Jim Hendrickson, Program Director, IBM Sterling B2B Services

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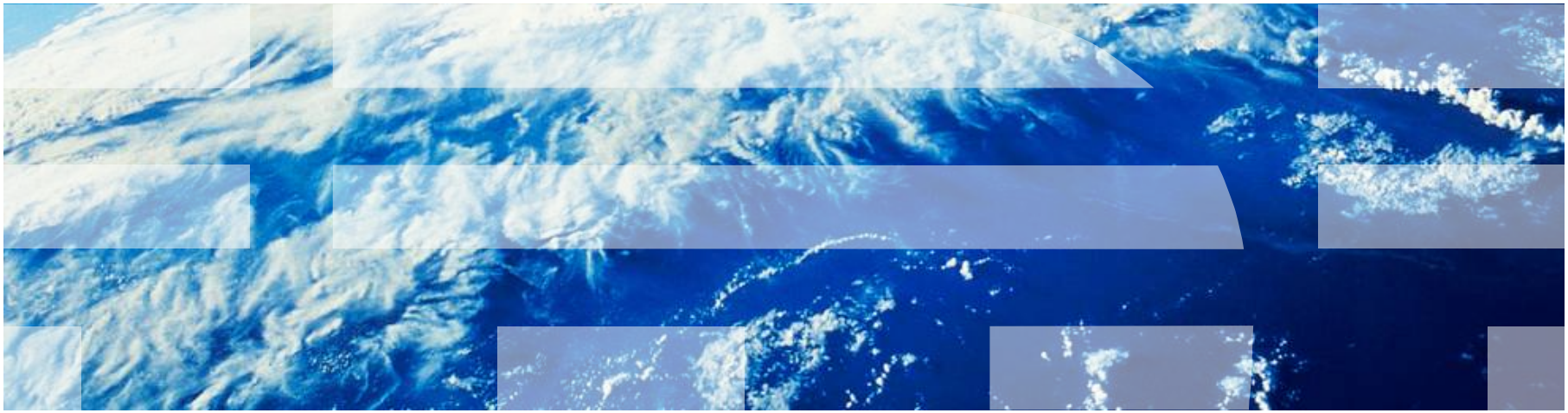
B2B Cloud Services

Tailoring Process Solutions with Web Services



Agenda

- The Evolution of the Network Effect
- The Process Solutions Context in the Cloud
- The Web Services Context in the Cloud
- Web Services: 3 Use Case Examples

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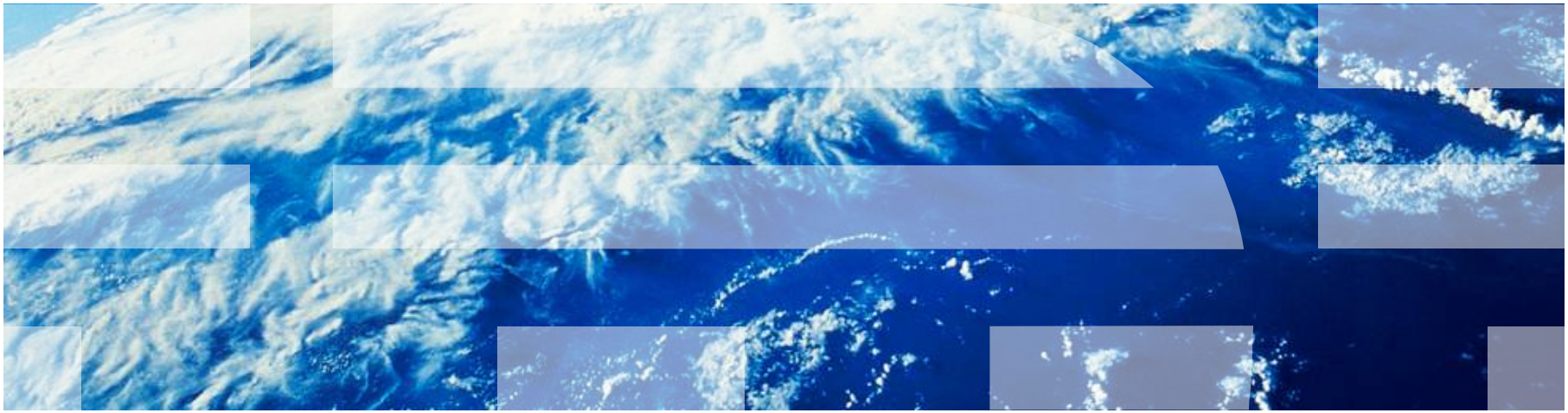
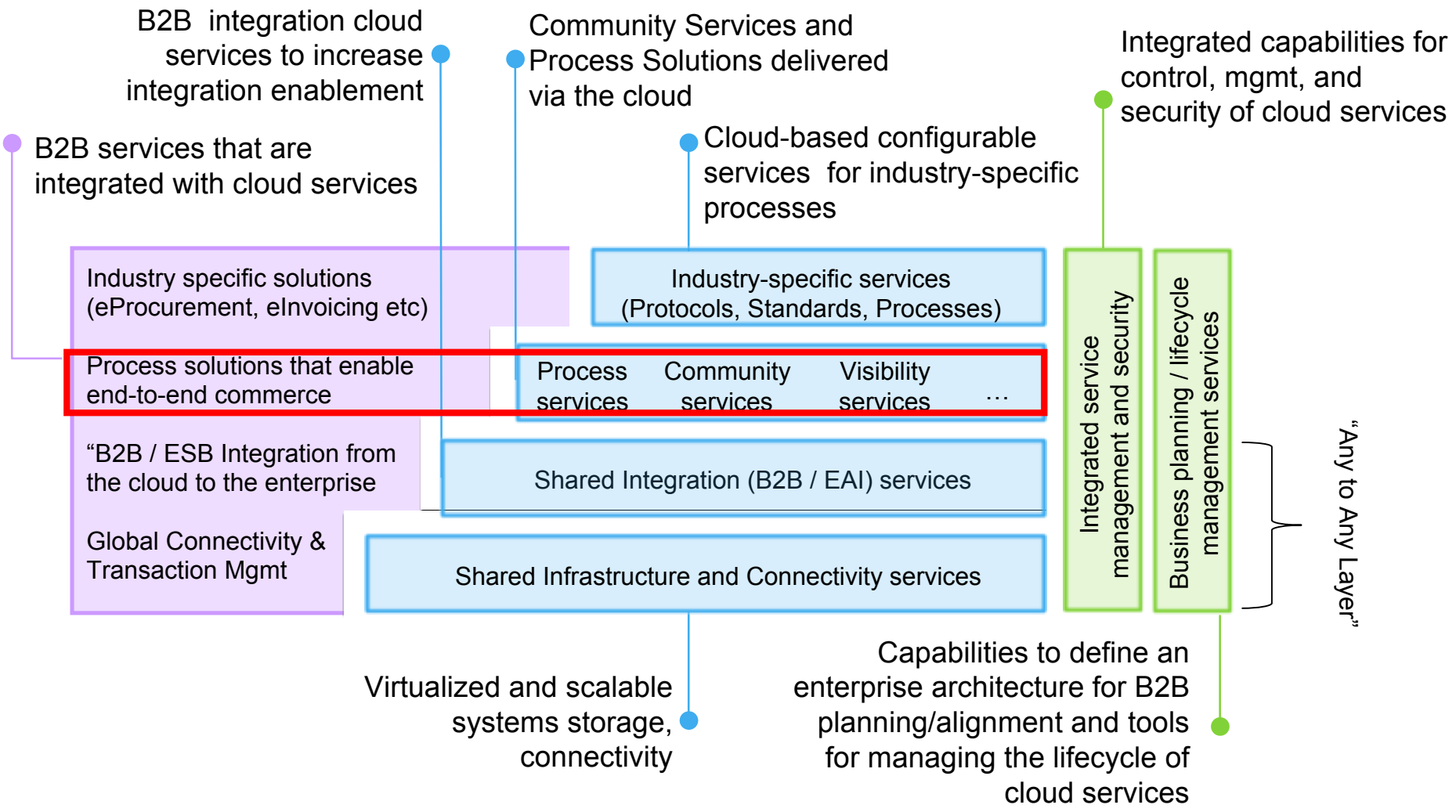
B2B and the Cloud



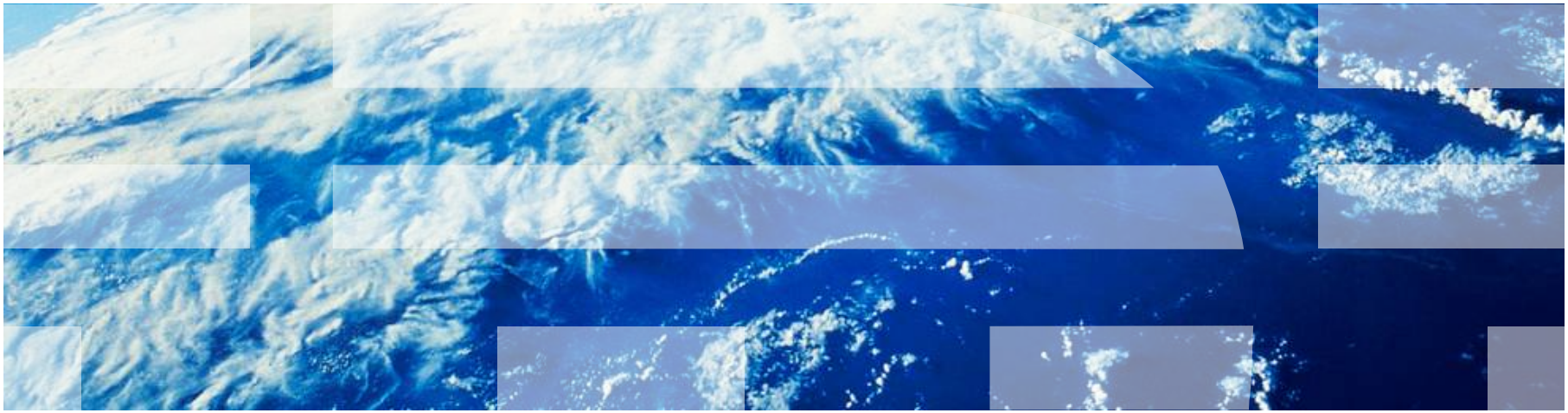
Cloud is a natural evolution of the of B2B model

