
**INNODIGITAL**

## *ebXML의 이해*

- ◆ UN/CEFACT & OASIS가 선도 후원
- ◆ XML에 기반 한 개방적 기술 프레임워크
- ◆ 업무와 업무, 업무와 사람, 사람과 업무 환경간의 전자적 업무자료의 교환을 내용과 형식에 있어 일관 되게 처리하여 단일의 범세계적 시장을 창출하기 위함
  - 제공 기술 규격이 W3C XML규격에 합치
  - ebXML규격을 준수하는 전자거래 응용업무간 상호운용성
  - 기존의 EDI 표준과 개발중인 XML 업무표준으로부터 Migration Path를 제공하여 상호 운용성과 효율성의 극대화 추구
  - 신뢰할 만한 국제표준이 되는 것
- ◆ 18 개월 프로젝트 ( 1999. 11 - 2001. 5 )

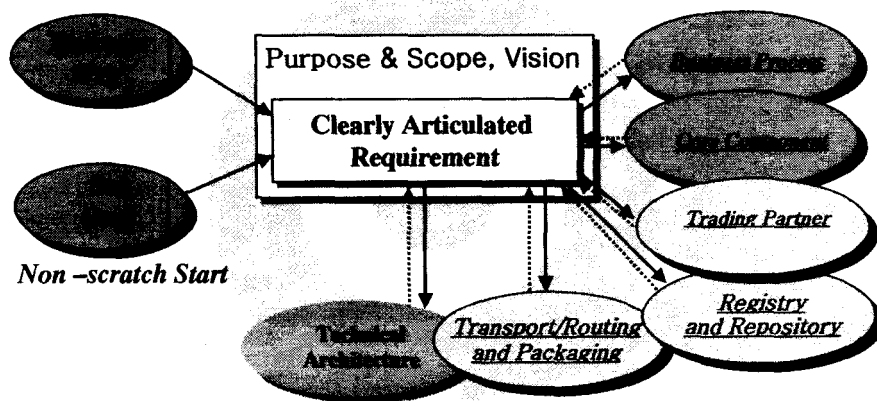
Copyright 2001 INNODIGITAL All rights reserved

## 일반적 요구 사항

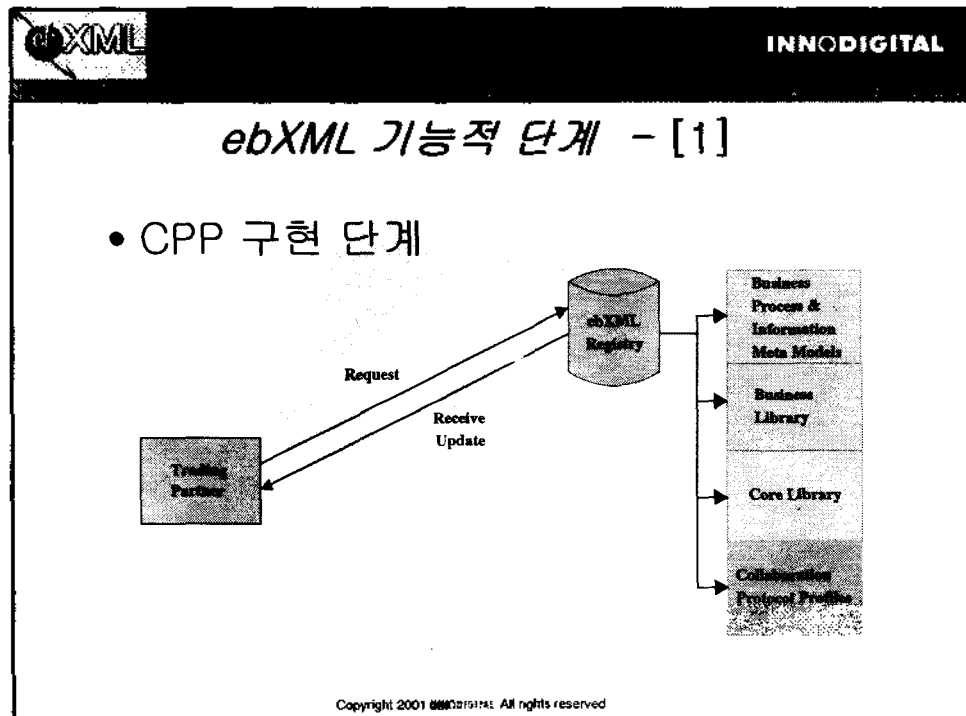
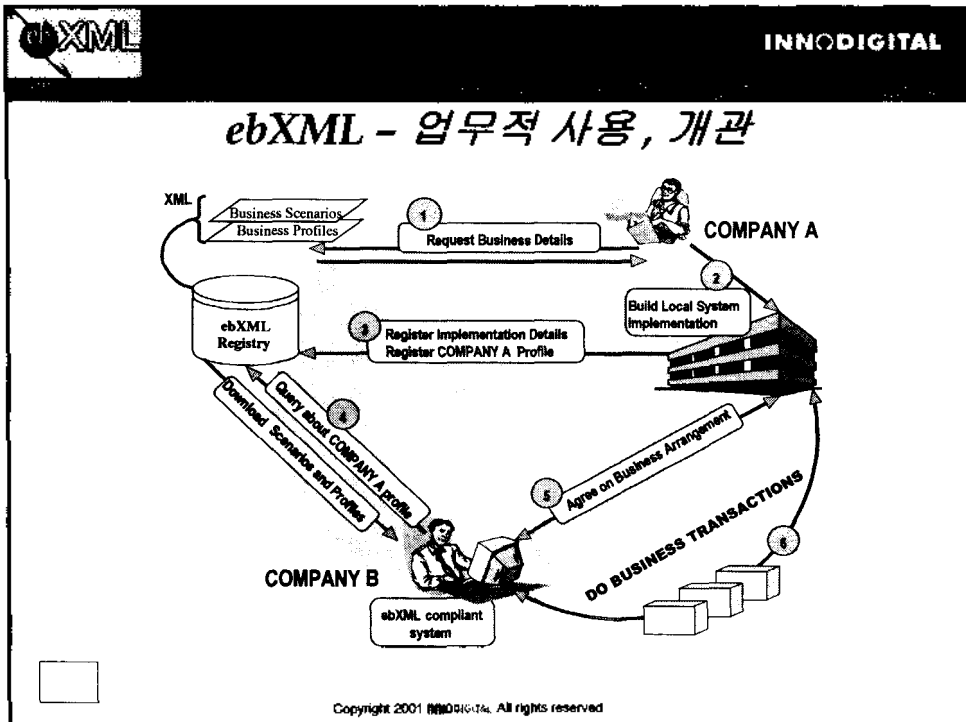
- ◆ XML 사용에 대한 단일의 일관된 단순한 접근법 필요
- ◆ ebXML을 따르고자 할 때의 절차와 권고의 필요
  - 수직적 - 산업계 업무적 사용자
  - 수평적 - ISV에게 모두 소용
- ◆ 비용이 적게 드는 간단한 적용부터 비용이 많이 드는 포괄적이며 복잡한 구현요구까지를 다 충족
- ◆ 간헐적(AdHoc)이어서 핵심만을 필요 → 고도로 공식적이며 구조적 적용에 이르기 까지

