
The Business Value of A Service-Oriented Architecture

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Agenda

1. SOA - Definition, Attributes and Business Benefits
2. SOA - Relevance and Value for Financial Services & Insurance
3. Achieving the Business Value of SOA
4. Measuring and Sustaining the Business Value through Best Practices
5. Case Studies
 1. Consolidation & Improved Customer Service
 2. Revenue Growth
 3. Operational Efficiency

SOA - Definition and Key Attributes

Service-Oriented Architecture may be defined as:

- An approach to organizing IT resources (data, logic, infrastructure) as *services* with well-defined, high-level interfaces
- Basic value proposition is to provide stable interfaces in front of diverse or volatile implementations
- SOA is not just an architecture of services seen from a technology perspective, but the policies, practices, and frameworks by which we ensure the right services are provided and consumed
- Key driver towards making the IT organization a “service-provider” that delivers continuous value to the business

SOA - The Anti-Definition

- SOA is NOT Web Services. Can be implemented via
 - EAI, MOM, RMI, ORB
 - Web Services is the most natural implementation for secure, cross-platform, loosely-coupled systems, especially those deployed on the Internet
- SOA is NOT new
 - Similar principles existed in CORBA, OSF DCE but have been refined for the internet age
- SOA is NOT always the right answer
 - Don't build services for the sake of building services!

Business Benefits of SOA

• *Responsiveness*

- Flexibility, Ease of Extension
- Faster Delivery of Products and Services

• *Cost-efficiency*

- Improved Reuse and Investment Leverage
- Reduced Costs in the Long-run (improved long-term ability to redirect resources for strategic value)

• *Quality*

- Application Portfolio Rationalization
- Consistent User Experience

• *Value & Growth*

- Easier, Robust and Flexible Integration between Systems
- Ease of Integration with Providers, Business Partners and Outsourcing Partners

• *Agility*

- New product development
- M&A

SOA Business Maturity Model

Level One – New Functionality

- Goals include standards adoption and legacy integration

Level Two – Cost Reduction

- Goals include support for heterogeneous and distributed systems

Level Three – Business Responsiveness

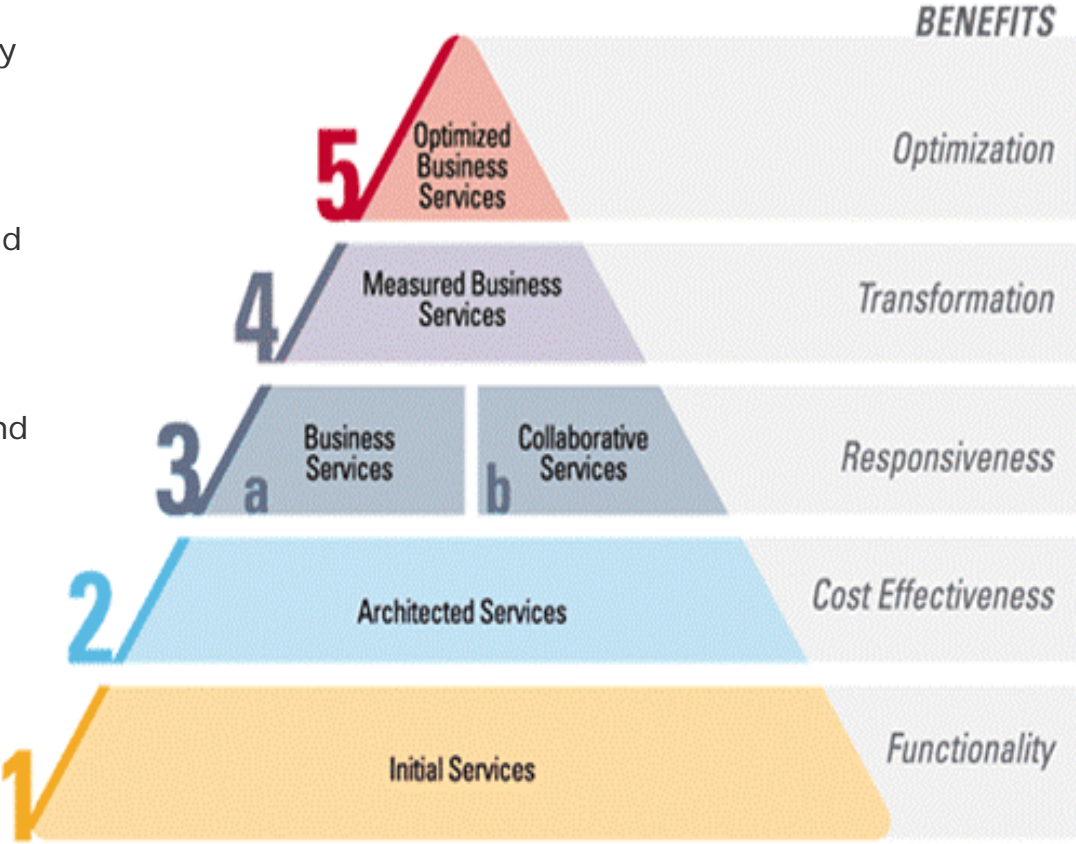
- Goals include reuse, ease of modification and cross-enterprise security

