POP204

Business Networks Integration – SAP Financial Services Network, Ariba

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October, 2013

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Agenda

SAP Financial Services Network

Ariba

Cloud Onboarding and Integration Rapid-Deployment Solutions (RDS) – Ariba as Example
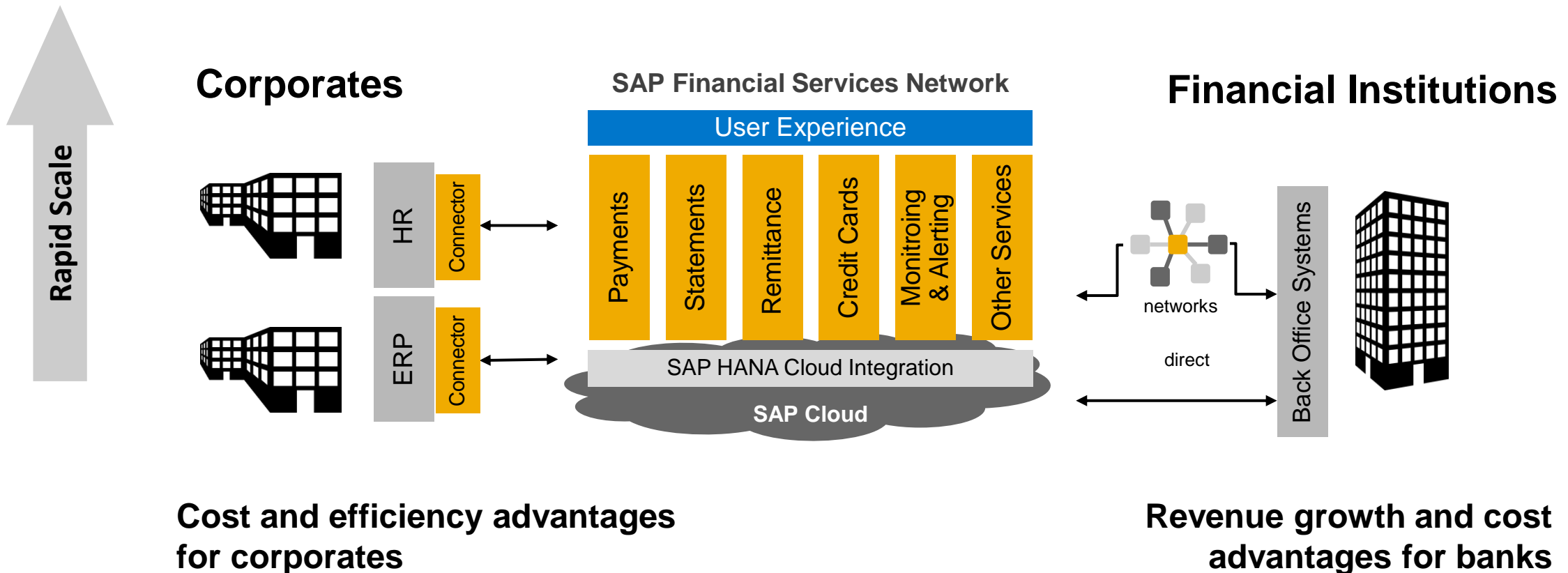
Summary

SAP Financial Services Network

SAP Financial Services Network (FSN)
Solution based on SAP HANA Cloud Integration

- Rapid on-boarding
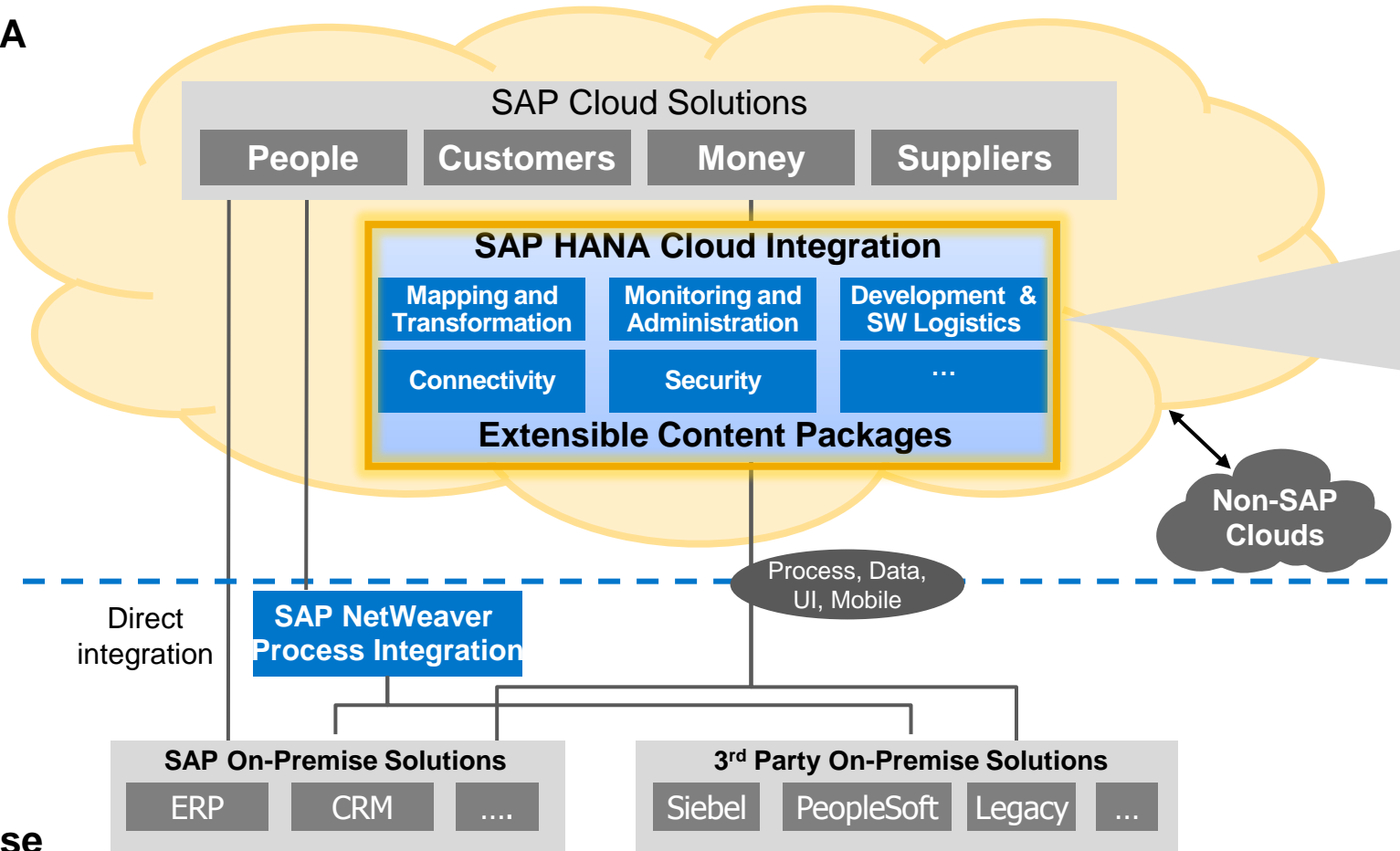- SINGLE integration point to entire network
- Offer more value-added services

- ZERO footprint at Bank and Corporate
- Run and operated by SAP
- Better funds visibility and cash forecasting

Rapid Scale

Corporates

HR — Connector

ERP — Connector

SAP Financial Services Network

User Experience

| Payments | Statements | Remittance | Credit Cards | Monitroing & Alerting | Other Services |

SAP HANA Cloud Integration

SAP Cloud

Financial Institutions

networks

direct

Back Office Systems

Cost and efficiency advantages for corporates

Revenue growth and cost advantages for banks

SAP Financial Services Network
Solution based on SAP HANA Cloud Integration

SAP HANA Cloud

SAP Cloud Solutions

| People | Customers | Money | Suppliers |

SAP HANA Cloud Integration

| Mapping and Transformation | Monitoring and Administration | Development & SW Logistics |
| Connectivity | Security | ... |

Extensible Content Packages

Non-SAP Clouds

Process, Data, UI, Mobile

Direct integration

SAP NetWeaver Process Integration

On-Premise

SAP On-Premise Solutions

| ERP | CRM | .... |

3rd Party On-Premise Solutions

| Siebel | PeopleSoft | Legacy | ... |

SAP HANA Cloud Integration
- Cloud based platform of choice for SAP Cloud solutions to connect to on-premise or cloud applications
- Complementary offering to SAP NetWeaver PI
- Prepackaged Integration Content
- Customer & partner ecosystem to extend and create new content and connectivity options

Application Edition
- Sales OD ↔ CRM OP
- SFSF BizX OD ↔ HCM OP
- SFSF EC OD ↔ ERP OP

SAP Financial Services Network

SAP Financial Services Network
Capabilities Today – Overview

Connectivity

- SFTP Client and Server
- WS-RM over HTTPS
- Pull Pattern based on web service
- FSN Connector (corporates)
- VPN

