FTA Technology 2010 Service Oriented Architecture

August 2nd, 2010

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_experience the commitment ™

Agenda

Service Oriented Architecture

- Software Development Evolution
- Services and Processes
- Enterprise Architecture
- Oversight Review and Best Practices

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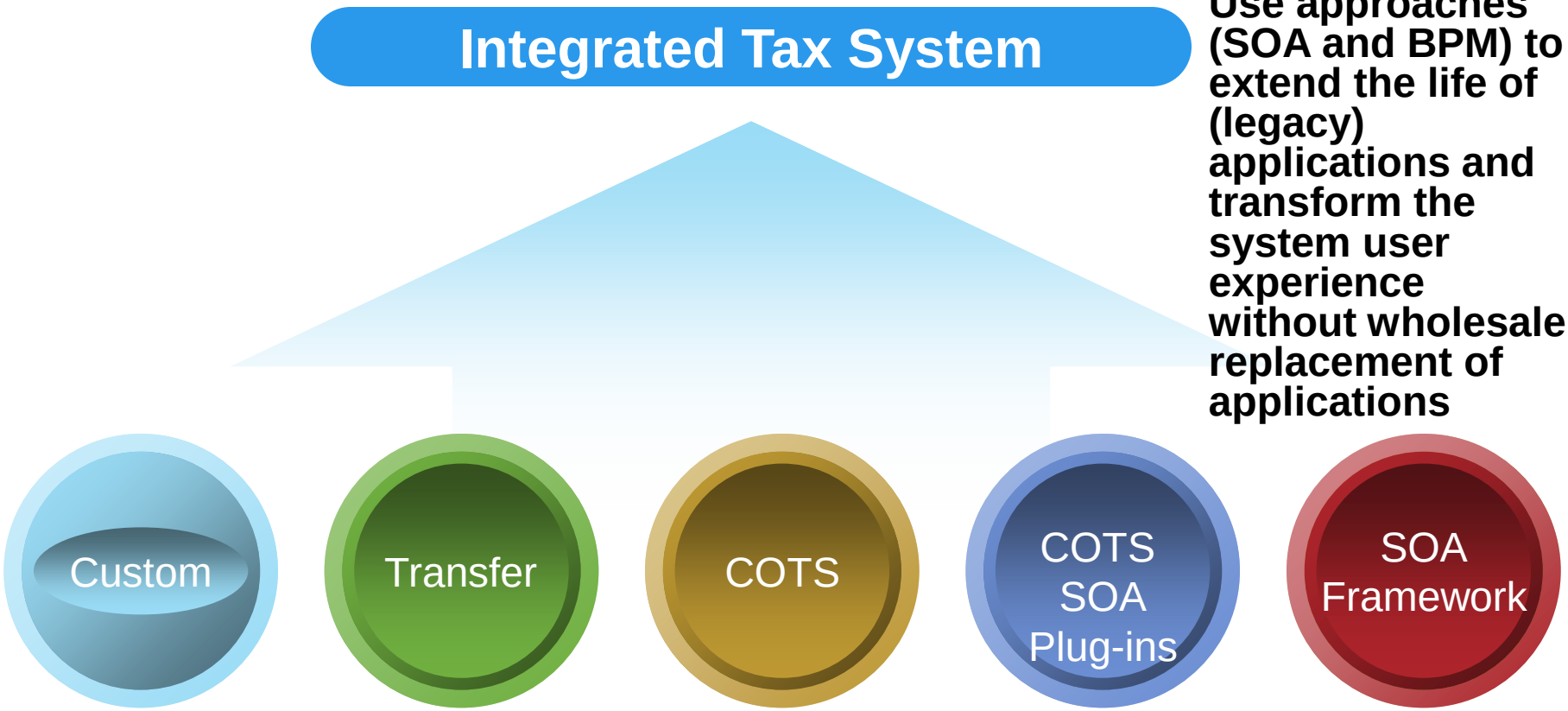
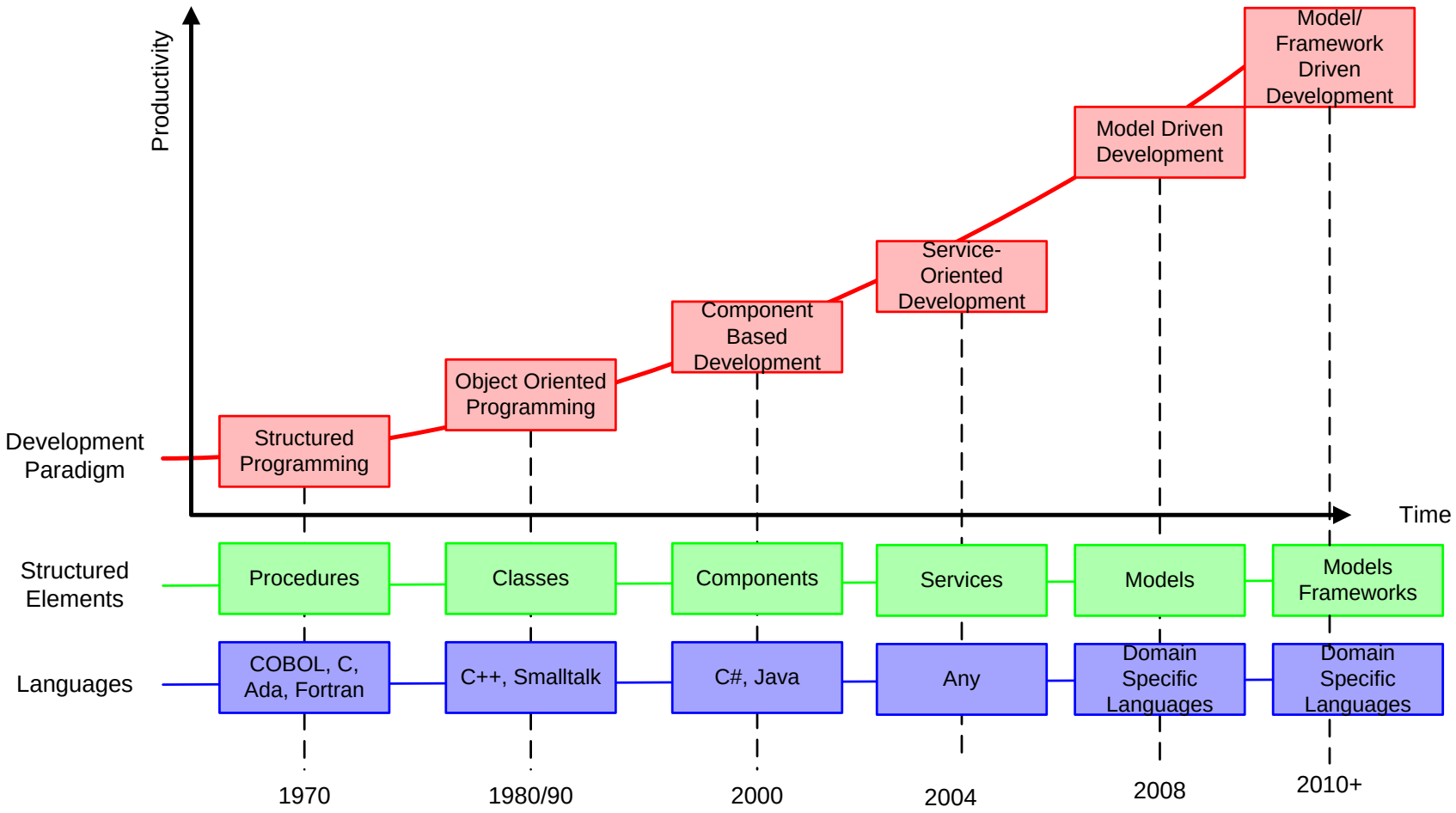
1. Software Development Evolution
2. Services and Processes
3. Enterprise Architecture
4. Oversight Review/Best Practices