Copyright 2001 INNODIGITAL All rights reserved

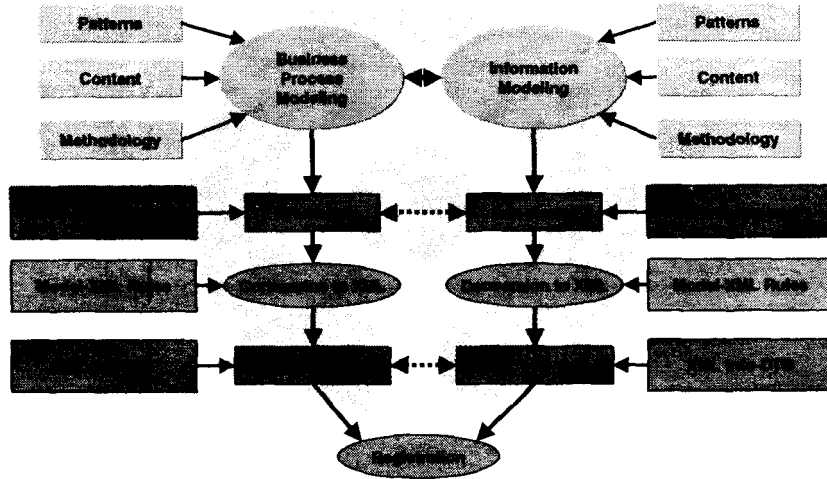
## ebXML 규격의 범위



Copyright 2001 INNODIGITAL All rights reserved

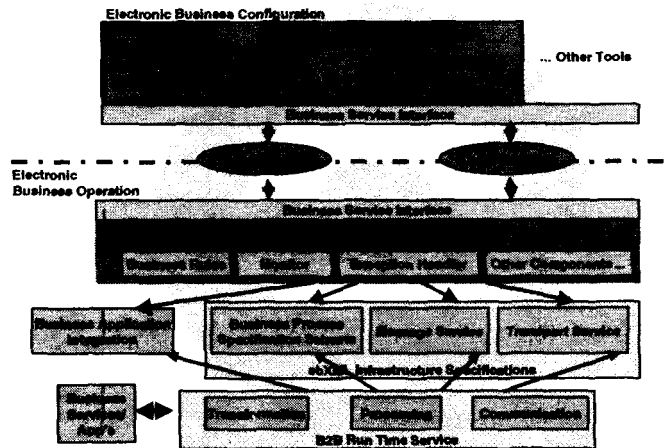


## Business Process 와 정보 모델링

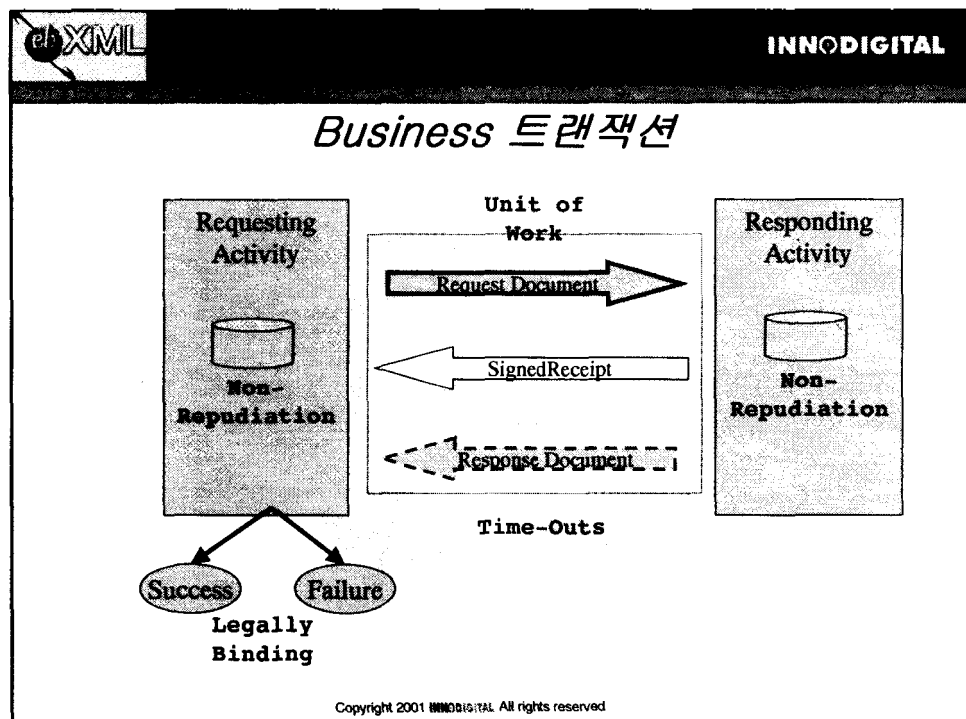
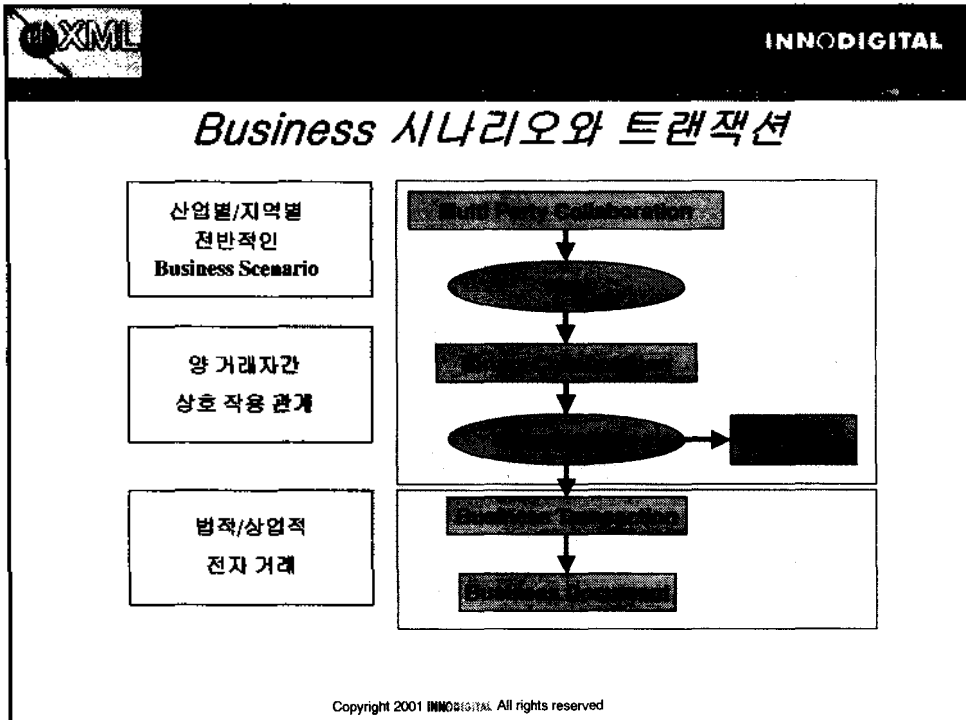