Security

- Transport level: HTTPS, SFTP, WS-Security
- Message / payload level: Encryption, decryption, signing, signature verification
  - PKCS#7
  - XML Signature (signing)
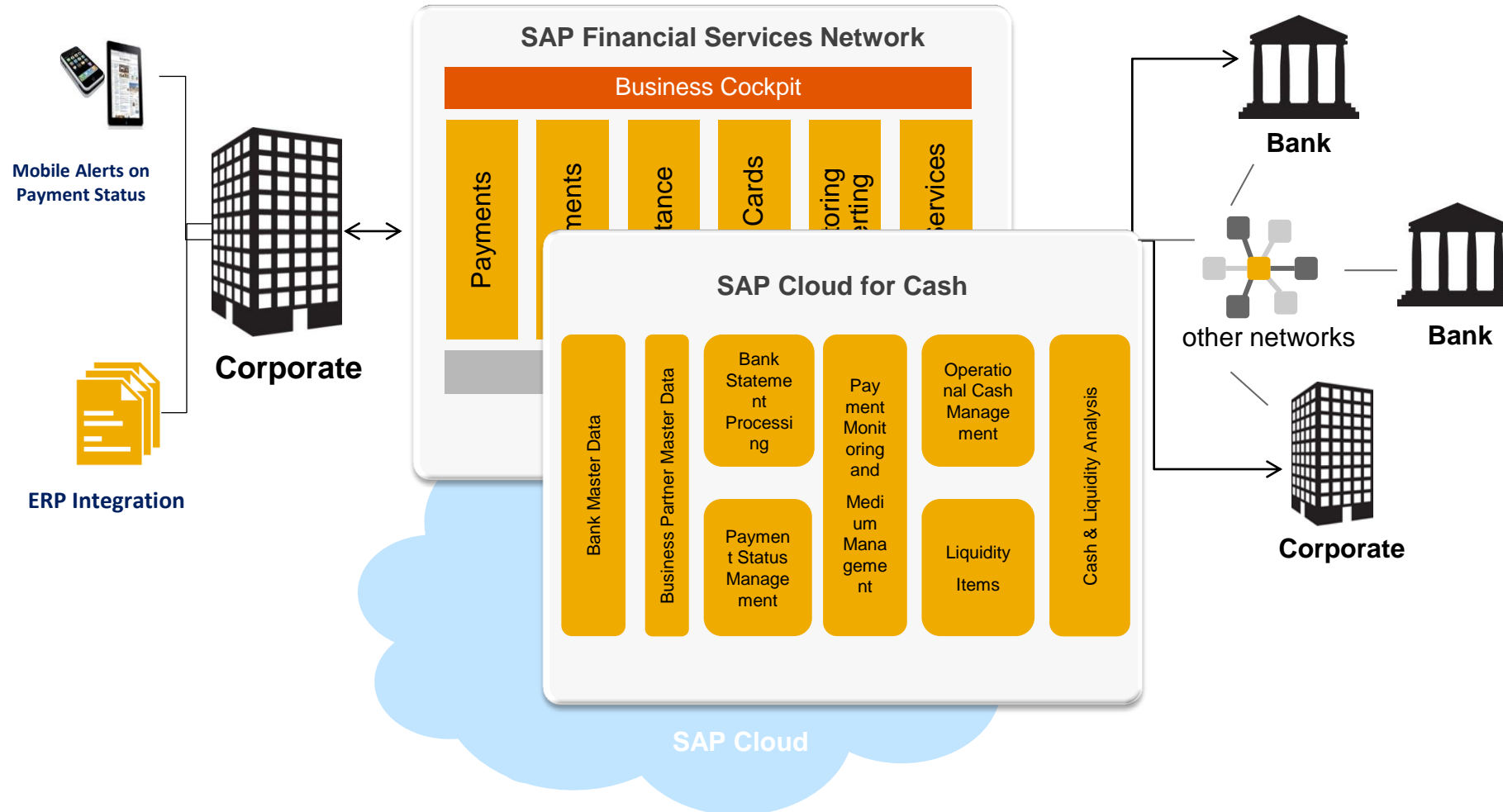- Encrypted Data Persistency
- Multi tenancy / data isolation

Design

- Graphical modeling of integration flows in Eclipse
- Routing, data transformation, mapping
- Generation & build to create, deploy runtime artifacts

Operations

- Centralized monitoring, administration in Eclipse
- Operations managed by SAP Cloud Managed Services
  - Start, stop of runtime nodes
  - Deploy security material to runtime nodes
  - Drive software updates, message monitoring
  - React on alerts on SPC (Service Provider Cockpit)
- Failover
- Rolling software update
- Audit & Logging
- Onboarding of participants via templates

SAP Financial Services Network
Integration with Cloud for Cash

SAP Financial Services Network

Business Cockpit

Payments | ...ments | ...tance | Cards | ...toring ...rting | ...ervices

SAP Cloud for Cash

- Bank Master Data
- Business Partner Master Data
- Bank Statement Processing
- Payment Status Management
- Payment Monitoring and Medium Management
- Operational Cash Management
- Liquidity Items
- Cash & Liquidity Analysis

SAP Cloud

Mobile Alerts on Payment Status

ERP Integration

Corporate

Bank

other networks

Bank

Corporate

- Manage company's cash flow, liquidity status
- Large enterprises have often complex ERP system landscape
  -> Impossible to have aggregated view on all cash transactions
  -> Companies go too late to market for investments, loans
- Focus of 1st increment of "1311" shipment planned: Business monitoring of payment request (pain.001), payment status (pain.002), bank statement (camt.053), direct debit (pain.008)
- Payment monitor: Monitor payments in different status
- Consolidated information for all expected cash inflows and outflows across a company

SAP Financial Services Network – Message Layer
FSN Message or Native Application Payload

```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<!-- Request Message   -->
<SOAP:Envelope
xmlns:SOAP="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:SAP="http://sap.com/xi/XI/Message/30">
<SOAP:Header />
<SOAP:Body>
   <n0:FSNMessageBulk
      xmlns:n0=https://fsnschemas.netweaver.neo.com/fsnflow
      xmlns:prx="urn:sap.com:proxy:XLP:
      /1SAI/TAE646AFACA686A8BD91404:700:2011/05/10">
      <FSNMessage>

         <SenderId>DE49900100000001000023</SenderId>
         <ReceiverId>WOWIDES1</ReceiverId>
         <MessageType>pain.001.003.03</MessageType>
         <FileName>DTA120807181425_0000</FileName>
         <NumberOfRecords>17</NumberOfRecords>
         <MessageId>MID-SAP-EBA-SCT-812-001</MessageId>
         <RelatedMessageId \>
         <ExtendedHeader \>

         <MessageContent>
            QINOX2IzX3N1cGVylQ==
         </MessageContent>
      </FSNMessage>
   </n0:FSNMessageBulk>
</SOAP:Body>
</SOAP:Envelope>
```

SOAP Message
- FSN messages are transported as SOAP documents
- But: FSN can send/receive also native application payloads (e.g. pain.001) without FSN Message wrapping

FSNMessageBulk
- SOAP Body contains a FSN message bulk with multiple FSN messages inside

FSNMessage Header
- Sender/ReceiverID
  - Used for routing
  - IDs agreed between bank and corporate
  - Bank-ID is unique in context of FSN. Corporate-ID is unique in context of a bank
- Payload information
- MessageID is ISO payment ID and therefore unique in context of a bank
- Number of records: Validation and billing

FSNMessage Content
- Message content is encrypted, signed and char encoded
- FSN can send/receive also native application payloads without security envelopes

SAP Financial Services Network
Sender / receiver tenant split
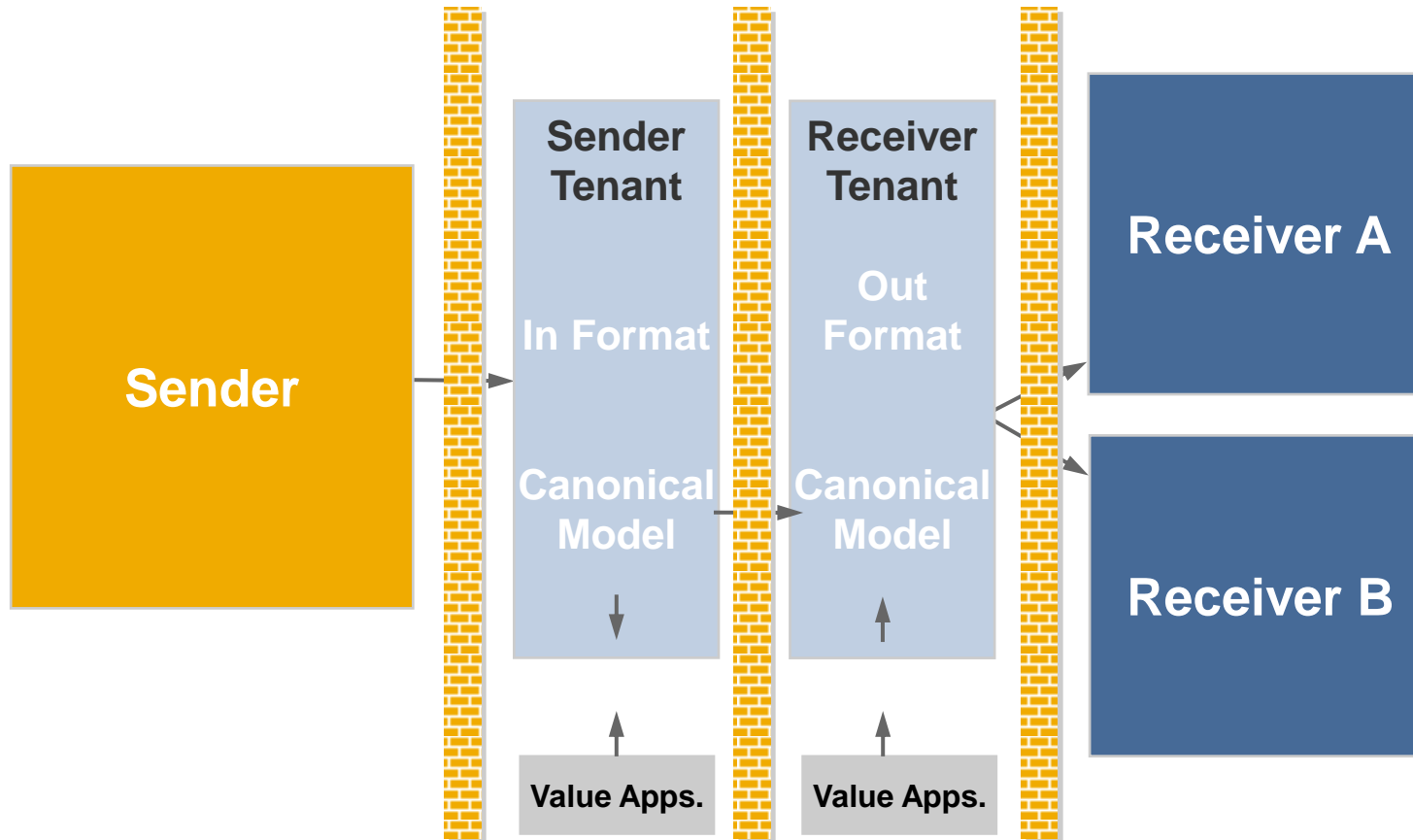
- Runtime isolation between sender and receiver tenant
- Message mappings are executed in the tenant they belong to
- Better isolation in message payload storage
- Value apps (e. g. business monitoring) can be deployed per participant (tenant)

