Simple EDI based on ebXML

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Electronic Commerce Promotion Council (ECOM)

HISANAO SUGAMATA

sugamata@ecom.or.jp

EDI Today

Legacy EDI

+ Contributing to the productivity of the present- day economy through the rapid information exchange among the major companies, if the exchange is continuance, frequent and plenty of.

BUT

- Lacking the flexibility and cannot follow the rapid Business Process Reengineering today.

- Requiring the intricate agreements and the testing on EDI between the parties by the person in charge, before starting the business.

- Being difficult to expand EDI world in SME's because of the expensive cost and the special EDI skills.

95% of FORTUNE 1000 are using EDI

BUT

Only 2% of Other SME's are using EDI

Web EDI

+ Easy to implement and to access the electronic datas when you have a PC with a normal browsing software.

BUT

- Requiring the human operation always and Inviting the errors sometimes, because the Web services don't provide the automation of the EDI data handling.

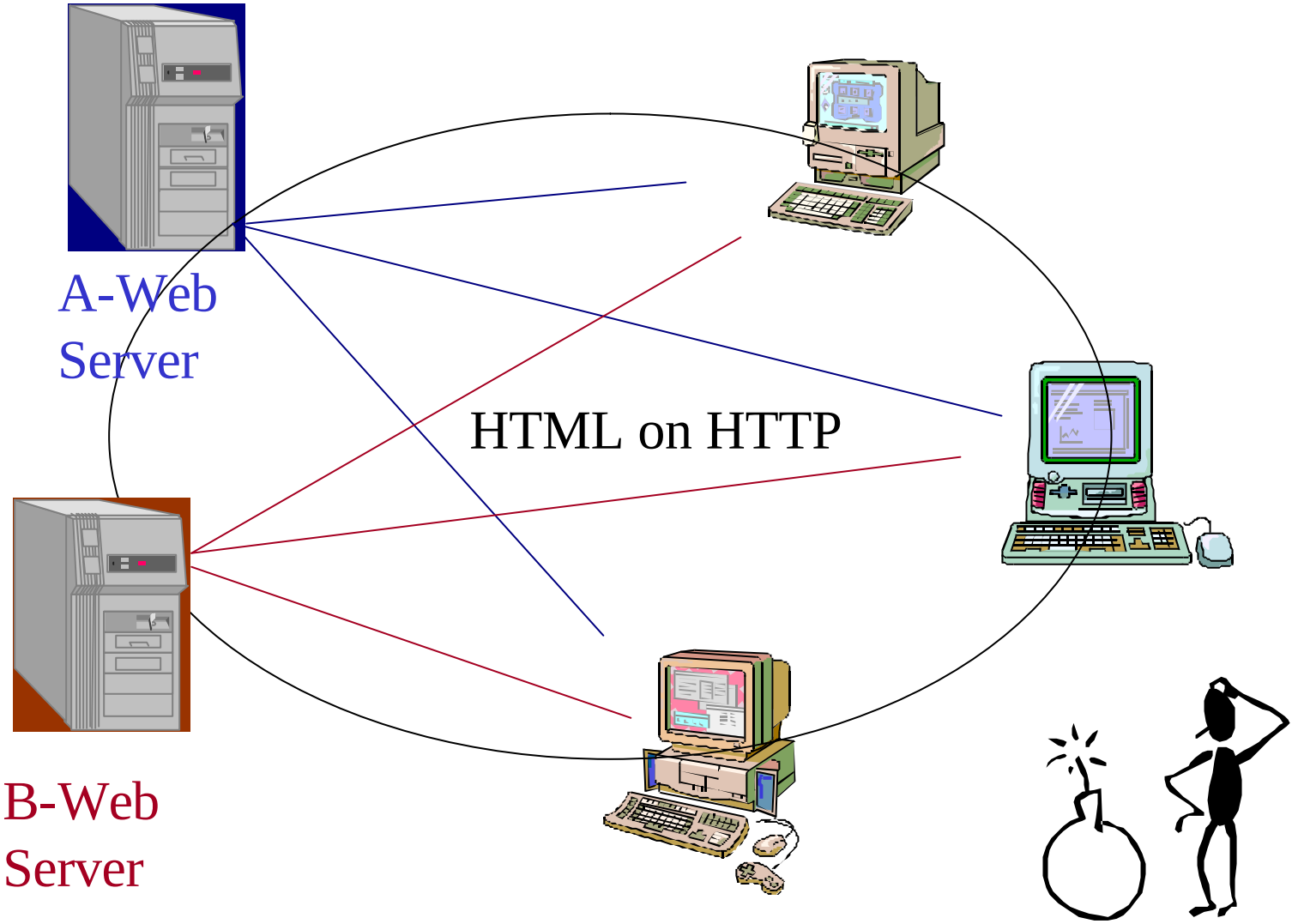
- Being difficult to continue the rapid and frequent EDI through Client-Server based system depending on the human handling.

