Tutorial 1

E-Marketplace Development Trend

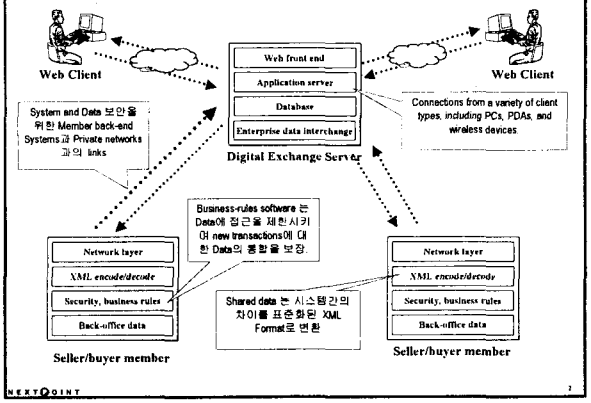
김 호 빈
(NextPoint)

eMarketplace Development Trend

2000.11.11

NEXTPOINT

eMarketplace in Action

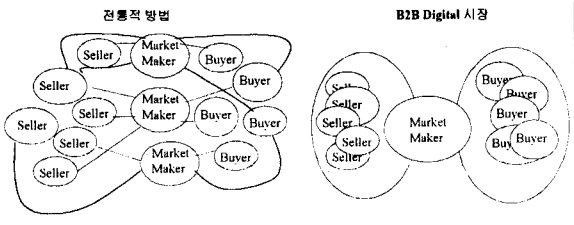


Contents

- ✓ eMarketplace Business
- ✓ eCatalog
- ✓ Collaboration : CPFR
- ✓ Process Integration
- ✓ Application Framework

✓ eMarketplace Business

eMarketplace Business Model

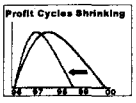


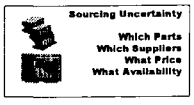
- 여러 개의 중개자
- 구매자 와 판매자의 연결이 없음
- 가격비교의 어려움
- 비효율적인 communication
- 완벽하지 못한 배달
- 많은 시간을 요구

- 하나의 중개자
- 구매자와 판매자의 직접적인 연결
- 가격 및 다른 정보의 비교
- 다른 부가가치정보제공의 기회
- 향상되어진 배달
- 즉각적인 응답

Market Environment of Business

- ❑ *Procurement inefficiencies*
  - ➢ Material and Purchase Process Cost reduction.
- ❑ Sourcing not proactive
  - ➢Lack of visibility disrupts ability to deliver
- ❑ Poor collaboration impedes ability to meet demand
- ❑ Communications impeded by product content negotiation

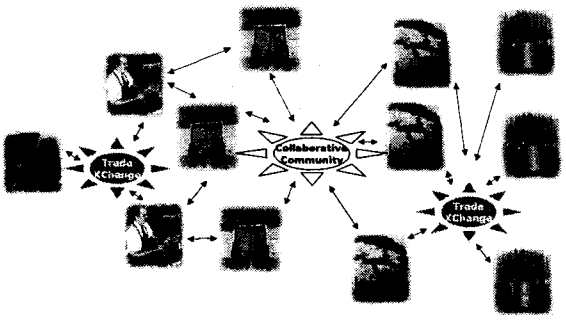




eMarketplace in Supply Chain

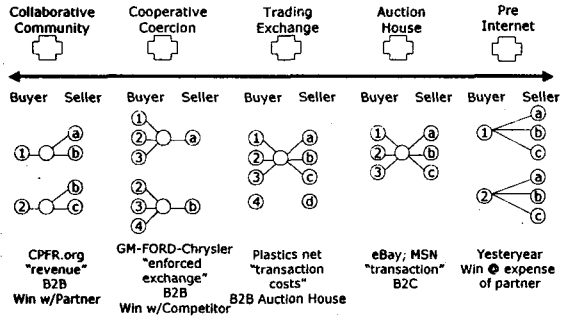
To Seller	To Marketplace Host	To Buyer
Provides new marketing and distribution channels to customers	Protects current role or creates new role within the commerce chain	Lowers up-front costs and risks
Provides better customer services through online interaction	Establishes value-add in digital economy	Gains access to more information and suppliers
Offers more complete product information to buyer	Increases service levels to existing customers	Provides access to secondary and excess supply auctions
Automates order/fulfillment	Leverages current information and customers	Eliminates ongoing software upgrades & maintenance costs
Lowers overall operational costs	Provides access to more information and suppliers	Utilizes outsourced expertise