SAP Financial Services Network
Links for further information

SAP Financial Services Network

- Documentation on SAP Help Portal:
  - SAP FSN: http://help.sap.com/sapfsn
  - SAP FSN Connector: http://help.sap.com/fsnagent
- SCN: http://scn.sap.com/docs/DOC-40696
- Ramp-up Knowledge Transfer (RKT): https://websmp103.sap-ag.de/~form/sapnet?_SHORTKEY=01100035870000759375&

SAP HANA Cloud Integration

- Documentation on SAP Help Portal: http://help.sap.com/cloudintegration
- SCN: http://scn.sap.com/docs/DOC-40396
- Ramp-up Knowledge Transfer (RKT): https://websmp104.sap-ag.de/~form/sapnet?_SHORTKEY=01100035870000758527&
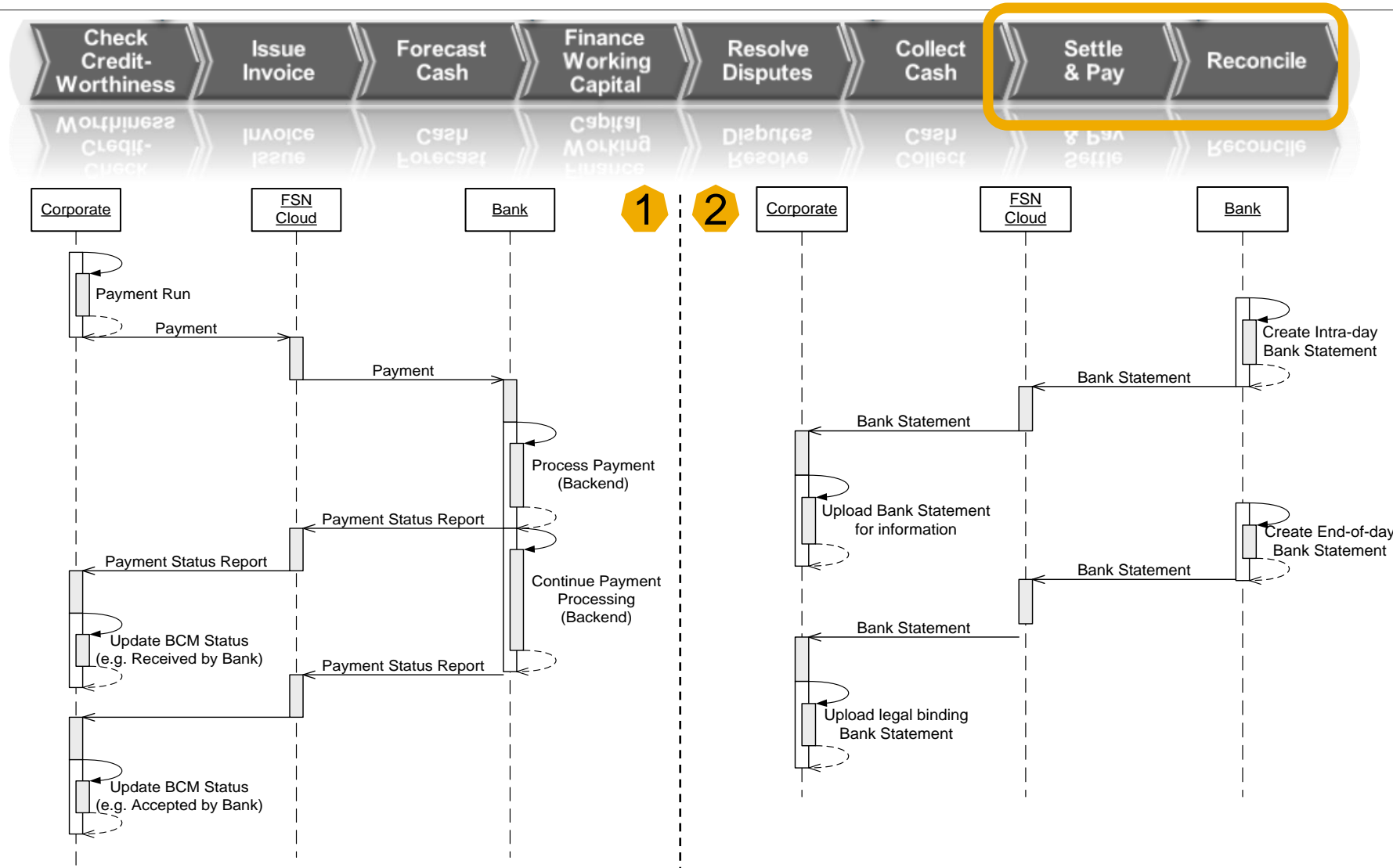
Demo

SAP Financial Services Network

# SAP Financial Services Network (FSN) –
End-to-End Payment Flow

Customer Installation

SAP ERP
Accounting

Invoice
Invoice
Invoice
Invoice

Payment Run ①

SAP FSN

③ **Payment Request**

1. Payment   87 $1,00
   0
   1. Invoice 28347 $400
   2. Invoice 29830 $200
   3. Invoice 930029 $300
   4. Invoice 73684 $100

②

④

⑦ **Payment Status Statement**
#87 $1,000 Finished

⑧
Status Update Statement ⑨

Bank

⑤ **Payment**

⑥ **Payment Process Status Update Statement**

Payment Request (pain.001)
1. Creation
2. Forward to FSN
3. FSN Processing
   – *Format & Values Conversion*
4. Forward to Bank
5. Execution

Status (pain.002), Statement (camt.053)
6. Status Update, Statement
7. FSN Processing
   – *Document Format and Field Level Translation*
8. Forward to Customer
9. SAP ERP Processing

SAP Financial Services Network
Business Process: Settle & Pay, Reconcile

SAP FSN Scenario – Demo Overview
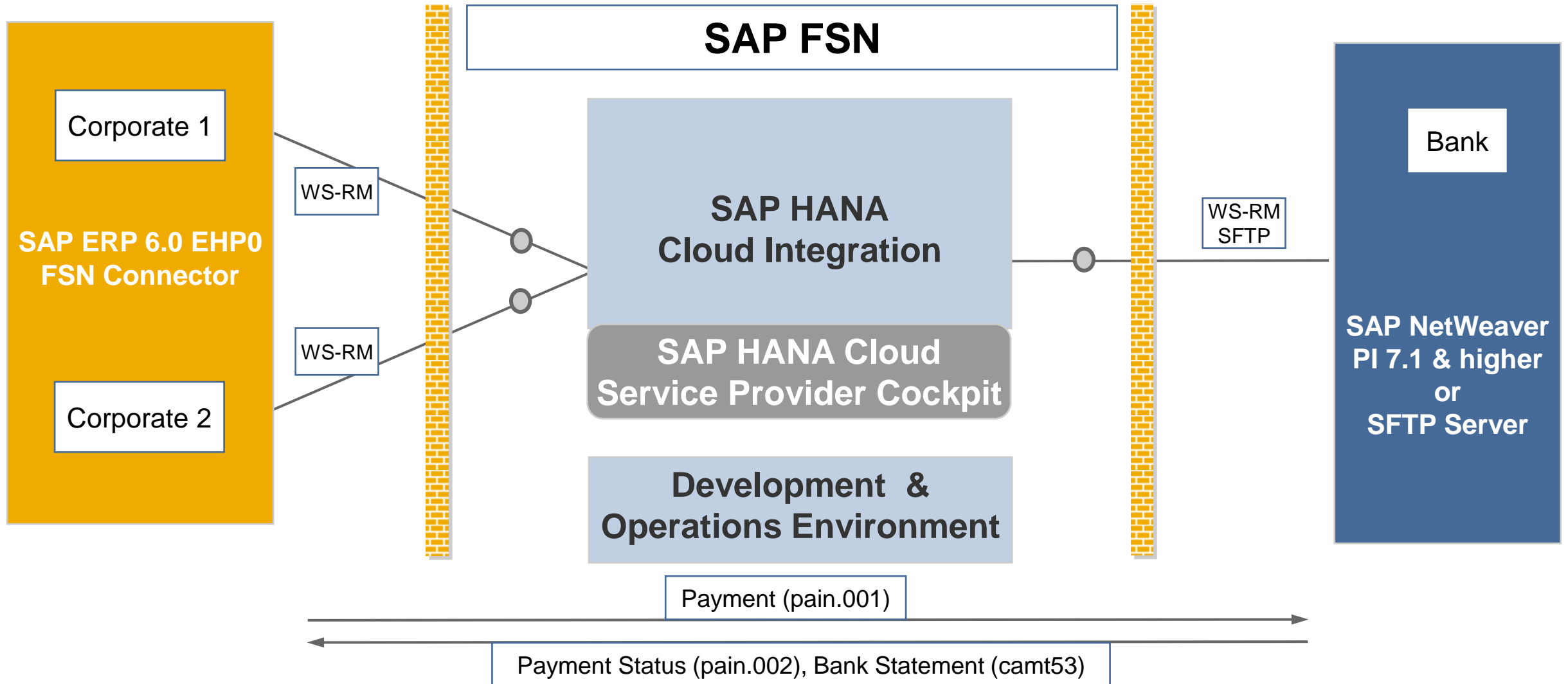
Target Personas (1)

Customer Side

- **Tenant admin : Configure backend systems**
  - Bank (FSN): Configure SFTP connectivity or SAP NetWeaver PI system
  - Corporate (FSN): Install and configure FSN Connector
  - Upload, download of communication information (WSDLs, certificates, SFTP directory name, public key)

- **LOB user : Trigger message exchange**
  - Payment requests
  - ...