There is a Solution

XML/EDI ==> ebXML

Standardization

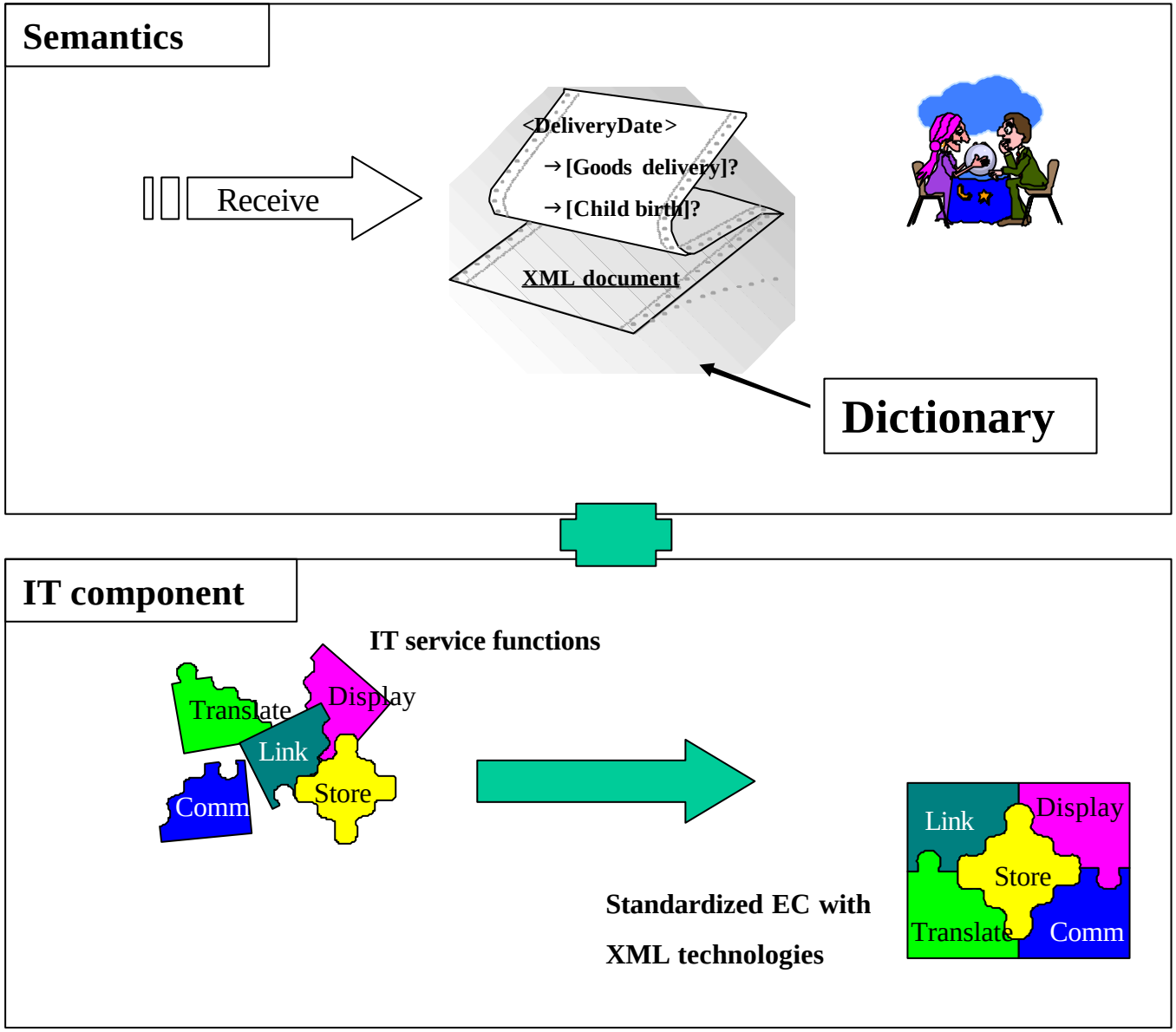
Web EDI



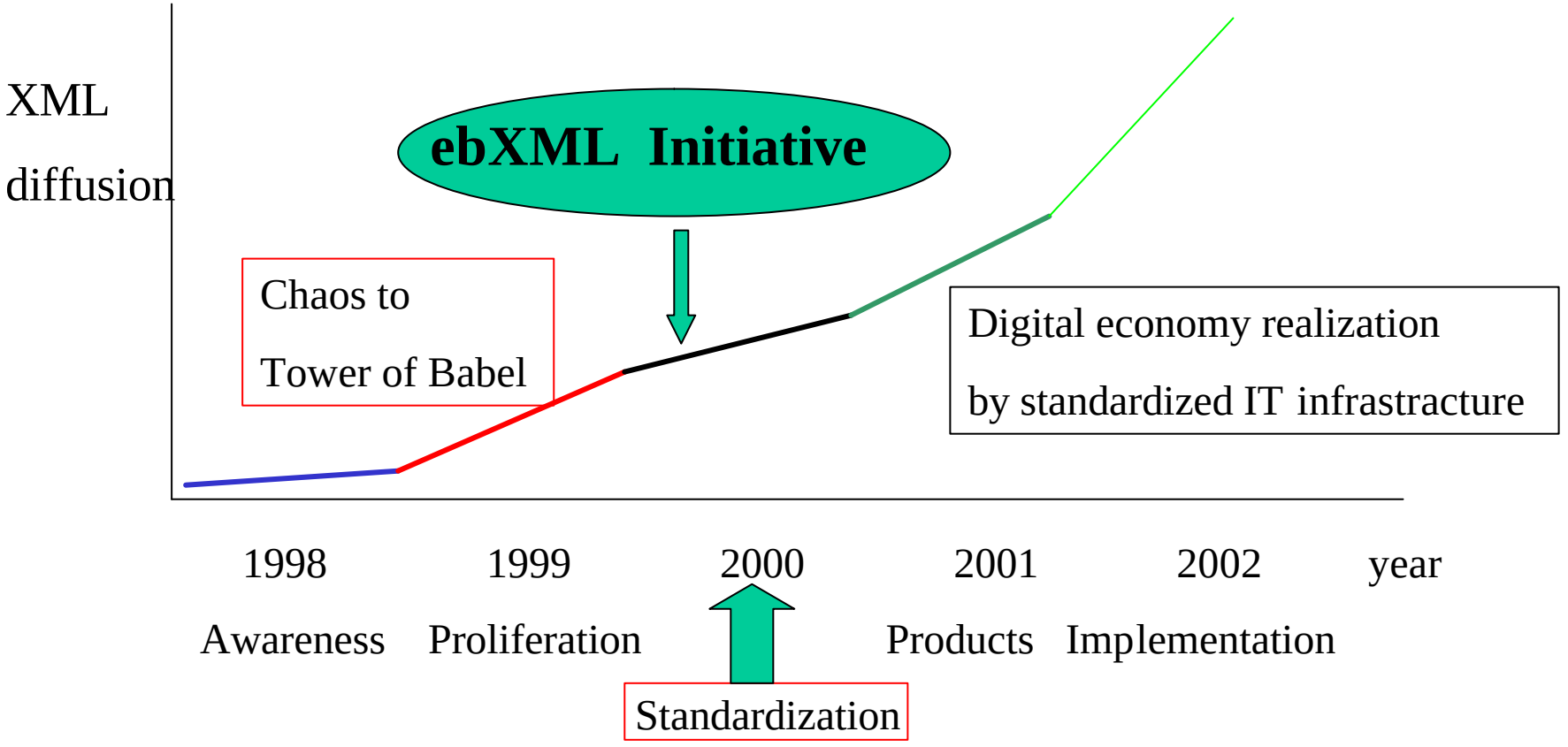
XML

XML (Extensible Mark up Language) offers exciting new opportunities for the exchange of business data, be that application-to-application, application-to-person or person-to-application.

Standardization is the key to success



XML used in e-Business



ebXML Initiative

Purpose : To research and identify the technical basis upon which the global implementation of XML can be standardized.

Goal : To provide an open technical framework to enable XML to be utilized in a consistent and uniform manner for the exchange of Electronic Business data in application to application, application to person and person to application environments.

Terms : November/1999 – May/2001

Creating a Single Global Electronic Market

Participants :

OASIS,UN/CEFACT,ANSI-X12,DISA,NIST,ISO-TC154,CEN-ISSS,EAN, DIN,EBES,HL7,SWIFT,OMG,OAG,OTA,CommerceNet,IBM,SUN, Microsoft,Oracle,RosettaNet,Amazon,AIAG,Boeing,BT,Dun&Bradstreet, Bank-of-America,JIPDEC,Taipei-III,KIEC…..

