

企業間 電子商去來 標準
研究

XML/EDI

A study on the XML/EDI Implementation for the System
of B- to- B EC

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(Sun-Yok Song)**

(ABSTRACT)

1990

가

(value chain)

, 21 E-

가

XML/ EDI

, XML B-to-B

B-to-B

XML/ EDI

Key Word : XML/ EDI, B-to-B , E-

· B to-B XML/EDI	· B to-B XML/EDI
1. B to-B	1. XML
2. XML/EDI	2. B to-B XML/EDI
3. XML/EDI	3. B to-B XML/EDI
4. XML/EDI	· XML B to-B
· XML B to-B	1. XML
1. XML	2. XML
2. XML	

· 序論

*
**

가 “Web-Life Style”
 가 .
 가 1990 (WWW)
 가 (Hypertext) 가 HTML(Hyper Text Markup Language) . HTML
 (Hypermedia) ,
 가
 가 . HTML 가
 HTML
 가
 Markup Language)가 , XML(eXtensible
 1980 가 EDI
 EDI EDI ,
 EDI EDI 1990
 EDI 가 XML
 EDI 가 EDI
 XML/ EDI EDI XML
 가
 EDI , (“B-to-B ”)
 XML/ EDI , XML B-to-B
 B-to-B
 XML/ EDI

. B-to-B 電子商去來 XML/ EDI

1.

企業間 電子商去來 標準

XML/EDI

Kalakota & Whinston

가

가

.1)

< 2-1>

	Technical Factor	Business Application	User Group
(EDI)	<ul style="list-style-type: none"> · 가가 (VAN) · EDI 	<ul style="list-style-type: none"> · (Transaction Processing) 	<ul style="list-style-type: none"> · : · :
	<ul style="list-style-type: none"> · (Intranet) · TCP/IP- (WWW) · E-mail 	<ul style="list-style-type: none"> · () 	<ul style="list-style-type: none"> · : · (,)
PC	<ul style="list-style-type: none"> · PC · LAN, ADSL 		<ul style="list-style-type: none"> · : PC · (,)
PC	<ul style="list-style-type: none"> · PC · LAN, ADSL 		<ul style="list-style-type: none"> · : · :
	<ul style="list-style-type: none"> · (Intranet) · TCP/IP (WWW) · HTML, · (Fare Wall) 	<ul style="list-style-type: none"> · , 	<ul style="list-style-type: none"> · : · :
()			<ul style="list-style-type: none"> · :

()

(B2C),

1) Kalakota, R., and A. Whinston, Frontiers of Electronic Commerce, Addison-Wesley Publishing Company(New York), 1996.

2 2

(B2G), (B2B), (C2G) (B2B EC)

가가 (VAN) EDI

VAN

가 (Technical Factor), 가

(Business Application),

(User Group) < 2-1>

2. B-to-B

1996 B-to-B US21.9 \$ 2000 US600 \$

1998 US48 \$, 2000 US1,112 \$가

(Firewall), (Authentication), , PKI(Public Key Infrastructure)

1996 US6.7 \$ 2000 US55 \$

가 , EDI

B-to-B EDI 가

EDI

80% B-to-B

CALS/ EC , (가 , , , ,

8) , ,

JECALS , (ANX)

가

2,400 1 5,000 , 30%

가

B-to-C

B-to-C EU

'99 1 377

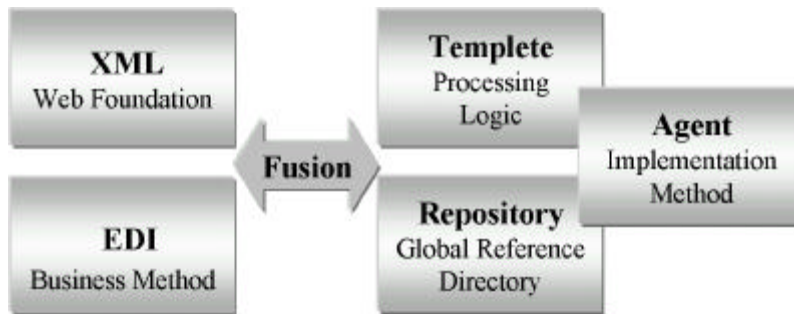
121 가 , 가

2 2

EDI 가 , EDI . 1998 3
 ISO8879 SGML XML(eXtensible Markup Language)
 XML/ EDI 가 .
 XML/ EDI EDI(VAN/ EDI, HTML/ EDI)
 EDI 가 .⁴⁾
 가
 , , , , , , XML/ EDI

XML/ EDI
 XML EDI
 XML/ DTD , XML 가
 XML/ EDI .
 XML
 , EDI
 가 EDI XML/ EDI
 가 (< 2-1>).