Copyright 2001 INNODIGITAL All rights reserved

## Business Process 와 정보 모델링

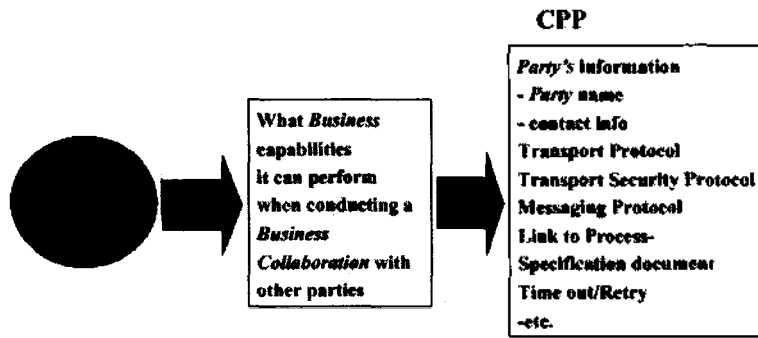


Copyright 2001 INNODIGITAL All rights reserved



### 거래 상대자 정보

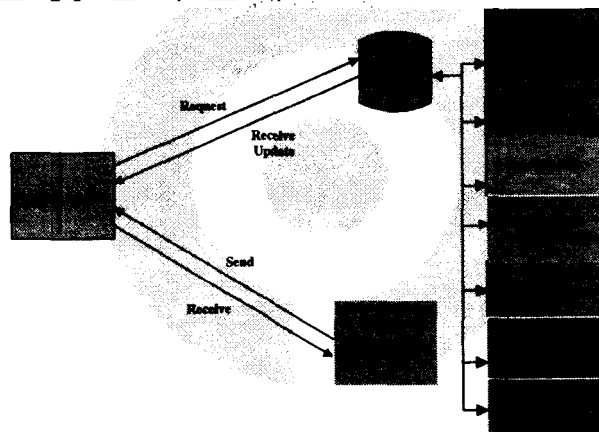
- Collaboration-Protocol Profiles (CPP)



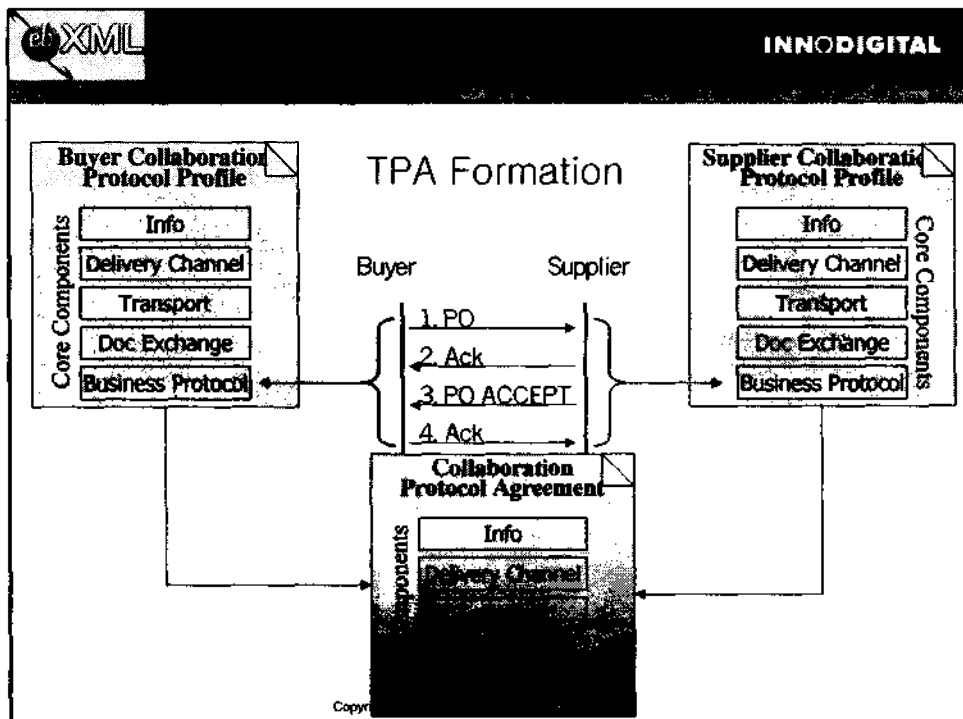
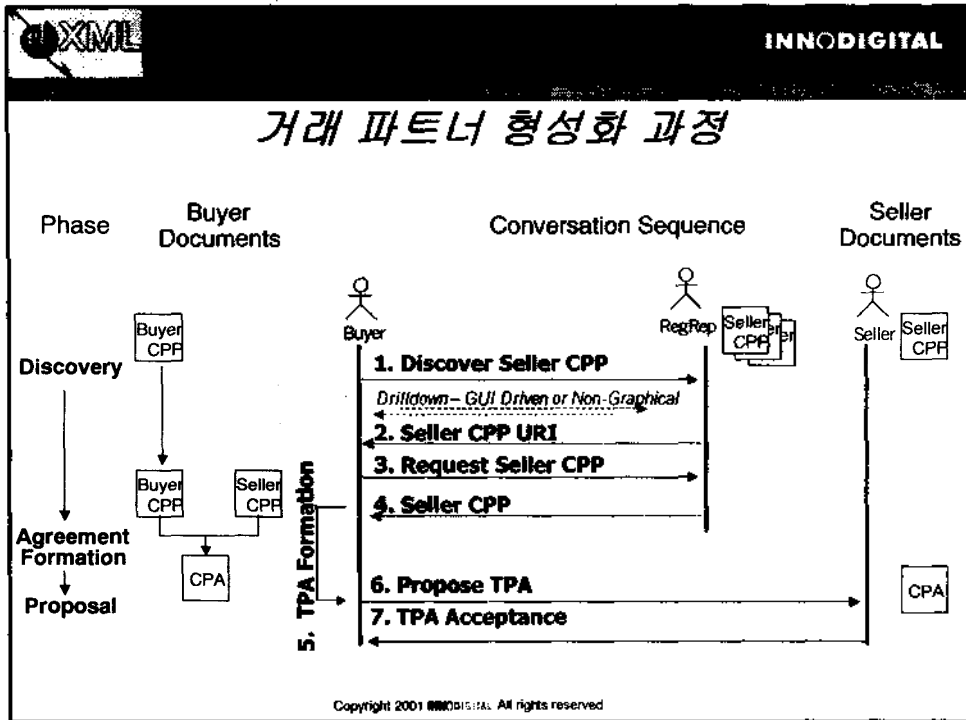
Copyright 2001 INNODIGITAL. All rights reserved

