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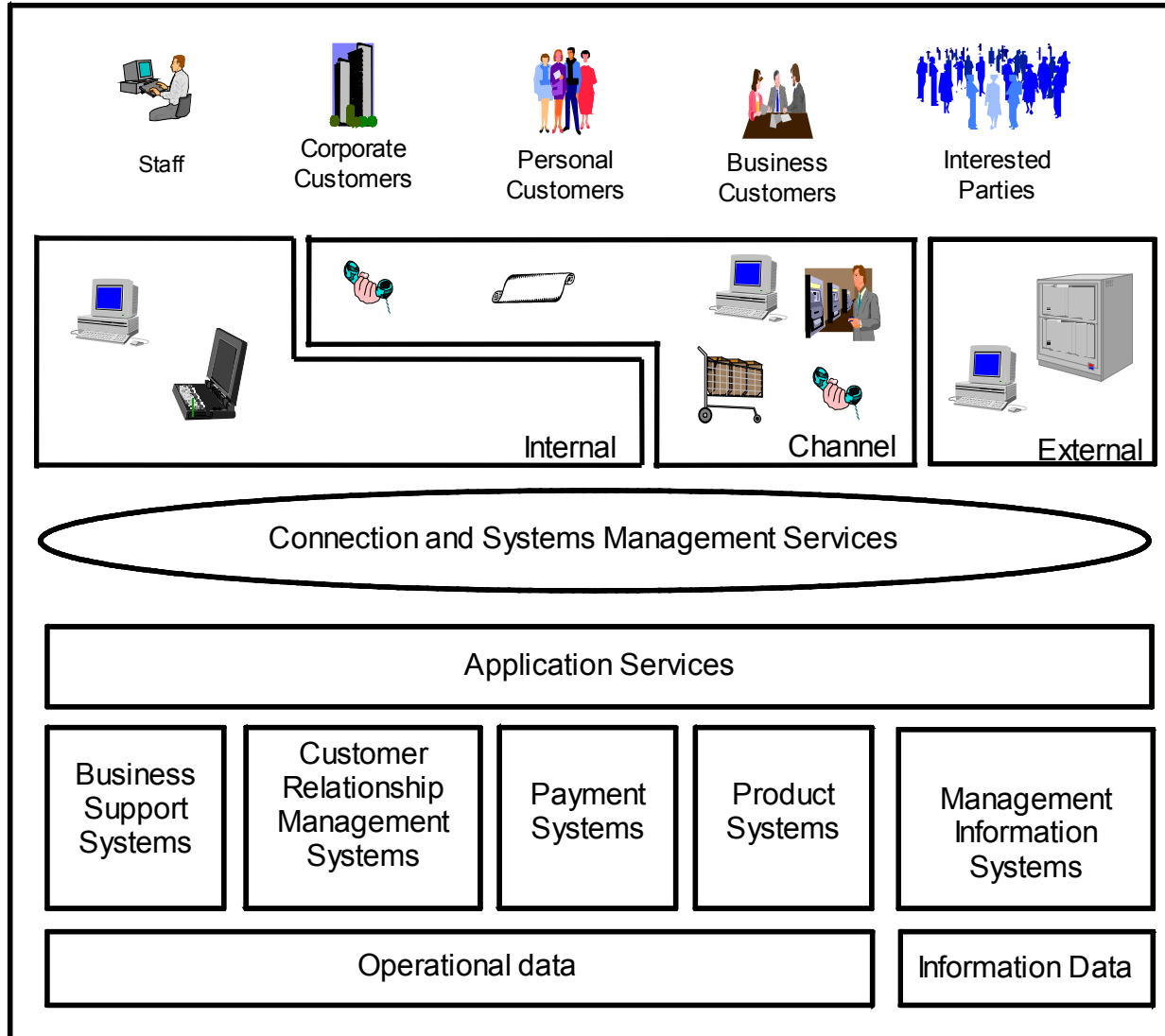# SOA в реаліях