EDI Taxonomy   EDI

*,   **,   ***

*,** LG-EDS   , CALS & CIM   , ***   ,
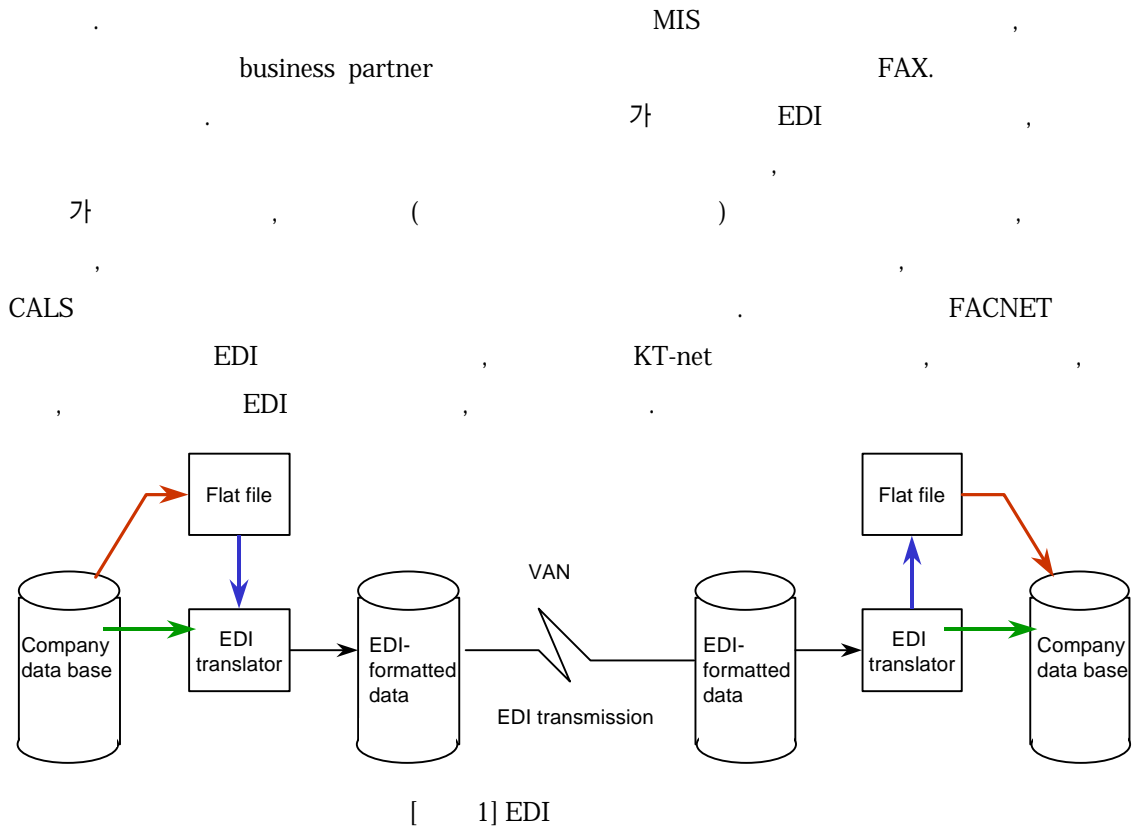
Abstract

EDI(Electronic Data Interchange) has been used to automate the inter-organizational business trans-actions for a few decades. Originally it hired the OSI X.400 as its protocol and required separate pri-vate network, so called VAN. Nowadays Internet has expanded and been ubiquitous in the help of World Wide Web. At the same time, EDI has reached to adapt Internet technology for their network protocol. Therefore, today there are many technical forms to act EDI and each has suitable business trading environment. This paper deals with what EDI forms are suitable to what business trading environments. For this purpose, EDI technology has to be classified first, and the business situation should be examined. Proper choice of EDI technology to special business situation will help the com-petitive advantage in today's threatening business environment.

1.

EDI   OSI X.400
EDI(Traditional EDI)   WEB, SMIME, FTP   Internet EDI
.   .   CALS   (EC)
,   EDI   ,
EDI   (bargaining power)   (first mover advantage)
.

,   ,   ,   EDI
.   EDI   ,
/   ,   EDI   (Taxonomy)   .
EDI   ,

.

2. EDI(Electronic Data Interchange,   )

EDI

.   EDI   FAX,

.   MIS   ,

business partner   FAX.

.   EDI   ,

,

,   (   )   ,

,   ,

CALS   .   FACNET

EDI   ,   KT-net   ,   ,

,   EDI   ,   .

[1] EDI

3. EDI

-   **OSI X.400   Traditional EDI**

EDI   ,   EDI

.   EDI   Traditional EDI   .

VAN(Value Added Network)   , EDI

. VAN   ,   VAN

. EDI   UN/EDIFACT   ,

,   ,

.   ,

,   ,   .   ,

Traditional EDI

.