ebXML Requirement

1. Expand the Scope of EC

+ Inter-Company / Industry / Cross-Industry

+ Global companies / SMEs

+ Domestic / International

2. Openness

+ Open access by Human and Maschine

3. Interoperability

+ Business Process and Information Model Sharing

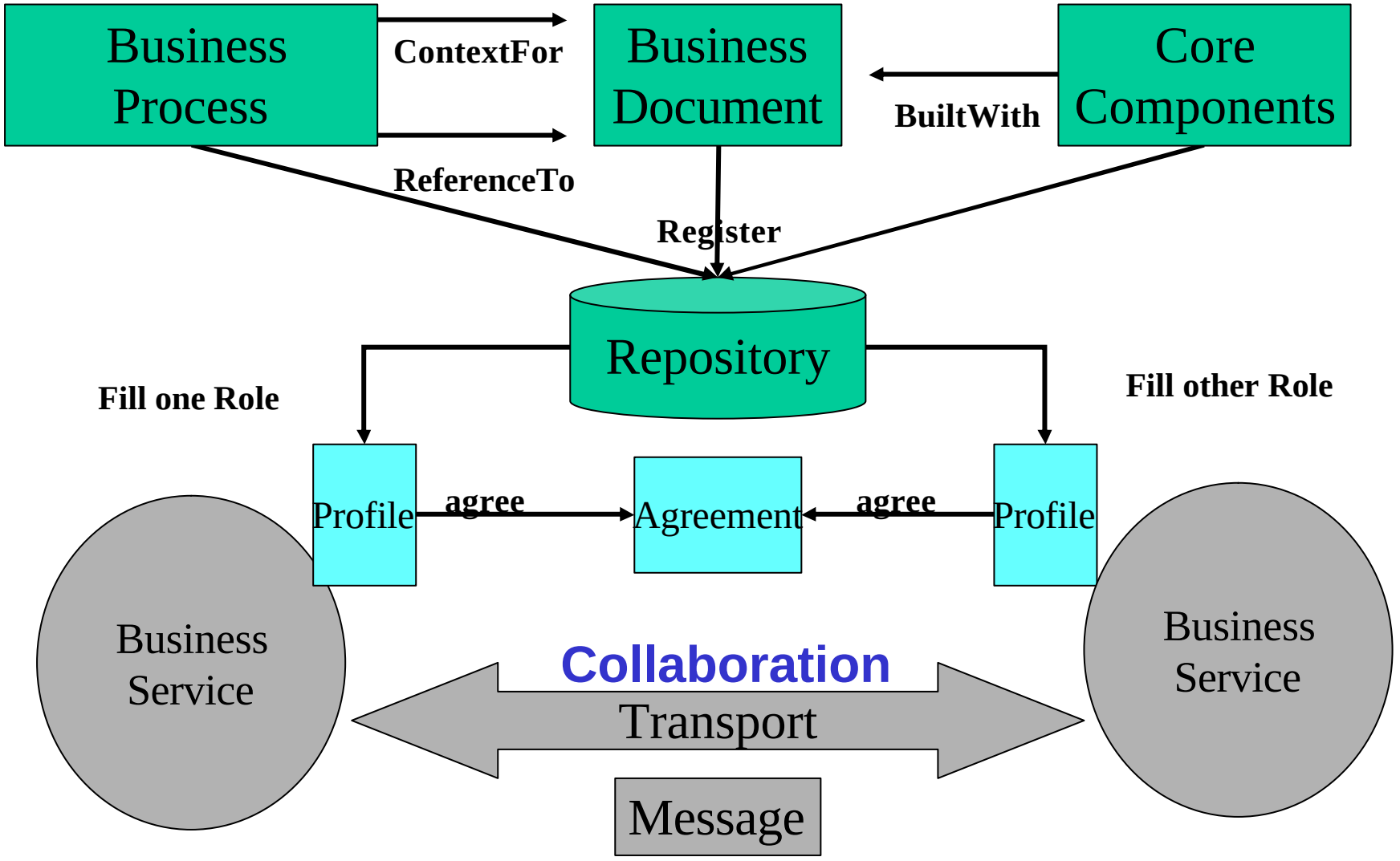
+ Connectivity in the means of IT