Target Personas (2)

SAP

- **SAP Application Content developer**
  - Create standard integration content, e. g. configure integration flows, generate configuration bundles
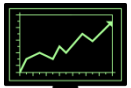
- **SAP Cloud Managed Services aka SaaS admin**
  - Create tenants, start runtime nodes
  - Deploy certificates to corresponding runtime node
  - Drive software updates, message monitoring
  - React on alerts on SPC (Service Provider Cockpit)

- **SAP Cloud Professional Services aka Developer**
  - Support customer extension scenarios, e. g. build mappings
  - Deploy configuration bundle to corresponding runtime node

SAP Financial Services Network
Sender/ Receiver Split: Configuration in Integration Flow

- **Sender / receiver split**
  - Connection between sender and receiver tenant is modeled via a sender integration flow and a receiver integration flow
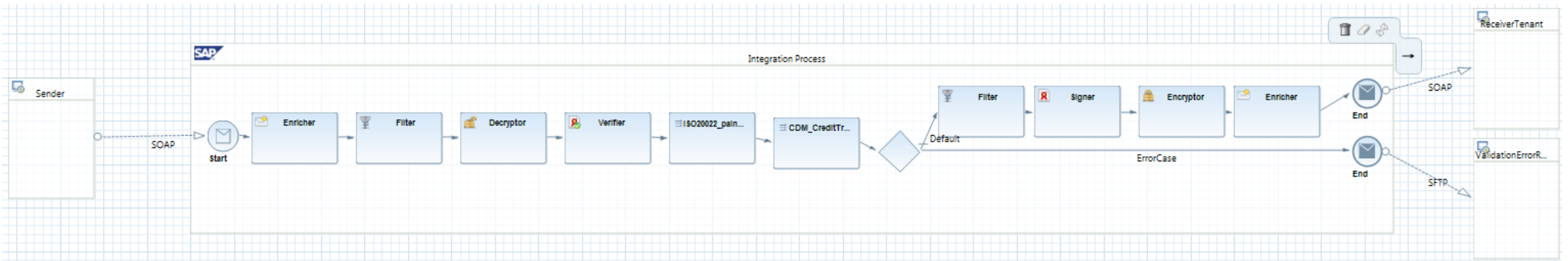
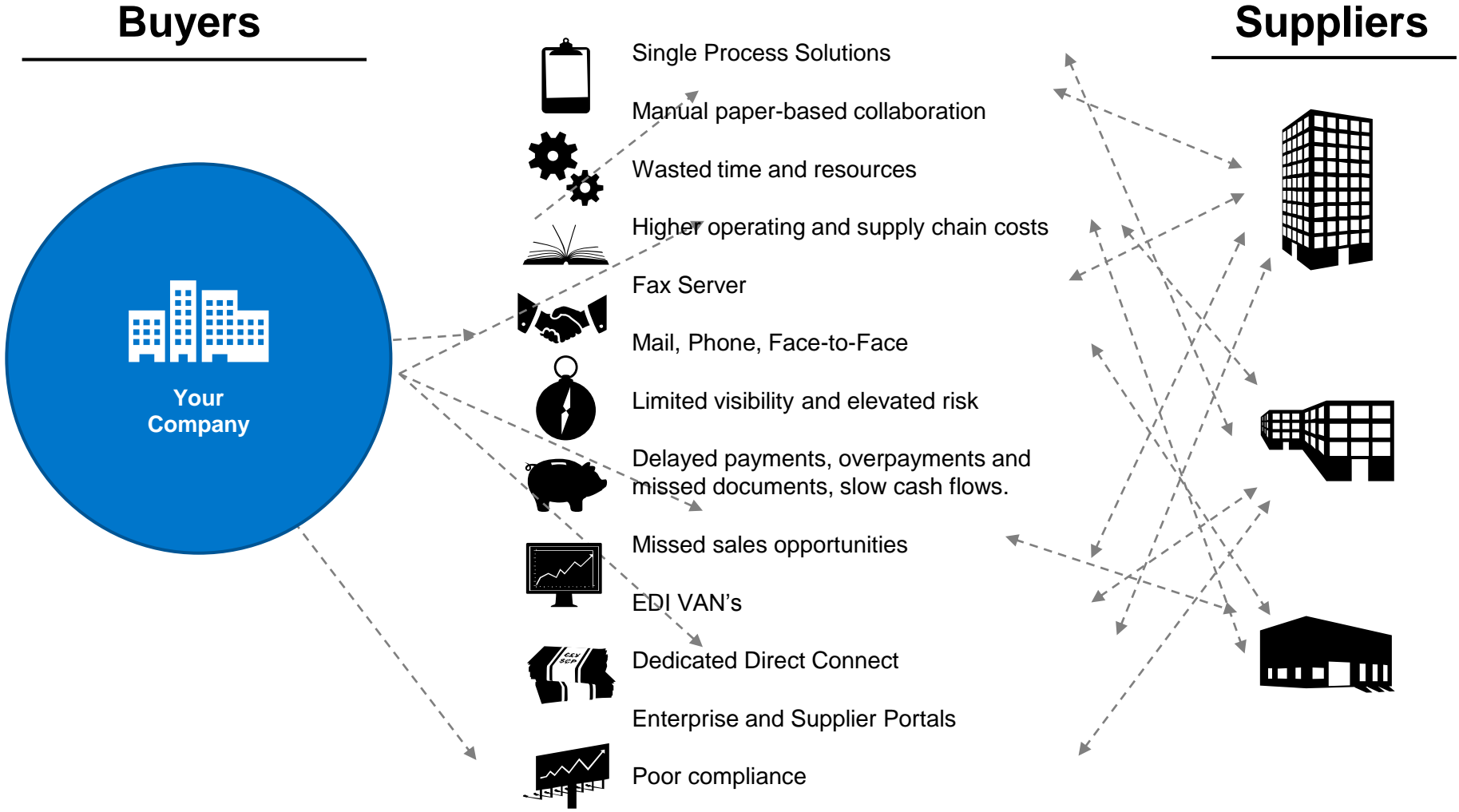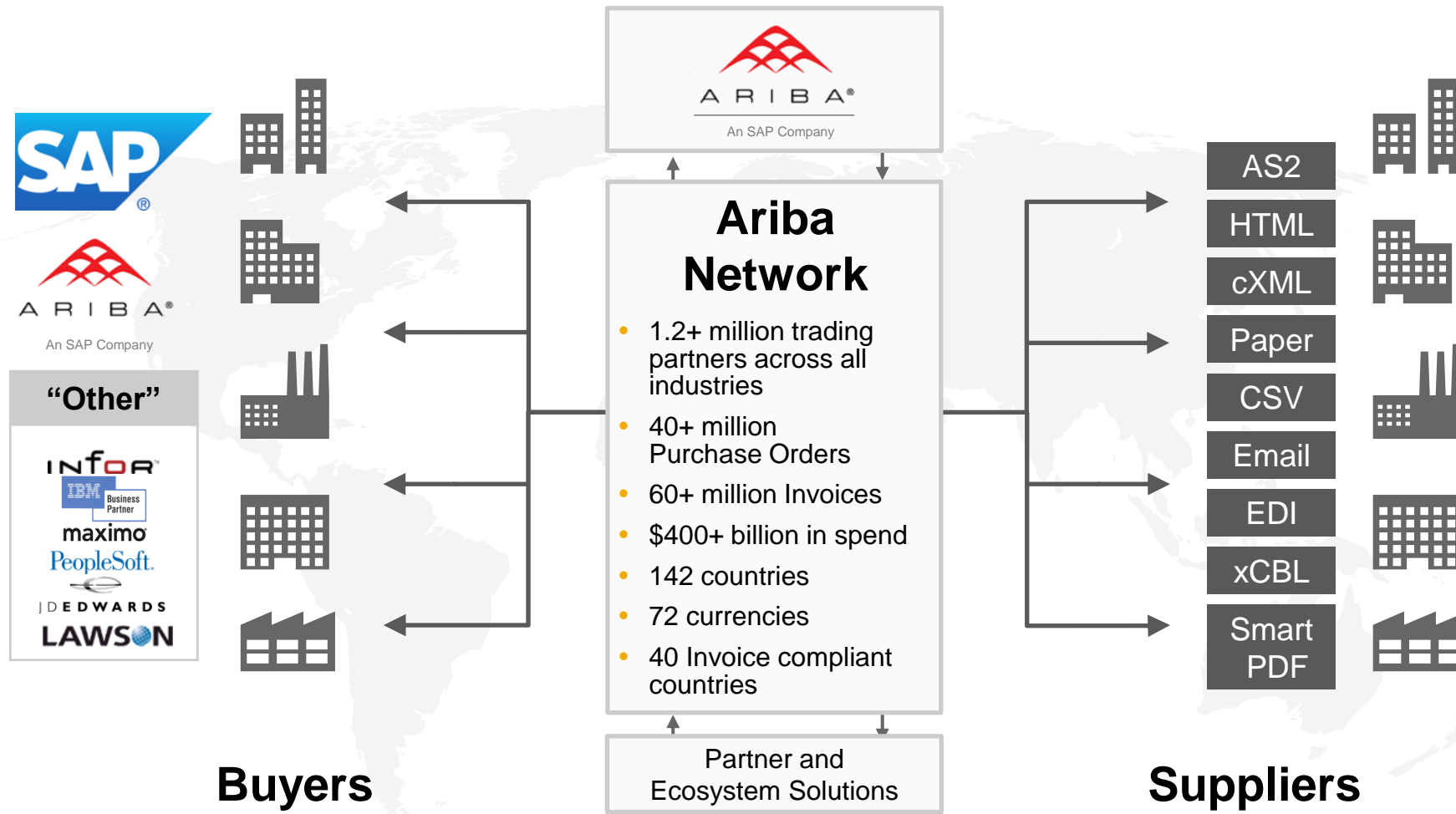Sender Integration Flow
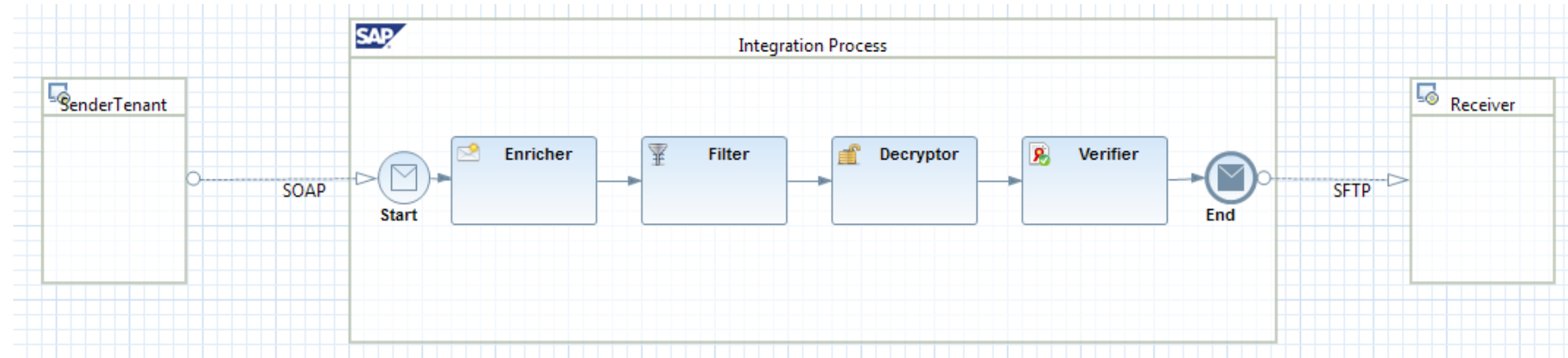
Receiver Integration Flow