України, досвід, перспективи
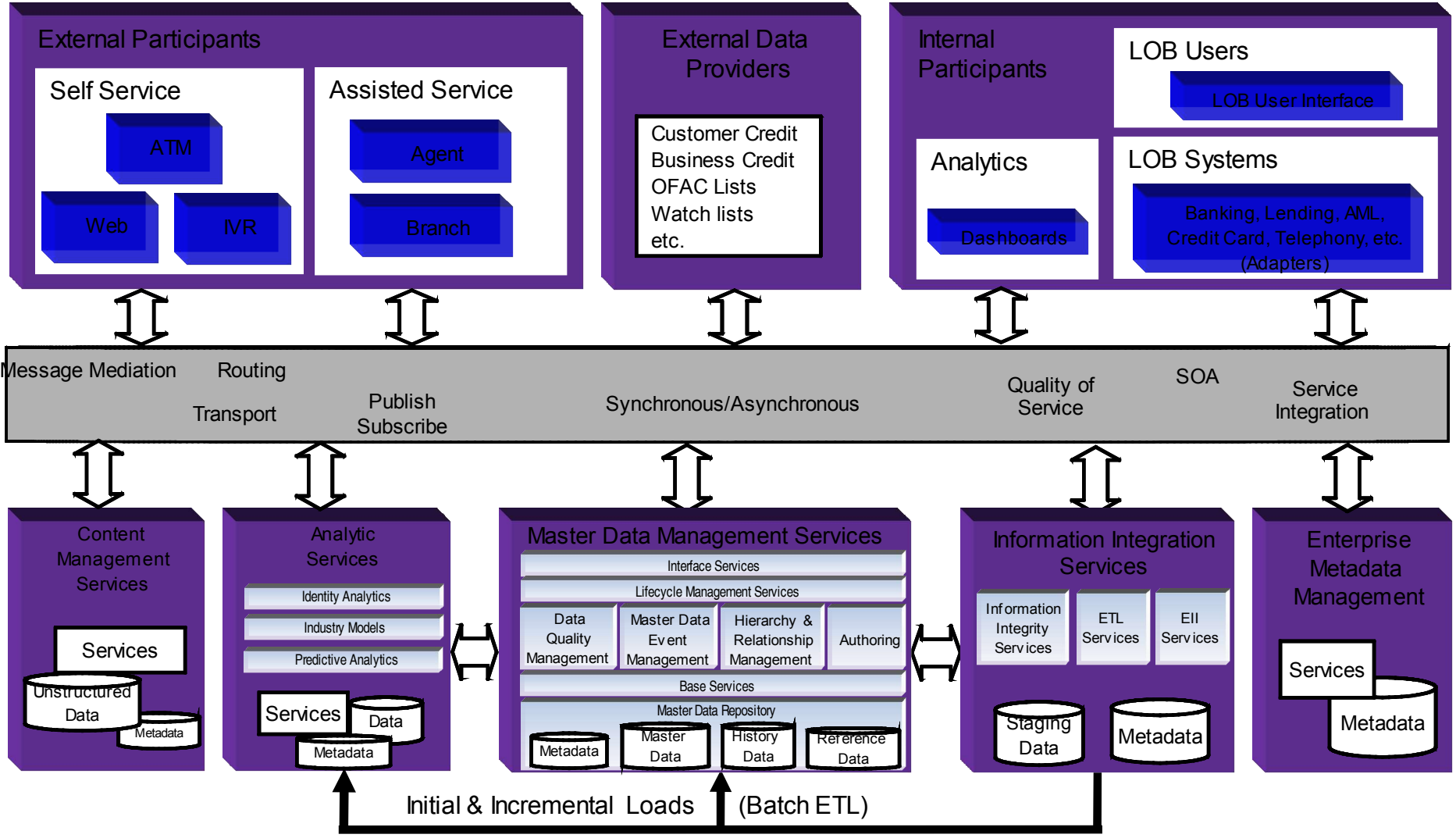
Enterprise Architecture Overview