- **A B2B Cloud is:**
  - A new consumption and delivery model that will likely evolve from B2B services capabilities in the market today
- **A B2B Cloud has the potential to address:**
  - **Integration**: Simplified and extended integration models
  - **Community:** Greater ease and control of the community and community development
  - **Process Management**: De-construction of applications capabilities to the process essence needed in the moment
  - **Visibility / Analytics:** Beyond the capabilities of today, Cloud could enable increased demand and event-based capabilities
- **A B2B Cloud is envisioned to be:**
  - A unification of Integration, Community and Process, and Visibility / Analytics in a Cloud Service model
  - A service deployment model as a brokered, public cloud
  - Brokered capabilities enable a B2B services hybrid between public and private clouds

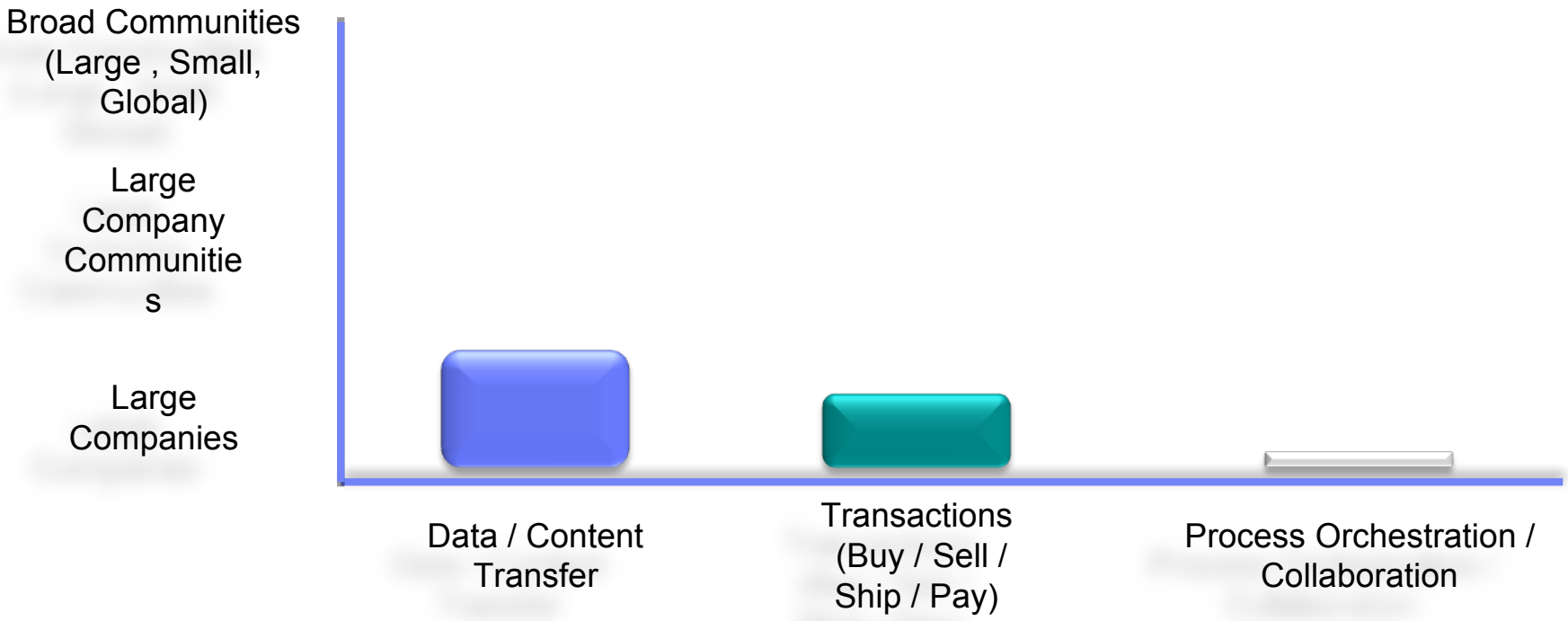
A framework for a B2B Cloud Services Broker



The Evolution of the Network Effect

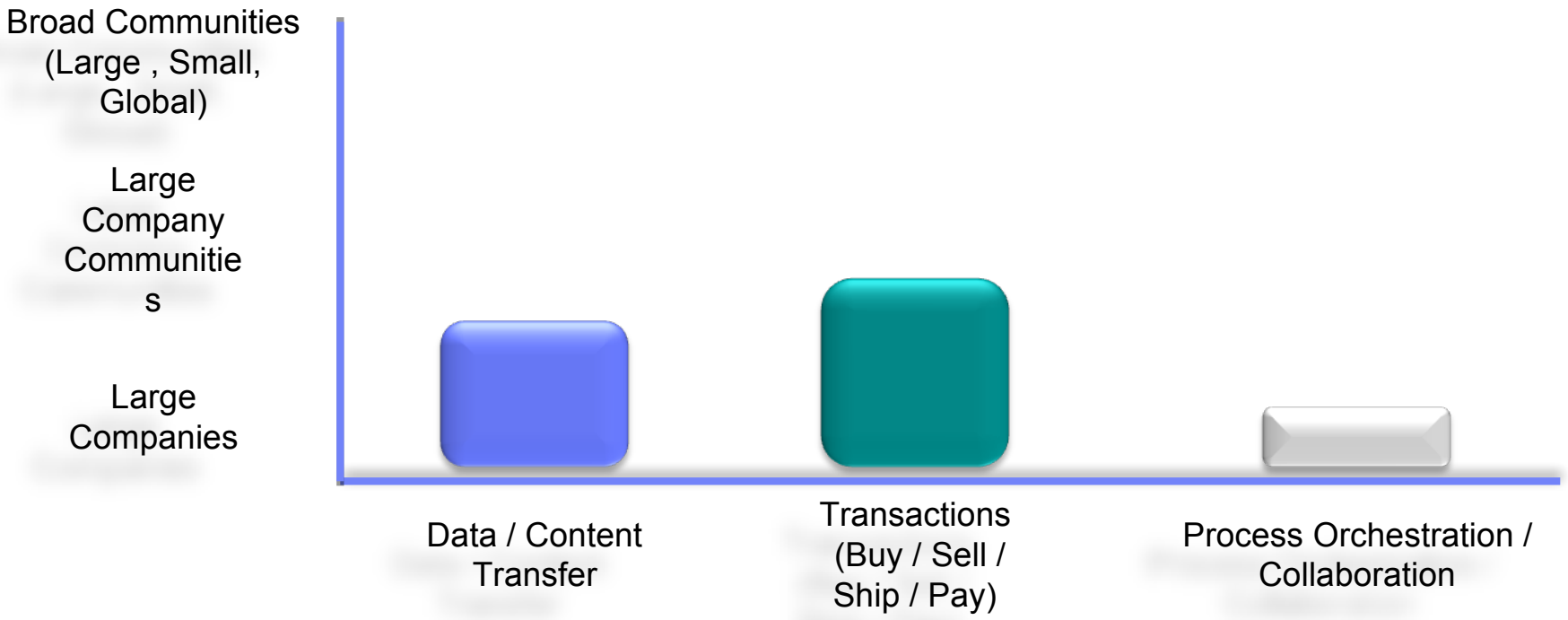


The Evolution of the Network Effect
1970 – 1980: Mainframe Era



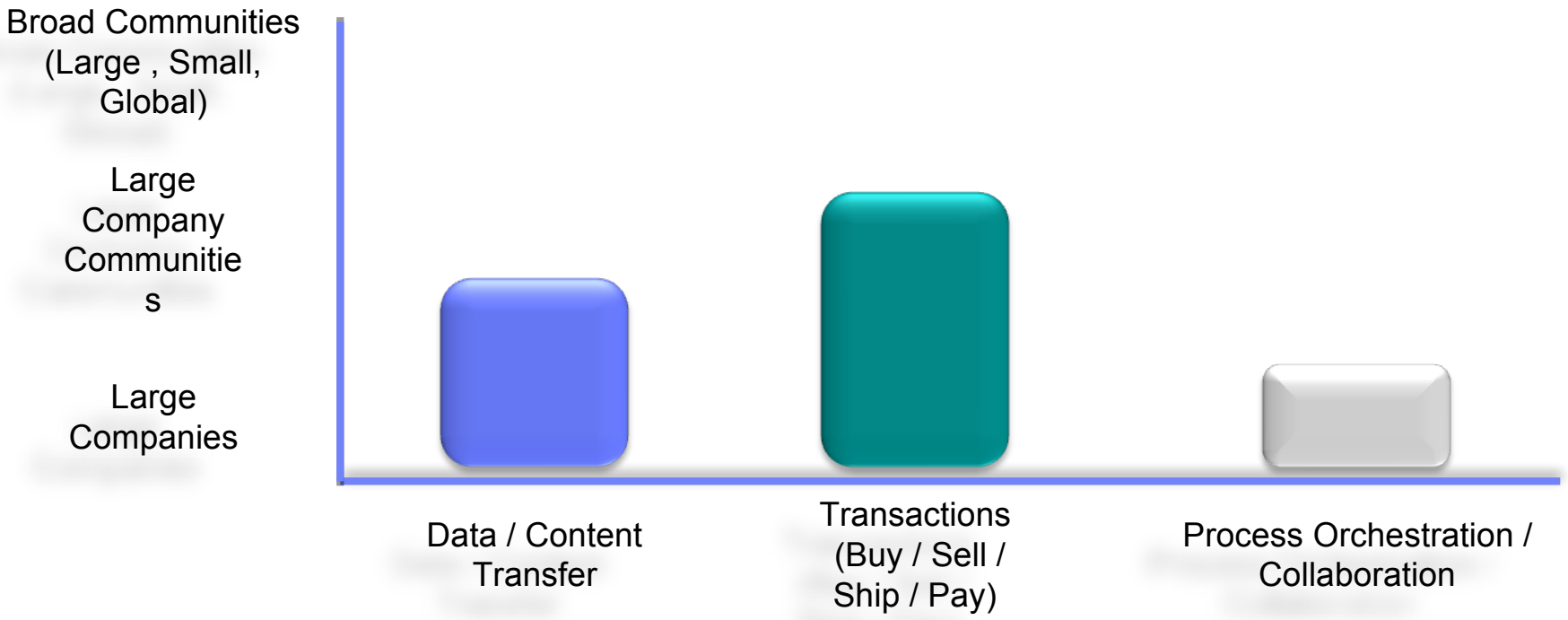
- Point-to-Point Communities
- Mainframe Centric
- Data transfer based on point-to-point communities and tape sharing
- Process Orchestration based on manual processes and paper