Level Four – Business Transformation

- Goals include business activity monitoring and event stream processing

Level Five – Business Automation

- Goals include event-driven automation and self-correcting business processes



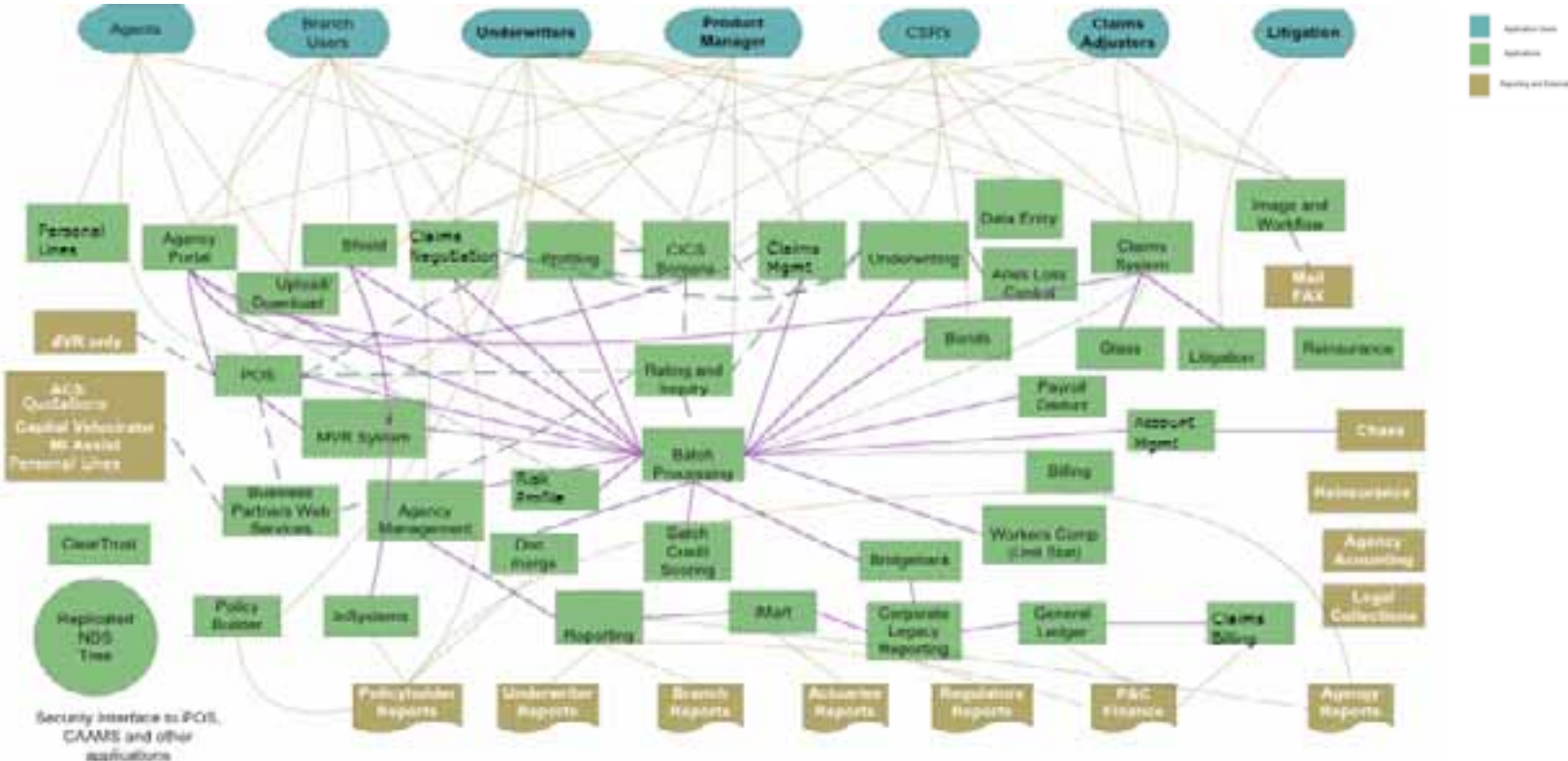
Business Challenges facing the FS and Insurance Industries in 2006

- Increased Regulatory Compliance
- Increased demand for business responsiveness
- Increased customer service expectations (e.g self-service, faster adjudication)
- Managing and guarding increasing amounts of data
- Pressure for growth and operational efficiency
- Consolidation

Existing Architecture cannot handle this!