IT Systems Strategic Direction
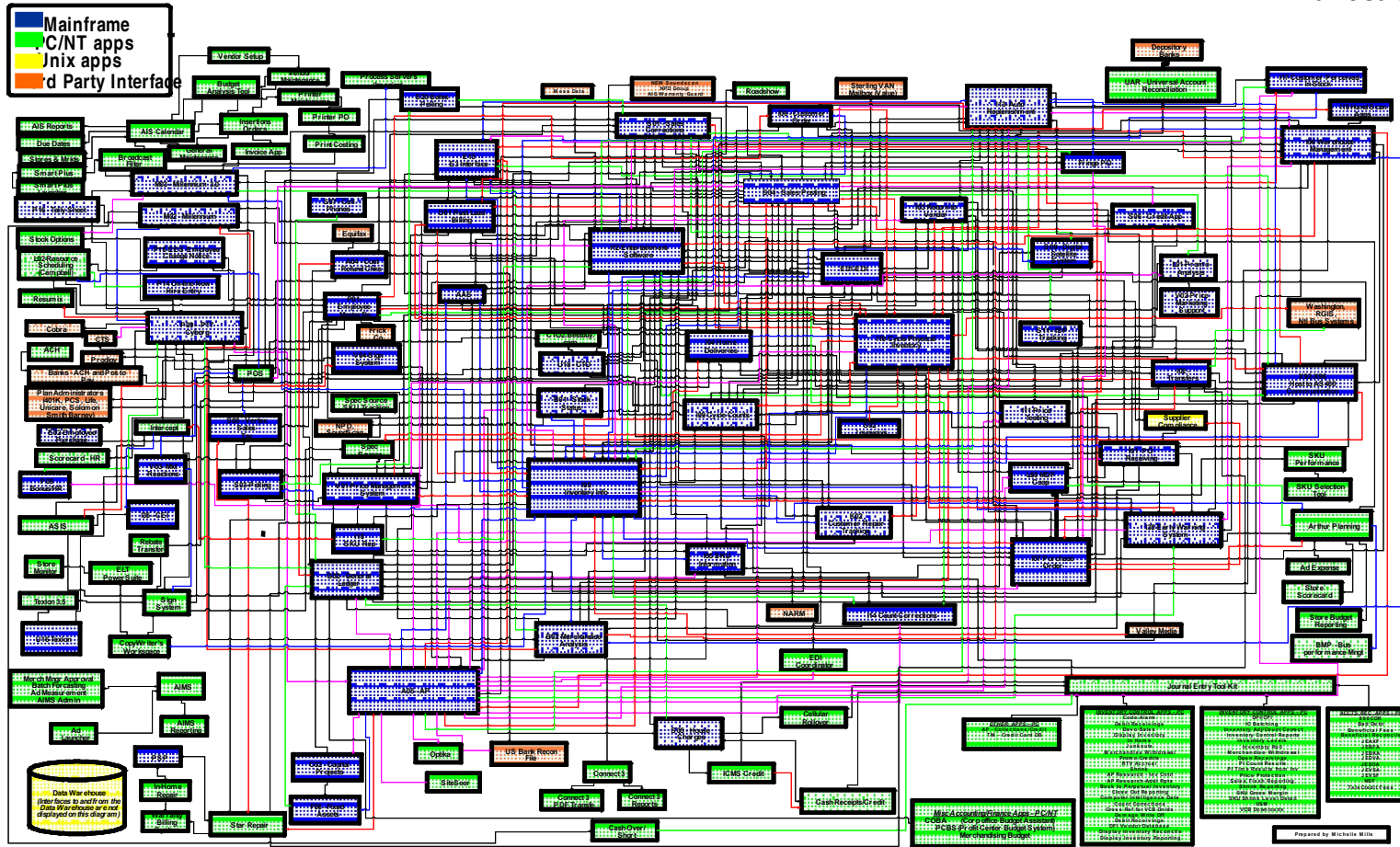### Characteristics