The Evolution of Integrated Tax Systems

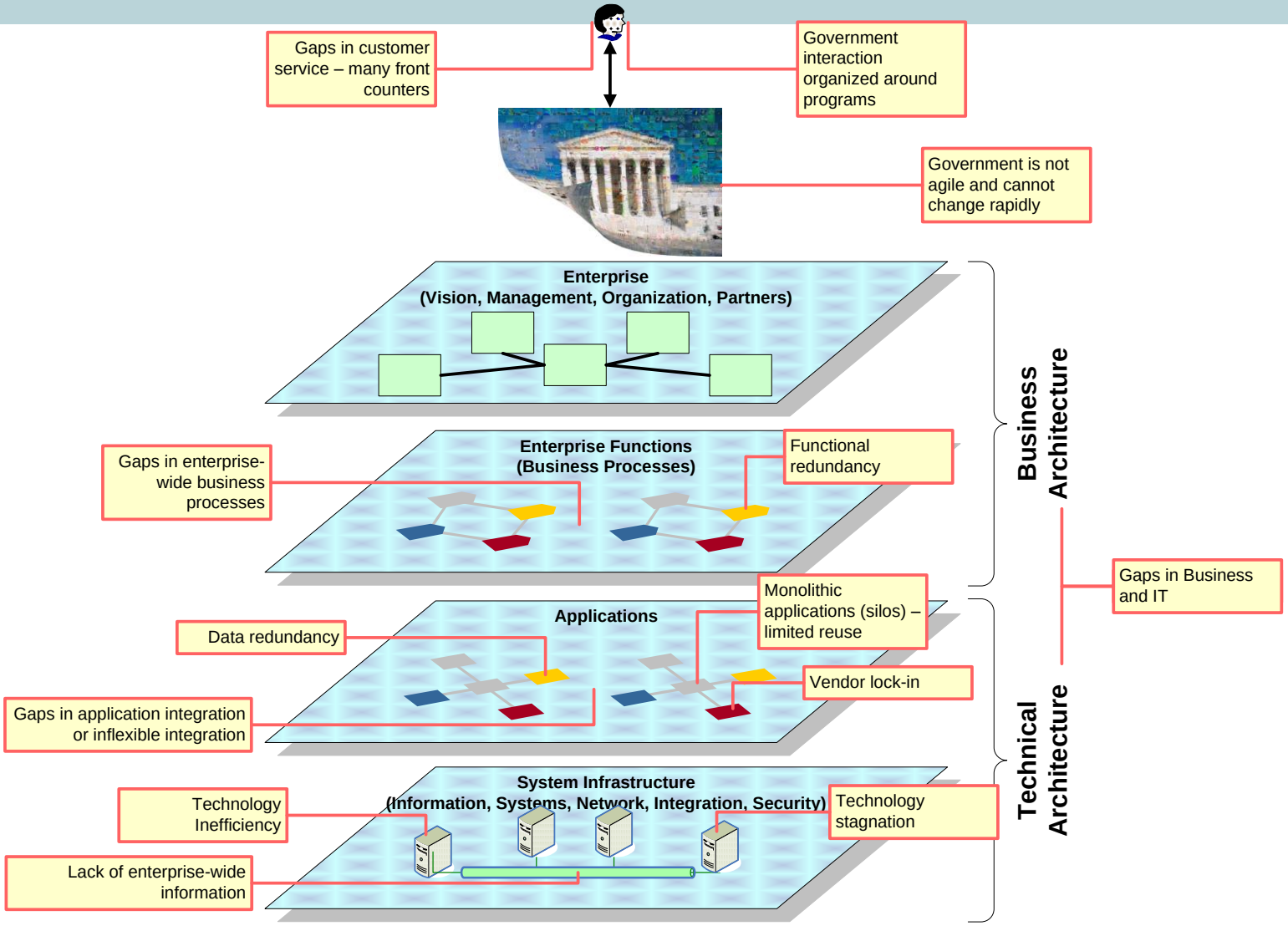


Use approaches (SOA and BPM) to extend the life of (legacy) applications and transform the system user experience without wholesale replacement of applications