A typical P&C Insurance Industry application infrastructure is plagued by:

- Point-to-point connectivity
- Redundant components
- Tight coupling
- Brittle architecture



Application Integration

There Is A Need For Simplicity

The **Current State Architecture** is not conducive to responding to identified industry trends and business drivers in an efficient and cost effective way.

- The present reliance on disjointed systems and supporting data models results in **increased costs, slow information processing, and high error risk**
- Non-standard and scattered integration **inhibits compliance, consolidation and business responsiveness**
- Systems inflexibility **limits ability to** respond to pressures to **reduce costs and develop new offerings**

Creating **SOA** delivers:

- Standards for implementation, data and interfaces
- An enhanced customer experience and integration
- A “plug and play” architecture for services
- An established framework for reuse
- Consistent security and enforceable privacy of data

A Potential P&C Service Oriented Architecture

SOA provides an opportunity for simplicity and reuse

Sample Keane
P&C Insurance Client

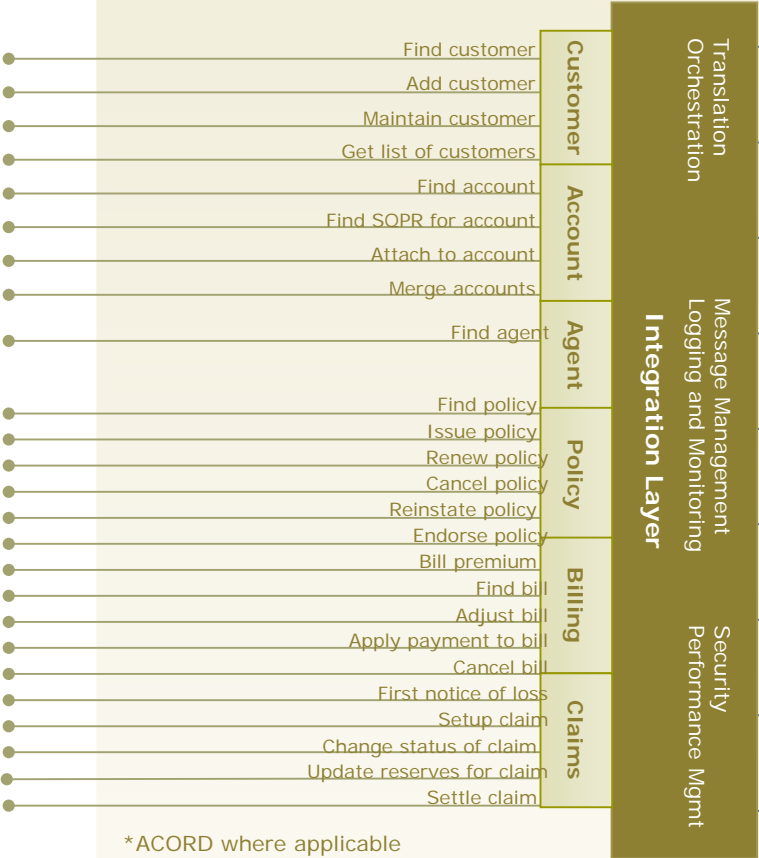
Portal/Client Layer

External Partners

Portals, Browsers,
Internet Applications

Internal Applications

Integration Layer*



*ACORD where applicable

Application Layer

Technical Services

Presentation Security	Troubleshooting Root Cause Analysis	Management Business Rules Engine	Workflow Management Metrics Management	Billing BPM	Allocation and chargebacks Organic Infrastructure
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Achieving SOA's Business Vision