Internet Trading Exchange(ITE)



Collaborative Commerce

Internet Commerce Continuum



E-Commerce Elements

Trade Exchange / Net Market / Super Portal 요소

Content

Catalog
Marketing
RFQ/RFP
Rules/Workflow

Initial Focus
- Continuous Innovation

E-Commerce Elements

Trade Exchange / Net Market / Super Portal 요소

Content

Catalog
Marketing
RFQ/RFP
Rules/Workflow

Transaction

RFP/RFQ
Procurement
Sourcing
Financials
Logistics
ERP

Technology

EAI
Database
Security

Secondary Focus
- Continuous Innovation
- Good for ERP "thinkers"

E-Commerce Elements

Trade Exchange / Net Market / Super Portal 요소

Content

Catalog
Marketing
RFQ/RFP
Rules/Workflow

Transaction

RFP/RFQ
Procurement
Sourcing
Financials
Logistics
ERP

Technology

EAI
Database
Security

Outsourcing

Hosting
Managed Services

BPR
Best Practices

Employee

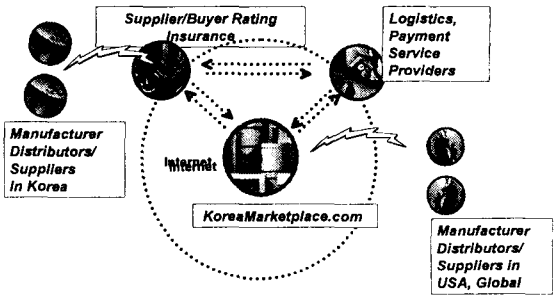
Expense
Schedule

Tertiary Focus
- Continuous Innovation
- Portals outdoing themselves

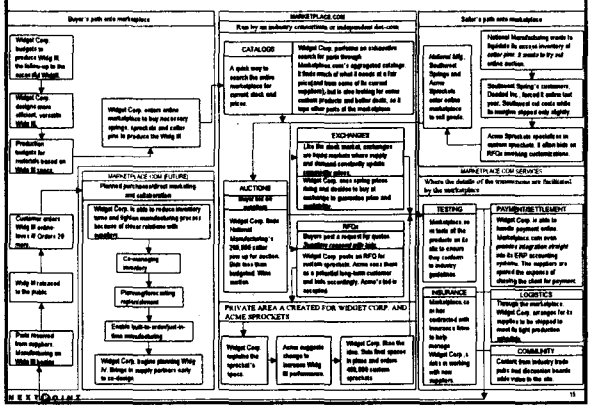
Trade Exchange / Net Market / Super Portal 요소

Content	Transaction	Collaboration	Technology
Catalog Marketing RFQ/RFP Rules/Workflow	RFP/RFQ Procurement Sourcing Financials Logistics ERP	CPFR CTM CFMS Product Design	EAI Database Security
Outsourcing	**Intelligence**	**Perform**	**Employee**
Hosting Managed Services BPR Best Practices	Supply Chain Planning Demand Chain Planning Supply Chain Execution APS	Profit / Costs Performance KPI's Alert Resolution	Expense Schedule

Value Add and Collaboration Model



eMarketplace Global View



✓eCatalog

UN/SPSC

UN/SPSC (United Nations Standard Product and Service Code)

UN/SPSC 는 상품과 서비스 분류를 위한 논리적 체계를 제공하는 국제 표준 상품 분류 코드임

상품 분류는 두자리 수의 숫자 값과 하나의 문자 설명으로 구성됨
XX Segment (분석 목적의 논리적 배열의 집합체)

XX Family (상호관련 상품군(Commodity) 카테고리에 대한 일반적인 그룹)

XX Class (일반적 이용 또는 기능을 공유하는 상품 그룹)

XX Commodity (대체 가능한 상품 및 서비스 그룹)