The Evolution of the Network Effect
1980 – 1990: Mini Computer Era



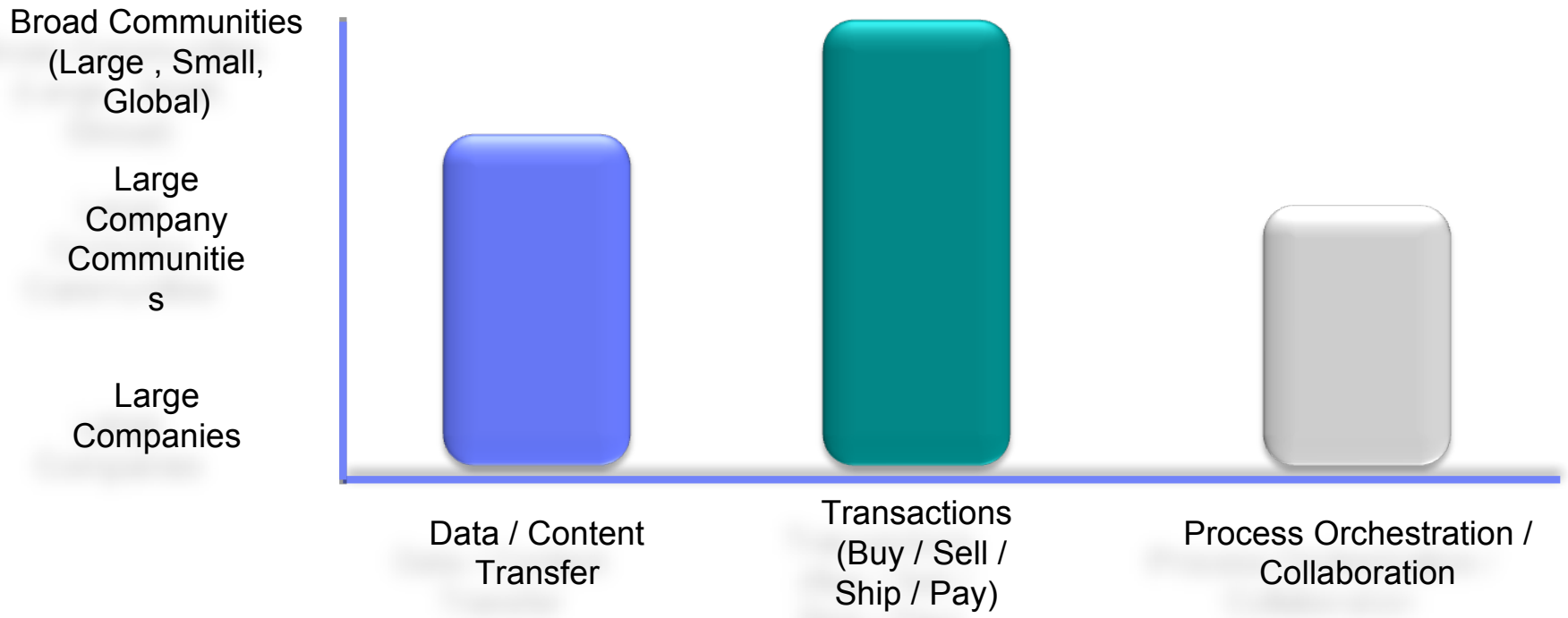
- EDI standard defined and implemented in largest companies
- Distribution of mini-computers create early distributed systems environments
- Data transfer via point-to-point grows incrementally with more mature network protocols
- Process orchestration still manual and paper-based with early innovation in “MRP”

The Evolution of the Network Effect
1990 – 2000: ERP Era



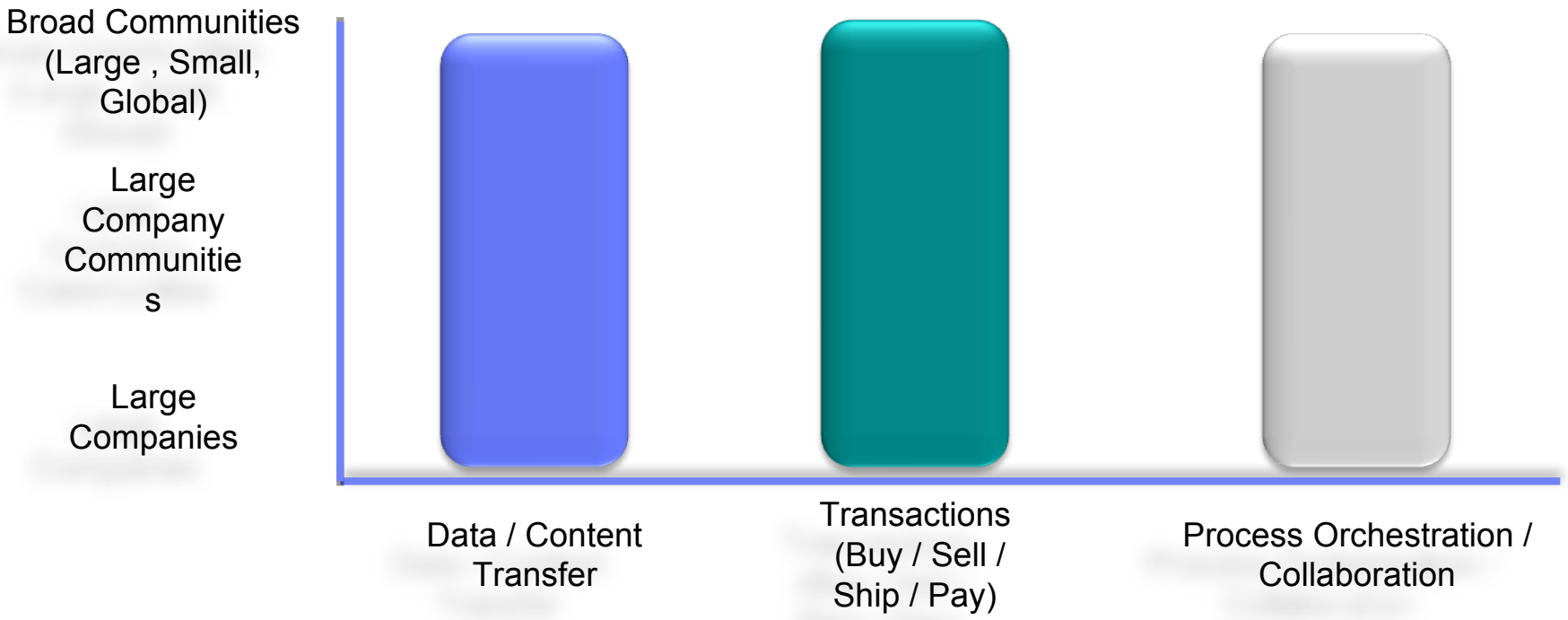
- EDI communities benefit from rapid growth of ERP systems and EDI VAN growth
- Client server (tier II and III) begin to proliferate fueling growth of the “ERP Era”
- ERP Data Integration used as an early system-to-system integration strategy
- Process orchestration within the enterprise-based on growing just in time strategies

The Evolution of the Network Effect
2000 - 2008: Integration Era



- Integration (EAI and B2B) becomes common to tie disparate systems together
- Internet (Post Bust) plays an increasing role in extending to small communities
- Multi-enterprise communities become priority for data and transactions
- Process orchestration and collaboration extend to multi-enterprise communities
- Process orchestration and collaboration hindered by fragmented functions / systems

The Evolution of the Network Effect
2008 - Present: Cloud Era

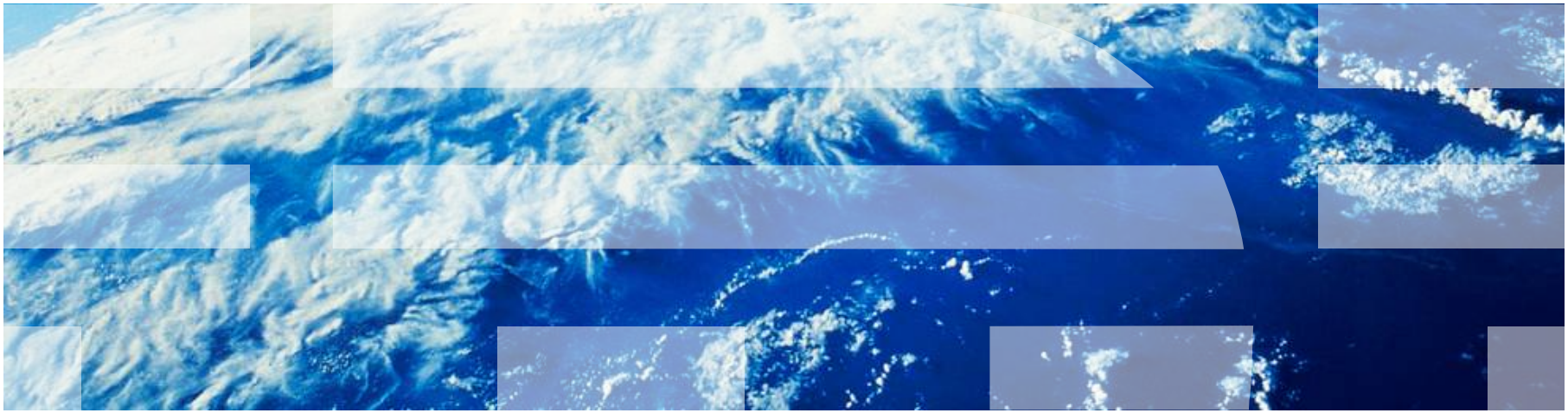


- Matured protocols enable ubiquitous connectivity and messaging capabilities
- Integration available to virtually all communities
- Cloud services enable an extended broker model creating deeper enterprise integration
- Process orchestration and collaboration enabled through cloud integration