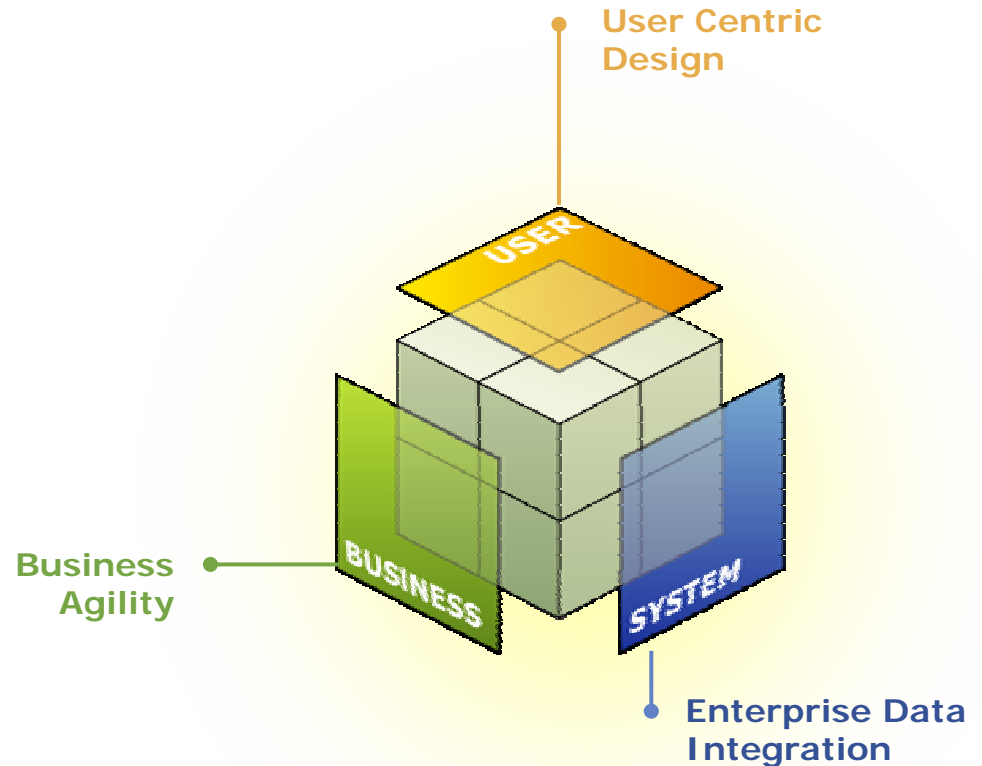
Evolving current state architecture to SOA requires:

- Careful & Thorough Planning
- More Than Just the Technology
- Significant Business Analysis
- Deep Understanding of the Business Strategy
- Coordination
- Patience
- Investment in Resources
- Experience
- Planned Execution & Follow-through

A Methodical Approach to Realizing the Vision

Keane's methodology for developing an SOA strategy is called 'Surveyor'; it includes building a future state **reference architecture** vision, and a **roadmap** to evolve to the vision.

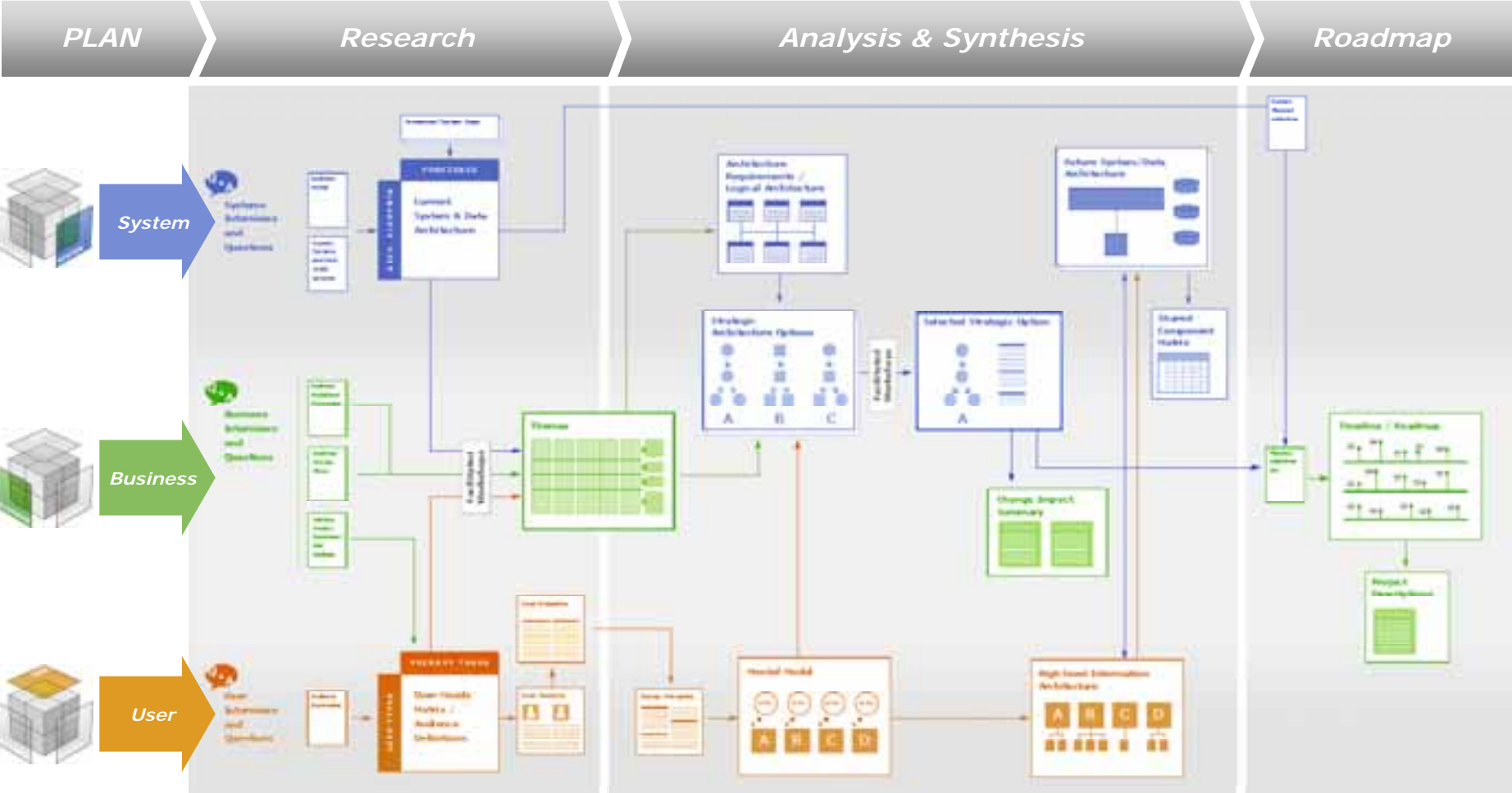
- A **holistic** approach for aligning business and technology direction that includes business, user and system aspects
- A **customizable** process that is highly tailored to the specific engagement
- Utilizes a client-focused strategic **collaborative** methodology
- Provides **incremental** and **immediate** value