| | Staff | Corporate Customers | Personal Customers | Business Customers | Interested Parties |

Internal · **Channel** · **External**

Connection and Systems Management Services

Application Services

| Business Support Systems | Customer Relationship Management Systems | Payment Systems | Product Systems | Management Information Systems |

| Operational data | Information Data |

Flexible	Rapid response to business and technological change. Exploit common systems and processes.
Enables Service Excellence	Cost effective, robust, reliable and performant with continuous availability
Enable bank-wide Access	Facilitate access to shared systems, information and data to all users where and when required.
Secure	Protects business assets, secures access systems and data.
Standards	Rationalisation, simplification and efficiency through the use of recognised, enforced standards
Manageable	Management processes and tools embracing all aspects of IT systems.
Internal	Internal access to systems
Channel	Access to system from customer facing channels
External	External access to systems from interested parties
Connection and management services	Systems services providing routing and access control to systems
Application services	Workflow, imaging and support for multiple channels to access common applications

Sample bank Architecture

External Participants

Self Service
ATM

Web   IVR

Assisted Service
Agent

Branch

External Data Providers

Customer Credit
Business Credit
OFAC Lists
Watch lists
etc.

Internal Participants

Analytics

Dashboards

LOB Users
LOB User Interface

LOB Systems
Banking, Lending, AML, Credit Card, Telephony, etc. (Adapters)

Message Mediation   Routing   SOA   Quality of Service   Service Integration

Transport   Publish Subscribe   Synchronous/Asynchronous

Content Management Services
Services

Unstructured Data   Metadata

Analytic Services
Identity Analytics
Industry Models
Predictive Analytics

Services   Data   Metadata

Master Data Management Services
Interface Services
Lifecycle Management Services

| Data Quality Management | Master Data Event Management | Hierarchy & Relationship Management | Authoring |

Base Services
Master Data Repository

Metadata   Master Data   History Data   Reference Data

Information Integration Services
Information Integrity Services | ETL Services | EII Services

Staging Data   Metadata

Enterprise Metadata Management
Services   Metadata

Initial & Incremental Loads   (Batch ETL)

Complexity is Forcing Change in IT…

Actual Application Architecture for a Midwest Corporation

"About 35 percent of an enterprise's software budget is spent on maintaining the multitude of point-to-point application links already in place. *— Gartner Group*

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"SOA" Defined: What is …..?

… a service?

A **repeatable business task** – e.g., check customer credit; open new account

… service orientation?

A way of integrating your **business as linked services** and the outcomes that they bring

… service oriented architecture (SOA)?

An IT **architectural style** that supports service orientation

… a composite application?

A set of **related & integrated** services that support a business process built on an SOA

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Convergence in support of SOA

Standards

- *Now*: Broadly adopted Web services ensure well-defined interfaces
- *Before*: Proprietary standards limited interoperability

Organizational Commitment

- *Now:* Business and IT are united behind SOA (63% of projects today are driven by LOB)*
- *Before:* Communication channels & "vocabulary" were not in place

Investment Protection

- *Now:* Tools & methods can leverage existing business application assets, isolating the impact of change
- *Before*: "Rip and replace"

Degree of Focus

- *Now:* SOA services focus on business-level activities & interactions
- *Before:* The focus was on narrow, technical sub-tasks