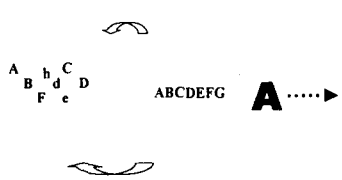
XX Business Function (상품군 지원해 조직에 의해 수행되는 기능)

분류 예

Segment	44 (사무실 장비, 액세서리, 사무용품) 10 (사무실 기구 및 부속품과 액세서리) 11(사무실/책상 액세서리)
Family	12(사무용품) 15 (수련 물품) 16(사무 물품) 17(필기구) 18(수정용품)
Class	19(잉크와 리필 심) 01(India 잉크) 02(심 리필)
Commodity	03(펜 리필)

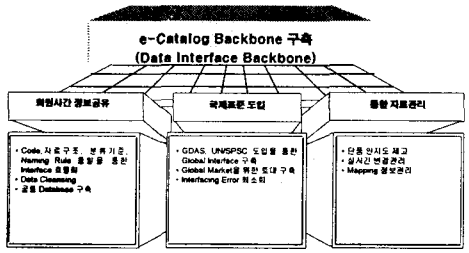
"펜 리필" = UNSPSC 분류 44-12-19-03

Catalog Content workflow

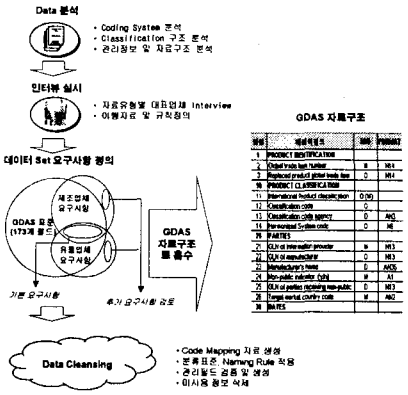


B2B integration technology should allow companies to route mission critical business Documents among diverse trading partners

eCatalog Standardization



Standardization process



GDAS 자료구조

번호	제품식별자	MM	PRODUCT
1	PRODUCT IDENTIFICATION		
2	Global trade item number	M	M14
3	Replaced product global trade item	O	M14
10	PRODUCT CLASSIFICATION		
11	International product classification	O (M)	
12	Classification code	O	
13	Classification code agency	O	AN3
14	Harmonized System code	O	M6
20	PARTIES		
21	GLN of international provider	M	M13
22	GLN of manufacturer	O	M13
23	Manufacturer's name	O	AN35
24	Non-public indentor (VIN)	M	A1
25	GLN of parties receiving non-public	O	M13
26	Target market country code	M	AN2
30	DATES		

GDAS

GDAS(Global Data Alignment System)

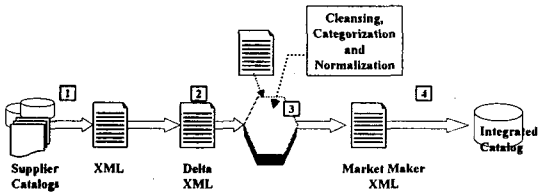
국제 상품코드관리기관(EAN International/UCC)에서 Global 표준 기반으로 각국의 전자카타로그 연계 및 호환성을 위해 개발한 전자 카탈로그 의 국제 표준 데이터 집합임 (12개 그룹으로 정의되며, 173개 데이터 필드로 구성)

GDAS 구조

• Product Identification	• Product Classification	• Parties	• Dates	• Description	• Measures
GROUP 01 EAN/UCC-8, UCC-12, EAN-13,EAN/UCC-14 (2개 필드, Unique Key로 사용)	GROUP 10 UN/SPSC, HS,분류코드 관리 기관 (4개 필드)	GROUP 20 ISP 3166 Code(국가 코드), GLN(Global Location Number) (6개 필드, 상품정보제공자 관련 정보)	GROUP 30 CCYYMMDDHHMM (6개 필드, 상품 출시 일자, 거래 가능일자, 유효변경일자 등)	GROUP 40 Product Name, Lang.(ISO 639), PLU(Price Look Up) (13개 필드, 상품/브랜드/그룹 명 등)	GROUP 60 ISO Packaging Standard, UN/ECE Recommendation 21 (25개 필드, 상품규격,측정단위 등)