Trends in Application Development



Barriers to Achieving Agility



Traditional Application vs. SOA

Traditional Applications	SOA
Designed to last	Designed to change
Tightly coupled	Loosely coupled, agile and adaptive
Integrated silos	Composed of services
Application-oriented	Process-oriented
Long development cycle	Interactive and iterative development
Cost centered	Business centered
Favors homogeneous technology	Favors heterogeneous technology
Rip and Replace	Plug and Play
IT driven customization	Business driven configuration

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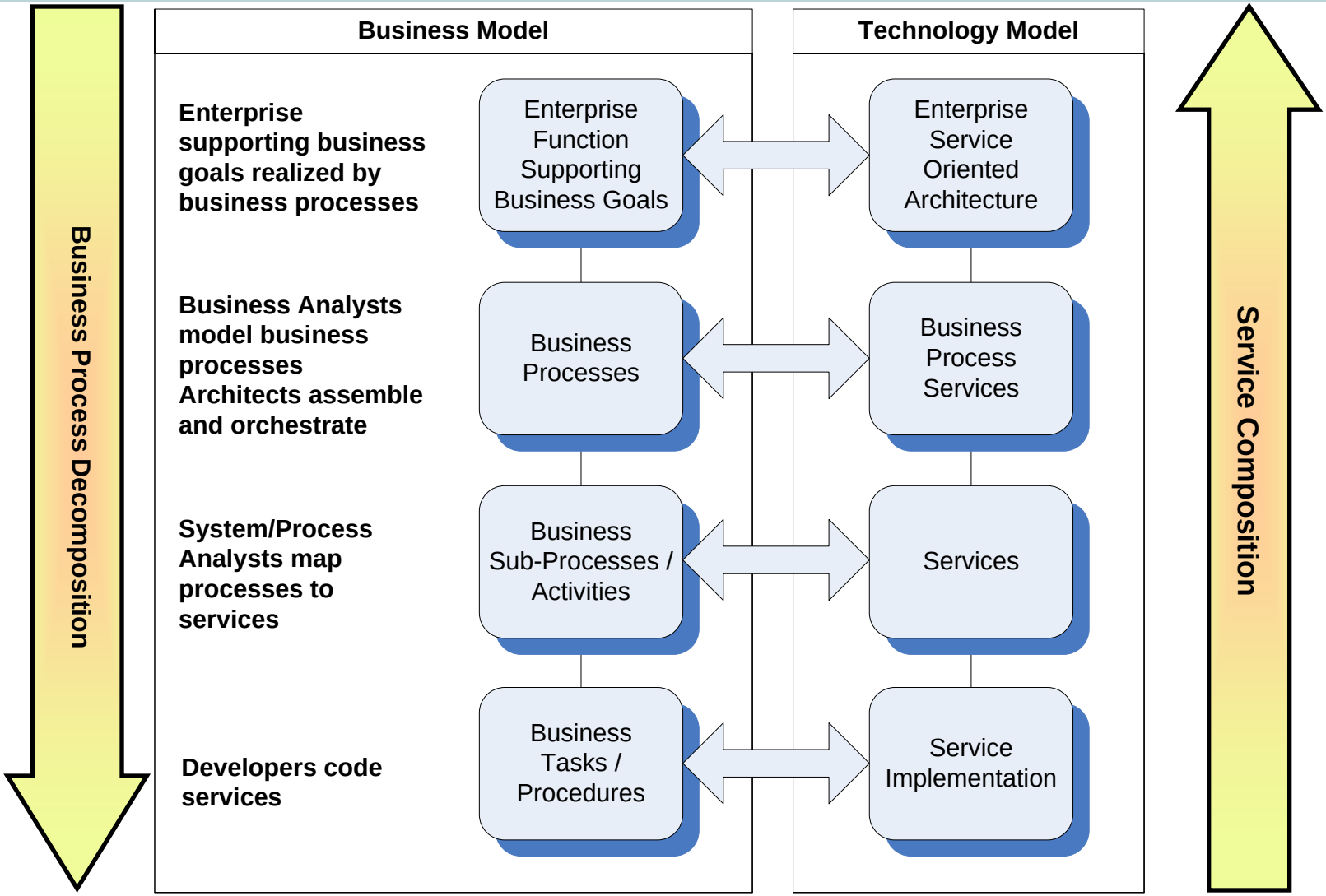
Business – Technology Model