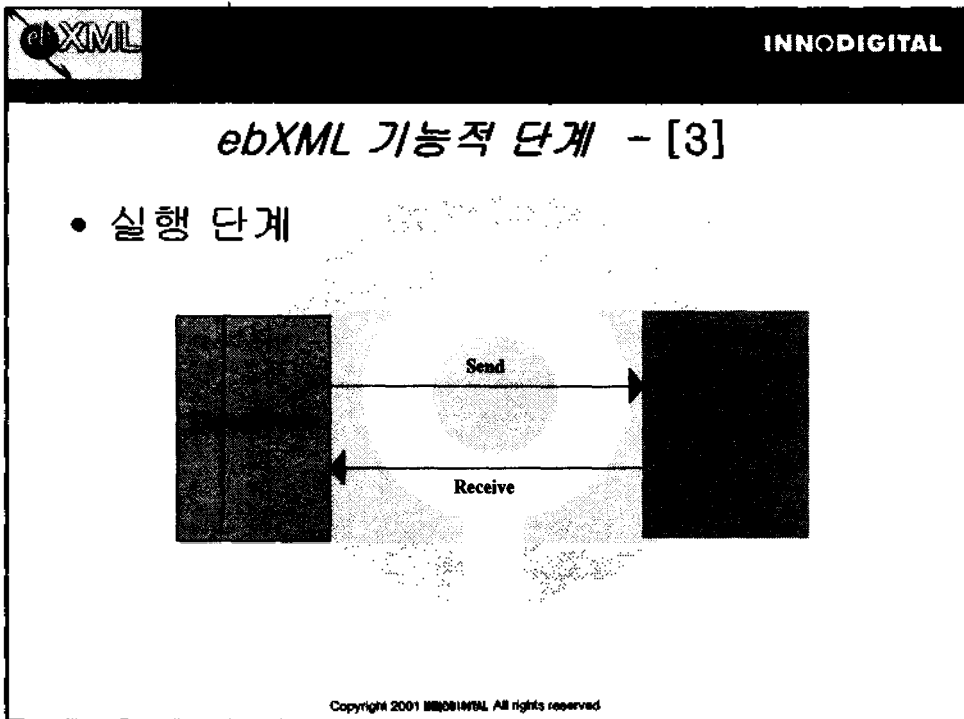
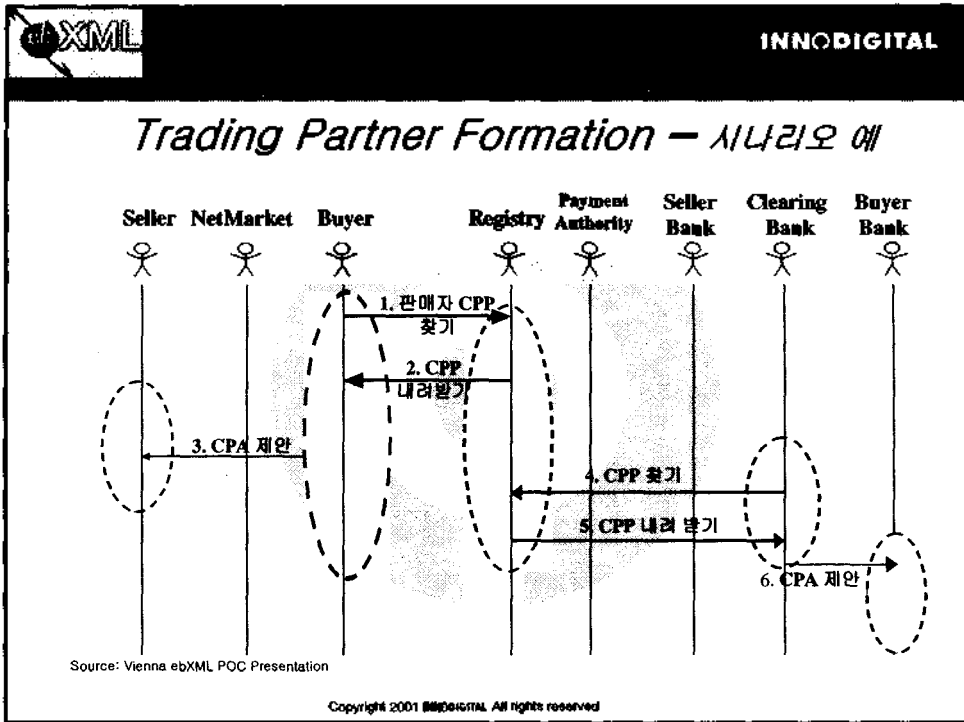
### ebXML 기능적 단계 - [2]

- 발견 및 검색 단계



Copyright 2001 INNODIGITAL. All rights reserved



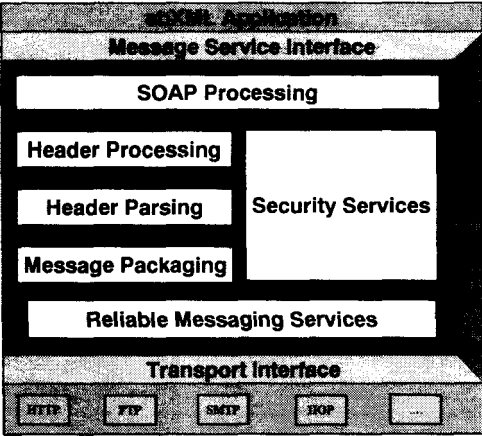




**XML** **INNODIGITAL**

## Messaging Service

- Messaging Service 구조



The diagram illustrates the Messaging Service Architecture. It is structured as follows from top to bottom:

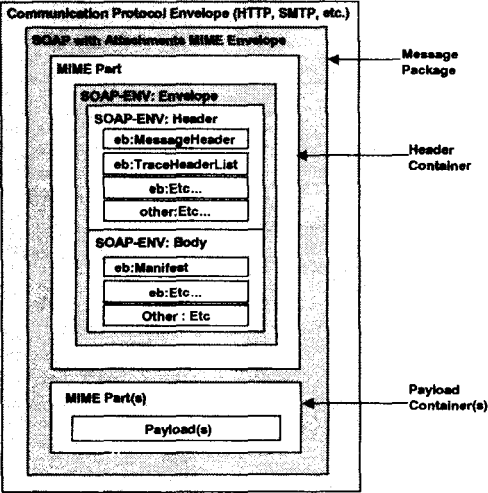
- XML Application** (outermost layer)
- Message Service Interface** (inner layer)
- SOAP Processing** (top sub-layer)
- Header Processing** and **Header Parsing** (middle sub-layers)
- Message Packaging** (bottom sub-layer)
- Security Services** (interacts with Header Processing and Header Parsing)
- Reliable Messaging Services** (interacts with Message Packaging)
- Transport Interface** (bottom layer)
- HTTP**, **FTP**, **SMTP**, **JOP**, and **...** (protocols supported by the Transport Interface)

Copyright 2001 INNODIGITAL All rights reserved

**XML** **INNODIGITAL**

## Messaging Service

- ebXML Message 구조



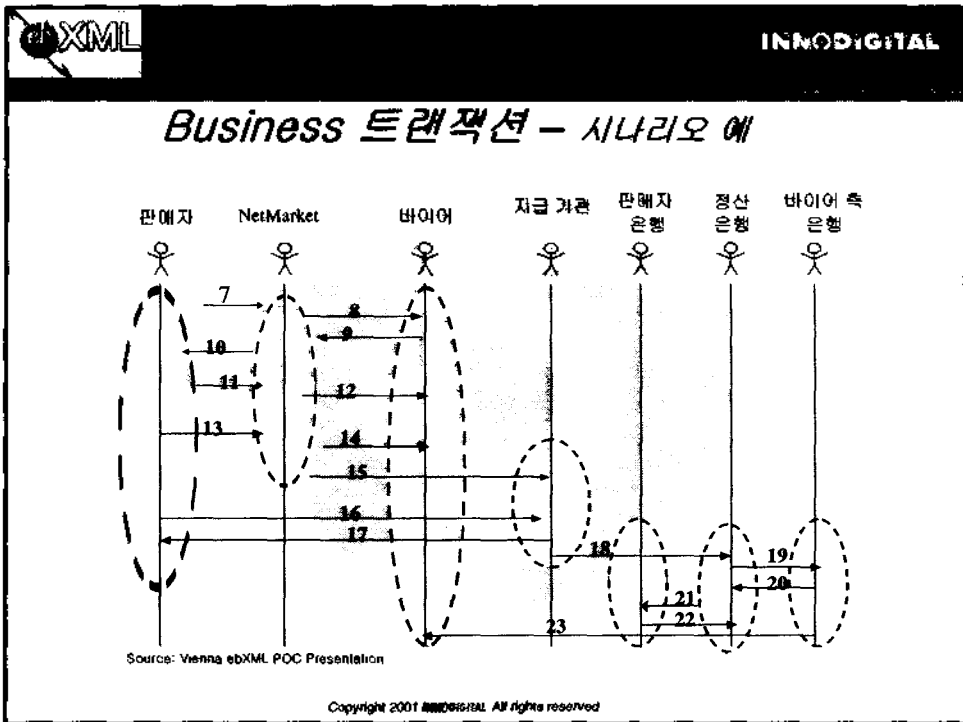
The diagram illustrates the ebXML Message Structure. It is structured as follows from outer to inner:

- Communication Protocol Envelope (HTTP, SMTP, etc.)** (outermost layer)
- SOAP with Attachments MIME Envelope** (inner layer)
- MIME Part** (sub-layer)
- SOAP-ENV: Envelope** (sub-layer)
  - SOAP-ENV: Header** (sub-layer)
    - eb:MessageHeader
    - eb:TraceHeaderList
    - eb:Etc...
    - other:Etc...
  - SOAP-ENV: Body** (sub-layer)
    - eb:Manifest
    - eb:Etc...
    - Other: Etc
- MIME Part(s)** (sub-layer)
  - Payload(s)** (sub-layer)

Labels on the right side of the diagram point to the following components:

- Message Package** (points to the SOAP with Attachments MIME Envelope)
- Header Container** (points to the SOAP-ENV: Header sub-layer)
- Payload Container(s)** (points to the Payload(s) sub-layer)

Copyright 2001 INNODIGITAL All rights reserved

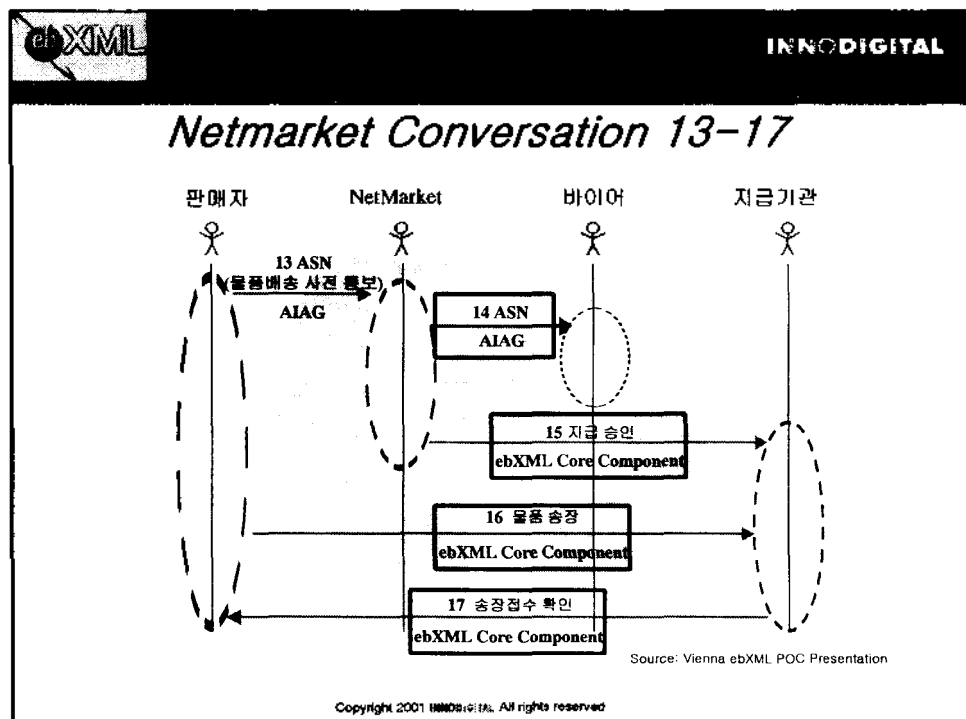
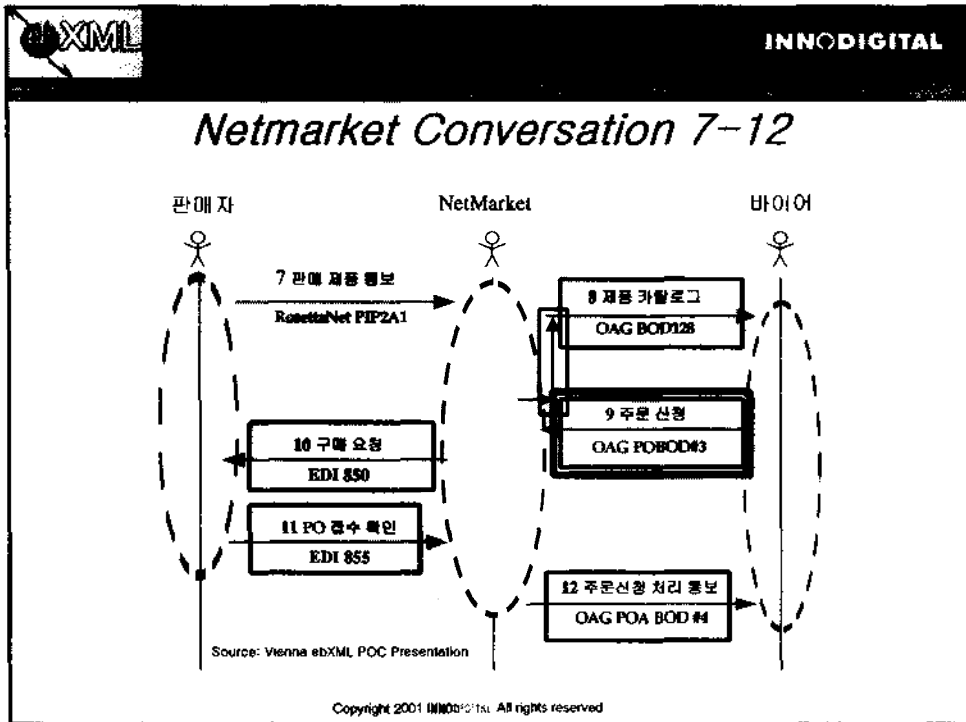


