes

- Improved quality of care
- Increased insight into medical history and improved diagnosis processes
- Ability to share patient information within the hospital and eventually with other facilities
- Enables medical personnel to study which treatments work best for particular diseases

City of Atlanta speeds delivery of services

Enterprise Modernization done 'Rationally'



Client Challenges

Internet Savvy Citizens Demand
Greater Services

Huge investment in legacy applications
Over 300B lines of code
Aging developer base

Solution

Extended reach of systems and
to the Internet with Web 2.0

Then enriched those services
with 2.0 mashups

COMPANY NAME	LOCALITY	ADDRESS	STATE	ZIP
BACK INDUSTRIES	1045	W MARIETTA	GA	30067
BIO-TEK INDUSTRIES	1300	W MARIETTA	GA	30067
BOBBY BROS INDUSTRIES	2120	MARIETTA	GA	30067
ZEPHIR INDUSTRIES	111	MARIETTA	GA	30067
PUMAR INDUSTRIES	1594	MARIETTA	GA	30067

Smarter Business Outcomes

Green Screen applications modernized for the Internet

Greater collaboration increasing developer efficiency

Faster delivery of new services

C L E A R B L A D E





Let's Build a Smarter Planet

Together

Thank You