+ Easy migration from Legacy EDI

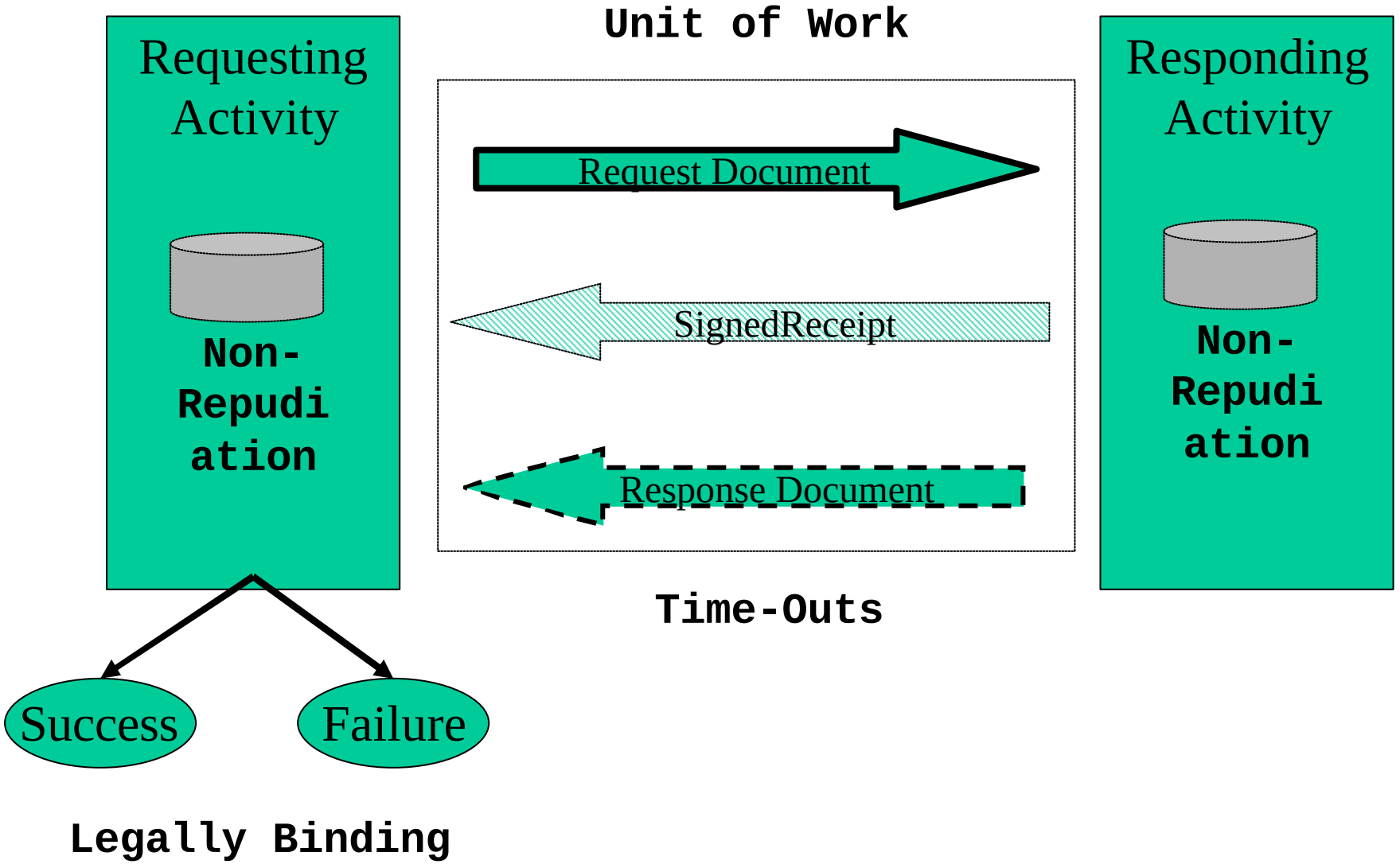
4. Security

+ Authentication / Integrity / Non-repudiation & Confidentiality

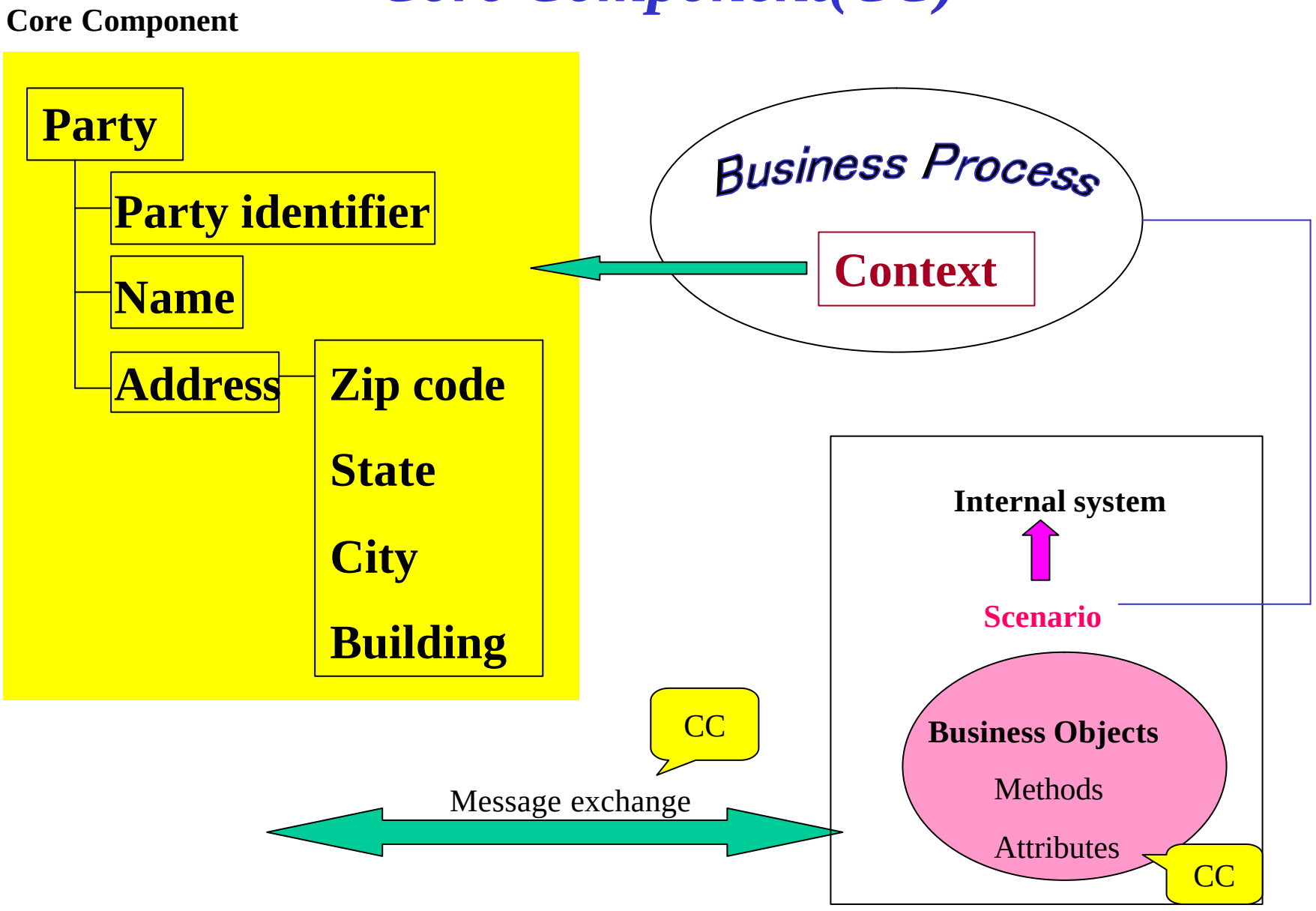
ebXML Architecture



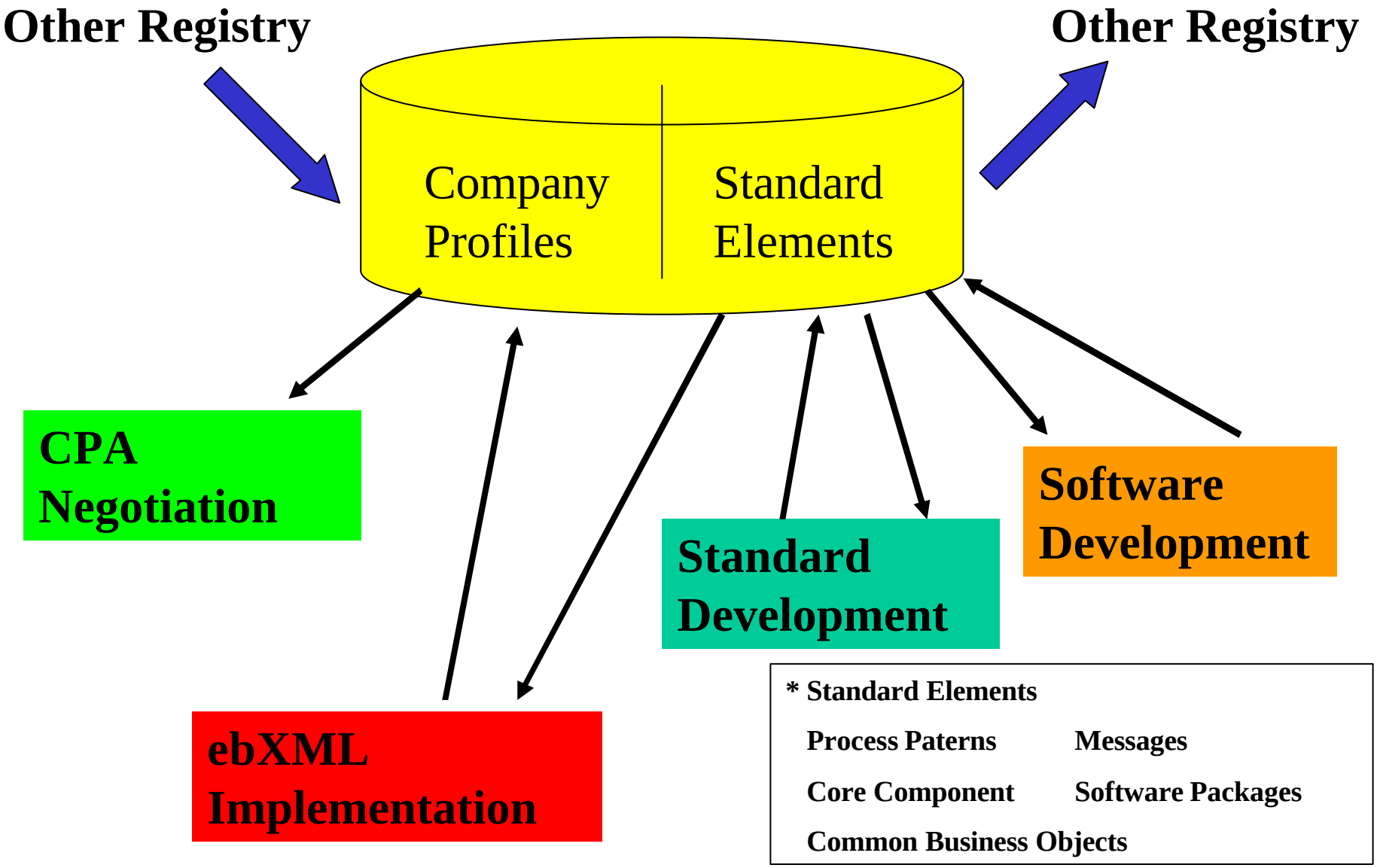
Business Transaction



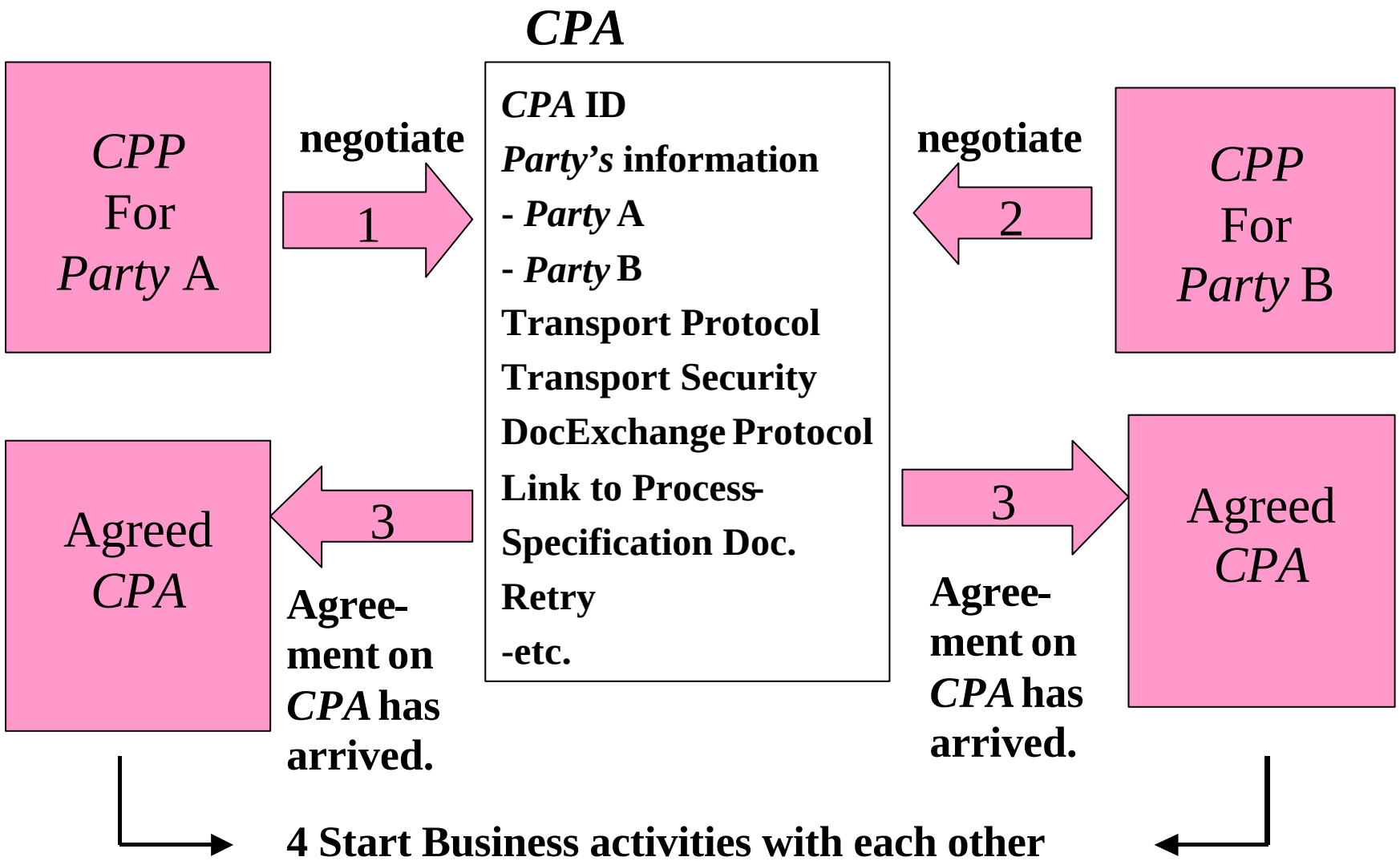
Core Component(CC)