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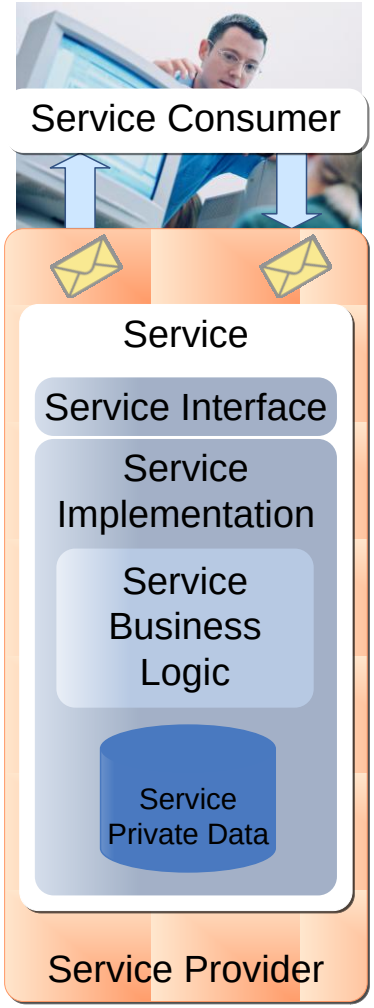
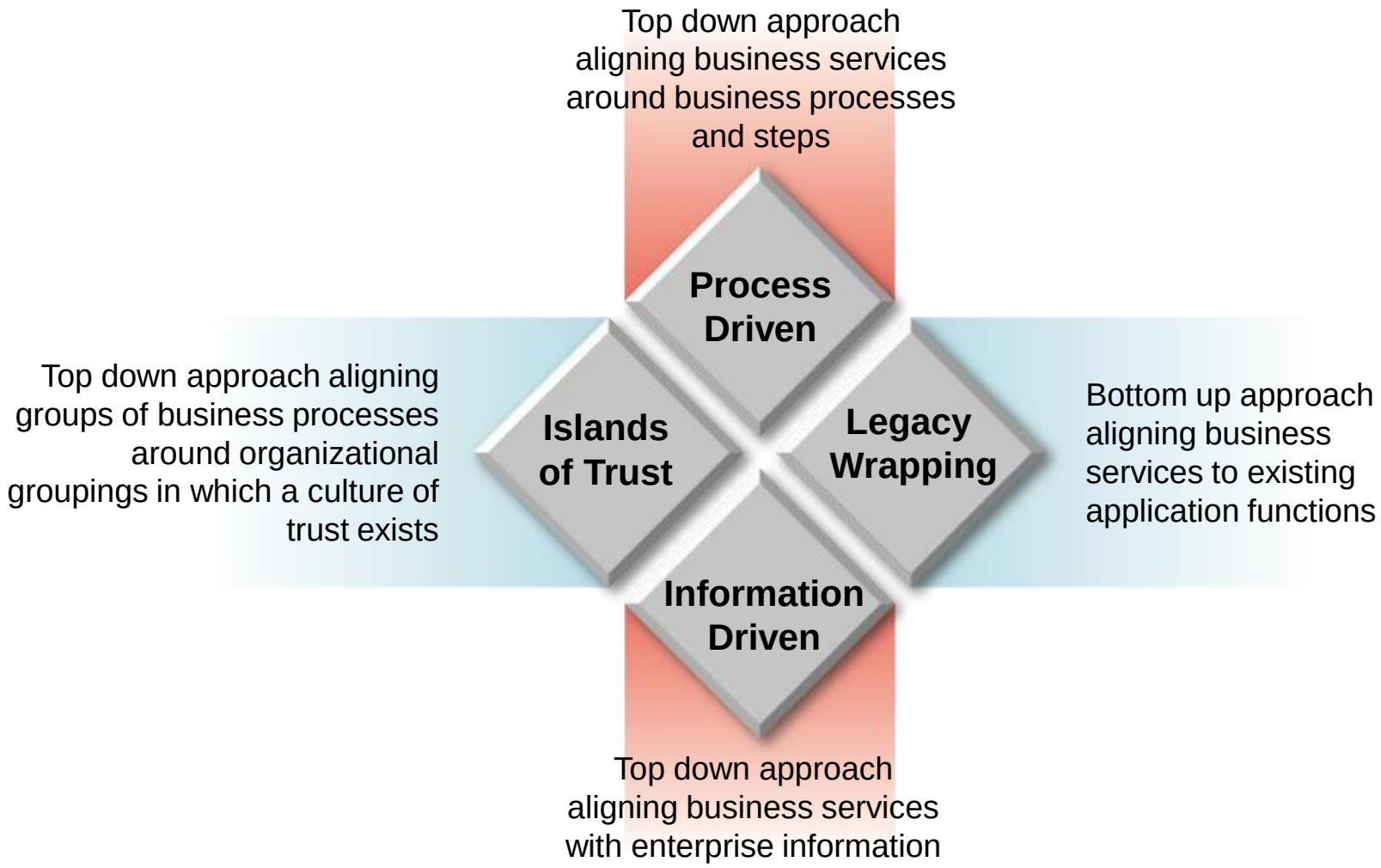
A Service…

- Is a unit of work done by a service provider to achieve results for the service consumer
- Is a software component that is capable of providing access to functions and data
- Is exposed to other components via a service description
- Appears as a “black box” to the service consumer
- Is interacted via message exchanges
- Encompasses a business perspective
- Decouples its interface from its implementation
- Is built to last
- Needs to ensure stability and robustness