Surveyor is a methodology that aligns business goals, user needs, and technology capabilities to deliver an enterprise architecture strategy

Surveyor™ Methodology — Business, User, System

The Abstracted Artifact and Process Map illustrates a preliminary Plan phase and 3 core phases: Research, Analysis & Synthesis, Roadmap



Surveyor™ Benefits & Deliverables

Benefits

- **Shared understanding** between IT, businesses, and partners of approach to achieving consortium's goals
- **Common language** to facilitate cross-group communication
- **Phased implementation approach** that minimizes disruption to current process
- **Confidence** within business; specifically that IT initiatives will support business goals and meet customer demands
- Reduction of operational costs by **eliminating redundancies**, **standardizing architecture** and **governance** models
- Focused **collaboration** between businesses and IT resulting in an **integrated user experience**

Deliverables

- Assessment of business themes, system challenges and user issues
- SOA reference architecture
- Roadmap of how to get there
- Governance plan for measuring and sustaining the benefits in the long-term

Best Practices for Realizing and Measuring the Business Value of SOA

- Make your services easy to use
- Loosely-coupled services require detailed governance, management, and SLAs - *Reliability*
- Actively manage the cultural, strategic, and tactical issues of a major paradigm shift
- Collect metrics on usage, especially across systems
- Evangelize the business benefits!