Ariba

The Challenge: Too many ineffective approaches for B2B collaboration
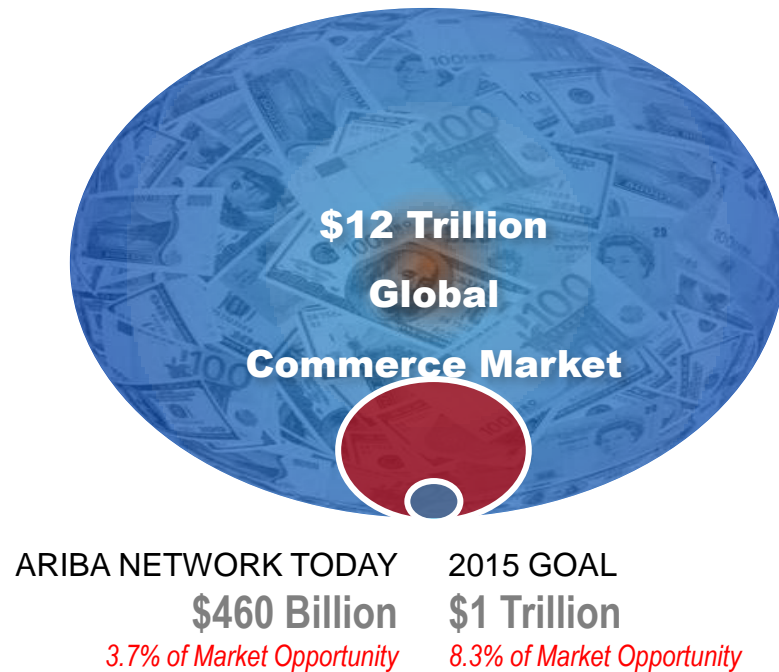
Inefficiencies cost companies $650B+ annually

Buyers

Suppliers

Your Company

Single Process Solutions

Manual paper-based collaboration

Wasted time and resources

Higher operating and supply chain costs

Fax Server

Mail, Phone, Face-to-Face

Limited visibility and elevated risk

Delayed payments, overpayments and missed documents, slow cash flows.

Missed sales opportunities

EDI VAN's

Dedicated Direct Connect

Enterprise and Supplier Portals

Poor compliance

The Ariba Network is the leading business network
~ 1 million partners use Ariba Network, €400+ billion of commerce in 140+ countries

SAP

ARIBA
An SAP Company

"Other"
INFOR
IBM Business Partner
maximo
PeopleSoft
JD EDWARDS
LAWSON

Buyers

ARIBA
An SAP Company

Ariba Network

- 1.2+ million trading partners across all industries
- 40+ million Purchase Orders
- 60+ million Invoices
- $400+ billion in spend
- 142 countries
- 72 currencies
- 40 Invoice compliant countries

Partner and Ecosystem Solutions

AS2
HTML
cXML
Paper
CSV
Email
EDI
xCBL
Smart PDF

Suppliers

Get the Global Spend
Market for Networked Solutions - Large and Underserved

$12 Trillion

Global

Commerce Market

ARIBA NETWORK TODAY   2015 GOAL

$460 Billion   **$1 Trillion**

3.7% of Market Opportunity   *8.3% of Market Opportunity*

- The Global 2000's value chains represent $12 Trillion in Commerce

- 63% of that commerce touches an SAP system today

- Applying the Ariba Business Network capabilities to these global value chains unlocks tremendous value for all trading partners involved

*Source: "Bridging the Procurement-Supply Chain Divide," Supply Chain Management Review, September/October 2012, pp. 36-42

Delivering Measurable Benefits to Buyers
Ariba Network: Extending Reach and Value Across All Industries

CATERPILLAR®

>4,500 global suppliers network enabled

98%+ touchless invoicing -- integrated with 8 SAP systems worldwide

96%+ on-time payments – and enhanced discount capture

75% reduction in AP costs

Global VAT and regulatory compliance – incl. in China

Deutsche Bank

>4,000 suppliers network enabled

>500,000 electronic invoices/yr. – integrated with 7 SAP systems globally

70% global invoice volumes moved from paper to electronic – incl. non-PO

30% reduction in BPO costs

Delivering Measurable Benefits to Sellers
Ariba Network: Extending Reach and Value Across All Industries

Faster Payment

MEDIAFLY

Cut quote-to-settle cycle by

84%

Taps early payment discounts to **improve** cash flow, fund investments.

Lower Customer Service Costs

EASI

Order process **reduced from several weeks to hours.**

Won $1M deal with global retailer via Ariba

Increase Sales

MARK MASTER

Grew orders with existing customers **>65%.** 20%+ Y-o-Y revenue gain for 6 years.

Gained **80%** of new clients from Ariba

Higher Customer Satisfaction

EBSCO

99% customer retention rates and

30% growth in accounts

Leading organizations are already using the Ariba Network to …

Collaborate immediately with all trading partners – activate not implement?
- Automation with >400 suppliers & 300 catalogs in <8 weeks

Turn paper into efficient electronic transactions?
- Cut 75% of processing costs

Catch errors and correct them – before they even happen?
- 98.8% touchless invoice rate

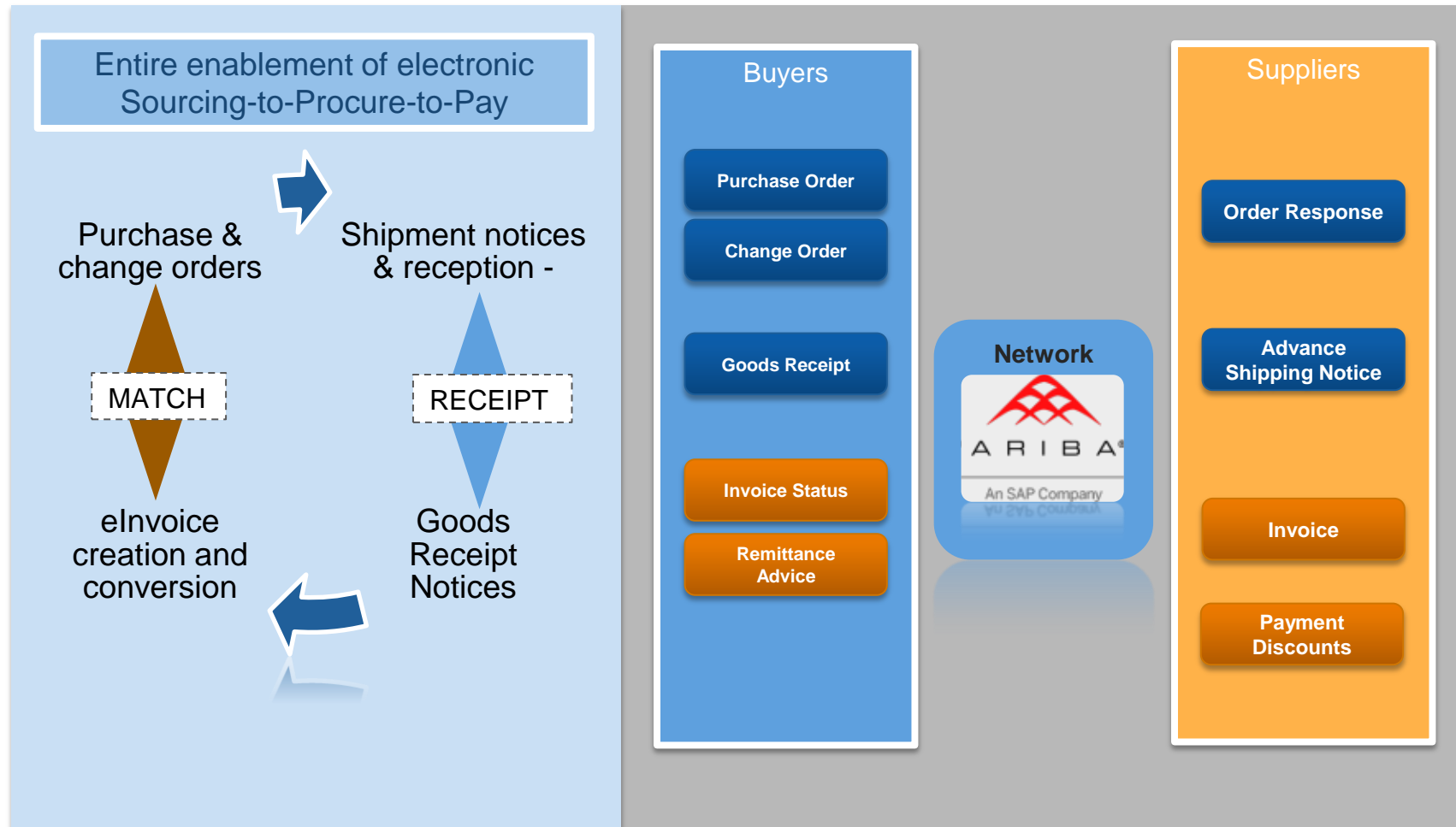**Reduce the cost of goods – beyond sourcing initiatives?**
- >16% of suppliers offering early payment discounts