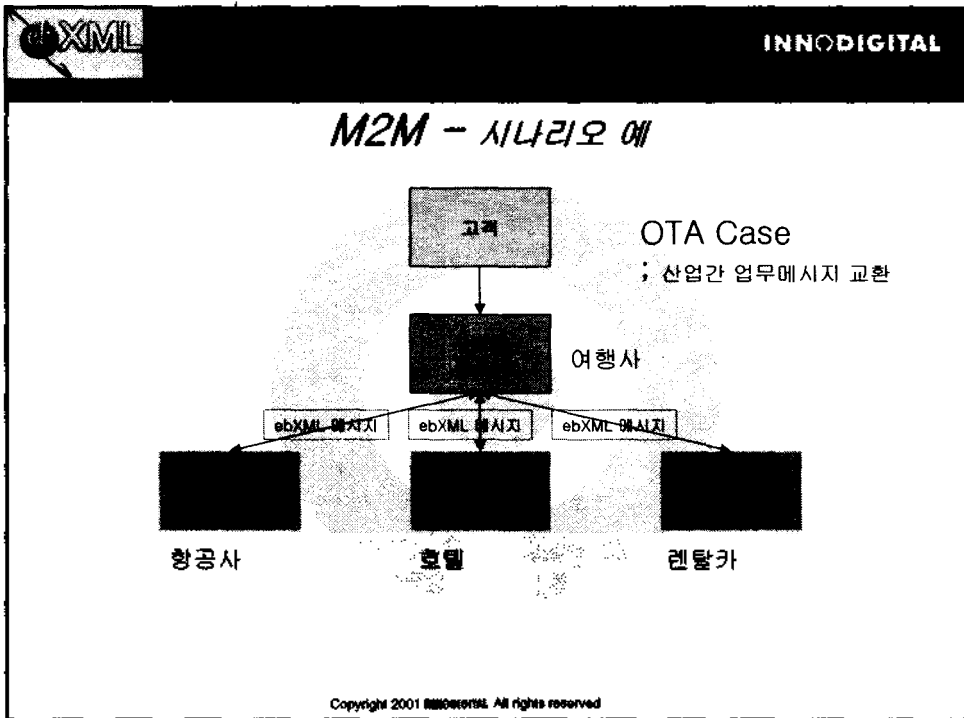
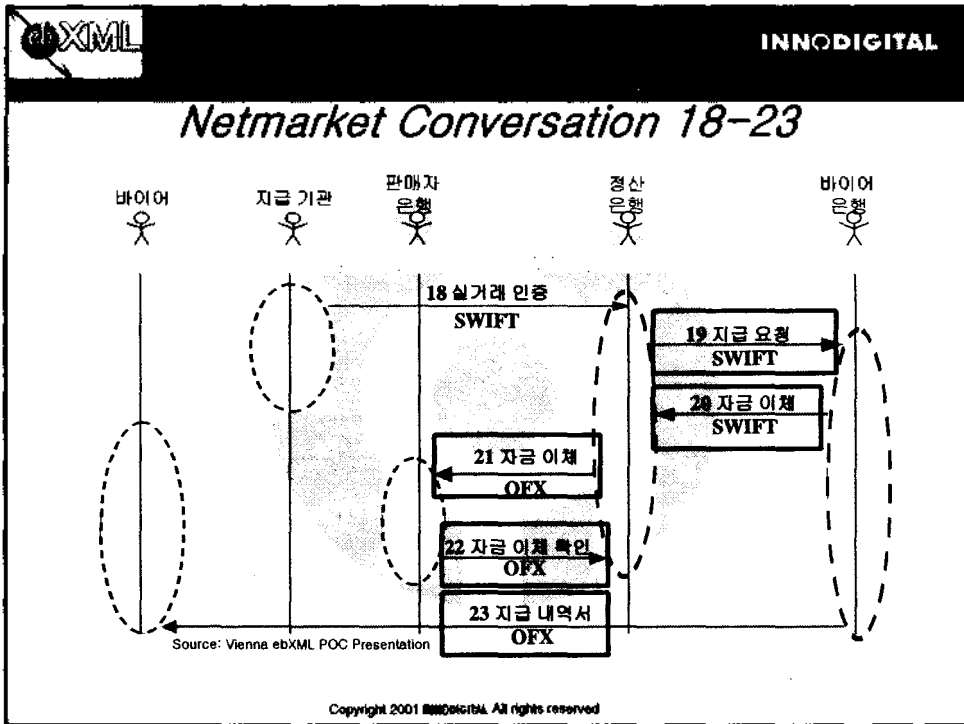
**ebXML** **INNODIGITAL**

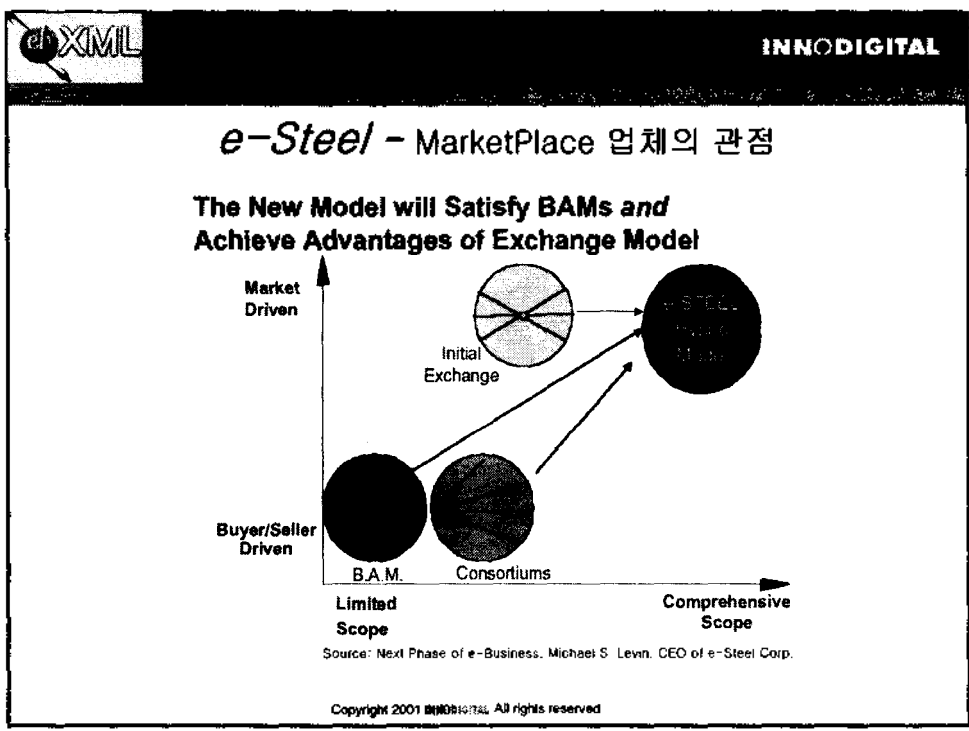
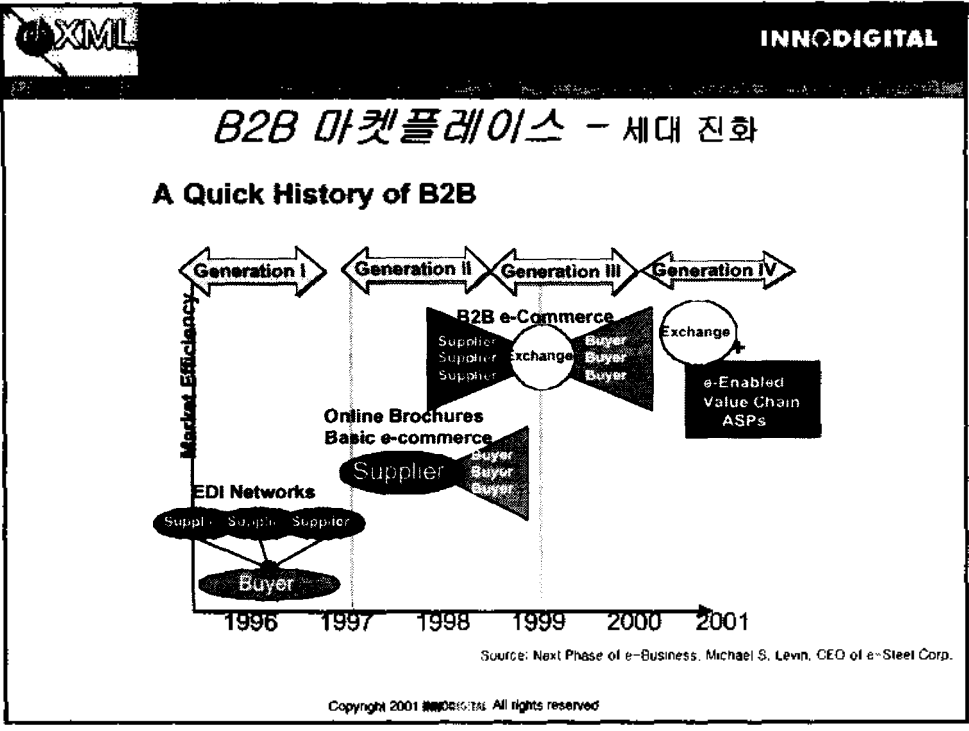
### Netmarket Messages