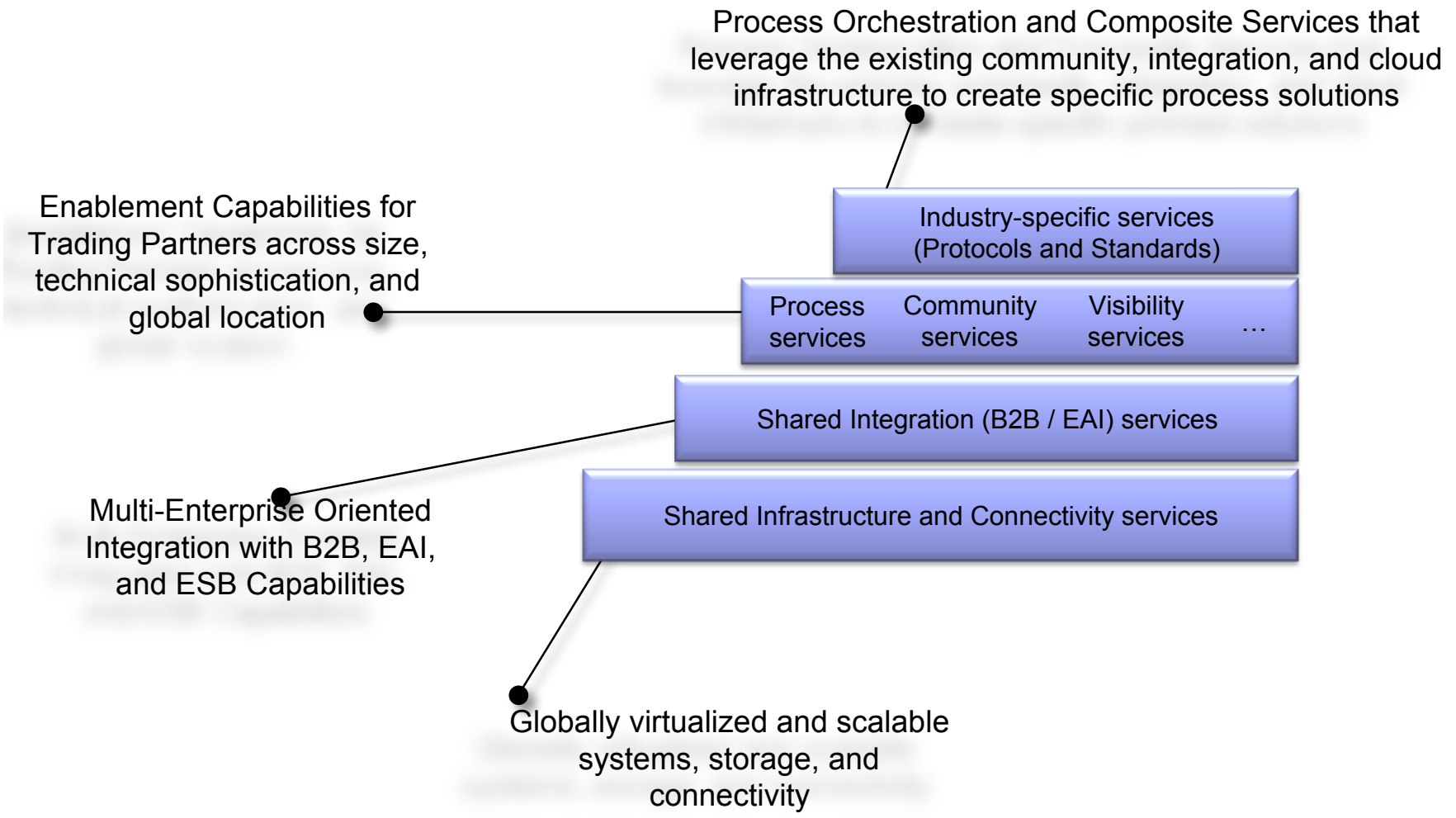
Summary

- Advances over the last 30 years in network protocols, messaging standards, and computing technologies have had a significant impact on the network capabilities and affects in commerce
- The Cloud Network is rapidly becoming the “one stop shop” for data and file transfer, transactions and transaction management, and process solutions (process orchestration and collaboration)

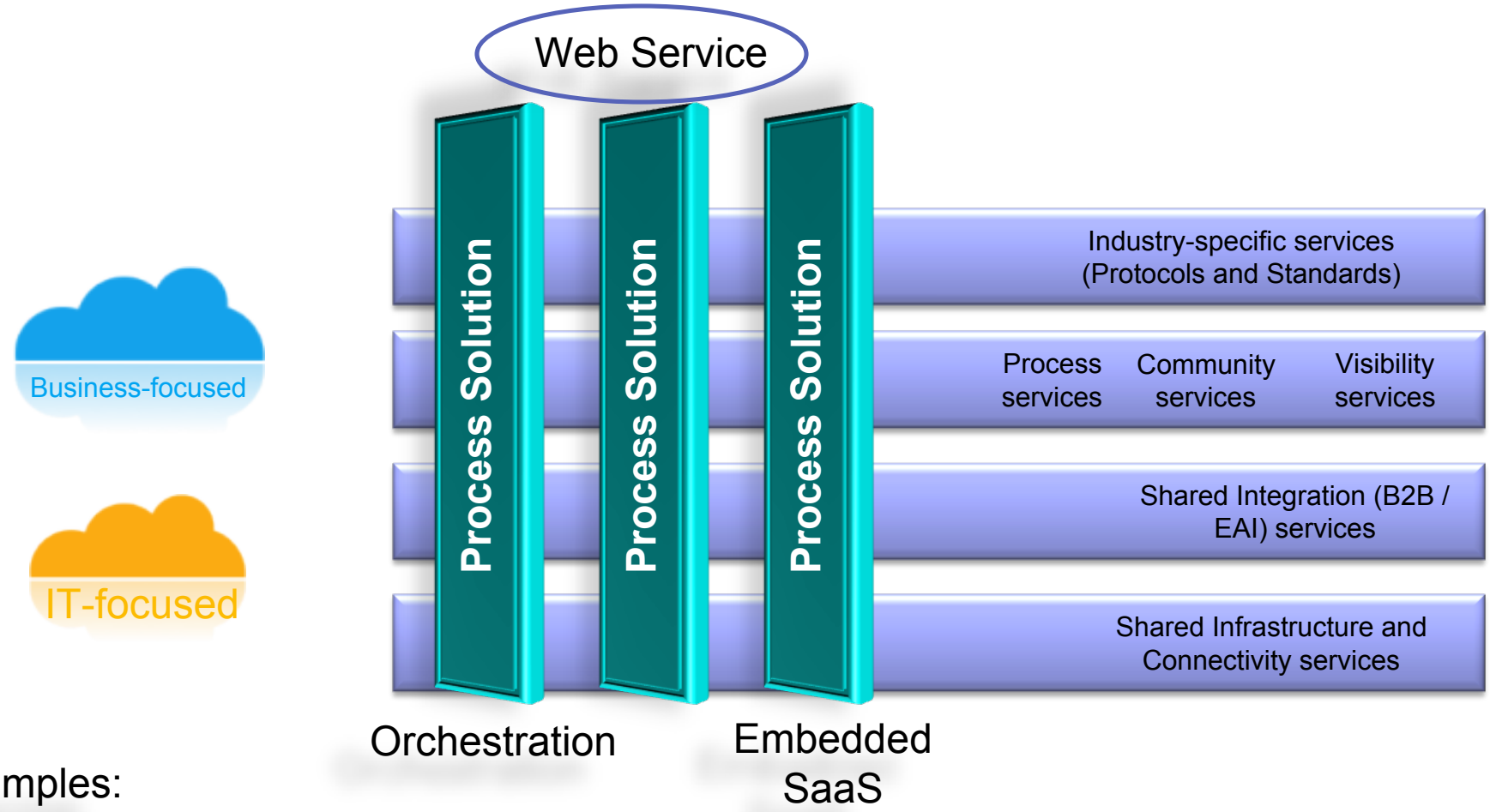
Process Solutions Context In the Cloud



The Cloud Services "Hierarchy of Need"