Connections

- *Now:* SOA services are linked dynamically and flexibly
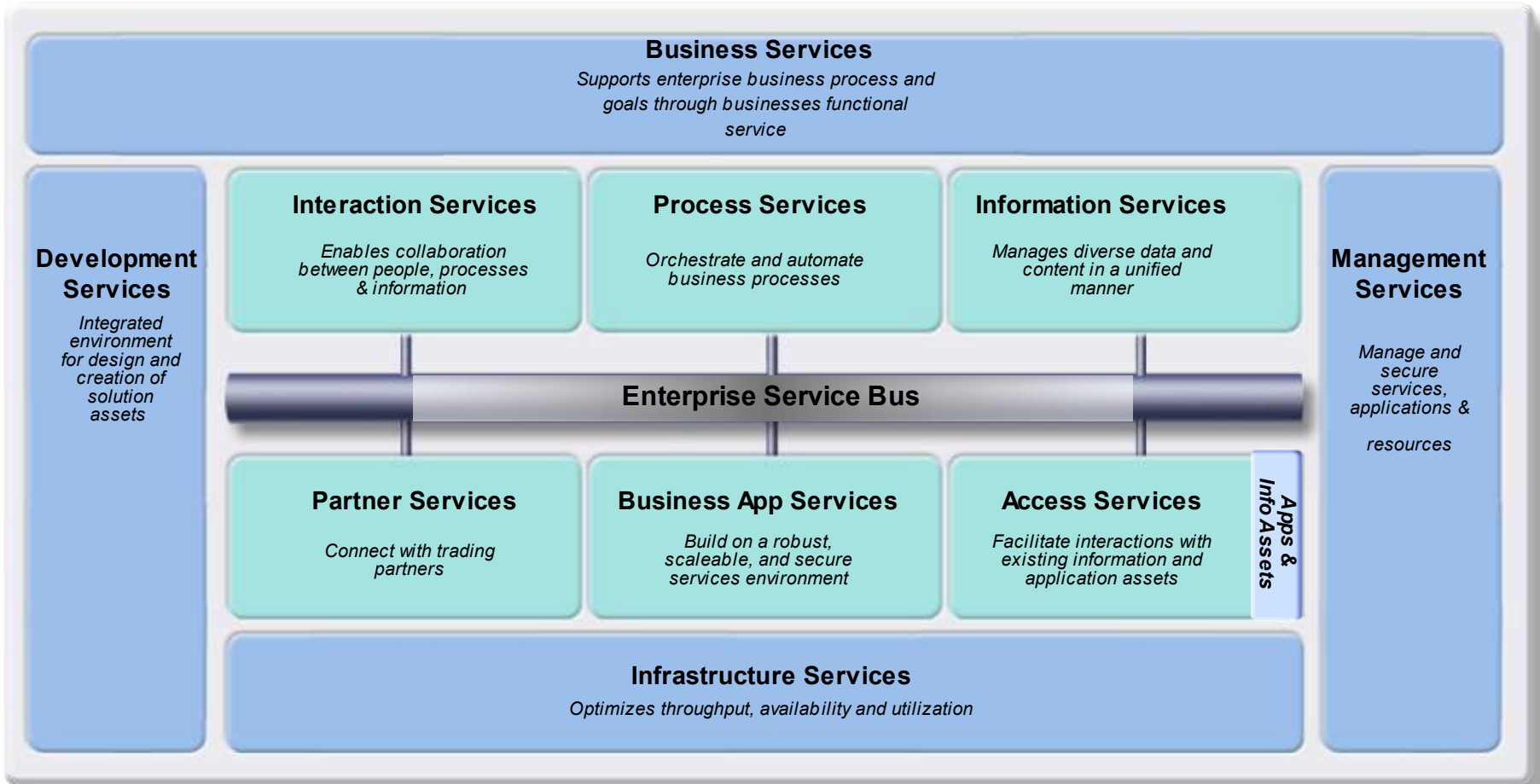- *Before:* Service interactions were hard-coded and application dependent