See opportunities you're missing and have the ability to participate worldwide?
- Grew existing customer orders >65%

Ariba
Procure to Pay Optimization

Entire enablement of electronic Sourcing-to-Procure-to-Pay

Purchase & change orders

Shipment notices & reception -

MATCH

RECEIPT

eInvoice creation and conversion

Goods Receipt Notices

Buyers
- Purchase Order
- Change Order
- Goods Receipt
- Invoice Status
- Remittance Advice

Network
ARIBA
An SAP Company

Suppliers
- Order Response
- Advance Shipping Notice
- Invoice
- Payment Discounts

Ariba - Collaborative Commerce

1 Million suppliers

Sourcing
Contracts

Catalogs

Purchase Orders
Order Confirmation
Shipping Notices

eInvoices
Invoice Status
Payment Status

Early Payments

GO TO MY: LEADS   PROPOSALS   CONTRACTS   ORDERS & INVOICES

Home   Inbox   Outbox   Catalogs   Enablement Tasks   Reports

Profile Completeness

100%

Quick Links

View: Last 31 days

Purchase Orders
New (13)
Changed (1)
Failed (0)
Partially Confirmed (0)
Partially Shipped (1)
Partially Invoiced (3)

Invoices
Failed (0)
Rejected (2)

Collaboration Requests
Response Needed (0)

Search

Purchase Orders
Order Confirmations
Ship Notices
Invoices
Payments
More...

Customer:

Order Number:

Date Range:
Last 7 days

☐ Exact Match

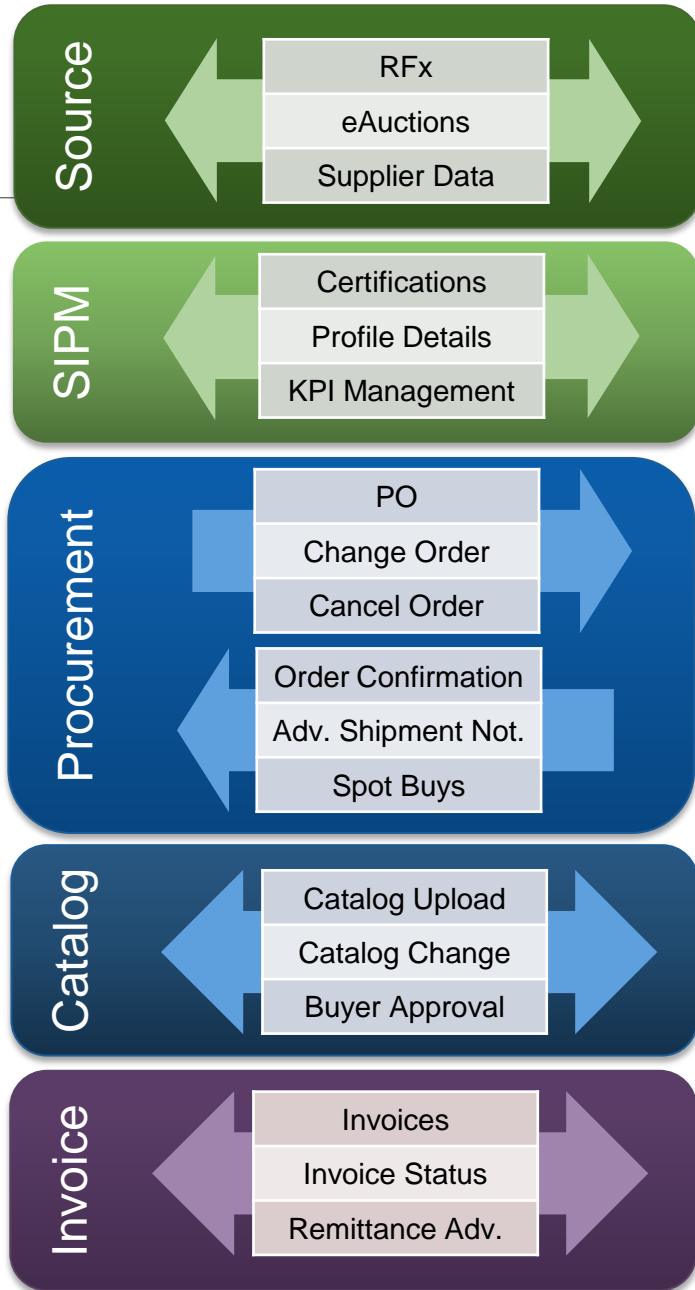| Purchase Order Status		Custom
Customer	New	Changed
Nestlé	0	0
Lloyds TSB Bank	4	0
AstraZeneca	7	0
Coca-Cola Enterprises	0	0

Clients

Invoice Status		Custom
Customer		Sent
Ariba EMEASales		0

Ariba – Supplier Collaboration Options
Common Multi-Vendor Approach

Source
- RFx
- eAuctions
- Supplier Data

SIPM
- Certifications
- Profile Details
- KPI Management

Procurement
- PO
- Change Order
- Cancel Order
- Order Confirmation
- Adv. Shipment Not.
- Spot Buys

Catalog
- Catalog Upload
- Catalog Change
- Buyer Approval

Invoice
- Invoices
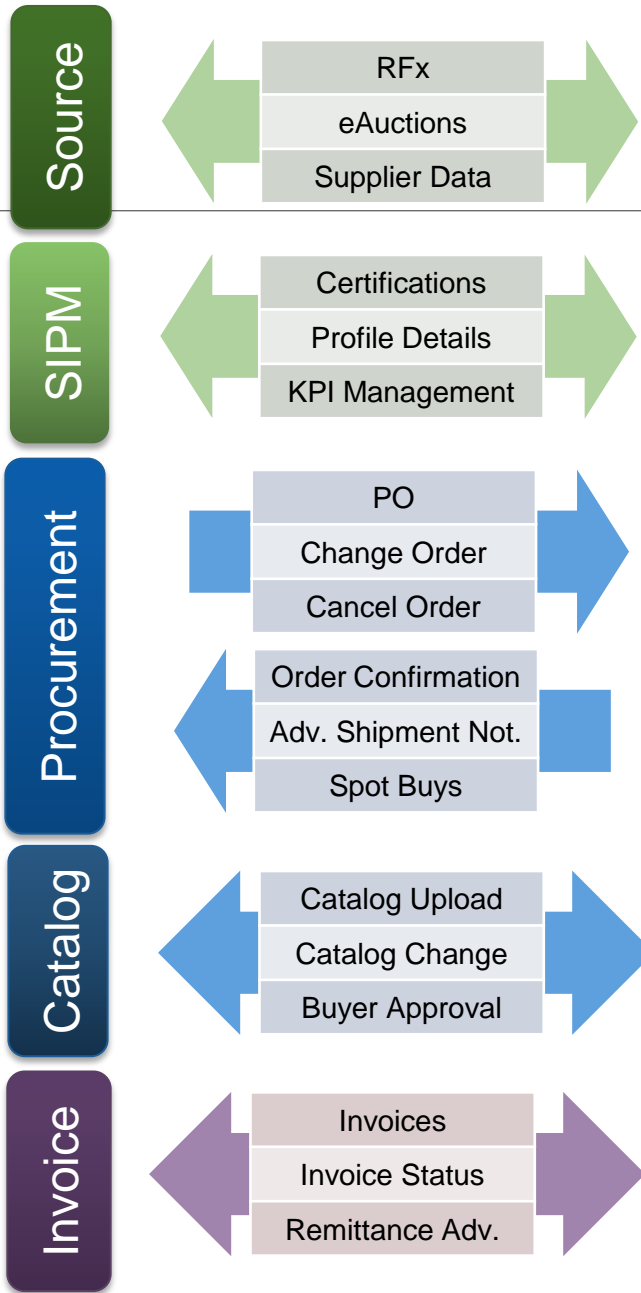- Invoice Status
- Remittance Adv.

For 1 supplier this means:
- 5 profiles to manage
- 5 separate logins
- 5 separate process
- **5 separate supplier enablement approaches**

Multiplied by all his clients

Ariba – Supplier Collaboration Options
Standardized Approach

Source
- RFx
- eAuctions
- Supplier Data

SIPM
- Certifications
- Profile Details
- KPI Management

Procurement
- PO
- Change Order
- Cancel Order
- Order Confirmation
- Adv. Shipment Not.
- Spot Buys

Catalog
- Catalog Upload
- Catalog Change
- Buyer Approval

Invoice
- Invoices
- Invoice Status
- Remittance Adv.