-   **S/MIME   Internet EDI**

EDI   .   MIME(Multipurpose Internet

Mail Extensions)   , S/MIME(Secure MIME)

,   EDI   .

, VAN   .   ,

,   COTS(Commercial Off the Shelf) S/W(Translator, Mapping S/W[1])

.   ,   .

- **S/FTP   Internet EDI**

    S/MIME   Secure/FTP   .

    Traditional EDI   . S/MIME   .

        http://www.ecweb.com/, *Electronic Commerce Systems*   .

- **Web EDI**

                              ,   , EDI   ,

                              .   SSL(Secure Socket Layer)   .

    Web   ,   Web browser   ,

        .   Web Server   ,

            .   ,

                              ,   .

        ,   Traditional EDI   ,

                                                      . 　, Web

                    ,   (potential trading partner)   .

- **Hybrid EDI(Web EDI + Traditional EDI)**
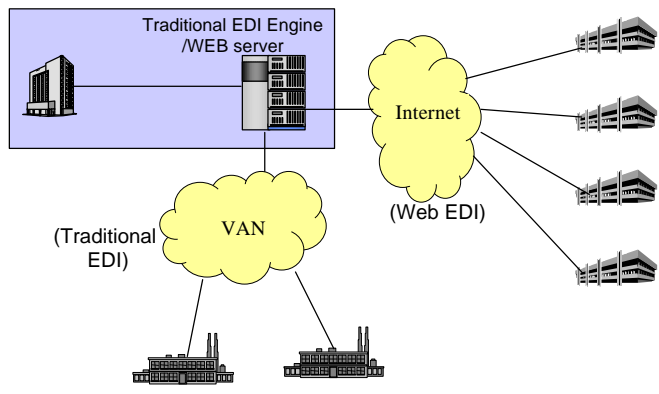
        Web EDI   Traditional EDI   ,

    Web EDI,

                        Traditional

    EDI   .

-                    **(Web EDI)**

Traditional EDI Engine /WEB server

Internet

(Web EDI)

VAN

(Traditional EDI)

[2] Hybrid EDI

                    .   Web EDI   VAN(   )

                              Broker   .   Broker   Web

                Broker   (catalog)   Web   .

    Buyer(Supplier)   ,   (buyer)   (   )

---

[1] EDI   Mapping S/W   Translator S/W   . [1]   ,   DB

        ,   DB   Mapping   ,   flat file   EDI   format

                                Translator   .

.

4. Business Trading Situations

- **Long term & Close relationships b/w trading partners vs. Short term or Ad hoc relationship**

,   . .