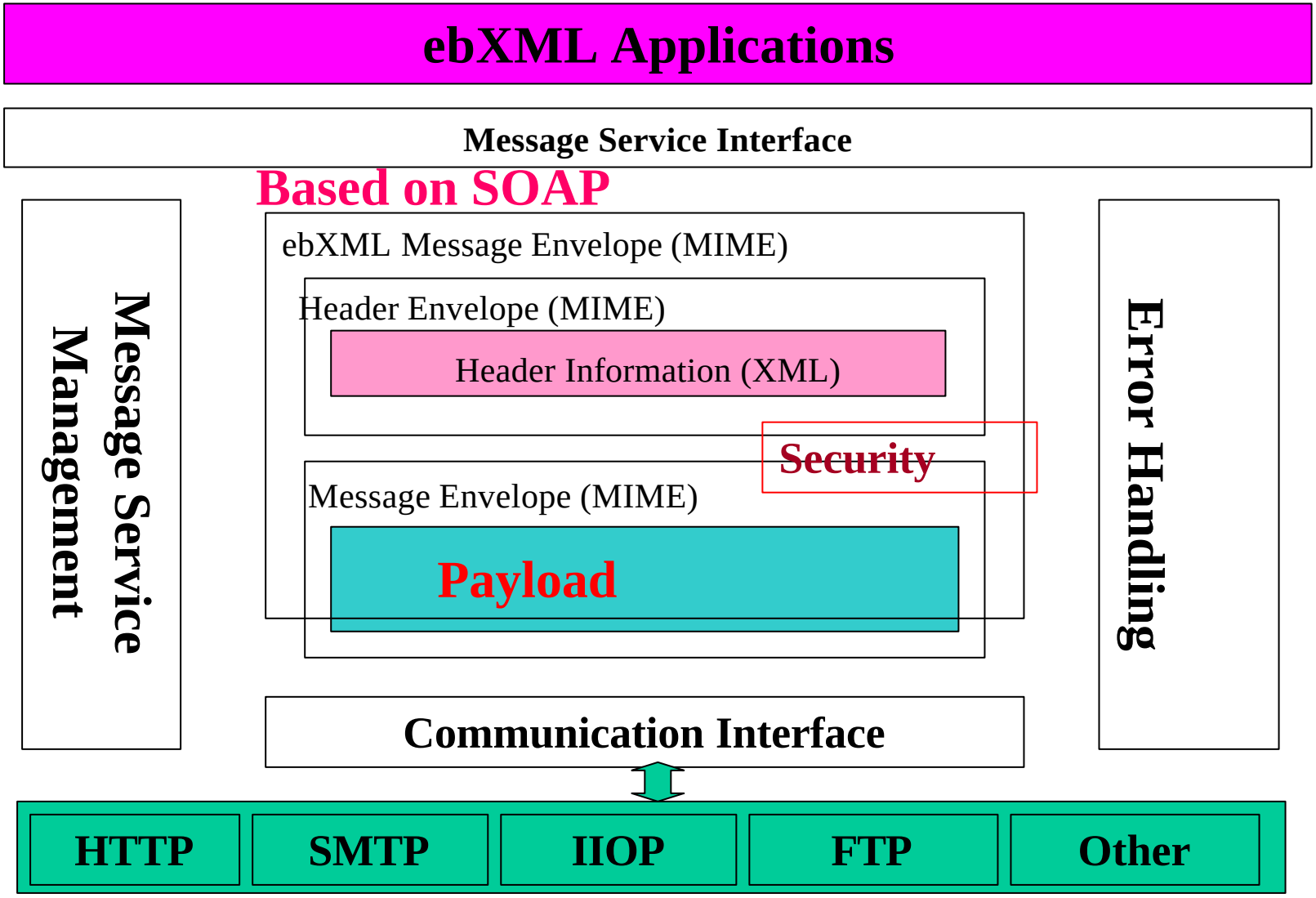
Registry & Repository



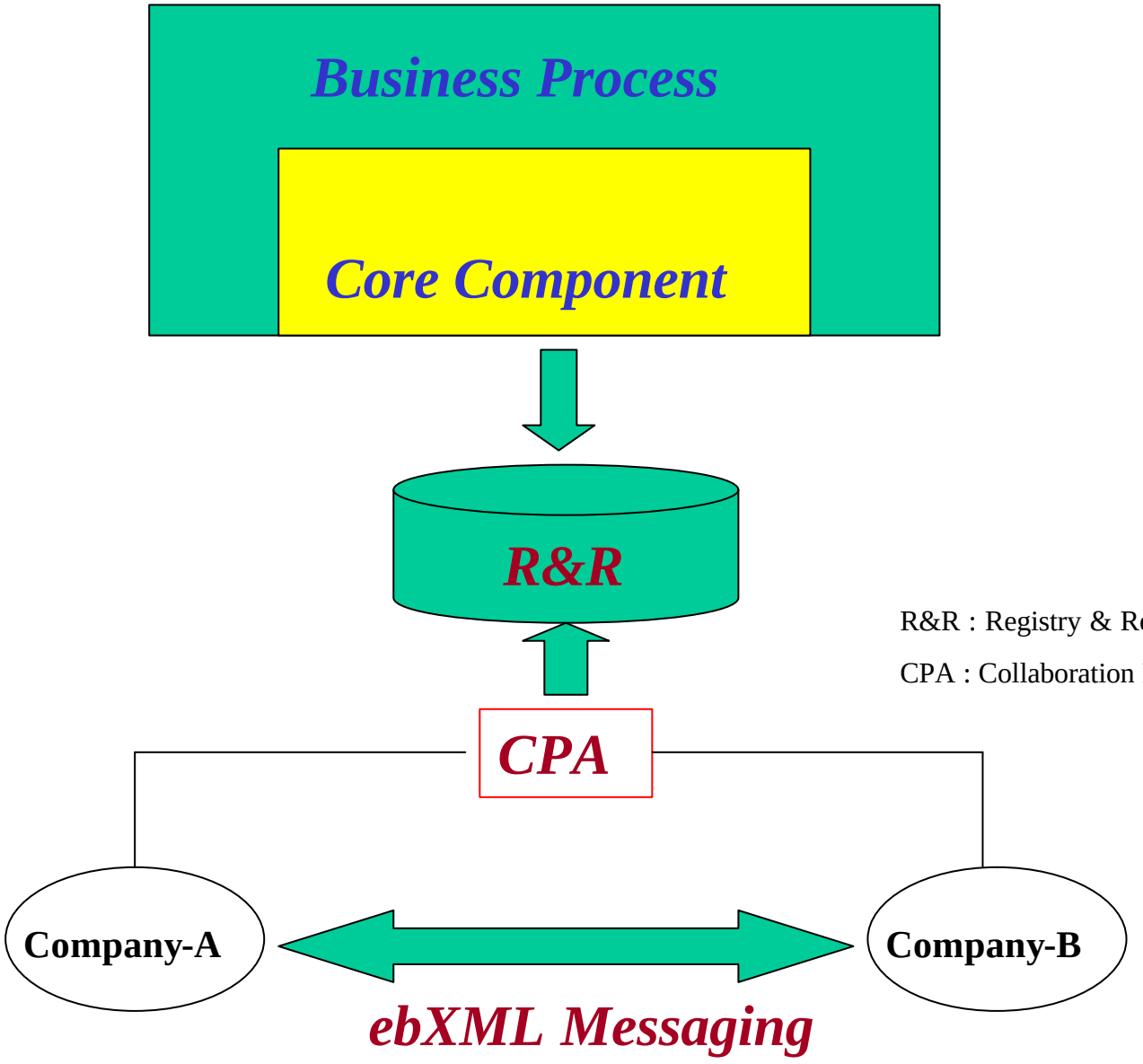
Collaboration-Protocol Agreements (CPA)