Case Study 1: Large European Agricultural Lending Bank

Strategic Imperatives

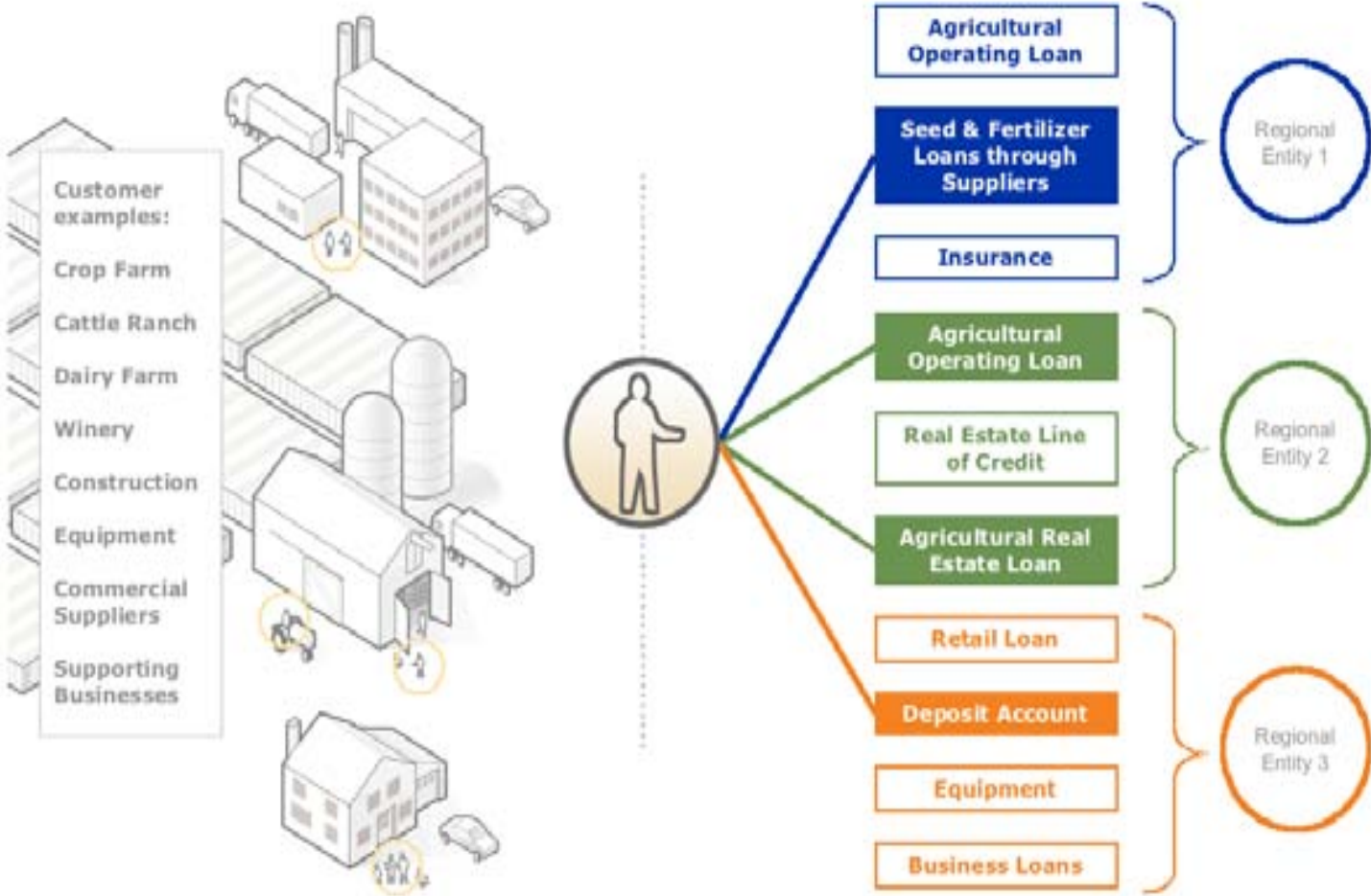
- 1.** Enable effective cross-selling by integrating systems across business groups, functions
- 2.** Identify and leverage similarities in lending processes and products
- 3.** Facilitate informed decision-making by providing real time access and visibility of information across applications and databases
- 4.** Identify and address information living in disparate legacy applications and databases across the enterprise
- 5.** Create a platform for future acquisitions

Vision

A network of entities that seamlessly provide a full spectrum of banking products