< 2-1> XML/ EDI



XML
 XML XML/ EDI . XML SGML HTML
 . XML

4) MicroSoft, "XML Scenarios,"(<http://msdn.microsoft.com/xml/scenario/intro.asp>).

企業間 電子商去來 標準

XML/EDI

XML EDI .
 EDI
 EDI XML/EDI EDI 100%
 가 EDI
 (Templates)
 XML 가
 XML
 , XML DTD
 DTD 가
 가 DTD
 (Agents)
 EDI
 가
 DTD
 (Repository)
 EDI BSI BEACON
 BSI BEACON EDI
 BEACON
 EDI , DTD
 가 5)
 XML/EDI
 EDI 가
 가 EDI
 XML/EDI 가
 XML XSL(eXtensible Style Language) DTD(Data Type Definition)

5) , “ EDI XML , ” , 1998.

2 2

XML, DB, XSL
XML/EDI XML VAN/EDI 가
XML/EDI XML/EDI
EDI XML/ DTD
XML/EDI VAN EDI
XML DTD
XSL Java ActiveX
XML 가 가
XML/EDI
EDI
XML
e- SCM,
EDI

< 2-2> VAN/EDI, HTML/EDI, XML/EDI

	VAN/EDI	HTML/EDI	XML/EDI
	EDI S/W X.25, PSTN	Web Browser Internet(TCP/IP)	Web Browser Internet(TCP/IP)
/	가	가	가
/			

4. XML/EDI

XML/EDI EDI 가 , ,
가 XML/EDI
가
6), W3 7), XML/EDI 8), CEN/ISSS/ XML/EDI
9) XML/EDI
10), EC 11)

6) <http://www.commerce.net/pojects/X12-XML>
7) <http://www.w3.org/Ecommerce/ovrview-xmldefact>
8) <http://www.xml/edi.com>
9) <http://www.ccnorm.be/iss/ work-sop/ec/xmledi/issxml.htm>

XML/ EDI

XML/ EDI

OFX(Open Financial Exchange)가

OFX

XML

ICE(Internet Content and Exchange)

OTP(Open Trading Protocol),

Business Language),

Internet) XML

XML/ EDI

(EDMS)

, E-mail

, ,

W3C

(WIDL), XML

가

. XML/ EDI

B-to-B

1. XML

가

XML

B-to-C

,

. e-

가

e-

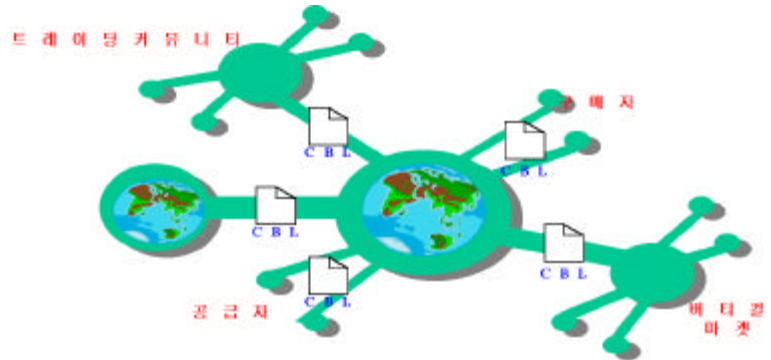
10) <http://www.ktnet.co.kr>

11) <http://ecommerce.dacom.co.kr>

2 2

(seller) (buyer)
 , B-to-C B-to-B가 e-
 . B-to-B가
 가 ,
 .
 가 가 . 가
 가
 가
 B-to-B 가 가
 . 가
 가
 가 가
 가 가 EDI XML/EDI
 가 (< 2-1>).