Messaging Service



ebXML Specifications



R&R : Registry & Repository

CPA : Collaboration Protocol Agreement

Current status of ebXML

1. Standard Models not completed

+ Problems on the portability of BPM

+ Problems on the language translation of CC

2. No consensus on the XML Instanciation of CC

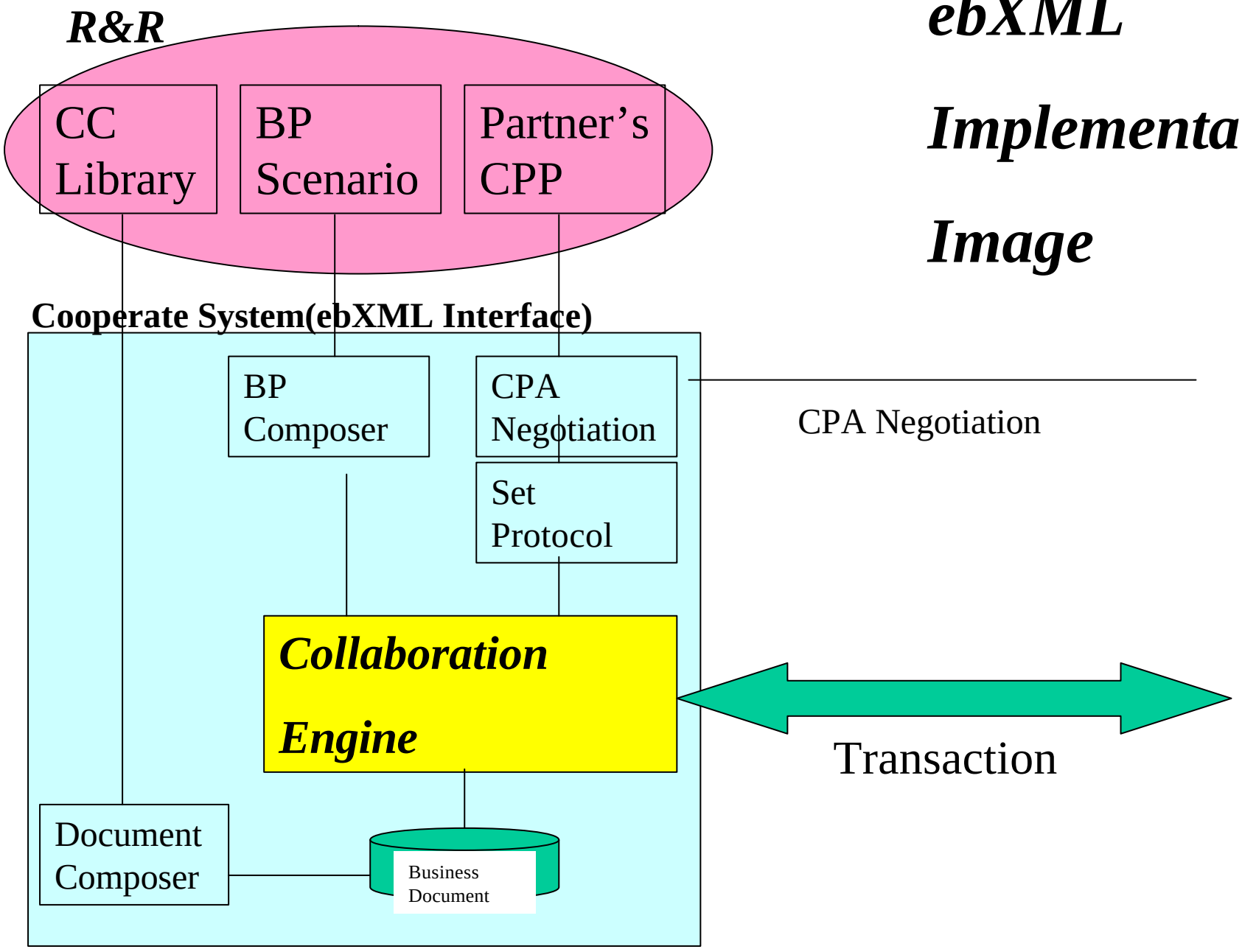
3. Early for implementing the full specification of ebXML