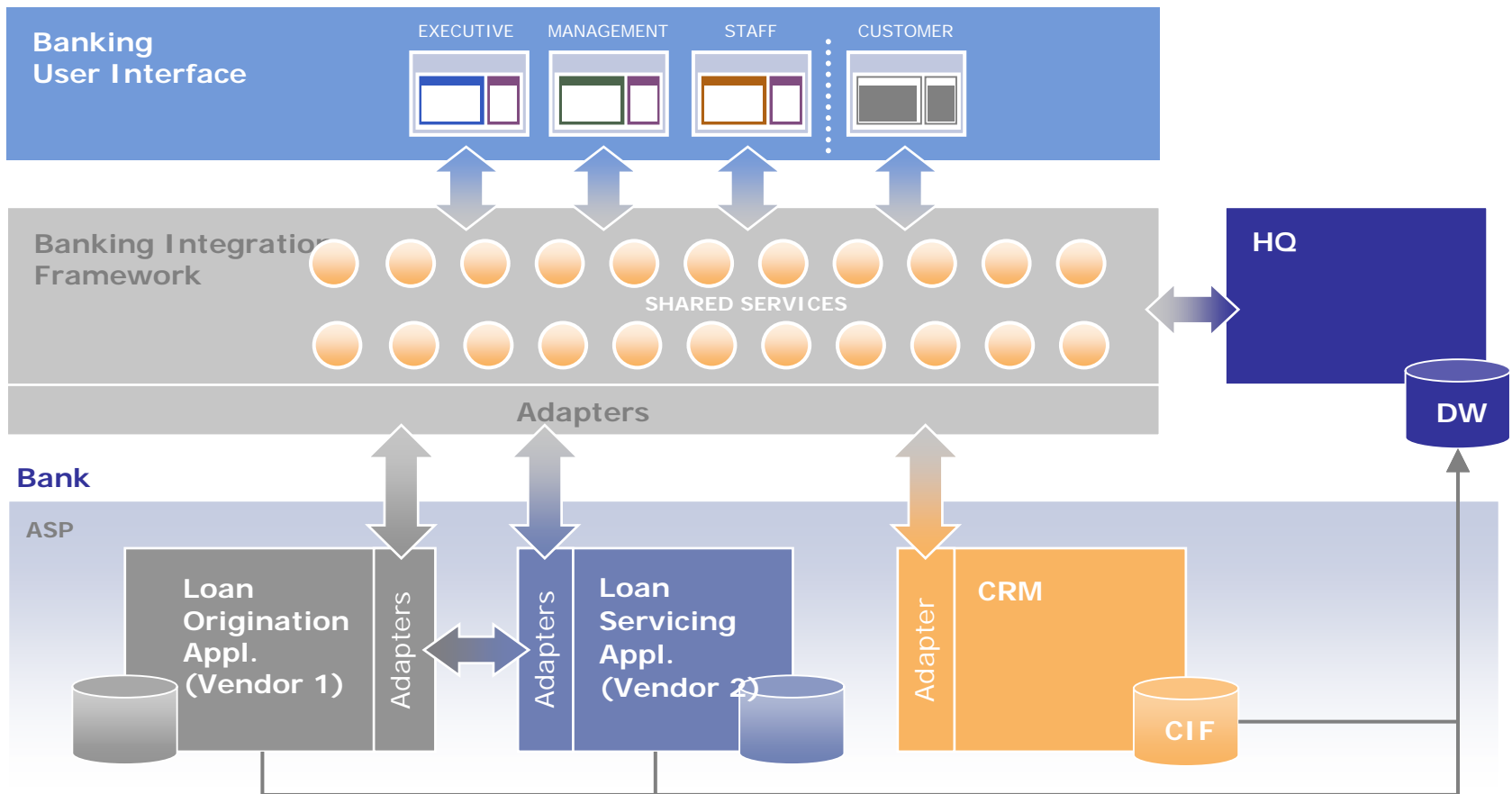
The Business Challenge

Customers have multiple, siloed points of access via regional entities, and the Bank has limited ability to service the customer as a whole.



Future State Enterprise Architecture for Lending

- All lending origination and servicing functionality hosted outside Bank
- Lending functionality exposed as web services by vendors, managed and orchestrated by the IF and made available via the common Banking user interface
- CRM and other supporting functionality available as shared services to the Country Banking User Interface
- Other services created for HQ future functionality (e.g. customer number synchronization)



Case Study 2: Major Retirement Services Administrator

- Front end integration across all product organizations is made possible by back end data linkages, following the service based architecture.

- User experience for Plan Administrators presents one coherent business, rather than different product companies. User logs in once, and finds one-stop-shopping.

- Updates in data under one product tap flow to the others.

SAVINGS PENSION OTHER BENEFITS INFO CENTER

NEWS PLAN PARTICIPANT ADMIN ASSISTANCE REPORTS COMMUNICATION INVEST

PARTICIPANT CONTRIBUTIONS WITHDRAWALS COMPLIANCE CONVERT IMPORT RELEASE INT. RATES

TRANSACTIONS APPROVALS BATCH

PARTICIPANT CONTRIBUTIONS WITHDRAW COMPLIANCE CONVERT

Work Alerts

- > [Initiate "Supervisor Report"](#)
- + [401k Plan needs adjustment](#)
- > [Loan Request: J. Smith](#)
- | [Change address](#)

Site Bytes

- [Legislative Alert – IRS Issues Final Regulations on Elimination of Certain Alternate Forms of Payment.](#) The IRS has announced new
- [cost of living adjustment \(COLA\) numbers.](#)
- For definitions of some financial terms and an explanation of many of the popular indices, see our [online dictionary.](#)

Info Center

What's New

Plans:
How to successfully combine two companies' retirement plans.

Mapping Out a Successful Combined Plan Portfolio:
Look at ways to select investment options for a new retirement plan.

Market Perspective:
Musings from an "Old Investment Guy": Alan Wilkinson stresses the importance of retirement planning now that we're living longer.

Plan Performance:
The effects of interest rate changes.

Service News

Anticipating Participant Concerns:
Clear and direct communication is crucial during a corporate action.