(7) Sales Product Notification	RosettaNet PIP2A1
(8) Product Catalog	OAG BOD128
(9) Place Order	OAG POBOD#3(Reliable Messaging)
(10) Purchase Order	ANSI vXXXX 850
(11) Purchase Order Ack	ANSI vXXXX 855
(12) Place Order Ack	OAG POA BOD#4
(13, 14) Advance Shipment Notice	AIAG
(15) Payment Authorization	ebXML Core Component
(16, 17) Invoice & ACK	ebXML Core Component
(18) Settlement Authorization	ebXML Core Component
(19) Payment Request	SWIFT
(20) Funds Transfer	SWIFT
(21, 22) Funds Transfer & ACK	OFX
(23) Statement	OFX

Source: Vienna ebXML POC Presentation  
Copyright 2001 INNODIGITAL All rights reserved







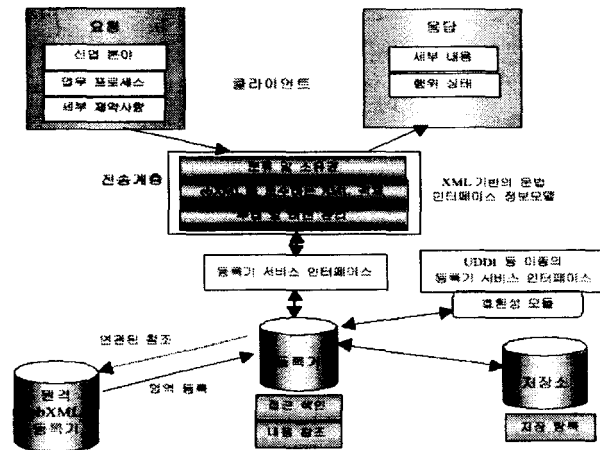
## B2B e-Commerce - 5 Key Opportunities

- ◆ Buy and Sell Directly
  - Open Marketplace
- ◆ Redefine Value Chain Business Processes
  - e-Enabled Collaboration
- ◆ Build Brand and Customer Retention
  - Private Marketplace
- ◆ Connectivity
  - Integration
- ◆ Hedging
  - Risk Management

Source: Next Phase of e-Business, Michael S. Levin, CEO of e-Steel Corp.

Copyright 2001 INNODIGITAL All rights reserved

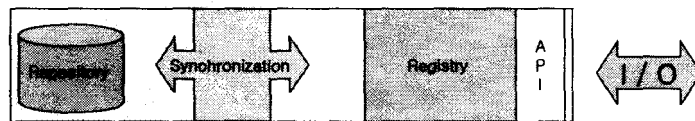
## ebXML - Registry Functionality



Copyright 2001 INNODIGITAL All rights reserved

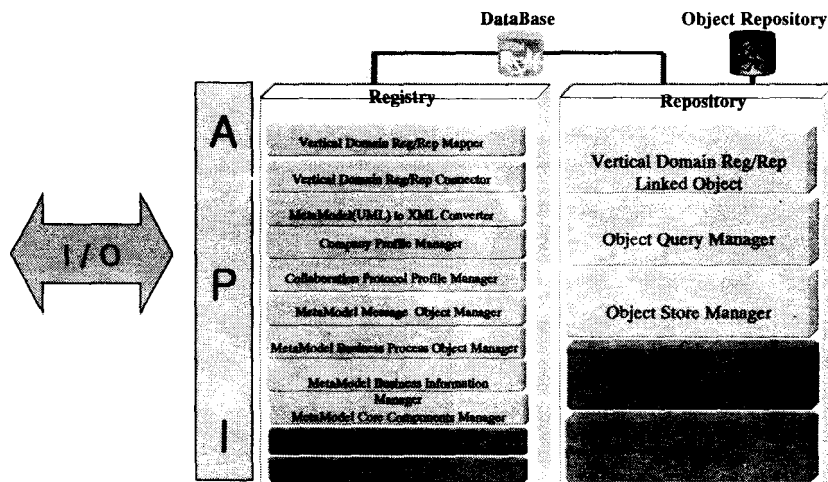
## ebXML Architecture

- ebXML의 중심에는 강력한 등록기들과 분산 저장소들이 존재
- 등록기를 통한 문서 접근
- 등록기들은 여럿의 다른 항목들에 대한 포인터와 메타 정보들을 보유 - Core Components, DTD, Trading Partner Profiles and Business Process documents.
- 업무 프로세스 계층으로부터 하단의 가장 원초 요소적인 수준까지 이들 항목들(CC)을 참조할 수 있도록 역할

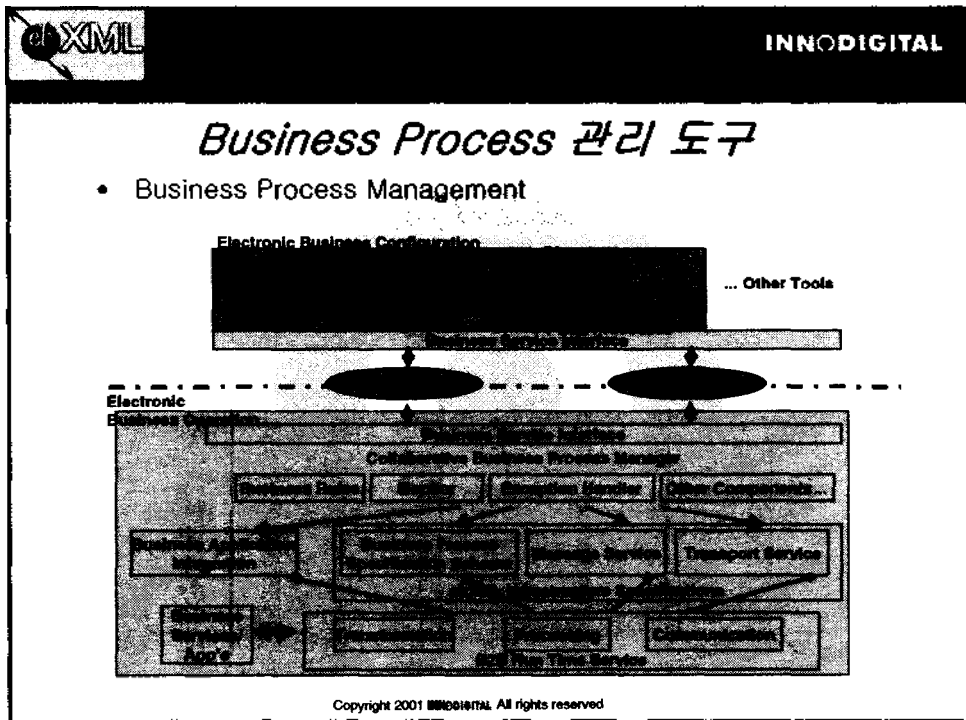
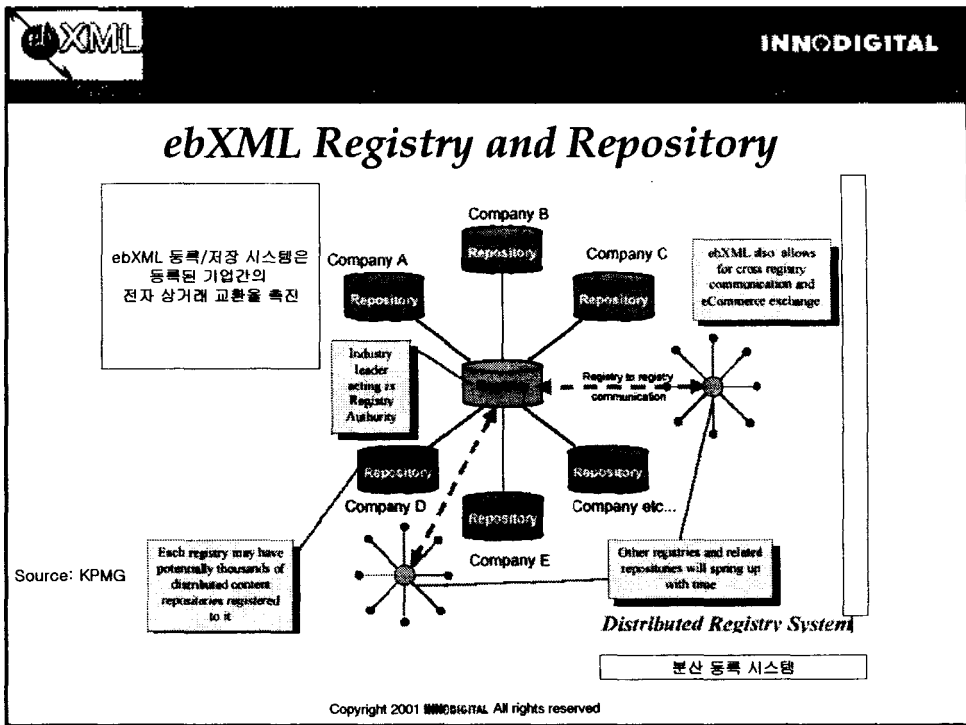


