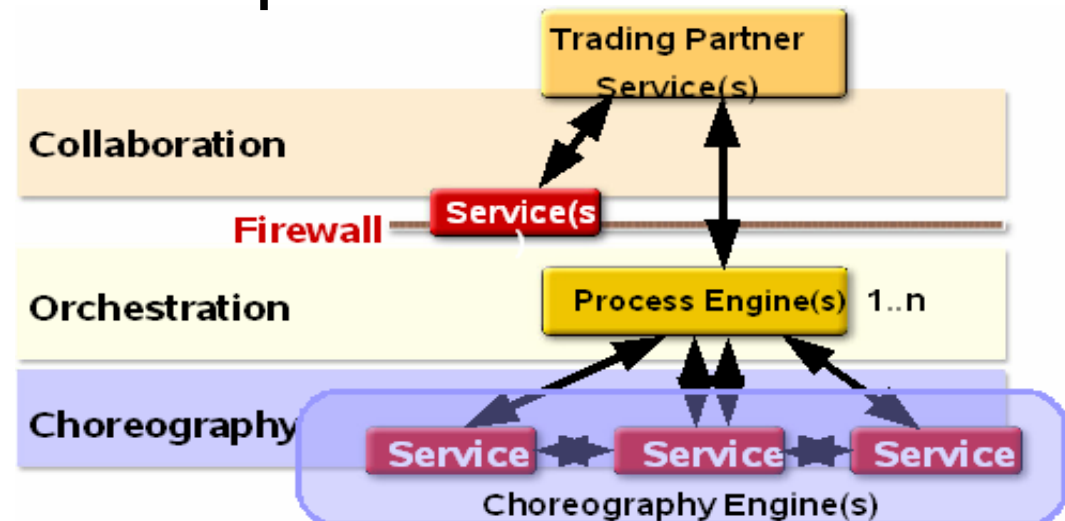


Business Processes in a Global Domain

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Presentation Outline

- Summarize current state of global eBusiness domain
- Relevant business process efforts
- Benefits and challenges
- Brief assessment of eBusiness progress for business processes



The Global eBusiness Domain

Current State

Electronic interchange across domains of control and, most often, communities

- Involves business expectations and may often include compliance
- Driven by peer, partner and community relationships
- Influences enterprise technologies
 - Affected by enterprise constraints
- Heterogeneous technology and topology environment

Global eBusiness Requirements

- Requires both flexibility and rigor
 - Secure and reliable transport
 - Means to publish, discover and make available artifacts and services
 - Configurable technical contracts
 - Business transaction patterns
 - Business and operational semantics
- Improve collaboration and facilitate interaction
 - Balance policies and practice