Level of Reuse

- *Now:* SOA services can be extensively re-used to leverage existing IT assets
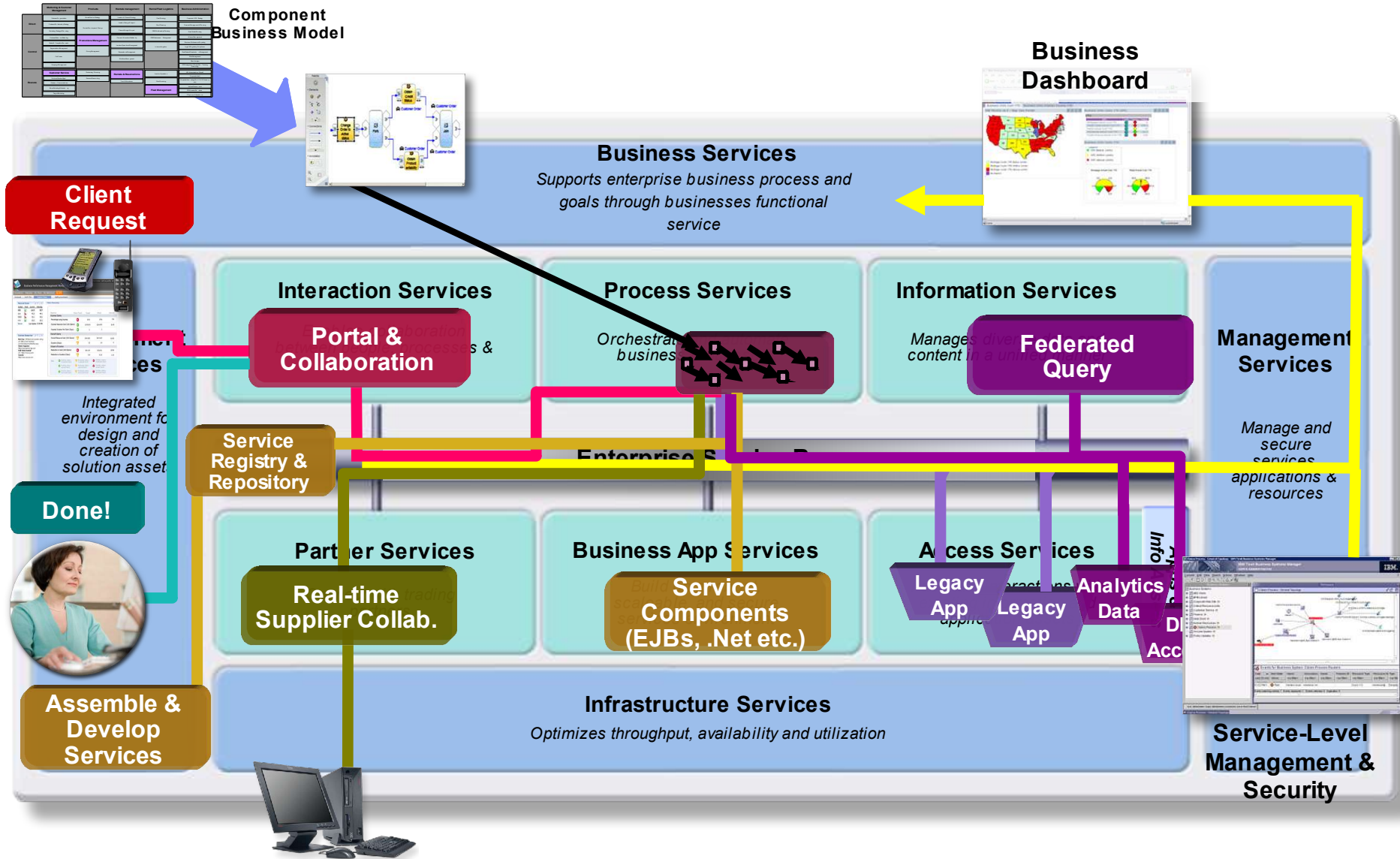- *Before*: Any reuse was within application "silos"