Ariba Network Log In
- Username:
- Password:
- Log In
- Forgot Username? Forgot

Ariba Network | Ariba Discovery | Ariba Exchange

NETWORK

Home | Inbox | Outbox | Catalogs | Administration

Profile Completeness
70%
Enter your website to reach 75% »

Quick Links
View: Last 7 days

Purchase Orders
- New (10)
- Changed (0)
- Failed (0)
- Partially Confirmed (0)
- Partially Shipped (0)
- Partially Invoiced (0)

Invoices
- Failed (0)
- Rejected (0)

Search
- Purchase Orders
- Order Confirmations
- Ship Notices
- Invoices
- Payments
- More...

Purchase Order Status
- Customer
- APCProduction
- Ar
- AriB
- Ariba

Invoice Sta

One single solution

For several of their clients

Cloud Onboarding and Integration Rapid-Deployment Solutions (RDS)

Ariba as example

Integration and onboarding requirements for cloud deployments

IT

Data Security and Compliance

Support for Complex Landscapes

Choice of Integration Technology

End-to-End Monitoring and Support

Best practices and proven integration and onboarding approach

LOB

Single Source of Truth/ Master Data Synchronization

Real-Time Business Process Integration

Integrated User Experience

Rapid Deployment & Time to value

Predictability of implementation scope, cost and time

Why is RDS the right answer for onboarding and side by side integration?

① Start   **② Deploy**   **③ Run**

RAPID DEPLOYMENT SOLUTIONS

Software

Service   Content

Enablement

Business Need

Receive preconfigured onboarding and integration content, services, tools, best practices, guides, templates, and presentations

Implement onboarding in a matter of weeks

Integrate with no surprises and minimal disruption, ensure long term integrity

Relax with a fixed scope, timeline, cost, and outcome

Accelerate end-user adoption with guides and educational materials
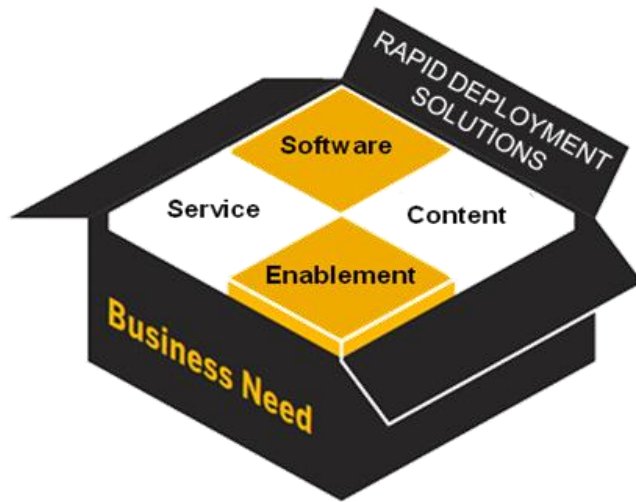
Integration options we plan to support with RDS (SAP & partner)
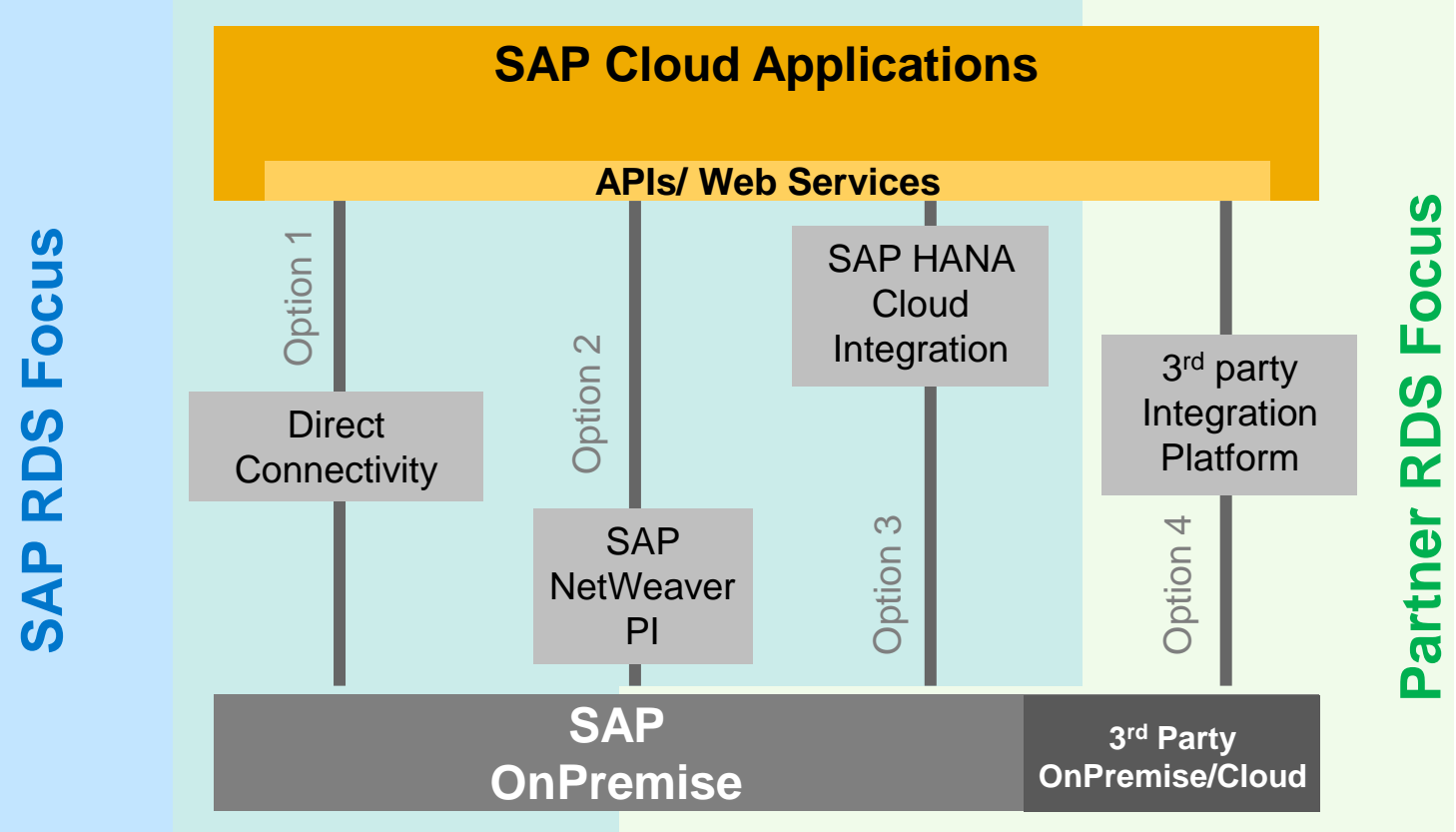
Enabling Innovation Adoption at Scale
Cloud: Onboard, Integrate and Run using Rapid Deployment Solutions

Onboard to the cloud
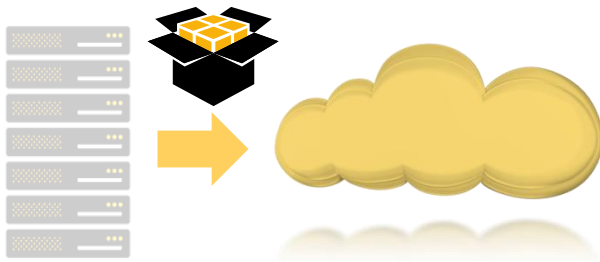
Pre-defined Best Practices for Data Migration and Database Migration

RDS Packages

- Business Warehouse on HANA Enterprise Cloud *
- Onboarding for Ariba Procure-2-Pay *
- Financial Services Network Corporate Onboarding *
- Rapid Data Migration to Cloud Solutions from SAP (SuccessFactors Employee Central, Customer OnDemand)
- Rapid Data Migration to SAP Enterprise Foundation Extended *

Cloud Deployment

RDS running in the Cloud

- SAP ERP rapid–deployment solution powered by SAP HANA
- SAP CRM rapid-deployment solution powered by SAP HANA
- Finance on HANA (Accelerators, Net Margin Analysis) *
- Custom Data Marts on HANA in the Cloud *
- SAP Afaria rapid-deployment solution
- SAP HANA Sentiment Intelligence rapid-deployment solution