Identification of Business Services



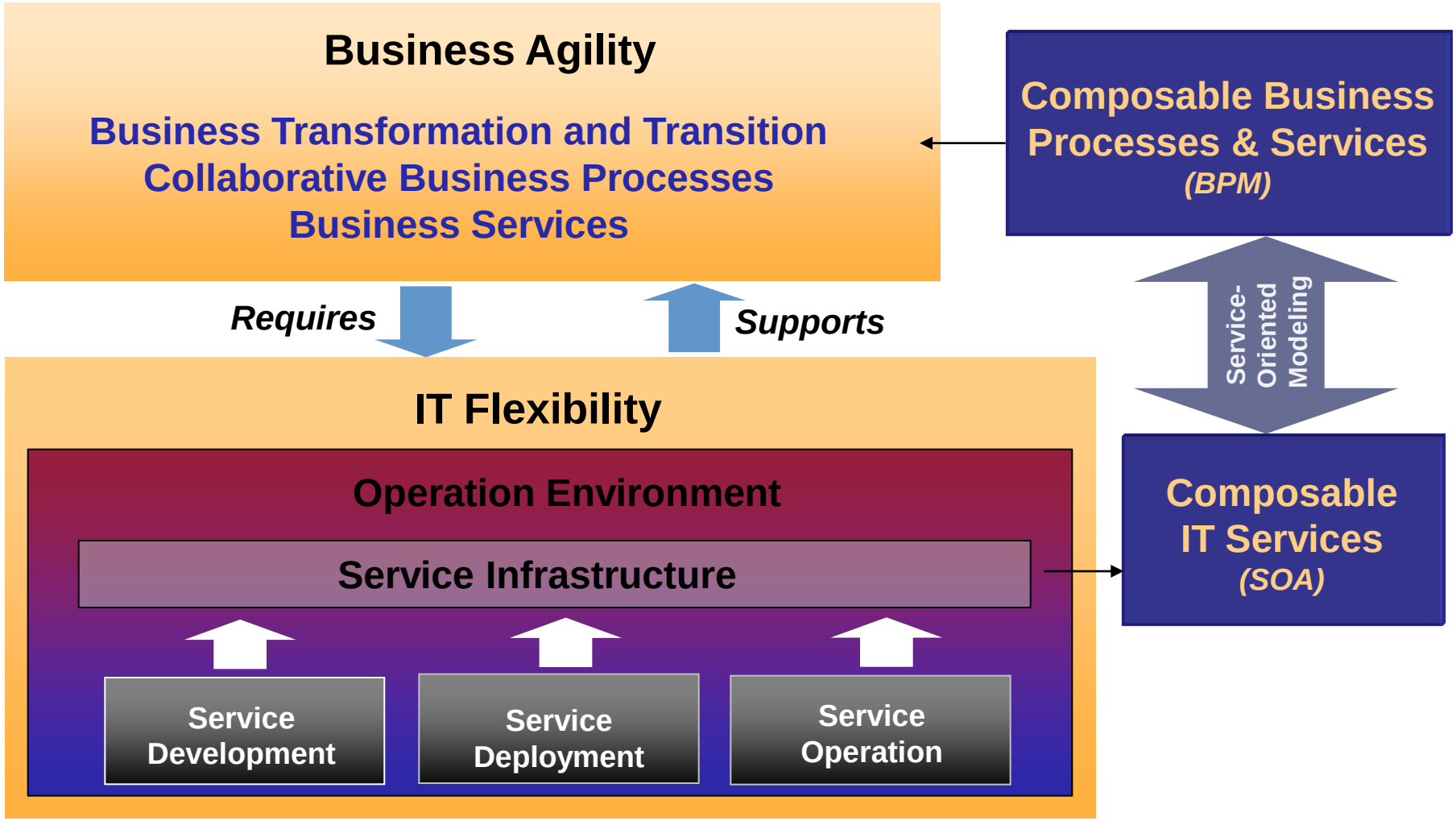
Service-Orientation

- Service Orientation
  - Use of “open” interoperability protocols to facilitate service interaction
- Architecture
  - A *process* of putting together components to achieve some overall goal
  - A *blueprint* that comprises the components organized by layers, their visible properties, their relationships and interactions, and constraints

Business Process Management

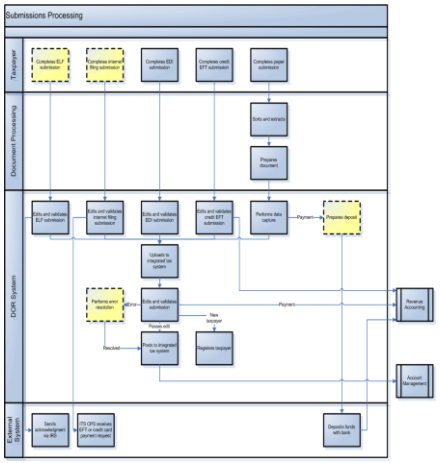
- Tightly coupled with SOA approach
- Business architecture focus
- Can be the cornerstone of service transformation
- Apply directly to measuring outcomes and relating agency process changes to benefits