*Source: Cutter Benchmark Survey
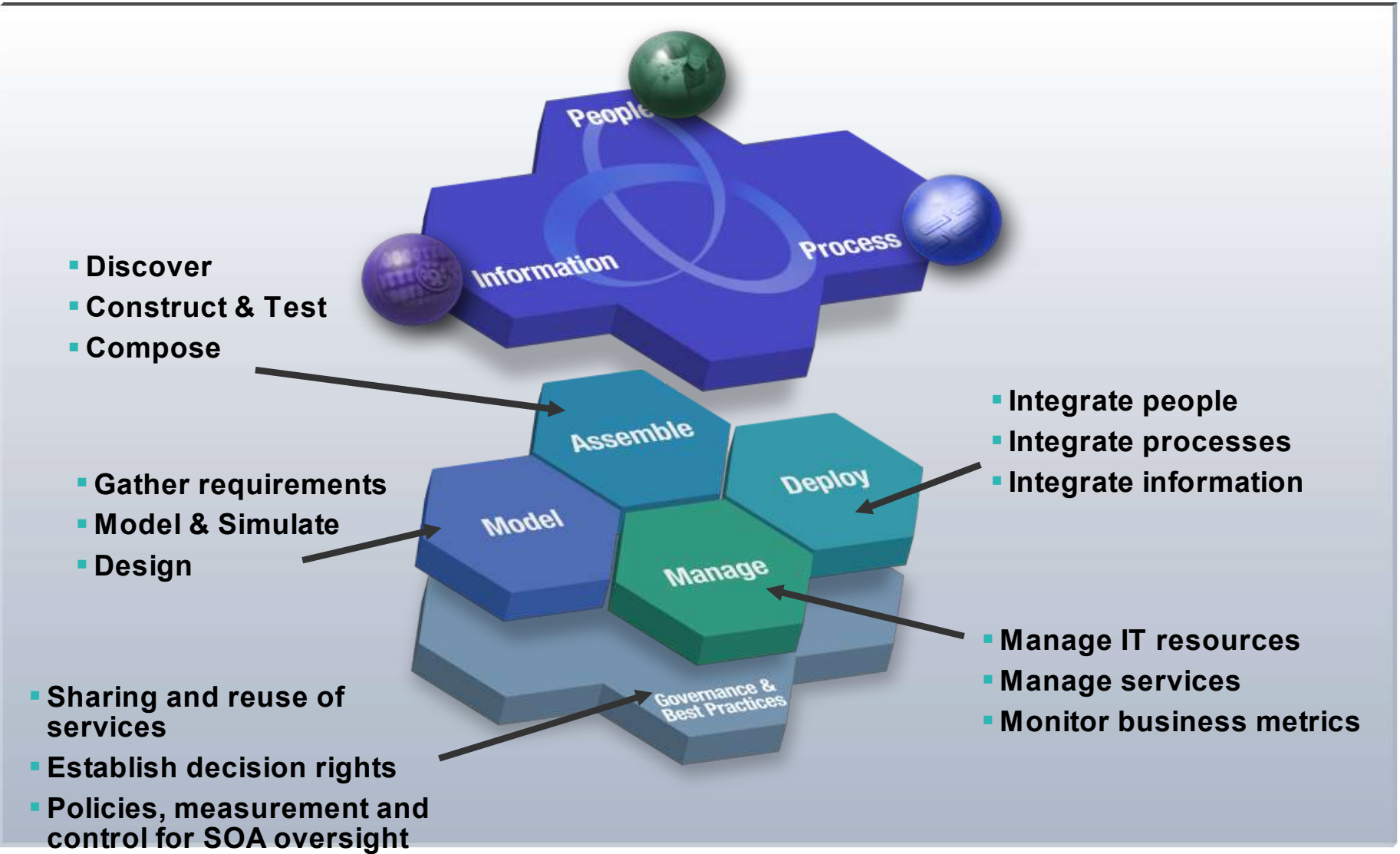
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SOA Foundation Reference Model
A Foundation for SOA Infrastructure

Business Services

Supports enterprise business process and goals through businesses functional service

Development Services

Integrated environment for design and creation of solution assets

Interaction Services

Enables collaboration between people, processes & information

Process Services

Orchestrate and automate business processes

Information Services

Manages diverse data and content in a unified manner

Management Services

Manage and secure services, applications & resources

Enterprise Service Bus

Partner Services

Connect with trading partners

Business App Services

Build on a robust, scaleable, and secure services environment

Access Services

Facilitate interactions with existing information and application assets

Apps & Info Assets

Infrastructure Services

Optimizes throughput, availability and utilization

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The SOA Foundation Reference Model in Action

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SOA Lifecycle provides a comprehensive approach

- **Discover**
- **Construct & Test**
- **Compose**

People

Information

Process

- **Gather requirements**
- **Model & Simulate**
- **Design**

Assemble

Model

Deploy

Manage

Governance & Best Practices

- **Integrate people**
- **Integrate processes**
- **Integrate information**

- **Manage IT resources**
- **Manage services**
- **Monitor business metrics**

- **Sharing and reuse of services**
- **Establish decision rights**
- **Policies, measurement and control for SOA oversight**
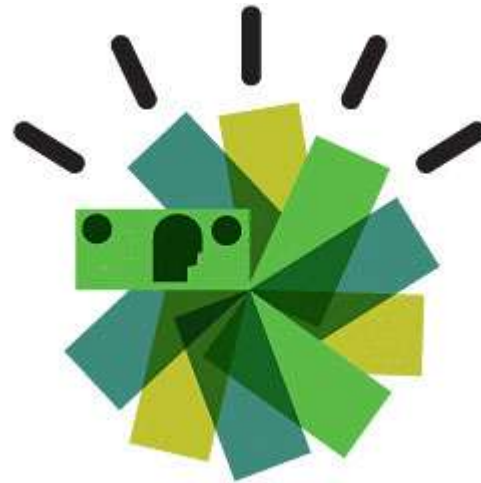
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Thank you