Compliance

IRS Proposed Reg re: § 411(d)(6) Protected Benefit Rules:
Details of the proposed regulations to eliminate certain alternate forms of account balance payment.

IRS Clarifies a Key Aspect of the Rollover Contribution Regulations:
There is some relief if a sponsor accepts an invalid rollover contribution from another plan.

Market Review

DJIA

10 11 12 1 2 3

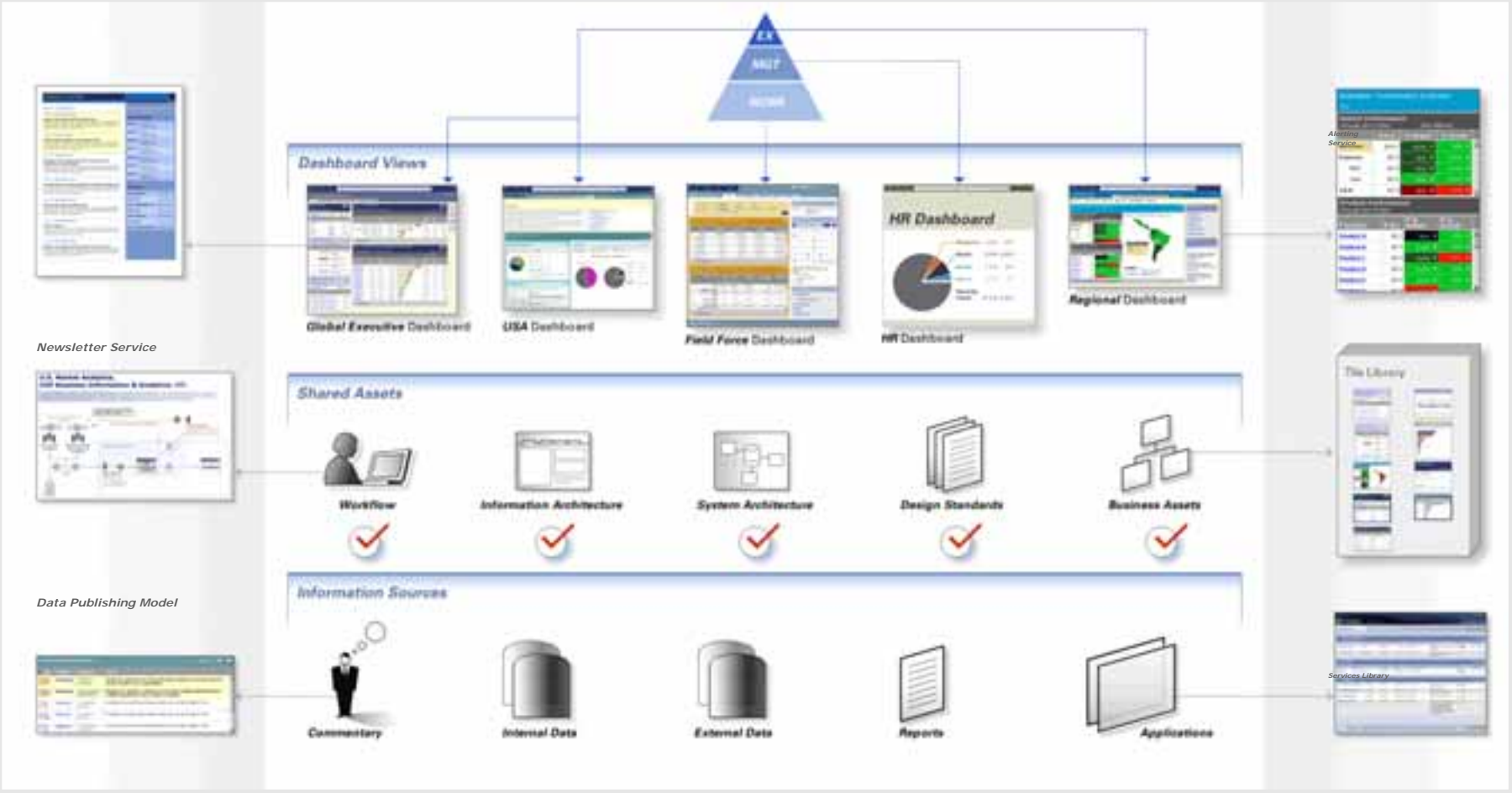
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DJIA	10,646.82	▲ 128.70
NASDAQ	3,988.92	▲ 104.16
S&P 500	1,460.55	▼ 12.82

Plan Sponsors

NEW Reporting Tools!

Case Study 3: Global Pharmaceutical Company



Commentary Service

Composite Application