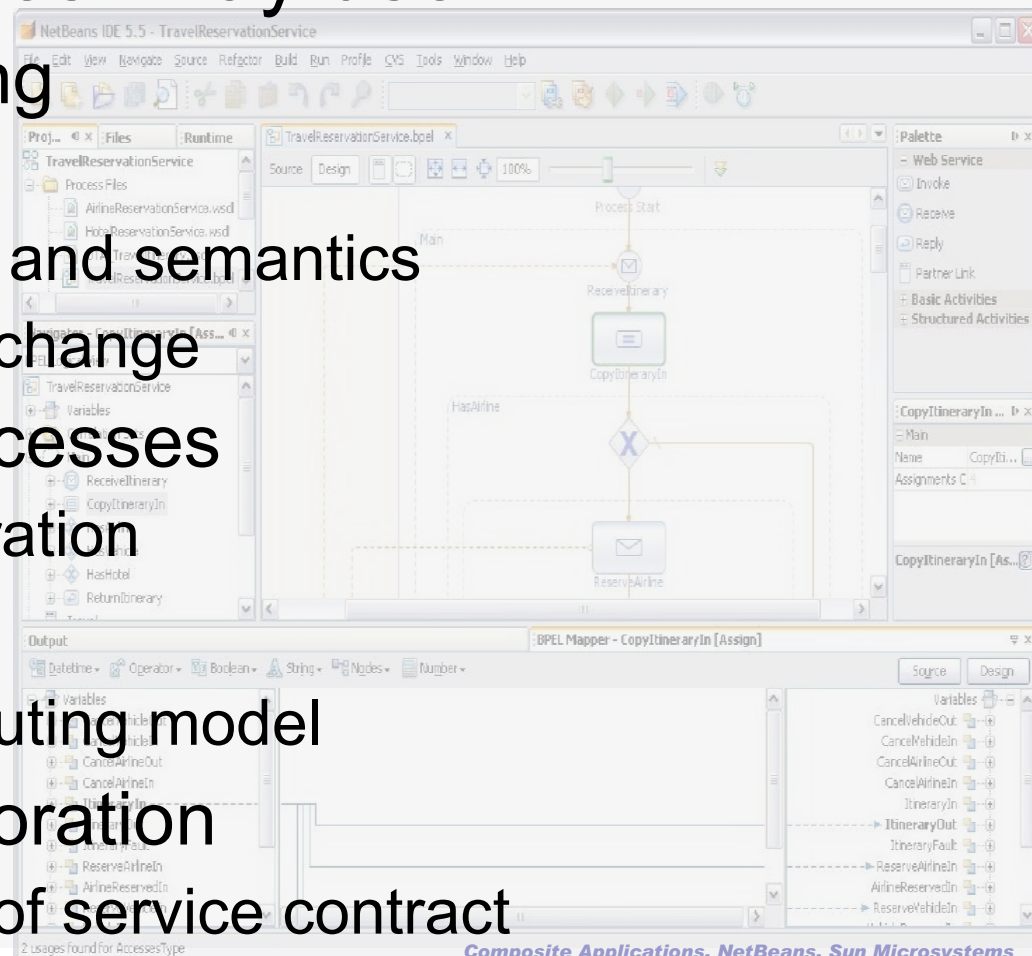
Common eBusiness Practices

Business Process Overview

- Practical, adaptable, and iterative to:
 - Balance cost-benefit to business
 - Address global and local requirements
 - Align to business context
 - Leverage and integrate standards
 - Where desired, realize and/or align cultural or regional norms
- Logical progression up technology ladder
 - First: Content and messages
 - Next: Agreements and processes