+ Development stage of Domain Models

+ Full works on Modeling/Design Required in each Implementation

Modeling/Design Experts with Expensive Cost

ebXML Implementation Image



Requirement for Simplification

1. Plug and Play

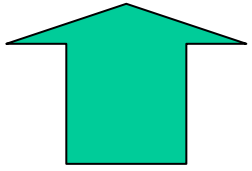
+ Non-expensive Packaged Solution

+ No need for the Special Skills

2. Bridge from the Legacy EDI

+ Easy to migrate from the Legacy EDI

+ Cooperation with Legacy EDI



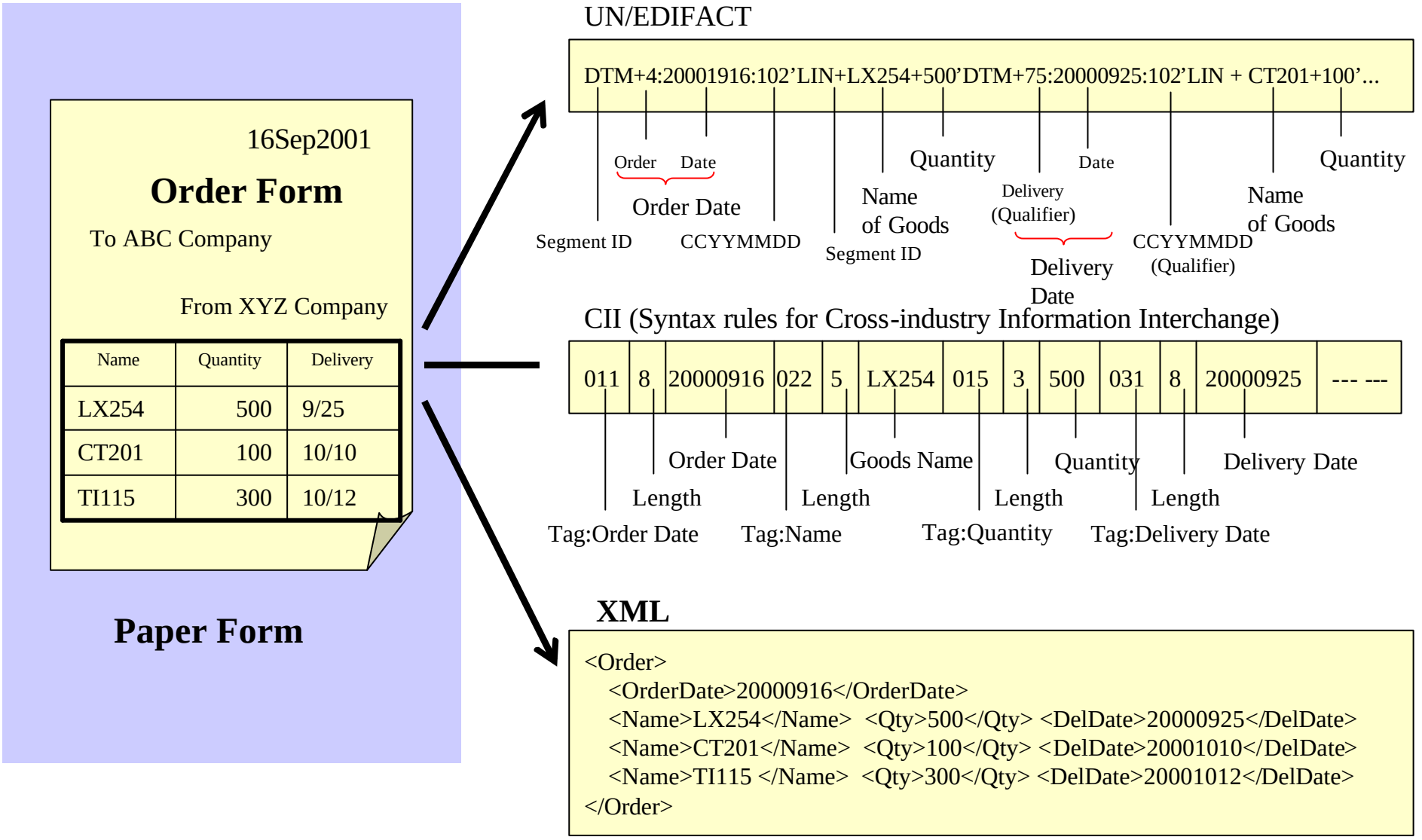
ebXML Requirement Specification

Simple EDI in Japan

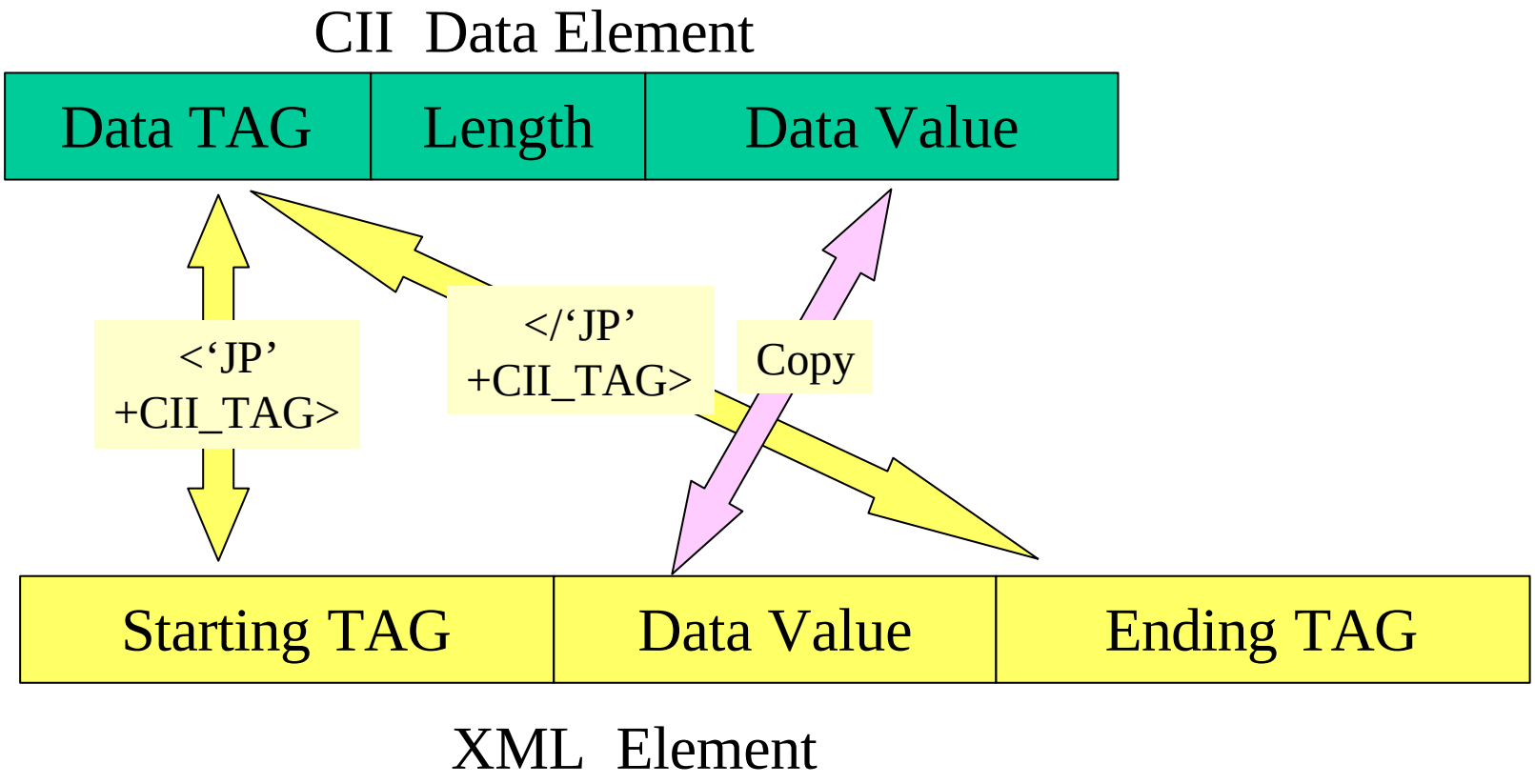
Exchange the pre-defined business documents on the pre-defined business process.

ebXML Specification	***Simple EDI***
Business Process	Can be used for collaboration engine
Core Componjent	Pre-defined (XML Instance from CII)
Registry & Repository	Repository for the standard elements
Partner Agreement	Not used
Messaging	ebXML Messaging Service

EDI Message Format



CII <-> XML Mapping



CII/XML Example

```
<?xml version="1.0"
encoding="Shift_JIS" ?>
<?xml-stylesheet
href="HWSWXSL4.xsl"
type="text/xsl" ?>
<CII-HWSW001A0110-V10>
<!– HW/SW EDI 001A  Product
                    Information -->
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<JPC19>990602135843</JPC19>
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</JPTRM>
</CII-HWSW001A0110-V10>
```
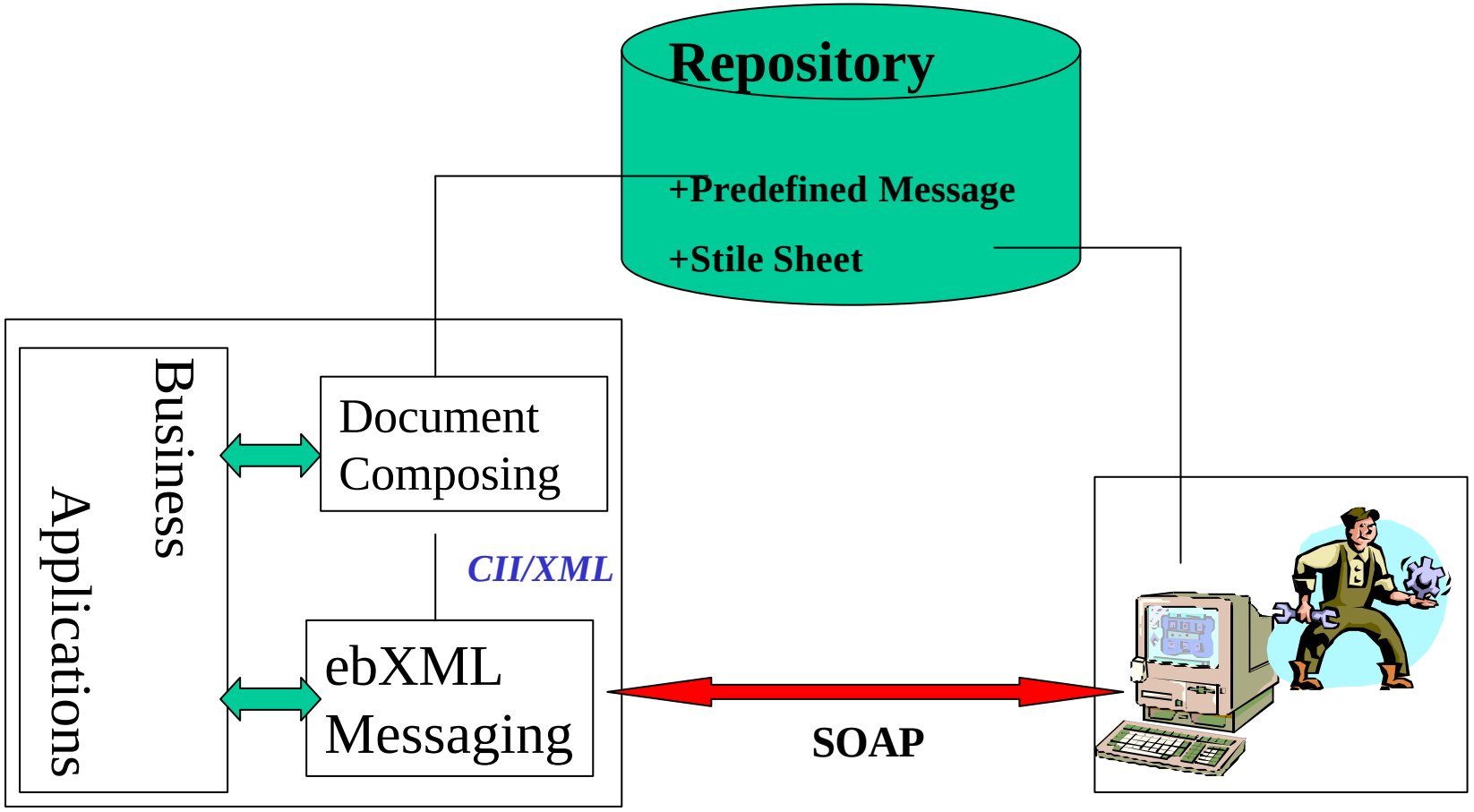