SOA + BPM Leads To …



Explicit Process Management

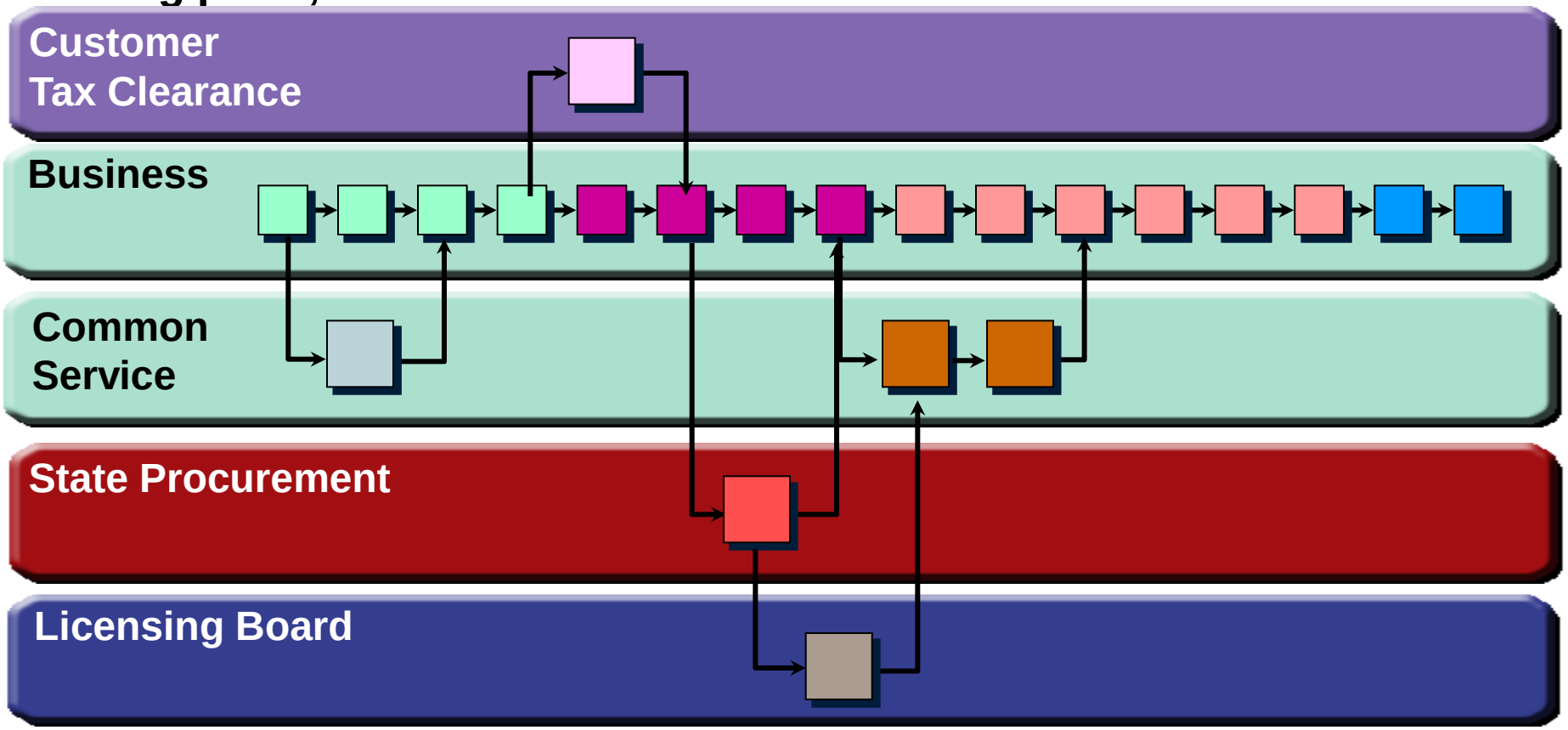
- Explicit BPM
  - Process is explicitly represented, usually by a graphical model, and is independent of its implementation
  - Bringing the power of technology to business staff and reducing their work
  - BPM is the bridge between Business and IT
  - Objective is increased flexibility



- A cyclical BPM life-cycle consists of:
  - Design
  - Modeling
  - Execution
  - Monitoring
  - Optimization