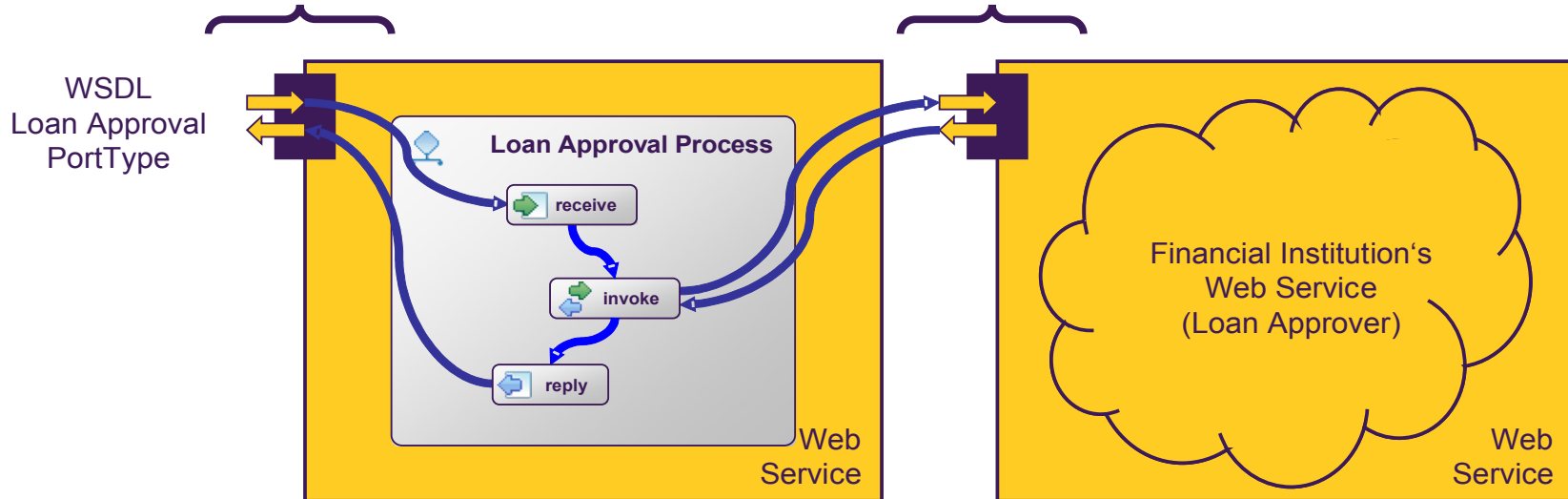
Business Process Overview

- Concentrates on use and integration of business processes. May use:
 - Business modeling
 - Metamodel
 - Element notation and semantics
 - Diagrammatic exchange
 - Orchestrated processes
 - Application integration
 - Choreographies
 - Distributed computing model
 - eBusiness collaboration
 - Business quality of service contract



Orchestrated Processes

OASIS WS-BPEL v2.0



Dieter Koenig, <http://lists.oasis-open.org/archives/wsbpel/200701/msg00021.html>

■ Cross-application integration

- Focus: Invokes and offers services in binary relationships
- Visibility: Well-known in marketplace
- Status: OASIS Standard, April 2007

Choreographies

W3C WS-Choreography Description Language v1.0



```
if  $x_{quote} \leq 100$  @Buyer then
{ Buyer → Seller : B2Sch(QuoteAccept).
  Seller → Buyer : B2Sch(OrderConfirmation).
  Seller → Shipper : InitS2H(S2Hch).
  Seller → Shipper : S2Hch(RequestDeliveryDetails).
  Shipper → Seller : S2Hch(DeliveryDetails,  $v_{details}$ ,  $x_{details}$ ).
  Seller → Buyer : B2Sch(DeliverDetails,  $x_{details}$ ,  $y_{details}$ ).0 }
else
{ Buyer → Seller : B2Sch(QuoteReject).0 }
• Notice the condition in the conditional branch,  $x \leq 100$ , is explicitly
  located at Buyer's.
```