< 3-1> 社



HTML

XML

(manufacturer)

XML

e-

. e-

XML

2. XML

CBL

CBL(Common Business Library) B-to-B

XML

. CBL

. CBL

. CBL

XML

SOX(Schema for Object-Oriented XML)

. SOX

가

CBL

CBL

CBL

BizTalk, cXML

BizTalk

BizTalk

. BizTalk

XML

(XDR)

가

Wrapper

cXML

cXML(Commerce XML) Ariba

40

XML

ICE

ICE(Information and Content Exchange)

(Syndicator)

2 2

(Subscriber)

XML (Element/ Attribute) . ICE
가

ebXML
ebXML(Electronic Business XML) UN/ CEFACT OASIS
XML

3. XML E-

XML B-to-B
B-to-B

B-to-B

. 3 (CRM:Customer Relationship Management)

B-to-B

Votal(Vertical Portal)

가

B-to-B

Customizing

, 가

가 SCM

e-Collaboration(e-)

가

(linear)

가

e-

e-

, e-

e-

e-

e-

가

가

社

. XML

3 GM, , 가
"MarketSite"

. MarketSite

e-

XML

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XML/EDI

MarketSite e- e- e- " " .
 , SAP mySAP.com 가 , Ariba Ariba Market Suite,
 , e- .
 XML B-to-B 가 가 , e- e- .
 e- 가 가 , e- .
 , (data warehouse) , ,
 . e- 가 가 .
 XML EIP(Enterprise Information Portal),
 가 . Data
 Channel 가 XML PML(Portal Markup Language) , 09
 . NEC社 "Smart Knowledge" XML
 . Smart Knowledge . Smart Knowledge Collection ,
 XML Knowledge View,
 . Smart Knowledge Collaboration, Personalization
 Customization .

. B-to-B

XML/ EDI

1.

12)
 Star Model
 EDI XML/ EDI가

12) XML/ EDI XML 가 , web
 EDI (XML/ EDI Group, "XML/ EDI Transaction
 Models," <<http://www.geocities.com/Wall Street/Floor/5815>>).

가 EDI XML 가 XML/EDI

Adhoc Model

Adhoc
(Electronic Enterprise)

Hybrid Model

Adhoc Model , Star Model

13)

XML/EDI

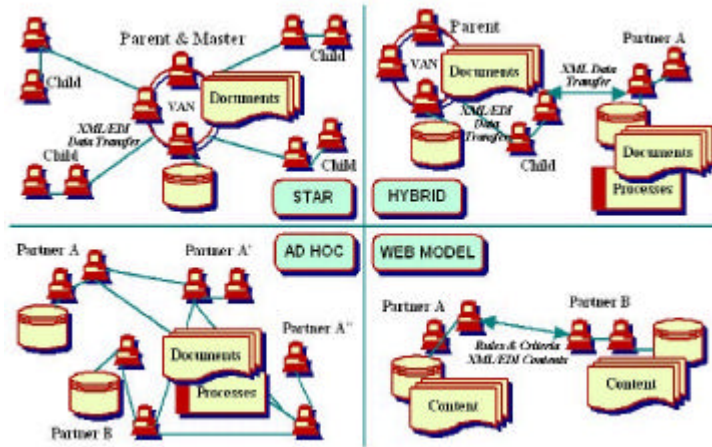
Web Model

가 가 가

RFQ(Request For Quotations)

가

< 4-1> XML/EDI



XML/EDI

. XML EDI

DTD

. DTD DB

(Schema)

13) <http://www.amazon.com>

. DTD가 XML ,

DTD(Document Type Definition)

DTD

(brochures), ,

가

가

가

DB

DTD

DTD

(element)

(attribute)

DTD

. DTD

, (element)¹⁴,

(Attribute)¹⁵, ,

XML

DTD

XML

. DTD

. XML

XML

XML

. XML

. , XSL

XML

2.

EDI

14)

15)

(Default Value)

XML/ EDI
가 . XML/ EDI

XML/ EDI 16)

EDI
가 , , XML/ EDI 가

X-Machine

URL XML . X-Machine
XML

Data Map

XML (DTD, ,) XML
(

XML Web

EDI to XML

VAN/ EDI XML XSL XML
XML . XSL 가

EDI 가 . EDI 17) XSL
(API) 가 . EDI 가 XML XSL

BizTalk XML

XML/ EDI

XML/ EDI : XML

XML/ EDI :