Copyright 2001 INNODIGITAL All rights reserved

## ebXML RegRep Implementation



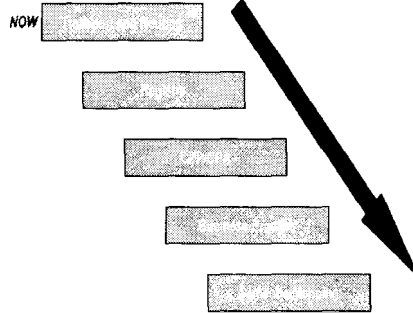
Copyright 2001 INNODIGITAL All rights reserved





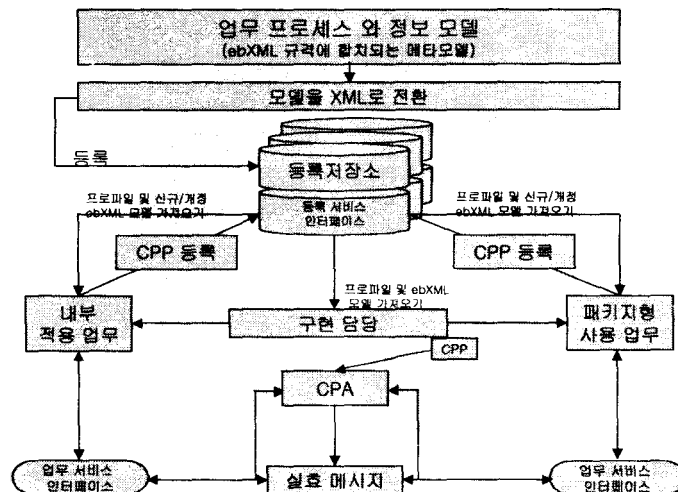
## Implementation Step - from now to Future

1. 기반구조 표준화  
(messaging, discovery, trading partner agreements)
2. 메시지 표준화 (business documents)
3. 기계 처리가 가능한 의미 체계 표준화



Copyright 2001 INNODIGITAL All rights reserved

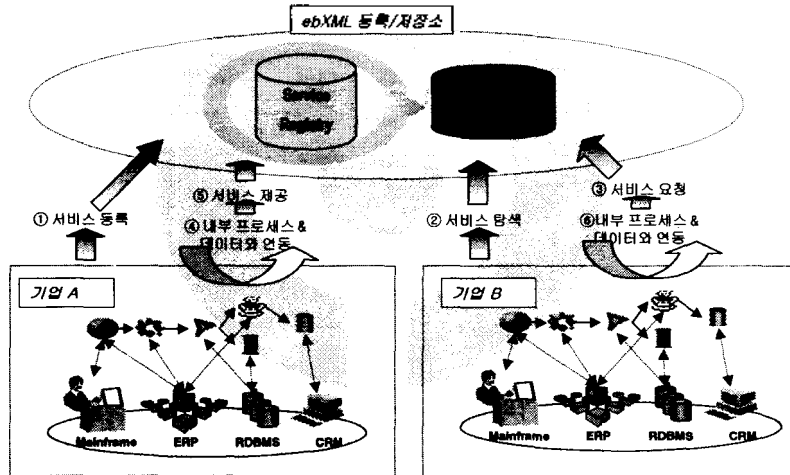
## ebXML: 기능적 서비스 관점



Copyright 2001 INNODIGITAL All rights reserved

## WebService View - Some Distant Future

❖ 내부 프로세스 및 데이터와의 연동



Copyright 2001 INNODIGITAL. All rights reserved

## ebXML : Phase II

- UN/CEFACT
  - Business Process
  - Core Components
- OASIS
  - Trading Partners
  - Registry
  - Messaging Service
- ebXML Initiative
  - Coordination Committee
  - Technical Architecture
  - Marketing

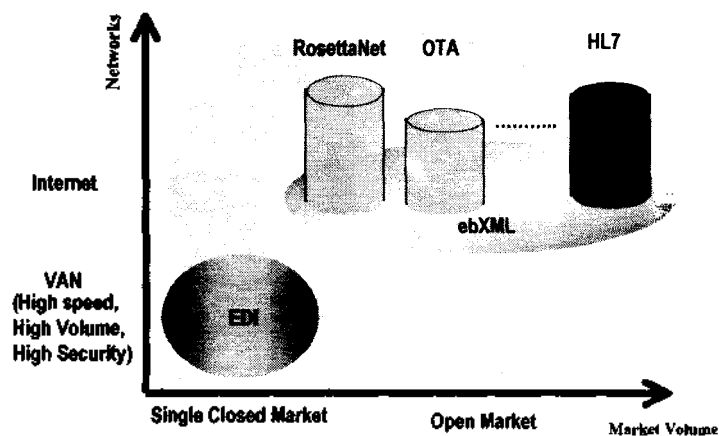
Copyright 2001 INNODIGITAL. All rights reserved

## 대표적 전자상거래 프레임워크 표준들

- EDI(UN/EDIFACT, XML/EDI Group)
- ebXML(UN/CEFACT, OASIS)
- BizTalk(Microsoft)
- eCo Framework(CommerceNet)

Copyright 2001 INNODIGITAL All rights reserved

## 전자상거래 프레임워크의 추이






Copyright 2001 INNODIGITAL All rights reserved



### 최근 ebXML 동향 : 국외

- 각국의 표준화 기구
  - CEN/ISSS(유럽)이 eBES를 구성하여 ebXML을 적극 수용
  - E centreUK에서 ebXML을 자체 XML 프로젝트 요구 조건으로 포함
  - OAG 표준 작업과 ebXML을 통합 추진
  - TradeGate(호주)에서 ebXML을 전자상거래 표준으로 채택
  
- 종적 산업 표준화 기구/연합
  - RosettaNet: ebXML Messaging service를 RNF로 채택
  - GCI(Global Commerce Intuitive): 데이터 교환 표준 backbone으로 ebXML 사용
  - AIAG(Automotive Industry Action Group): ebXML 프로젝트팀에 참여
  
- 소프트웨어 업체 및 사용자
  - ebXML 표준화 작업에 참여하거나 솔루션 개발 중
  - IBM, SUN Microsystems, CommerceOne, Viquity, Bind Systems, Care Data Systems, Fujitsu, Future Three/Synapz, Schemantix외

Copyright 2001 INNODIGITAL. All rights reserved

Creating A Single Global Electronic Market

For International Business

INNODIGITAL