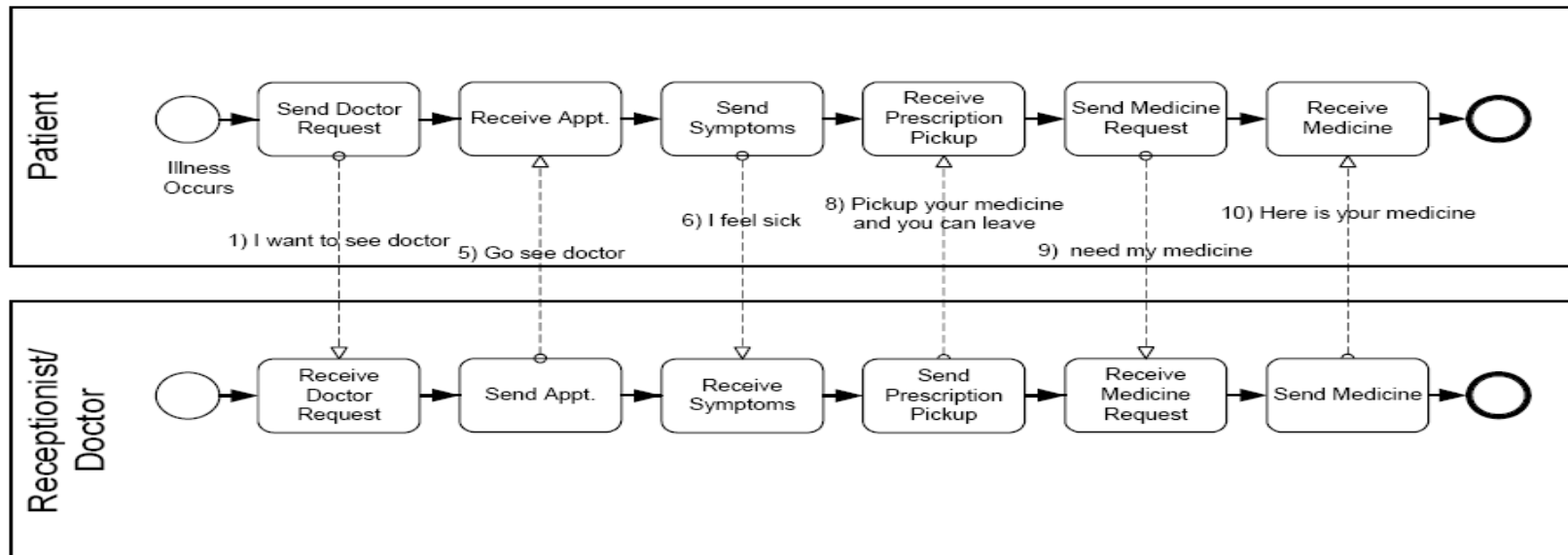
The of Choreography: Charlton Barreto,
<http://charltonb.typepad.com/talks/030206-cbb-pichor/index.html>

■ Distributed computing model

- Focus: Common observable behavior and endpoint projection / generation
- Visibility: Primarily known in financial services and academic communities
- Status: W3C Candidate Recommendation