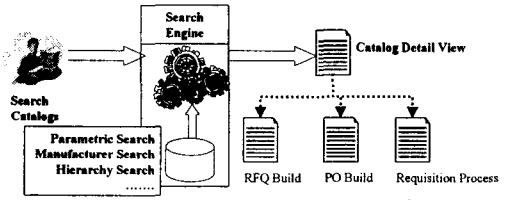
• Packaging	• Commercial Data	• Handling &Hazardous	• Product Hierarchies	• Attributes	• Packing Configuration
GROUP 90 ISO 639(기술언어), UN/ECE Recommendation 21 (10개 필드, 모질재질 등, 재질, 포장재질 코드 등)	GROUP 110 ISO 639(기술언어), UN/ECE Recommendation 21 (10개 필드, 가격, 가격 경정단위 세율등)	GROUP 130 UN/ECE Recommendation 21 (3개 필드, Hazard 코드, 위험분류,취급정보 등)	GROUP 140 GTIN(Global Trade Item Number)(3개 필드, Base Unit, GTIN Next Level 등)	GROUP 150 ISO 639(기술언어), UN/ECE Recommendation 21 (21개 필드, 완산자, 예상 코드)	GROUP 180 5개 필드, #of trade item in complete layer, 팔레트별 Trade Item수, 상품 적재 관련 정보등)

Catalog Content Integration



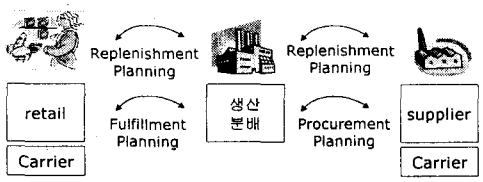
1. Data access and catalog publication in XML
2. Creation of delta file reflecting changed data
3. Cleansing, categorization and normalization of data
4. Integration of content into the catalog

eCatalog Usage



✓ Collaboration : CPFR

B2B



- 이슈와 초점이 ERP와 legacy SCM 차원에서 회사조직사이의 상호작용으로 이동하고 있다.
- 경쟁적인 차별화는 더 이상 지속적으로 유지될 수 없으며, 이것은 business process adaptivity(상호 프로세스의 적응도/통합)수준 안에서 결정되어질 것이다.

CPFR : Aligning Supply and Demand

CPFR is a collaborative approach to increasing product availability while reducing inventory across the supply chain.

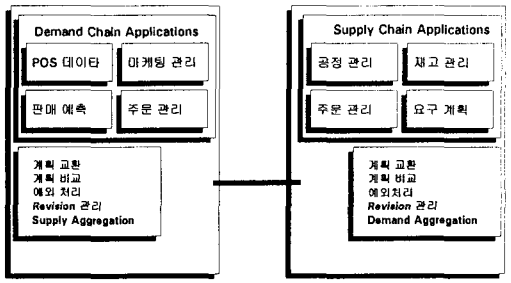
- Trading partners share forecasts and other supply chain data over the Internet.
- CPFR technology identifies exception conditions when:
  - Plans do not match
  - Forecast accuracy is out of tolerance
  - Overstock and understock conditions exist
- Partners resolve exceptions through negotiation and plan revisions.

Trading Exchange Weaknesses

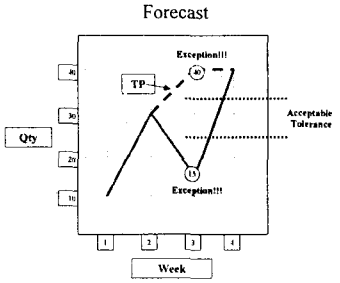
진정한 이익은 어디에 있는가?

- 거래 비용 절감?
  - 주문 실행 비용(Order Processing Cost)
- 연계 비용 절감?(Relationship Cost Reduction)
  - 거래상의 연계로 인한 비용/이익의 발생
- B2B 의 진정한 가치는 Collaboration 에서 찾을 수 있다.
- Collaboration은 경쟁의 한계를 극복 할 수 있다.