- **Small firms vs. Medium or Large firms**
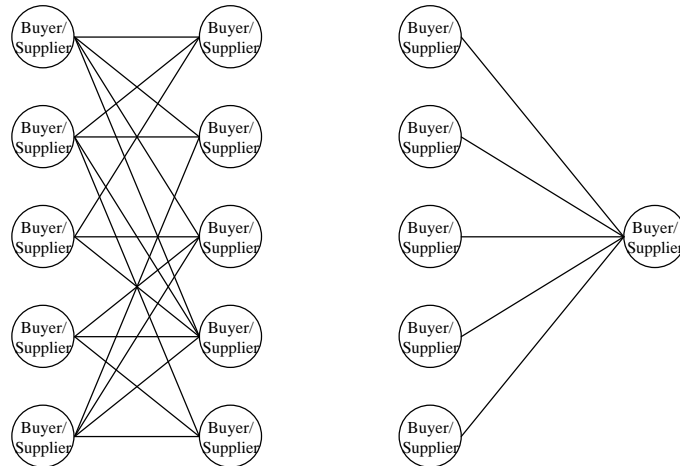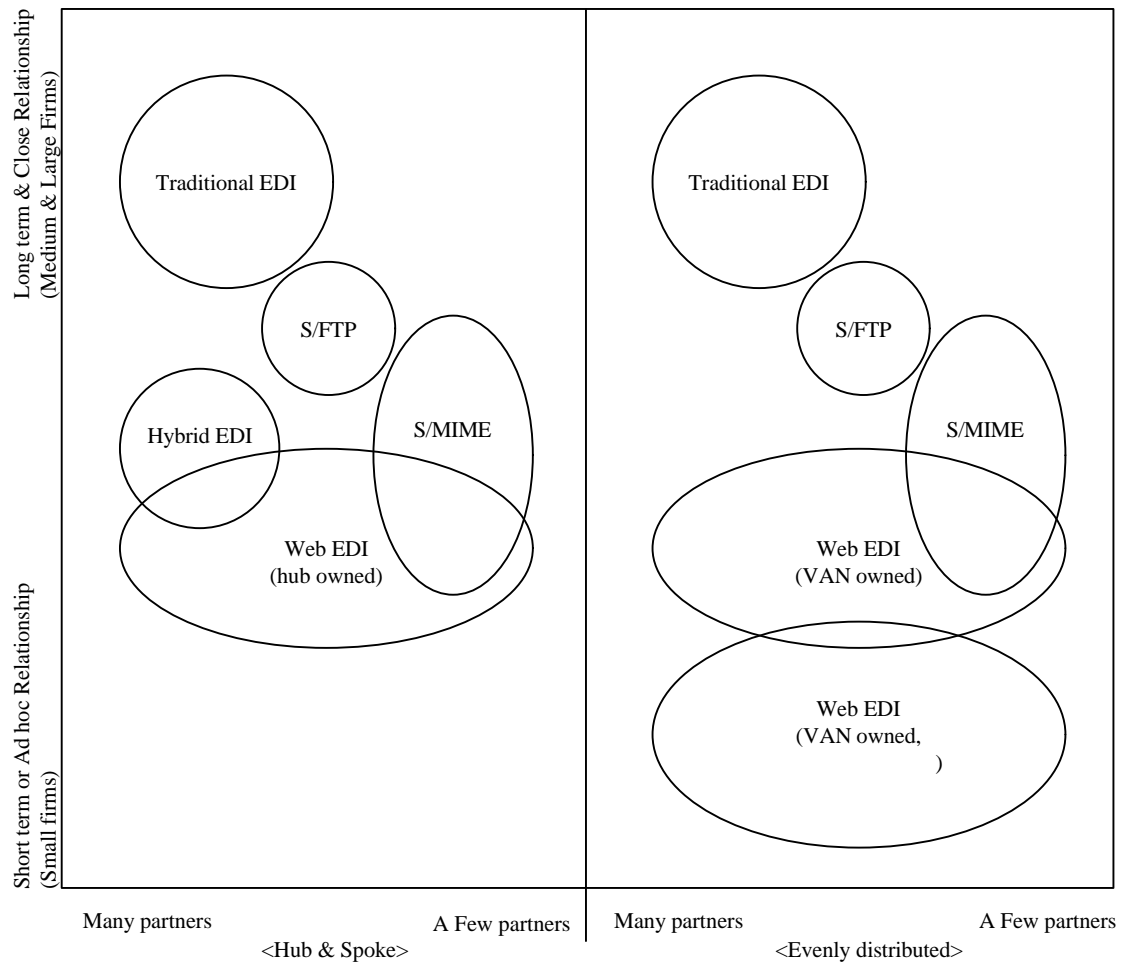
.   ,   , Traditional

EDI   .   ,

.

- **Hub & Spoke vs. Evenly Distributed**

Hub & Spoke

.

.

,   (bargaining power)   hub   .

,   Trading partner   Evenly Distributed

.

,   .

[3] Hub & Spoke vs. Evenly Distributed Business Situation

- **. Many partners vs. A Few partners**

,   .   ,

.

5. EDI Taxonomy   EDI

3   4   EDI   Business Trading Situation

EDI Taxonomy   . Y   Short term or Ad

hoc Relationship   ,   Long term and Close Relationship   . X

<Hub & Spoke>   <Evenly distributed>   .

.

4

[4] EDI Taxonomy

, Traditional EDI

, Size , ( )

. Web-EDI(hub-owned) , <Hub & Spoke> , (

) , ( ) ,

, . ,

Web EDI , ( )

, Web , ( )

. < > .

[1] EDI Taxonomy

Buz. Configuration EDI	<hub&spoke> <evnly distd>	# of partners	Degree of re-lationship	Scale of Firm	Remarks
Traditional EDI	both	So Many (esp. traffic)	Long term & Very close	Large/medium	VAN needed

5

S/FTP	both	Many	Long term & close	Medium	VAN needed Less commer-cial yet
S/MIME	both	Medium	A little close	Medium or small	No VAN needed Less commer-cial yet
Web EDI(hub owned)	<hub & spoke>	One hub Many spoke	Short term or Ad hoc	Hub: large Spk: small	No VAN needed
Web EDI(VAN owned)	<evnly distd>	Many firms	Short term or Ad hoc	Generally small	VAN needed
Web EDI( )	<evnly distd>	Many firms	Short term or Ad hoc	Medium and small	VAN needed
Hybrid EDI	<hub & spoke>	Many firms	both	Large/Medium/Small	Partialy VAN needed

, Hybrid EDI , <hub & spoke> ( ) (
) .

. Traditional EDI(VAN) ,

Web EDI .

6.

EDI , EDI
, .

, *EDI* , , 1992

, *KEB 93-2* , , 1993

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http://www.harbinger.com/, *Harbinger Web-Based EDI*

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http://www.ecweb.com/, *Electronic Commerce Systems: "S/MINE vs. FTP: Which is better for Internet EDI?*

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