Business Process Modeling

OMG BPMN v1.0+



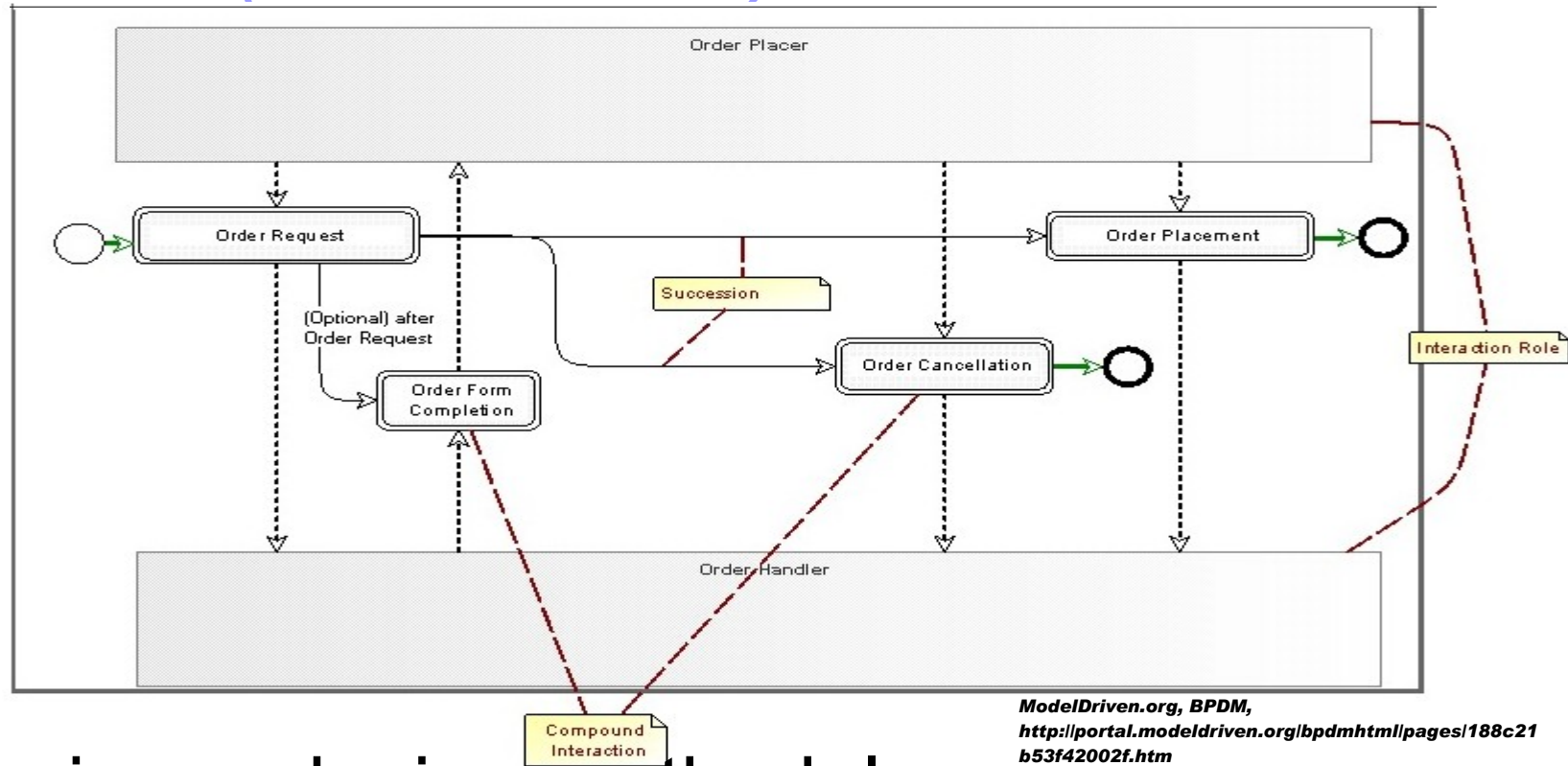
■ Modeling notation

- Focus: Graphical modeling objects with semantics; diagram exchange deferred
- Visibility: Gaining traction in visualization
- Status: OMG effort for v1.1 almost complete

BPMN v2.0.4, OMG v1.0,
<http://www.omg.org/docs/dtcl06-02-01.pdf>

Business Process Methodology

OMG BPDM (RFP Submission)