Applying Cloud Services Process Solutions

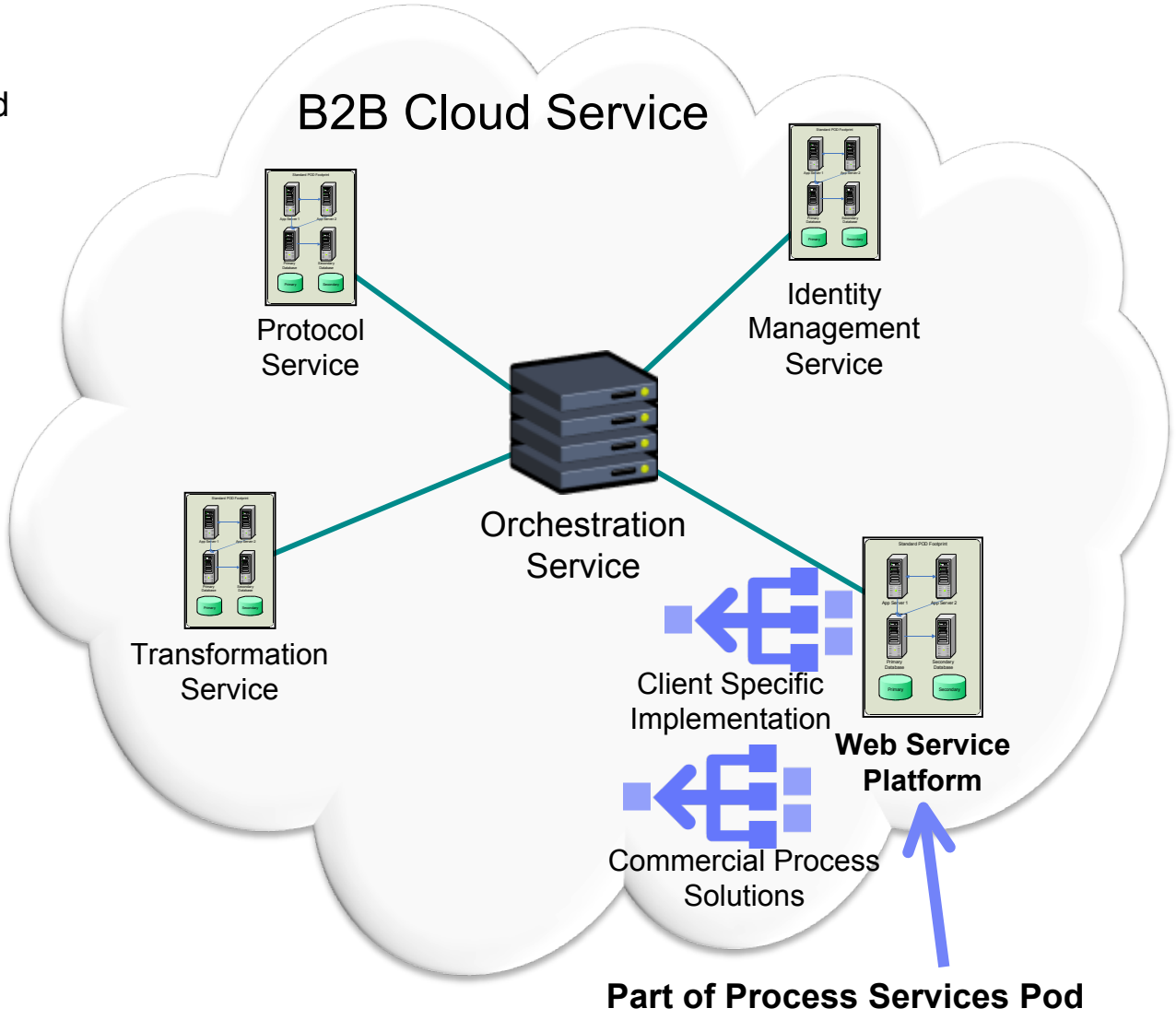


Examples:

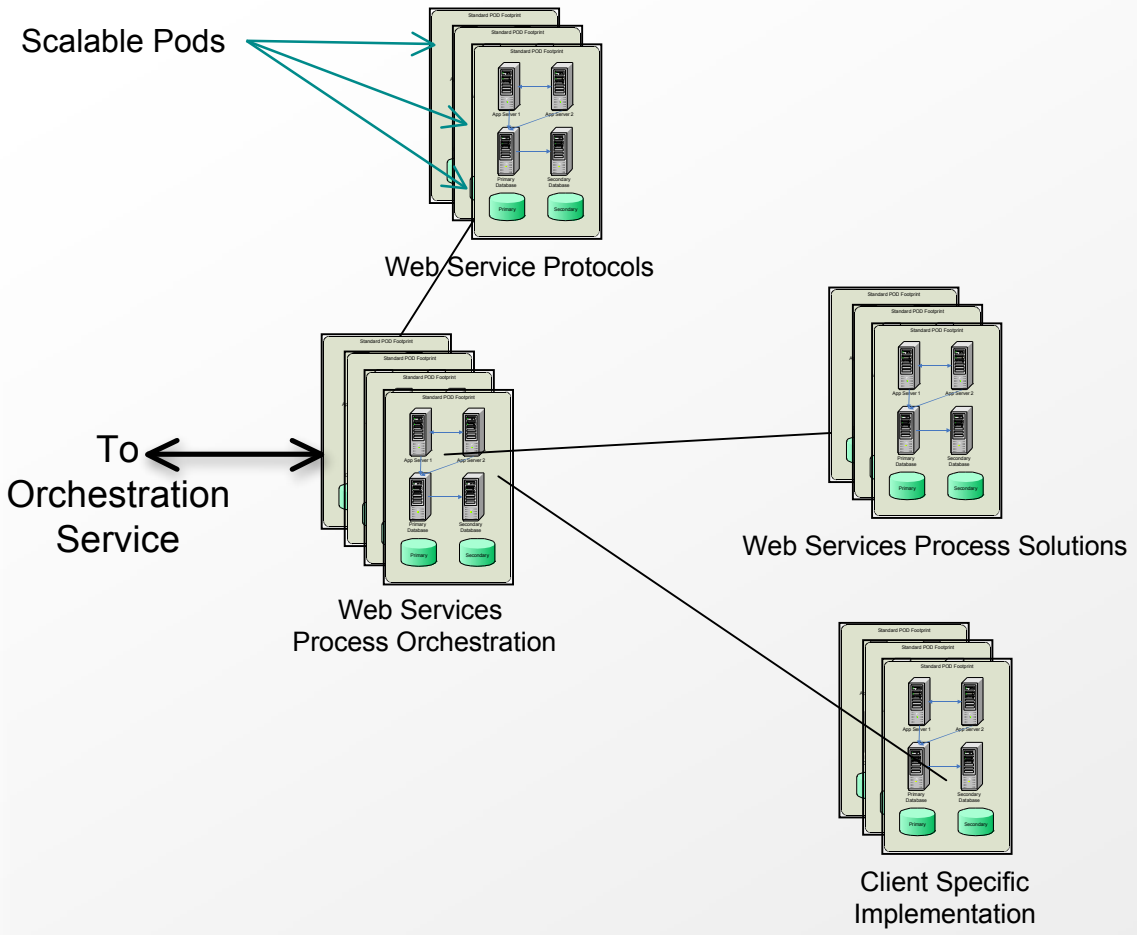
- Community Process Hub
- Field Services Coordination
- eInvoicing

Web Services in the Cloud

- Leverages services architecture
- Web Services specific service and architecture
- Implementation options:
  - Client specific:
    - Enables client specific solutions
    - Tailored to client specifications
    - Commercial grade
  - Web Service specific:
    - Protocol Service
    - Process Integration Service
    - Process Application

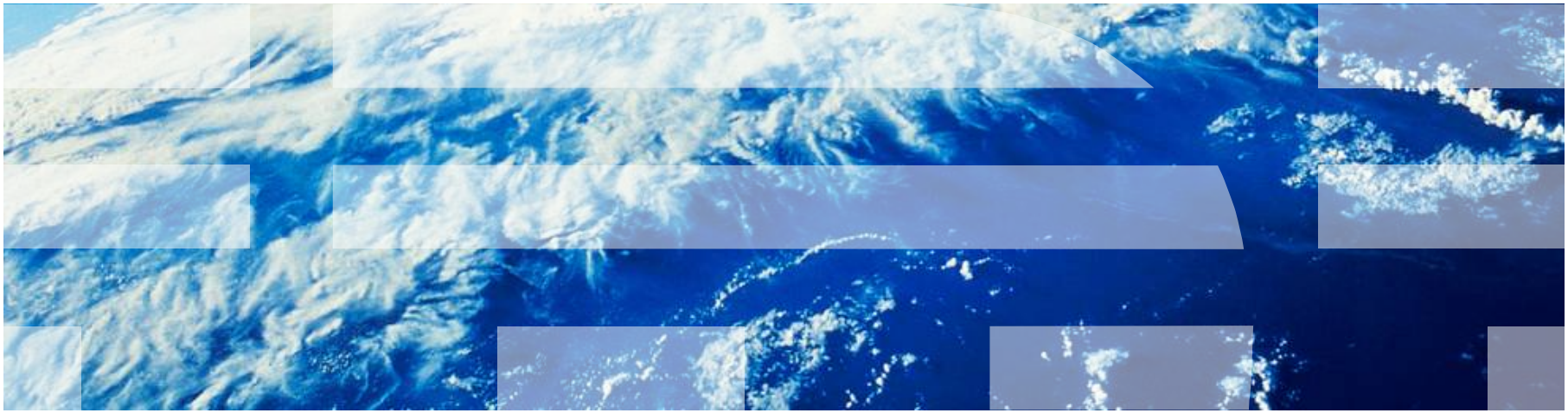


Process Services POD



- POD structure enables protocol, process, and implementation specialization
- Each set of capacities are both vertically and horizontally scalable
- Virtualized infrastructure enable service sharing and plug and play scalability
- Disaster Recovery mirrors full infrastructure
- Testing environment (solutions and load), configured in similar POD configuration to simulate production behavior
- Process Services PODs are services of the overall B2B Cloud Service