16) XML/ EDI

XML/ EDI

XML/ EDI

가 , EDI
XML 가

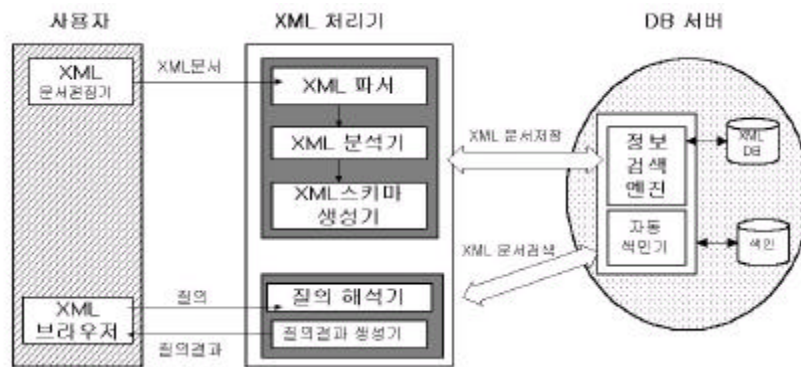
17) EDI EDI
EDI XML
XML

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XML/EDI

Messaging Agent : XML/ EDI , XML/ EDI
 EDI .
 Global Repository
 XML EDI , XML, XSL .
 XML XML , XML XML XML
 (< 4-2>). XML
 XML XML

< 4-2> XML



Firewall

가

B-to-B

SSL(Secure Sockets Layer) RSA

ERP

B-to-B

異 ERP

WIDL(Web Interface Definition Language)

가 가

가 WIDL XML

Gateway

XML/ EDI

HTTP

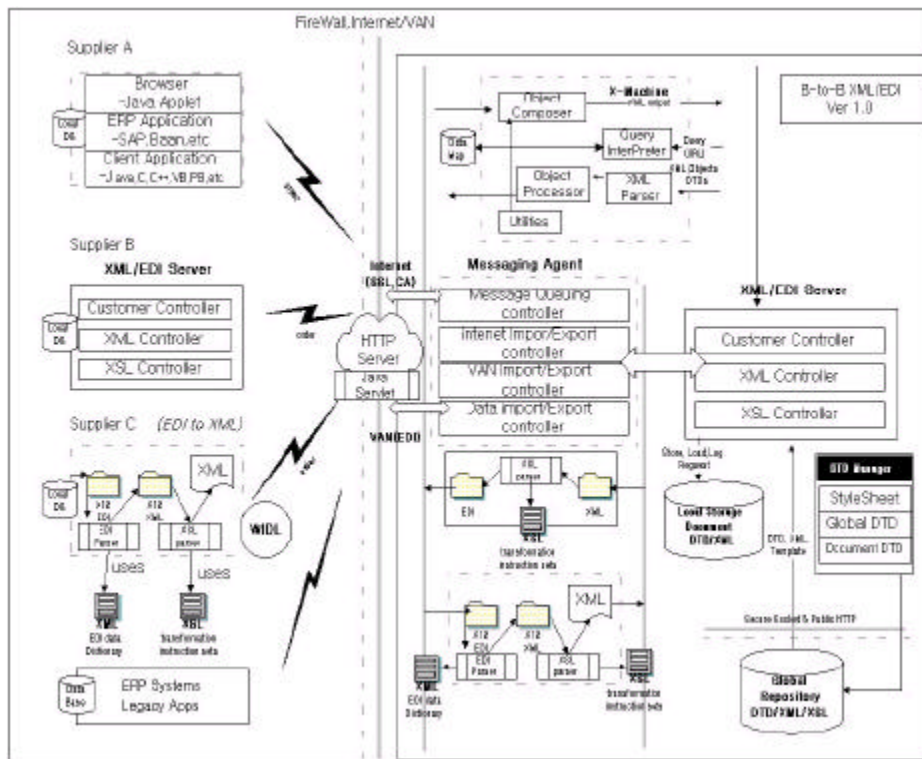
. HTTP Gateway ()

XML/ EDI

Open Client
 B-to-B 가 ,
 Builder Java Visual Basic Power
 DTD Manager
 EDI DTD XML , XSL
 XML 가

3. B-to-B XML/EDI

< 4-3> B-to-B XML/EDI



. 結論

EDI 1980 가
VAN/EDI HTML/EDI EDI , EDI S/W
1990 EDI 가
XML/EDI B-to-B 가 가
XML VAN/EDI HTML/EDI 가 ,
(E-collaboration) 가 . 社 MarketSite, SAP社 mySAP.com
, NEC社 Smart Knowledge XML B-to-B
B-to-B XML/EDI
XML/EDI
, XML EDI 가
, XML/EDI 가
가 XML/EDI (SI) B-to-B
, 가

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2 2

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<http://ecommerce.dacom.co.kr>

<http://www.ccnorm.be/iss/ work-sop/ ec/ xmledi/ isssxml.htm>

<http://www.commerce.net/poiects/X12-XML>

<http://www.w3.org/Ecommerce/ovrview-xmledifact>

<http://www.ktnet.com>

<http://www.xml/edi.com>