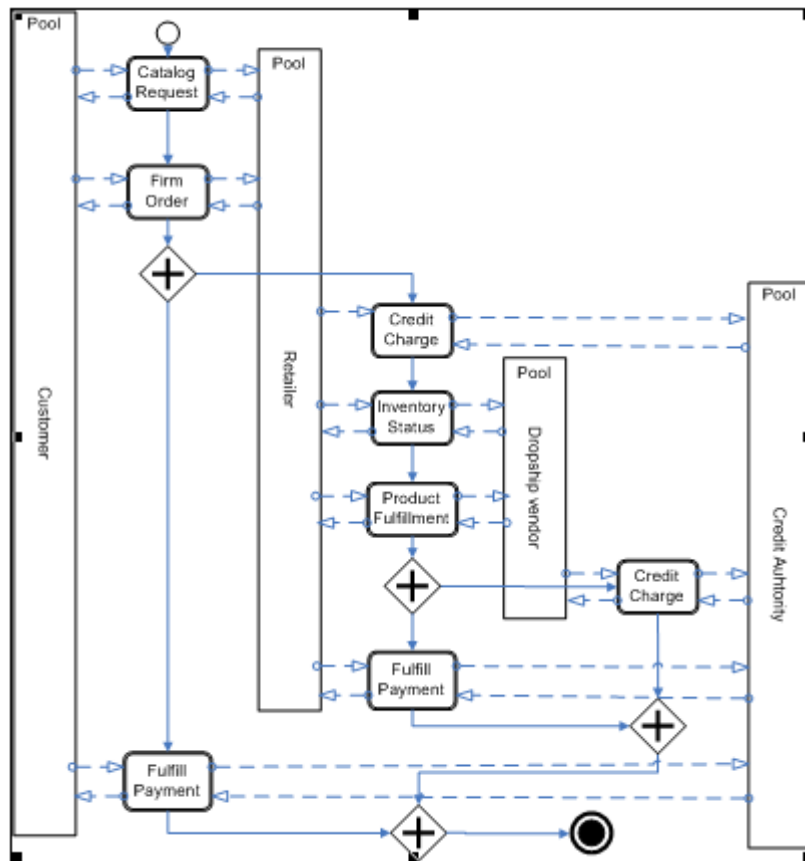


■ Business design methodology

- Focus: Integrates semantics with metamodel
- Visibility: Progressing in OMG albeit slowly
- Status: OMG RFP Submission in Sept 2006

eBusiness Collaboration

OASIS ebBP v2.0.4

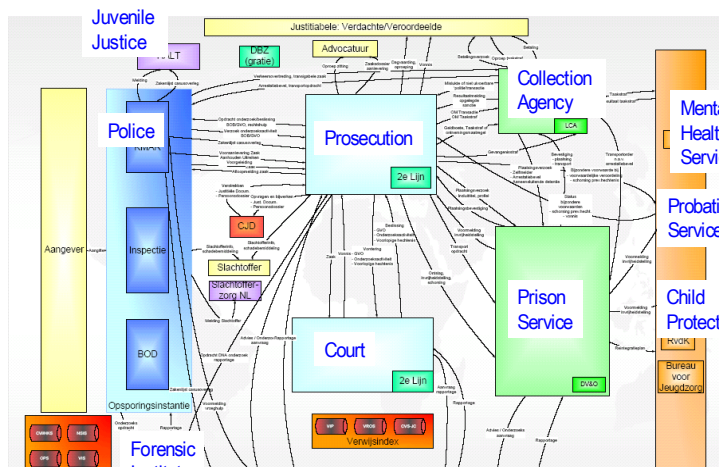


ebBP v2.0.4, OASIS Standard, <http://docs.oasis-open.org/ebxml-bp/2.0.4/OSISpec/ebxmlbp-v2.0.4-Spec-os-en.html>

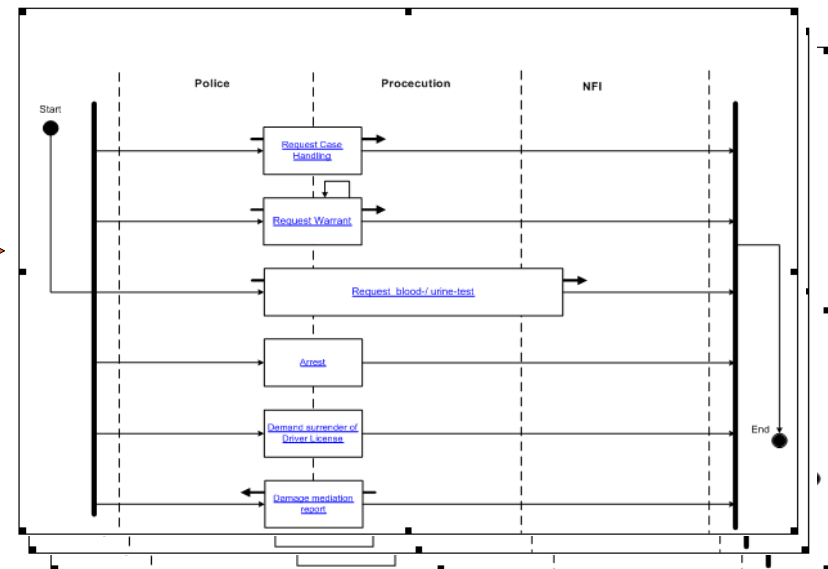
- Business quality of service contract
 - Focus: Document eBusiness message exchange using patterns / semantics
 - Visibility: Generating interest in many communities
 - Status: OASIS Standard, Dec 2006; ISO submission soon