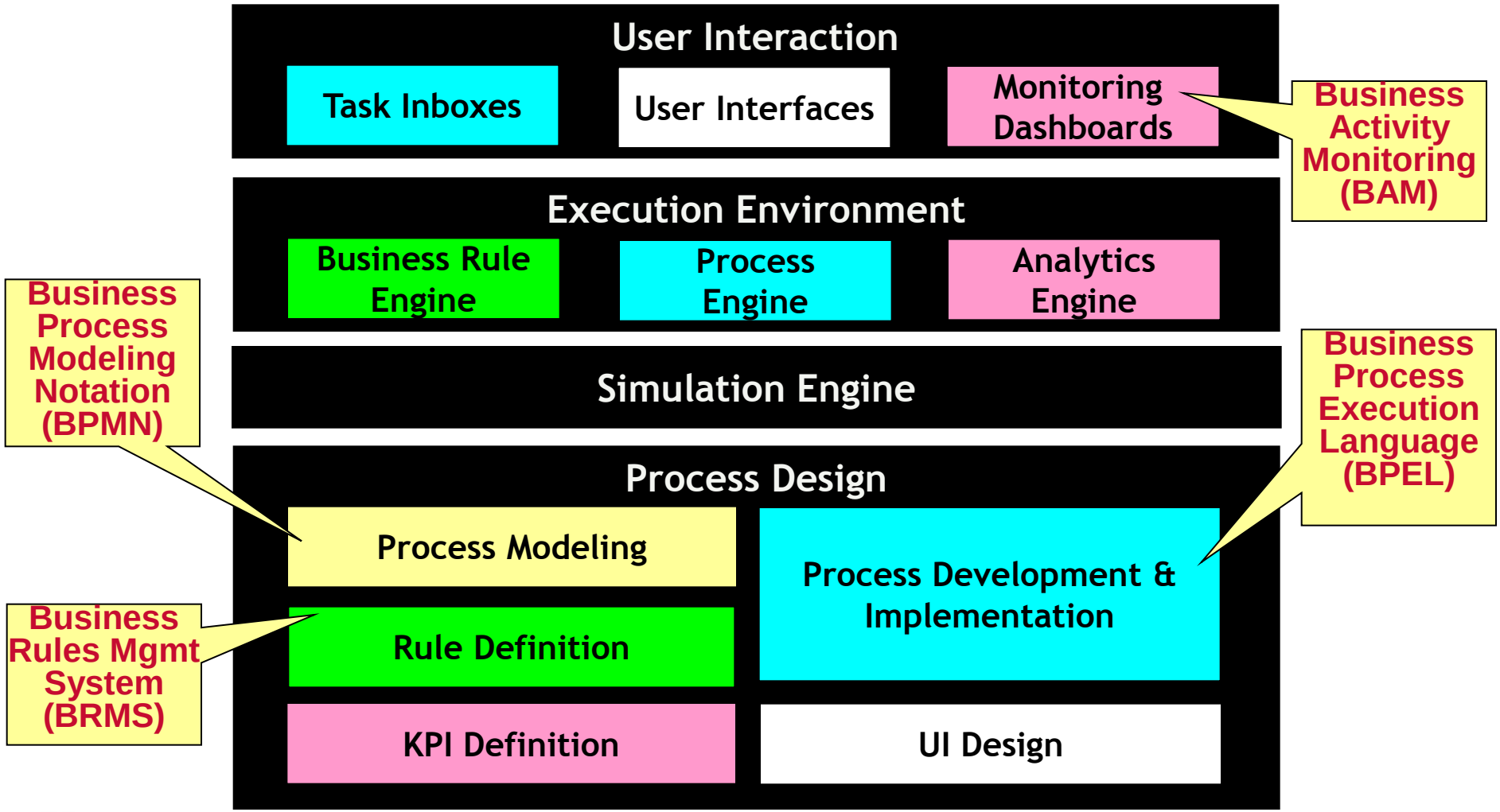
Process Agility

Starting point, an Internal Business Process



Change: Check Tax Clearance for Professional License Issuance or Renewal.

Technology Components of BPM



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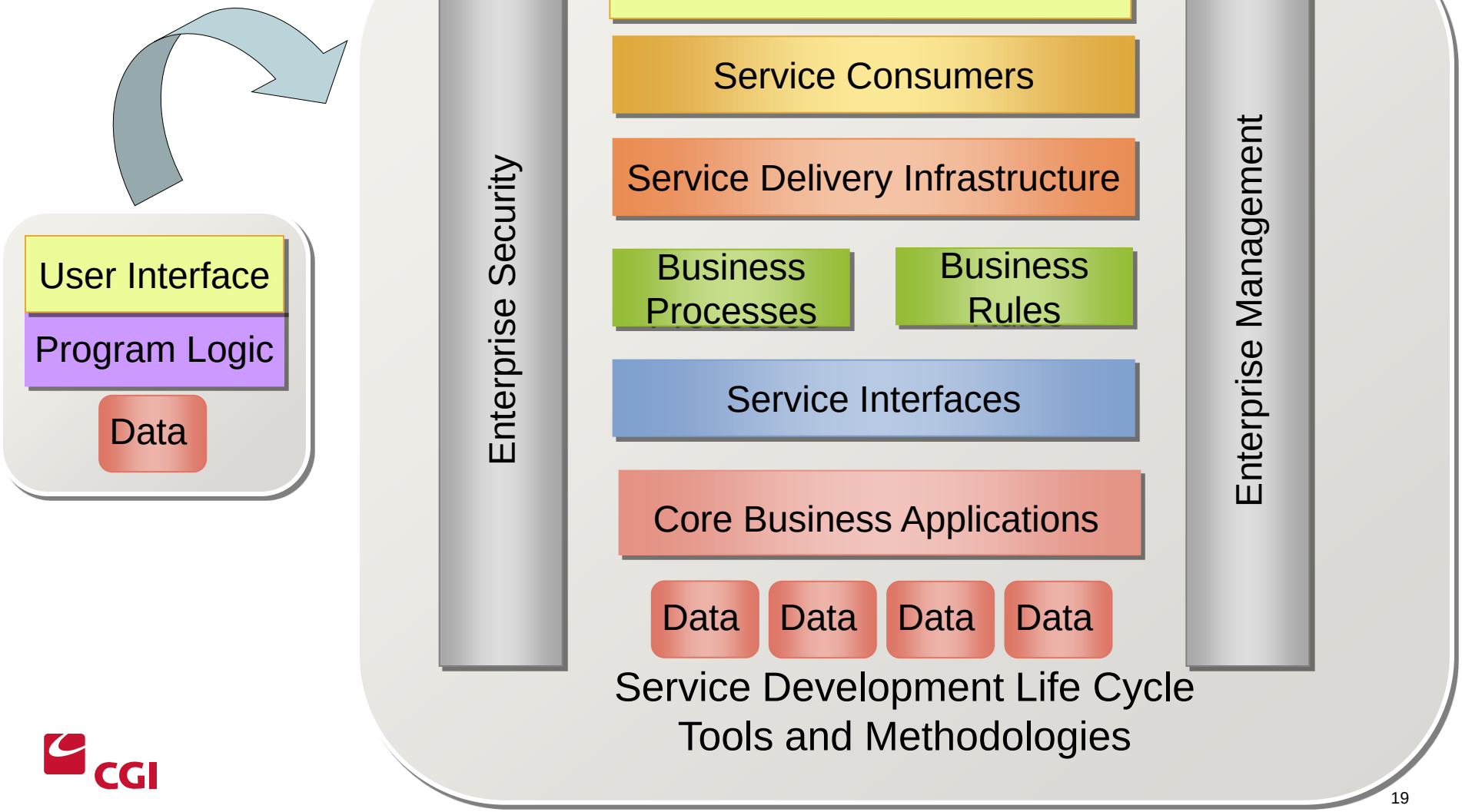
Building Agility – Logical Architecture



Benefits of Pre-Built SOA Infrastructure

Components	Usage
Framework	Pre-Built Implementation
Enterprise Services	Notice, Match, Locate
Technical Services	Business Rules, Portal, Address Normalization
ESB Integration	Registry and Repository
Industry Alignment of Services	PS Tax and Revenue
Legacy Systems Connectors	Interfaces
Security Services	Security Connections
Data Services	EOD,EDW,ECM
BPMS Integration	Work Flow, Process, Business Rules