BSP Service Framework

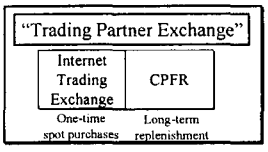


A Business Process Based On Exceptions

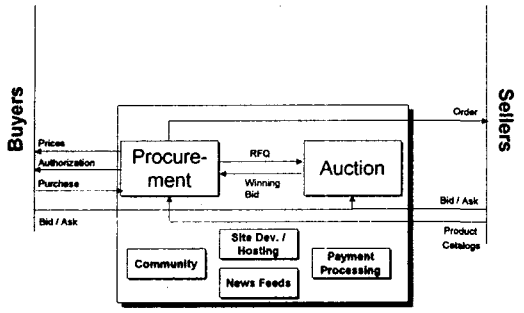


CPFR Boosts Trading Exchanges

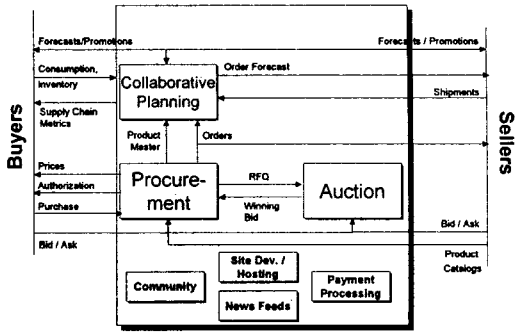
- **ITE's: aggregate buyers and sellers within a particular industry over the Internet**
- **TODAY: Spot purchases such as Maintenance, Repair and Operations (MRO) products**
- **FUTURE: All purchases including replenishment-based materials to support long-term collaboration of trading partners across the product lifecycle**



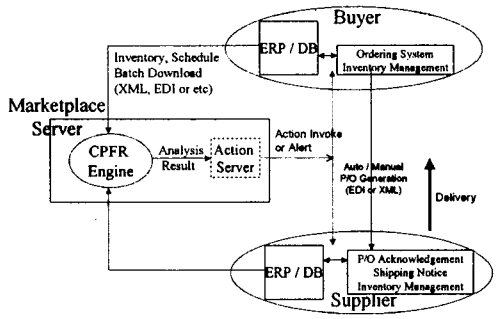
Current eMarketplace Model



Collaborative eMarketplace

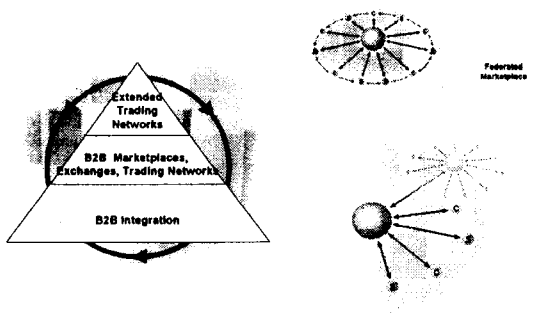


System Architecture Concept



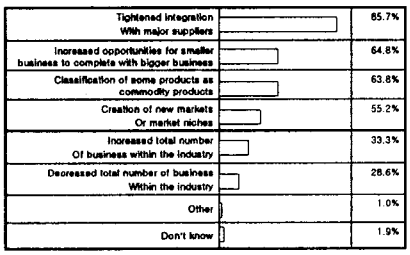
✓Process Integration

From Point to Point to Extended Trading Networks



Source: WebMethod, Inc.