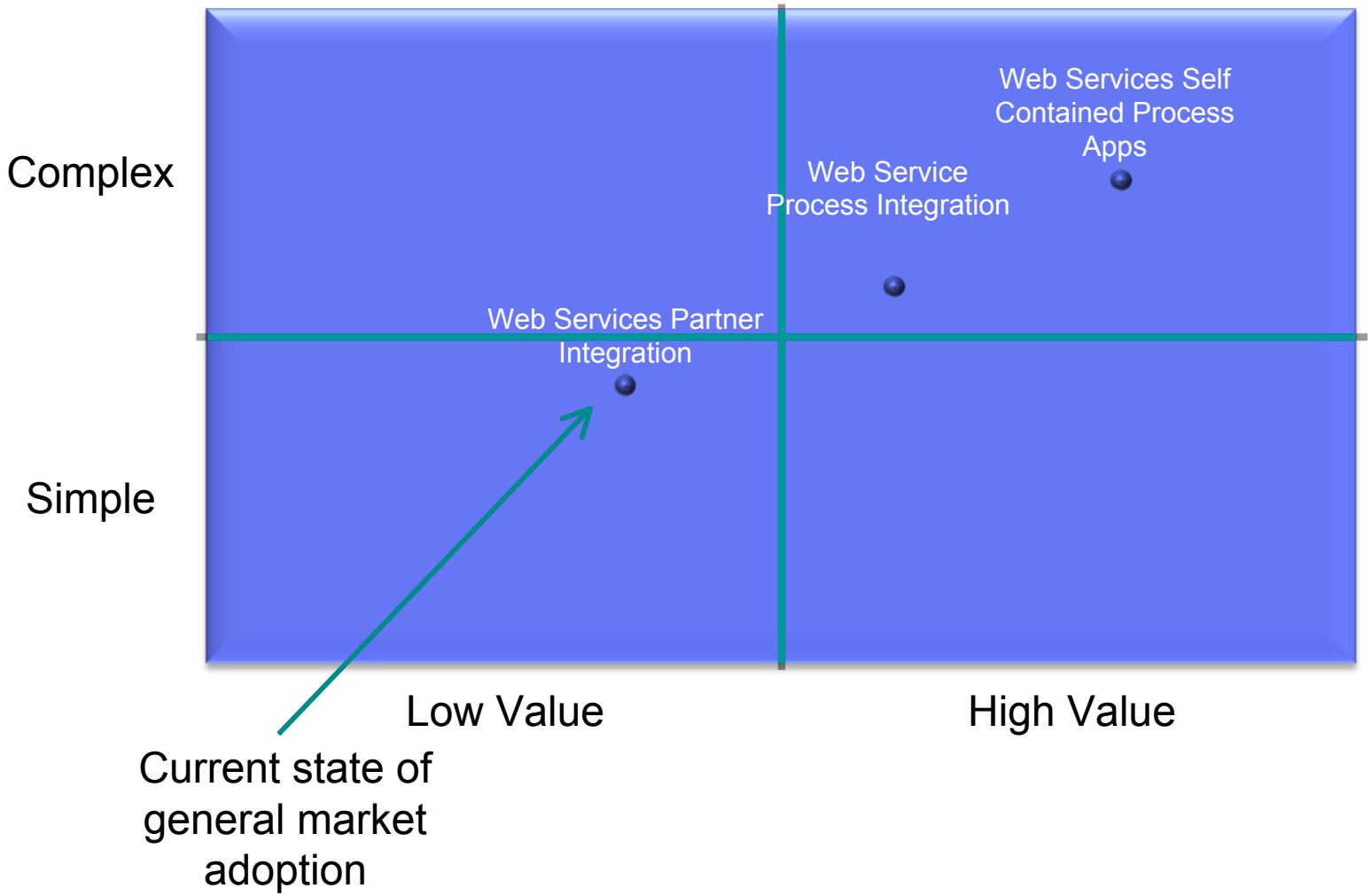
Web Services Context in the Cloud



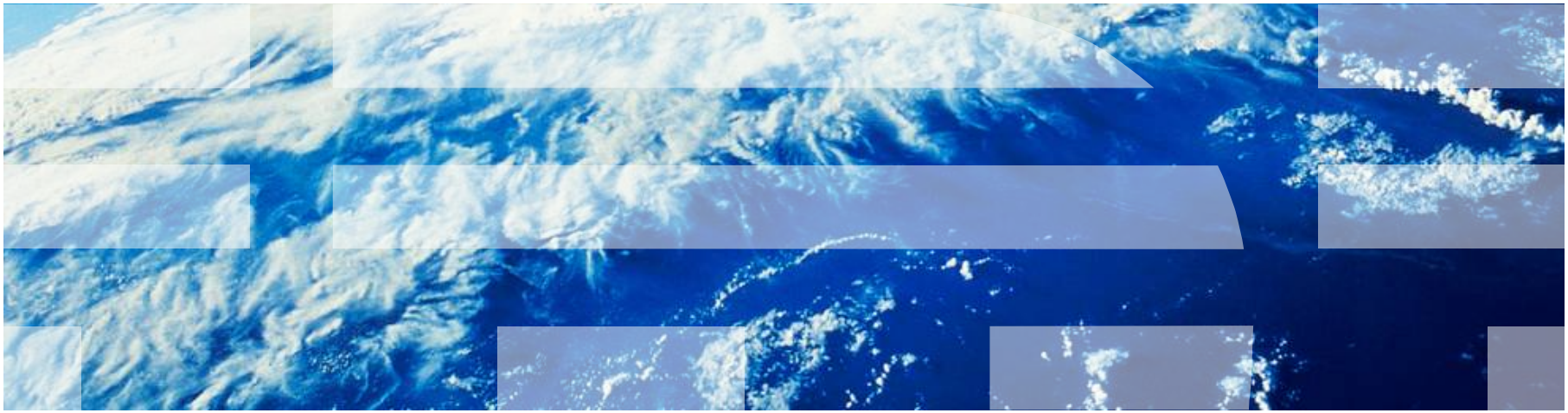
Web Services: How Relevant?

- Web Services can go well beyond their normal use today:
  - Often used as a messaging and connection protocol
  - "SOAP" = Web Services way too often
  - Often a substitute for other connectivity because it's more "modern"
- Web Services relevancy Is directly related to their use:
  - Web Service protocols for partner integration
  - Web Services capabilities for process integration
  - Web Services as a self-contained process application

Web Services: How Relevant?



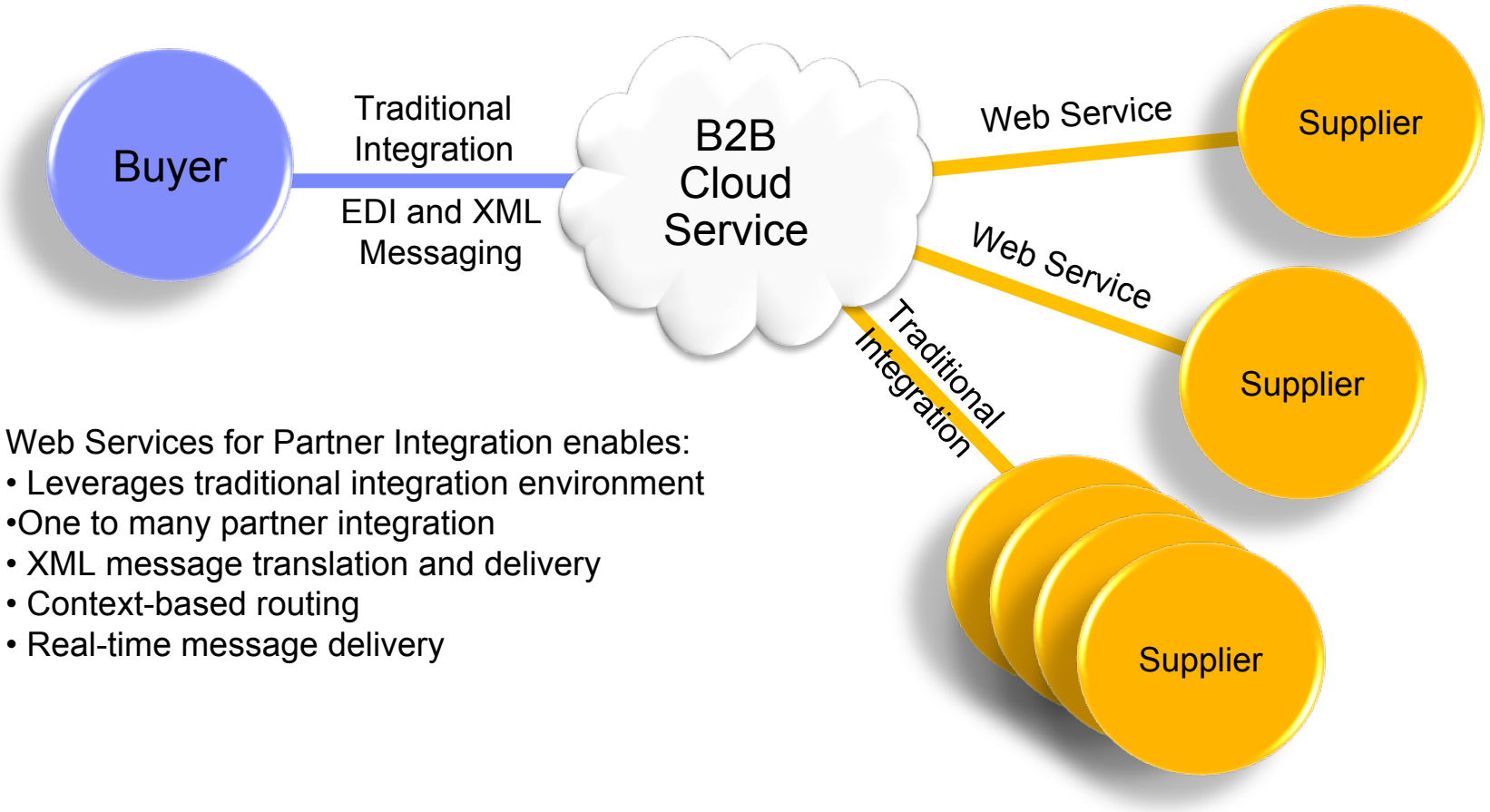
Web Services: 3 Use Case Examples



Web Services Partner Integration

Scenario

Client needs real-time XML-based integration to two priority shipping companies so they can provide shipping orders in real-time