Process Benefits / Challenges

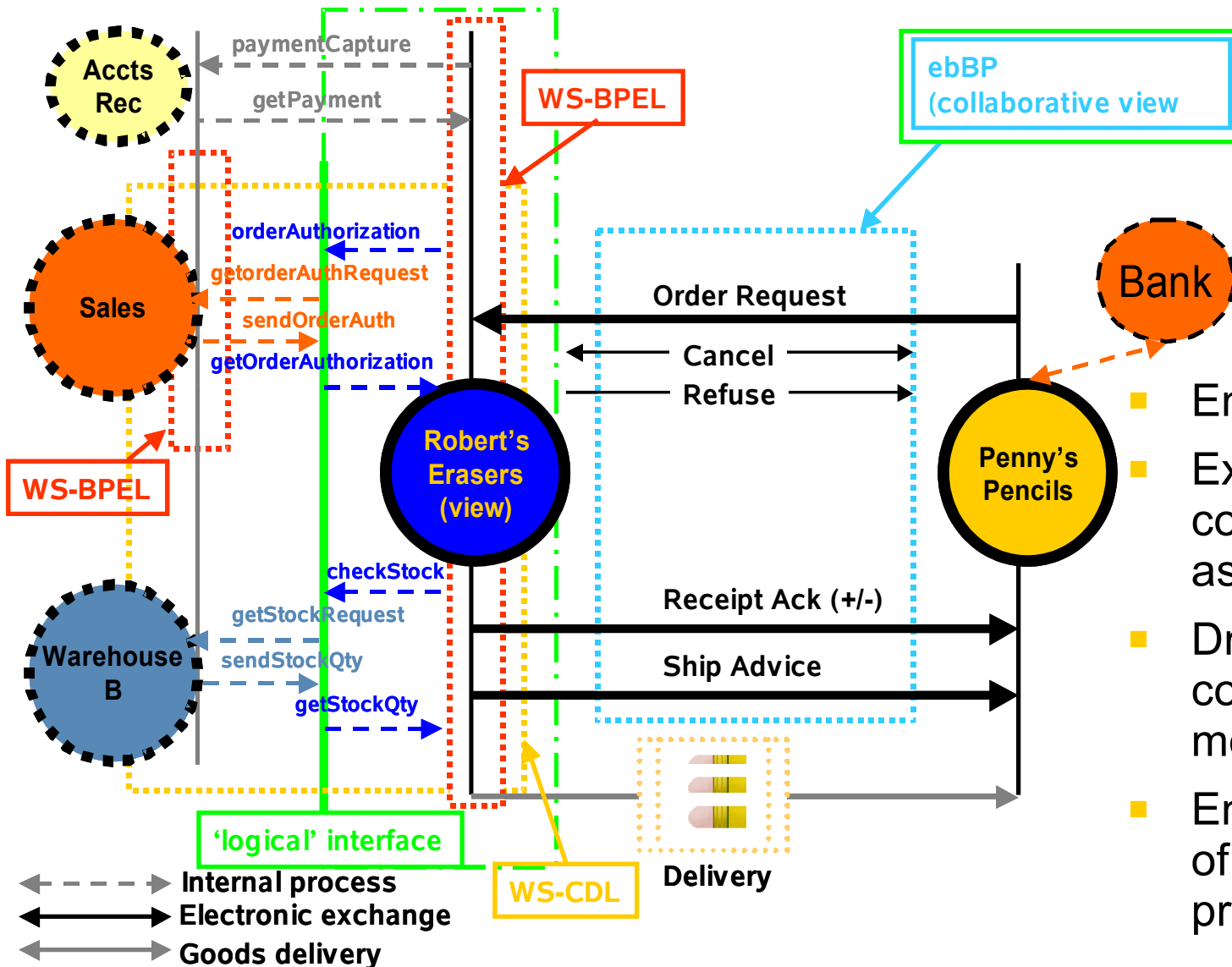
- Support and integrate enterprise systems
- Drive accountability and transparency
 - Business and service level monitoring, and conformance
 - Global communication avenues across domains
- Encompass business entities