Message Group Header

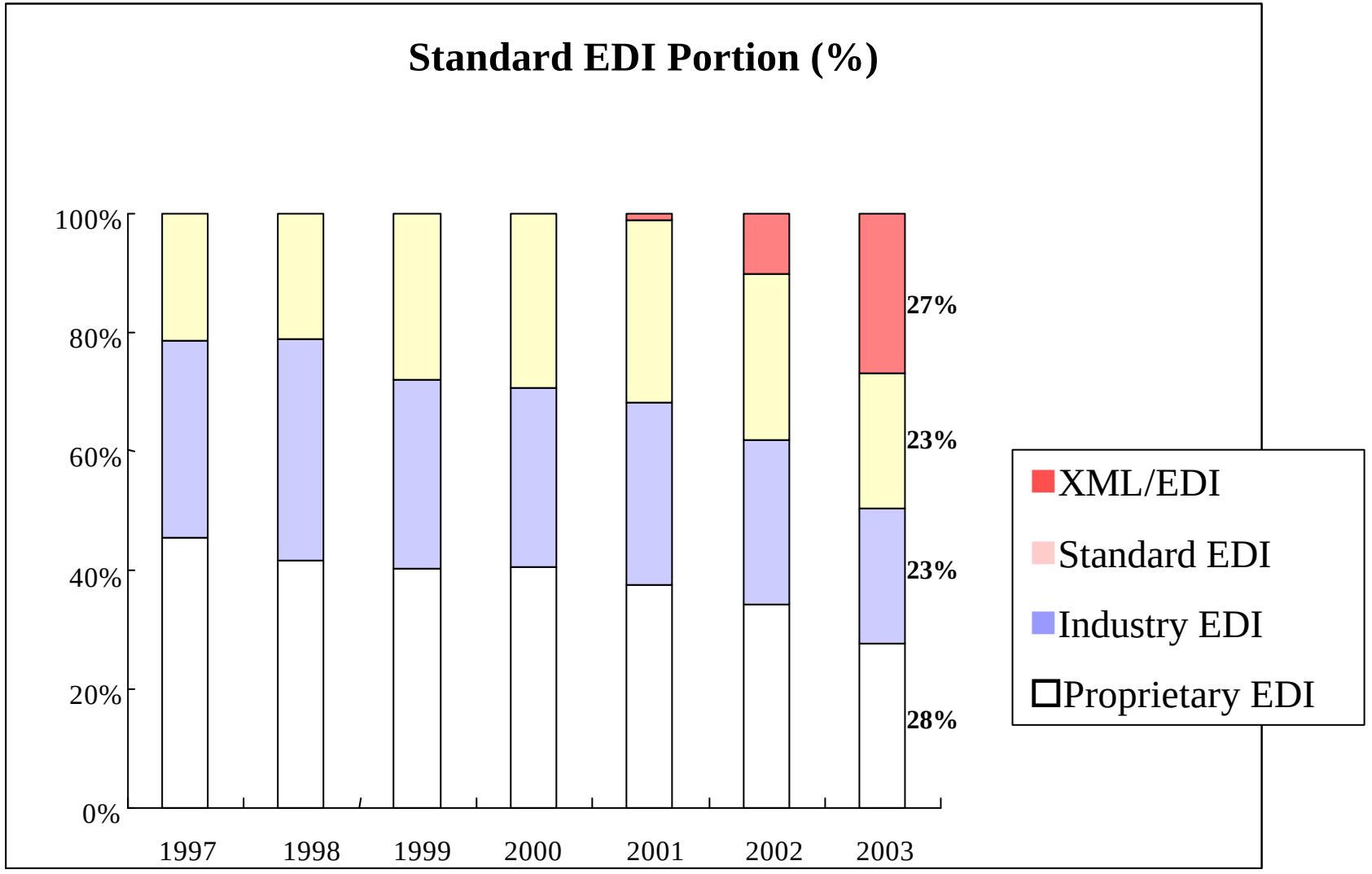
Message Body

Simple EDI System Configuration

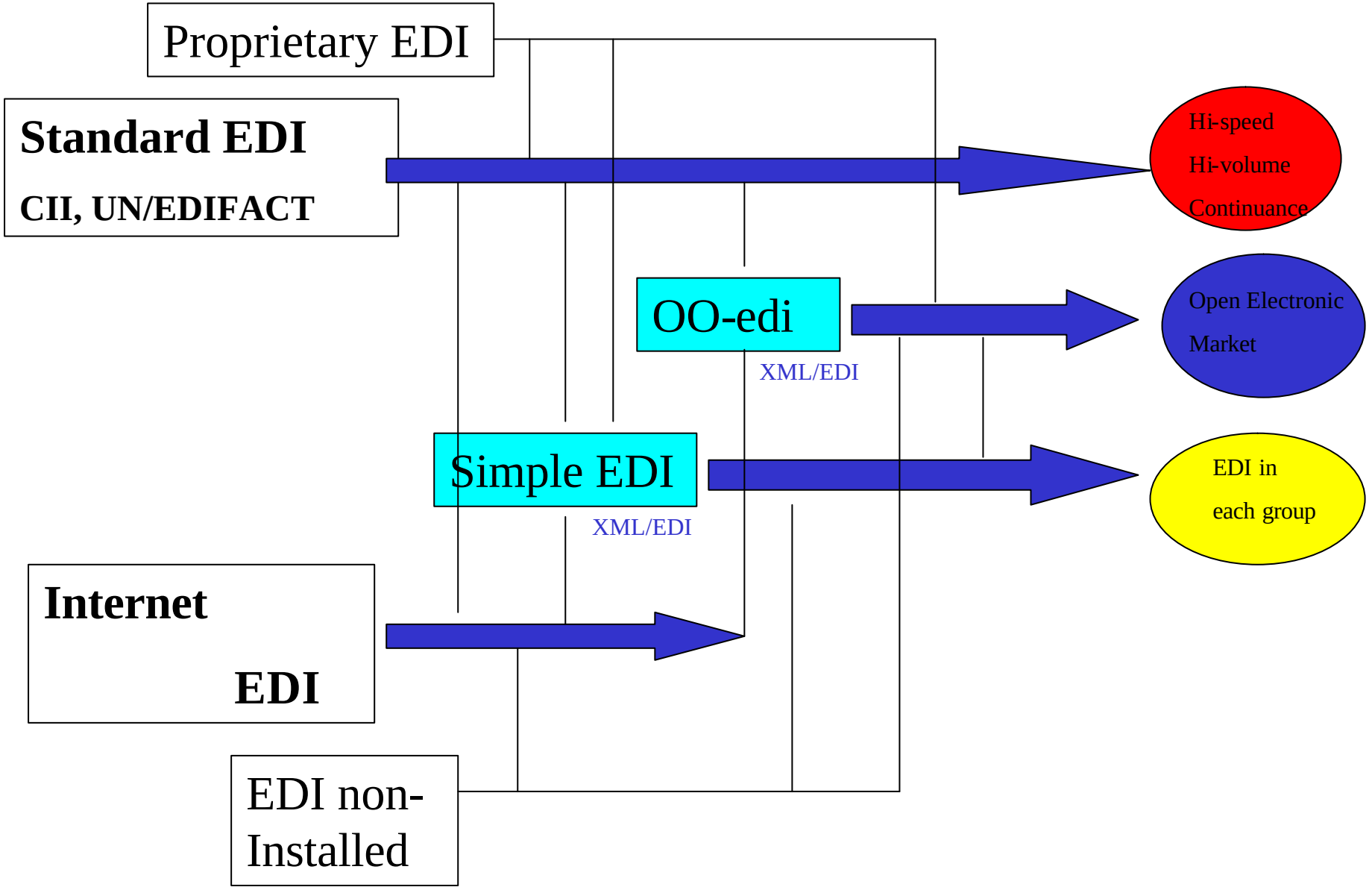
(without Collaboration Engine)



EDI Status in Japan



EDI Road Map


Proprietary EDI
Standard EDI
CII, UN/EDIFACT
Hi-speed
Hi-volume
Continuance
OO-edi
XML/EDI
Open Electronic
Market
Simple EDI
XML/EDI
EDI in
each group
Internet
EDI
EDI non-
Installed