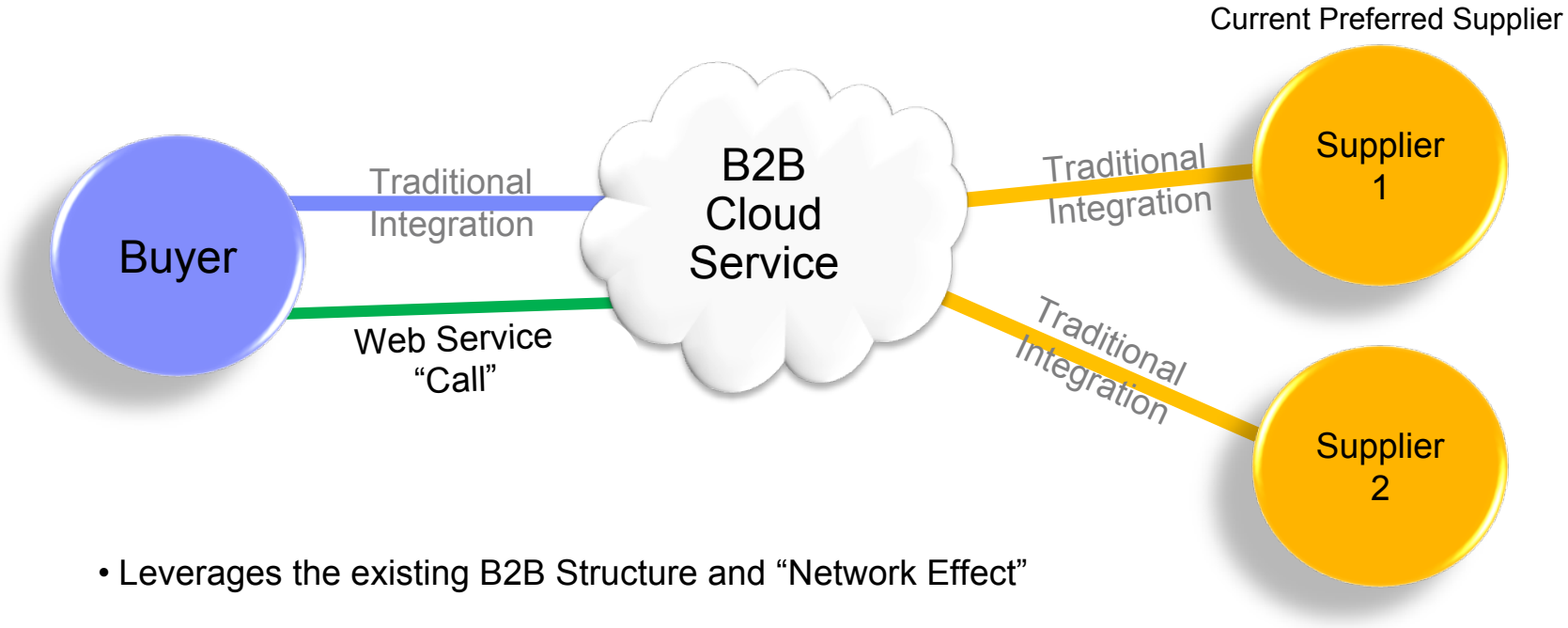
Web Services for Partner Integration enables:

- Leverages traditional integration environment
- One to many partner integration
- XML message translation and delivery
- Context-based routing
- Real-time message delivery

Web Services Process Integration

Scenario

For a specific type of order, the client wants to ensure they have the highest priority supplier, based on an enterprise supplier scorecard system that is updated regularly

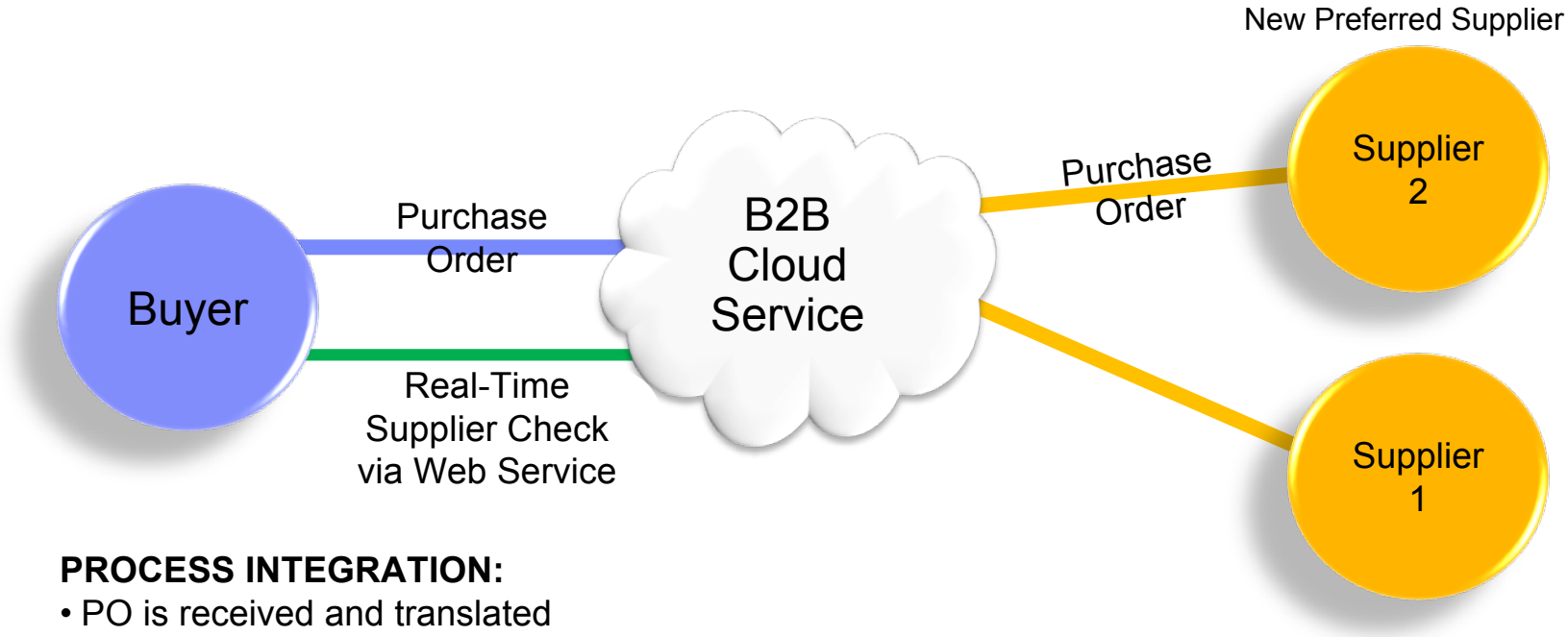


- Leverages the existing B2B Structure and "Network Effect"
- Provides dynamic data integration for Real-Time Processes
- Enable Web-Services-based Real-Time Data Update / Interaction

Web Services Process Integration

Scenario

For a specific type of order, the client wants to ensure they have the highest priority supplier based on an enterprise supplier scorecard system that is updated regularly



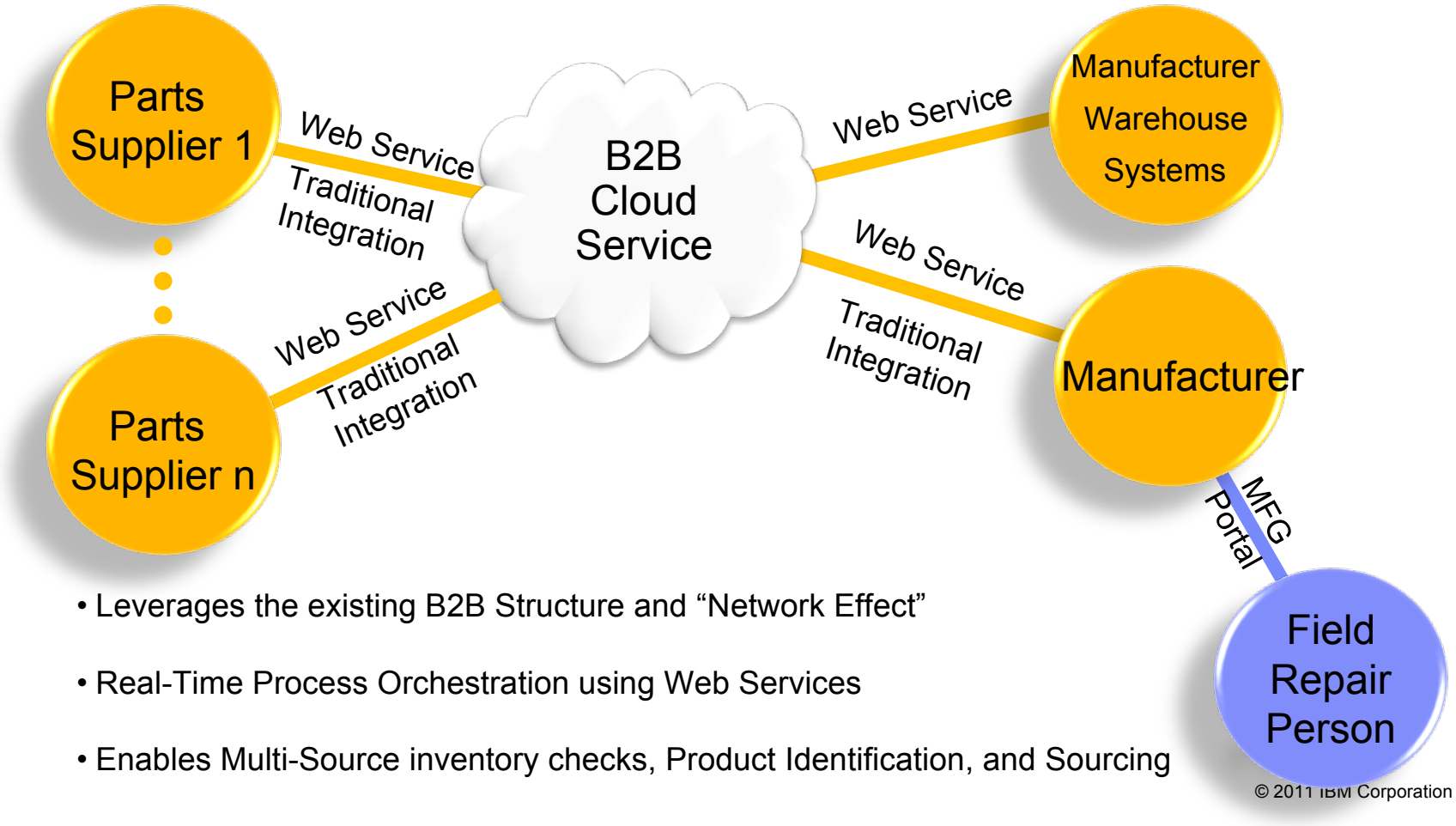
PROCESS INTEGRATION:

- PO is received and translated
- Determines PO has items that are in a specific category identified as “Dynamic Supplier”
- Constructs a Web Service Call to the Client’s ERP
- Identifies Current Preferred Supplier
- Updates Purchase Order with Preferred Supplier and sends

Web Services Process Application

Scenario

Repair person needs to quickly identify and procure repair part to service client repair from the most reliable supplier local to the repair location



- Leverages the existing B2B Structure and "Network Effect"
- Real-Time Process Orchestration using Web Services
- Enables Multi-Source inventory checks, Product Identification, and Sourcing

Web Services Process Application

Scenario

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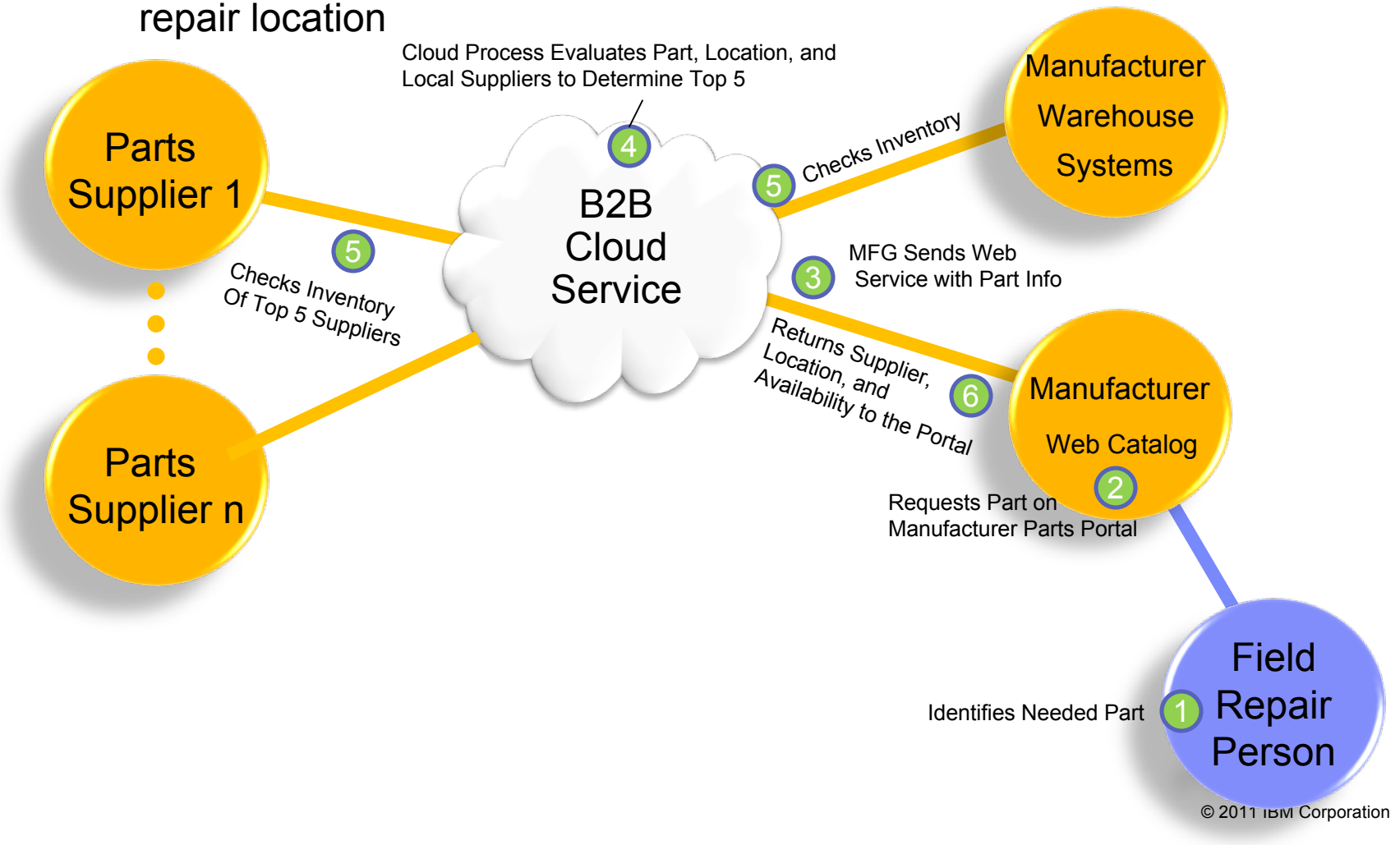
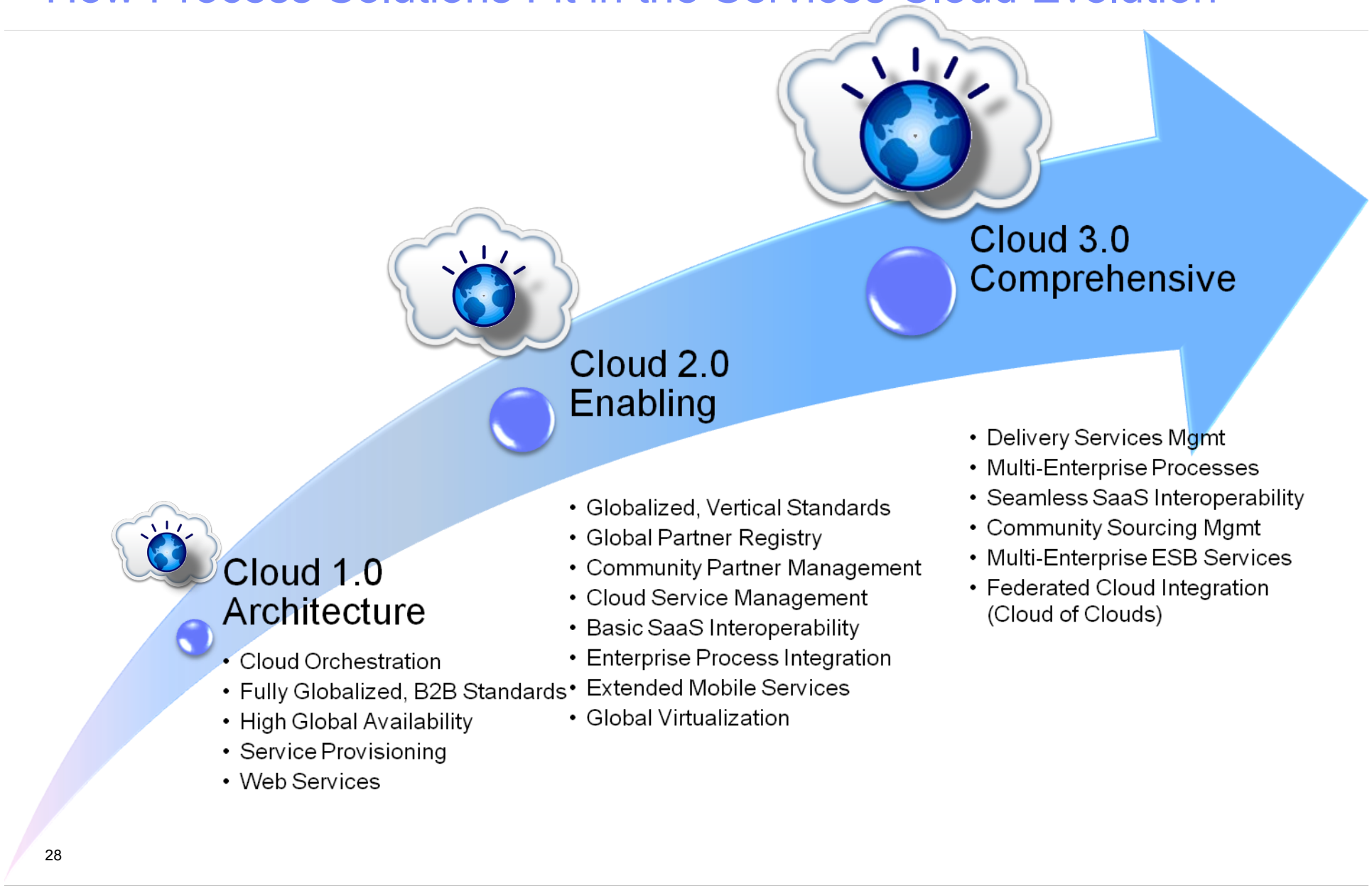


How Process Solutions Fit in the Services Cloud Evolution



Next up in the B2B Cloud Services series…

Questions?