*Criminal Justice, EPV
(Electronic Information Exchange),
The Netherlands*



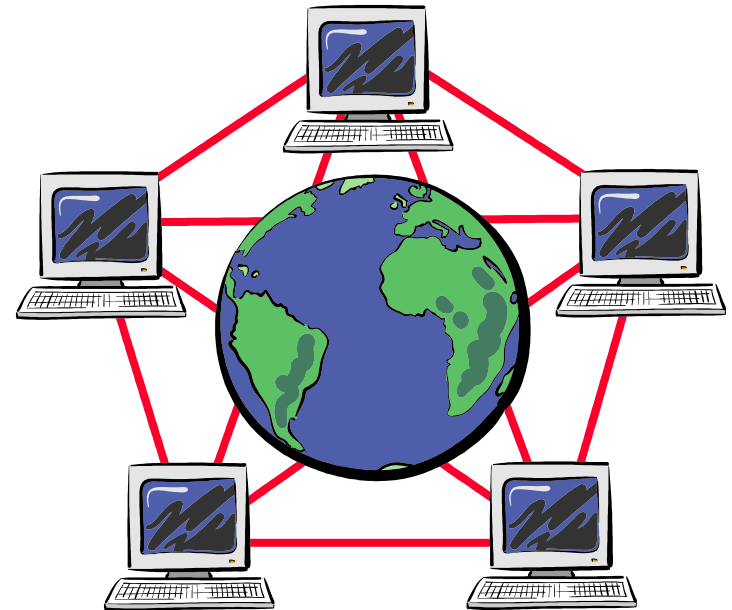
Achieving Process Synergy



- Enables design
- Exposes composed services as processes
- Drives process compatibility of message interfaces
- Enables monitoring of semantic-aware processes

Standards Adoption Enablers

- Tools for promoting conformance and interoperability
- Integrate earlier in standards process
 - Also leverage community investment
- Cohere business and technical focal points
- Prove functional capabilities in practice



Business Process Progress Report

- Community and standards examples
 - Role-based profiles to share electronic patient records
 - Trading partner guidelines for business agreements and technical contracts
 - Profiles spanning across (and within) domains for European eInvoicing and health care
- Marketplace use case examples
 - Leverage common content, building blocks and secure, reliable infrastructure
 - Choreographic control flow for gateway, supported by application integration components
 - Monitoring of business quality of service contracts

Global Business Processes

Summary and Questions

- Challenged to integrate across domains and compose as needed
- Process efforts are compatible although competitive in practice
- Communities engaged in coopetition
- Build from infrastructure to agreement and processes
- Evolution occurring albeit slowly

Resources Quick Hit

(in alphabetical order)

WS-BPEL:

http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=wsbpel

March webinar: <http://www.oasis-open.org/events/webinars/>

BPDM, BPMN:

BPDM submission: <http://www.omg.org/cgi-bin/doc?bmi/2006-09-07>

BPMN OMG (pre-FTF): <http://www.omg.org/docs/dtc/06-02-01.pdf>

CPP/A:

http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=ebxml-cppa

ebBP:

http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=ebxml-bp

Recent podcast: <http://www.ebxml.org/ebxmlpodcasts.htm#process>

UBL: http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=ubl

WS-CDL: <http://www.w3.org/2002/ws/chor/>

Recent article:

http://searchwebservices.techtarget.com/originalContent/0,289142,sid26_gci1245819,00.html?track=NL-110&ad=581378&asrc=EM_NLN_1062168&uid=1287513

WFMC (XPDL v2): <http://www.wfmc.org/>

Complementary brief follows:

The Role of BPM in Service Oriented Architecture, Charlton Barreto of Adobe