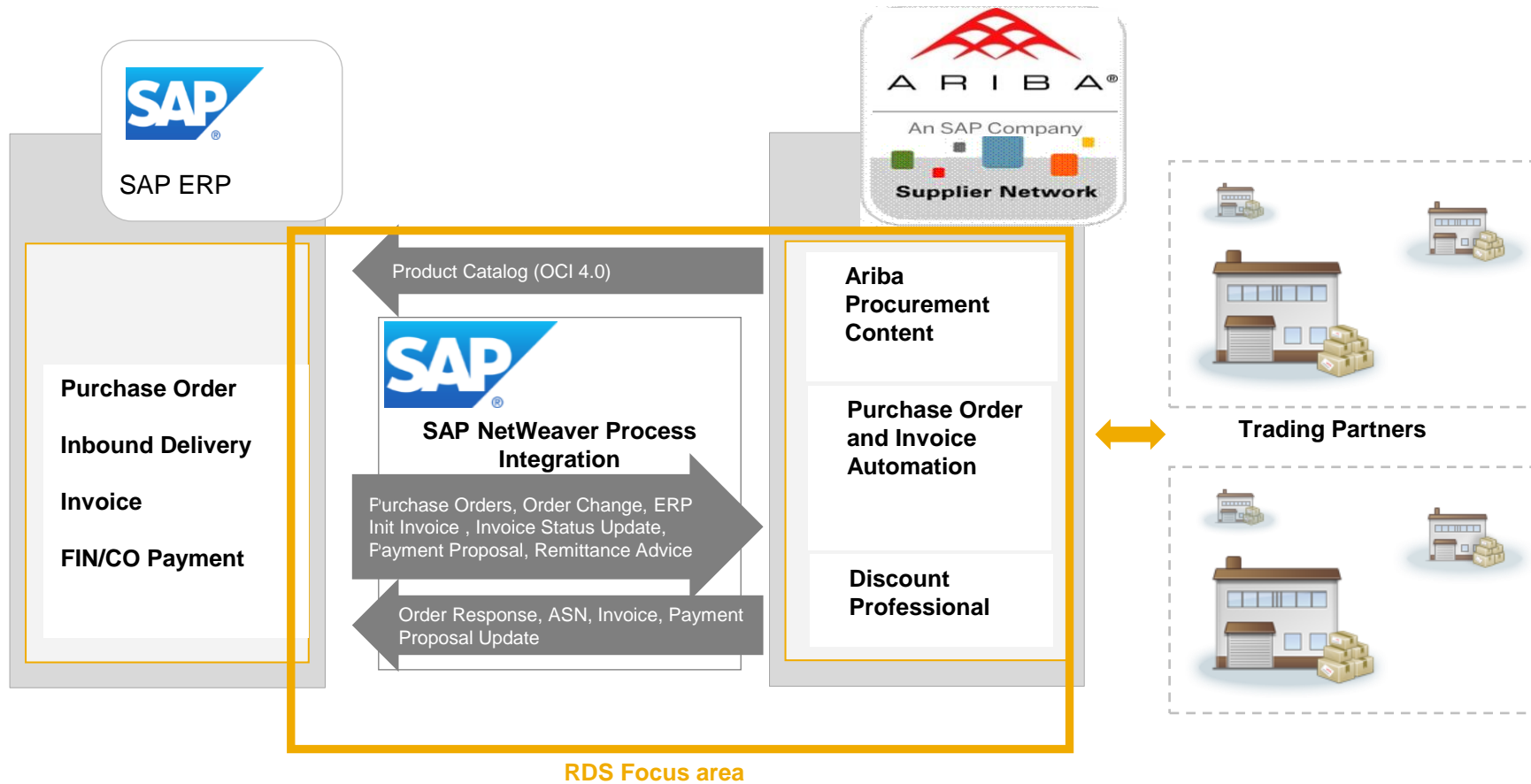### Integrate cloud with on premise
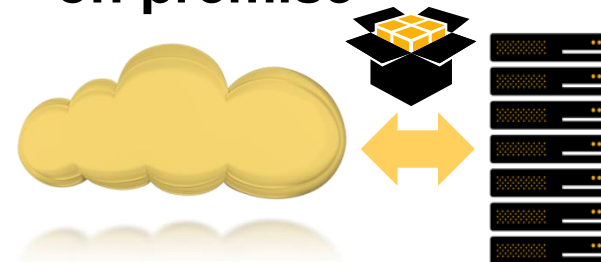
Pre-defined Best Practices for data/proccess integration

- SAP Business Suite Integration with the Ariba Network rapid-deployment solution
- SAP Rapid-Deployment Solution for Success Factors Integration
- ERP Sales OnDemand Integration *
- CRM Sales OnDemand Integration *
- Travel on Demand ERP integration *

SAP Business Suite integration with the Ariba Network – RDS
What's Included – Solution Scope

SAP ERP

- **Purchase Order**
- **Inbound Delivery**
- **Invoice**
- **FIN/CO Payment**

Product Catalog (OCI 4.0)

SAP NetWeaver Process Integration

Purchase Orders, Order Change, ERP Init Invoice , Invoice Status Update, Payment Proposal, Remittance Advice

Order Response, ASN, Invoice, Payment Proposal Update

Ariba Procurement Content

Purchase Order and Invoice Automation

Discount Professional

Trading Partners

RDS Focus area

Services Scope Overview
Building Blocks (Cloud and On-Premise modules)

Service Name: rapid deployment of SAP Business Suite Integration with the Ariba Network

Implementation Duration: 10 Weeks (Combined)

- SAP Business Suite integration with the Ariba Network RDS combines both Cloud and On-Premise services
- The core services (Cloud + On-Premise) are mandatory and build the backbone for the optional services
- The combined (Cloud + On-Premise) service can be implemented within 10 weeks

On-Premise Services   **Cloud Services**

	On-Premise		Cloud	
Core	**Foundation Service (Connectivity set up for PO & Invoice Automation*)** *includes support for ten mutually agreed upon sellers for go live		**Ariba Collaborative Finance (incl. Buyer Membership, Invoice Automation & PO Automation, *Supplier Enablement & Open ICS)** *includes support for ten mutually agreed upon sellers for go live	**Core**
Options	Catalogue Integration (OCI „punch-out")		Ariba Procurement Content Solution	**Options**
	Discount Management Integration		Ariba Discount Professional Solution	

Ariba Network Integration to SAP ERP 6.0

Ariba Network

Product Catalog	Supplier Enablement		Purchase Order		Order Confirmation		Invoice	
				Purchase Order Updates		ASN		Remittance Advice

SAP ERP 6.0

Product Catalog	Vendor Master	Create Purchase Order	Change Purchase Order	Order Confirmation		Supplier Invoice		Remittance Advice
					Inbound Delivery Notification			
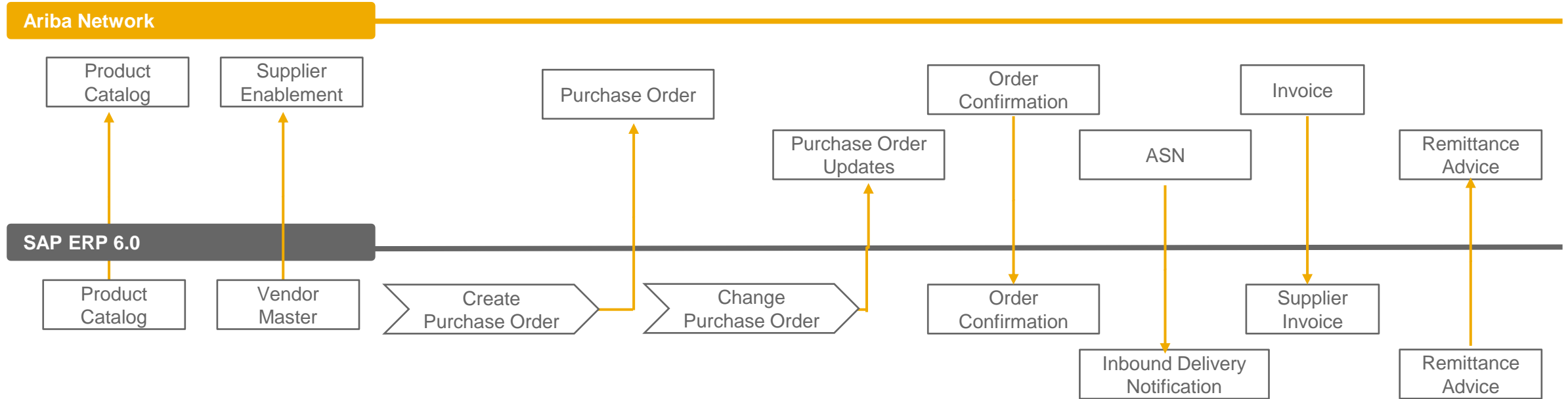
- Integration between SAP ERP and Ariba Network for electronic transmission of Purchase Orders, Updates, and Remittance Advice, and electronic receipt of Order Confirmations, Shipment Notices, and Invoices
- Predefined and preconfigured integration on SAP HANA Cloud Integration
- Also planned to be delivered via SAP Rapid Deployment Solution (RDS)

Further Information

SAP Public Web

scn.sap.com

www.sap.com

SAP Education and Certification Opportunities

www.sap.com/education

Watch SAP TechEd Online

www.sapteched.com/online

SAP TechEd Virtual Hands-on Workshops and SAP TechEd Online
Continue your SAP TechEd education after the event!

SAP TechEd Virtual Hands-on Workshops

- Access hands-on workshops post-event
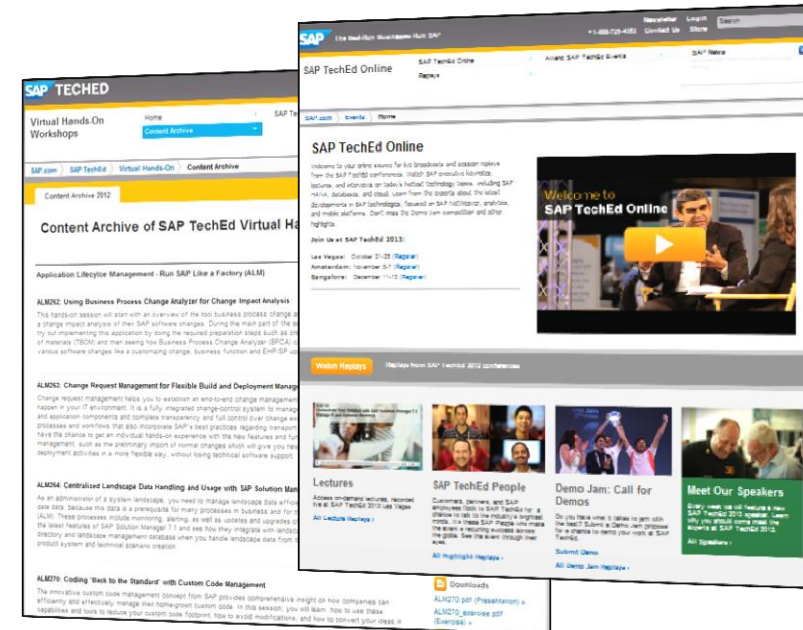- Available January – March 2014
- Complementary with your SAP TechEd registration

http://saptechedhandson.sap.com/

SAP TechEd Online

- Access replays of keynotes, Demo Jam, SAP TechEd LIVE interviews, select lecture sessions, and more!
- View content <u>only</u> available online

http://sapteched.com/online

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