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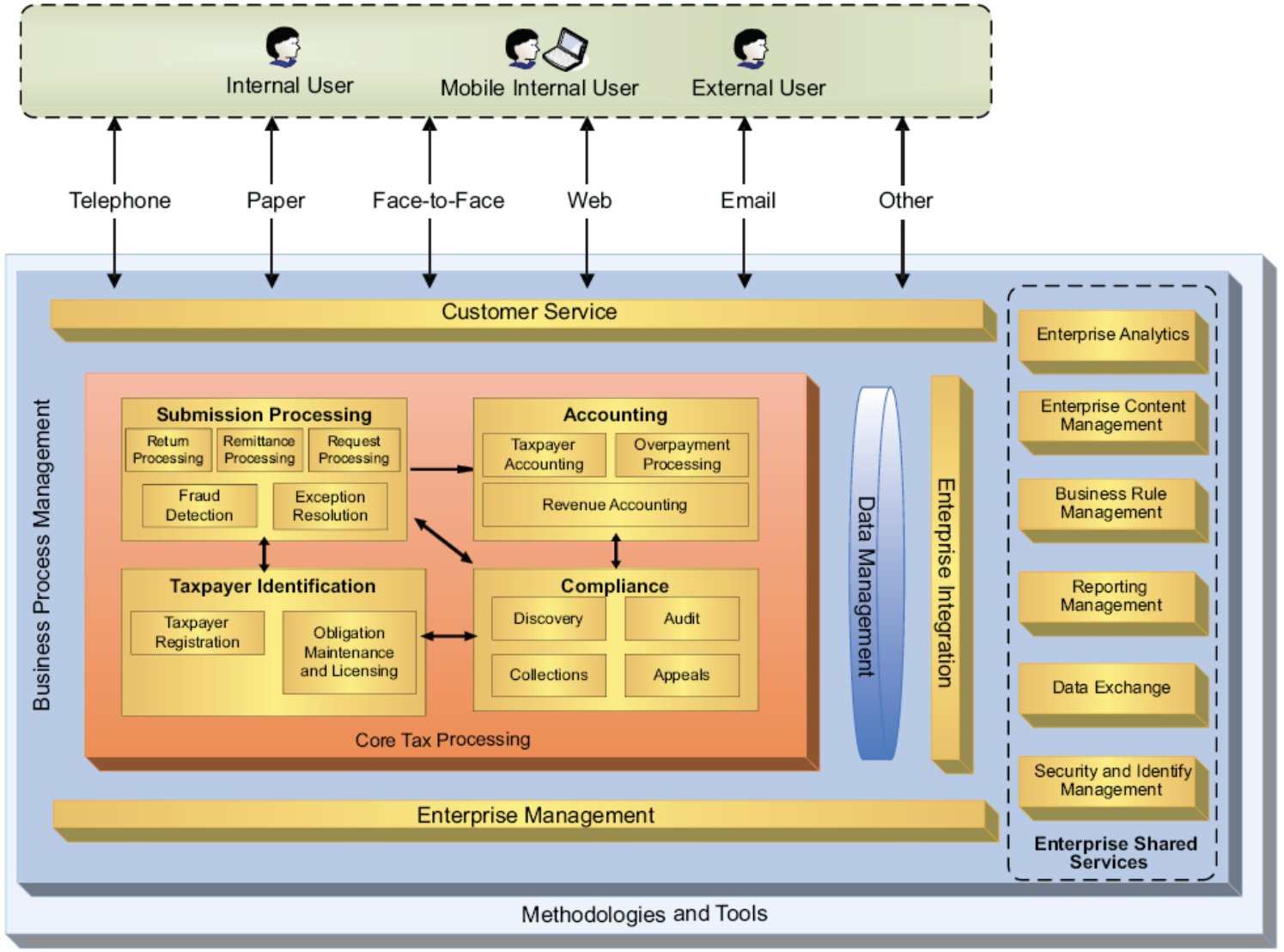
Revenue Agency Blueprint



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SOA Oversight Review

Practice	Organizational Value
Strategic Business/IT Planning	Strategic Oversight
Maturity Models	Organization in Context
Centers of Excellence	Core Competencies
UTIL	Best Practices
SOA SDLC	Adjusted to SOA Management
Service Lifecycle Governance	Processes, Tools, Org
Requirements and Analysis	Actors, Tools, Artifacts
Technical Reference Model	Industry Context
Reuse Strategy	Persistence Investment Driven

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SOA Best Practices

- **Portfolio Management**
  - Manage the portfolio of SOA projects
  - Helps IT define a roadmap aligned closely to the business
- **Requirements Capture**
  - Repository of business requirements
  - Prioritize requirements based on cost, resources, and benefits
- **User Experience Simulation**
  - New tools simulate user interfaces
  - Simulations are easy to understand, true "test drive" of the final product
  - Visual blueprint
- **Business Process Modeling**
  - Capture business processes during requirements stage
- **SOA Repository**
  - Automate the governance process across all products

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Questions/Discussion

Contact Information

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About the Presenter

- CIO Kansas DOR 11 Years
- FTA/IRS State Co-Chair TAG 2005-2007
- FTA/IRS State Co-Chair TAG Security Committee 2006-2008
- MTC Technology Committee Chair 2000-2008
- FTA National Service and Leadership Award in State Tax Administration 2008
- Experience with Local, State, Federal, and International tax agencies
- 32 Years in Information Technology Development, Management, and Leadership in State Government