Issues for eMarketplace Integration

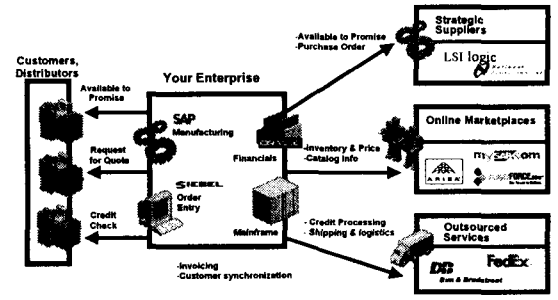


SOURCE : INFOWORLD DIGITAL EXCHANGE SURVEY 2000

Issues of eMarketPlace Integration

QUESTION	IMPLICATIONS FOR SUPPLIER	IMPLICATIOS FOR BUYER
What level of integration Does the exchange offer?	Most offer some document exchange. But only some offer full integration With back-end catalog and transaction system.	Some exchanges provide access only to raw data, other can integrate data directly into ERP or procurement applications
What integration platform Does the exchange use?	Popular integration tools don't necessarily provide data mapping between back-end applications and exchanges	Off-the-shelf applications are easier to integrate than legacy or custom-built programs
How long will integration take?	Links to customized or legacy apps could take months for each marketplace	Many buyers are holding off on integration until they develop a standard interface that works with multiple exchanges
Does the e-marketplace's integration methodology work For my business?	Some e-marketplaces use inflexible catalogs that don't account for subtle differences among industries	Some e-marketplace integration strategies are designed to fit the buying needs of just a few large players
Does the e-marketplace's integration methodology work For my back-end apps?	Some e-marketplaces have difficulty integration with customized and industry-specific catalogs and apps	Some e-marketplaces handle integration for only the most popular back-end application.

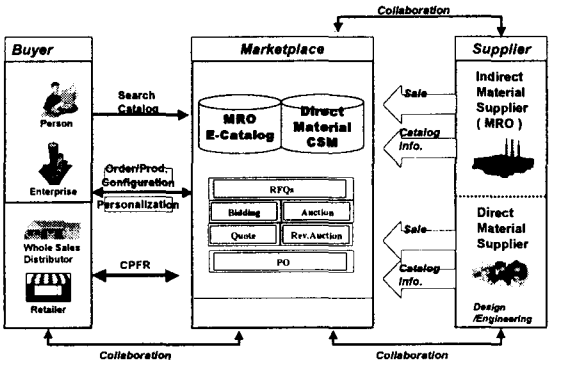
The B2B Integration Challenge



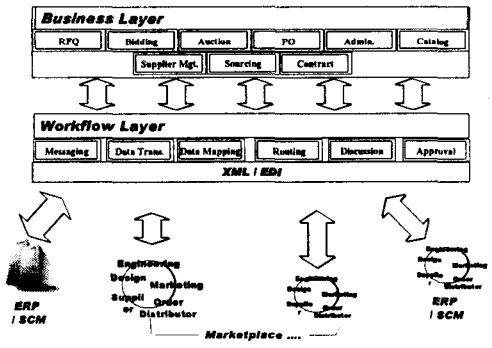
Source: WebMethod Inc.

✓ Application Framework

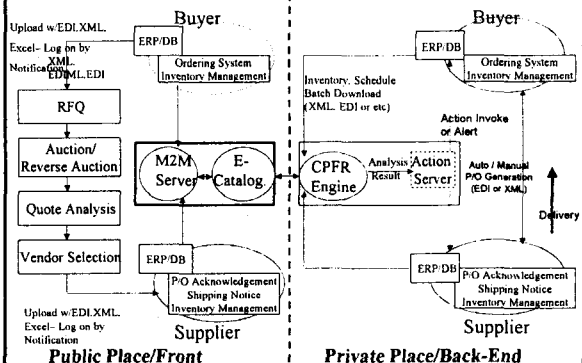
Application Framework (Overview)

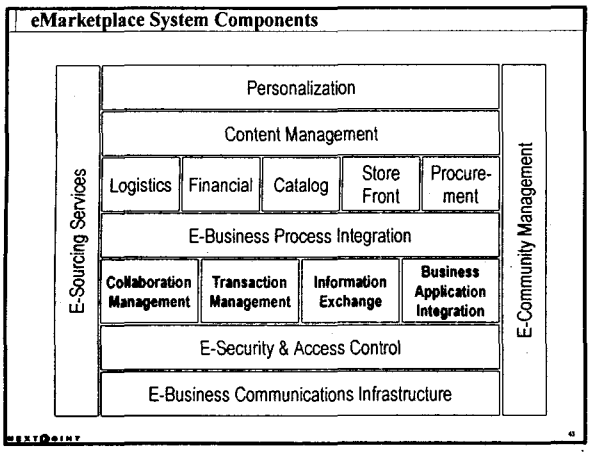


Marketplace Business Process



eMarketplace Business Architecture




eMarketplace System Components
E-Sourcing Services
Personalization
Content Management
Logistics
Financial
Catalog
Store Front
Procure-ment
E-Business Process Integration
Collaboration Management
Transaction Management
Information Exchange
Business Application Integration
E-Security & Access Control
E-Business Communications Infrastructure
E-Community Management