

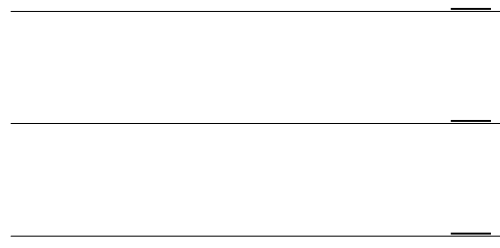
-B2B

-

-B2B

-

2001 6



. 88

! 가

가

가

가

3

2001. 7

.....

•	.....	1
1.	.....	1
2.	.....	5
3.	.....	7
가.	.....	7
.	.....	9
•	.....	11
1.	.....	11
가.	.....	12
.	.....	14
2.	.....	17
가.	.....	17
.	.....	20
.	.....	23
3.	.....	26
가.	.....	27
.	.....	30
.	.....	39
.	.....	53
•	.....	58
1.	.....	58
가.	.....	59
.	.....	61
2.	.....	64
가.	.....	64
.	.....	68

·	.....	78
·	.....	87
·	B 2B	94
1.	.....	94
2.	.....	96
가. 4C	.....	96
· Timmers	.....	100
·	.....	102
3.	.....	104
가.	.....	104
·	.....	115
·	.....	122
·	.....	125
·	.....	132
1.	.....	132
2.	.....	136
·	.....	139
Abstract	.....	143

1.	()	13
2.		15
3.		15
4.		21
5.		21
6.		23
7.	Timmers 11가	41
8.		69,70
9.		71
10.		72
11.		78
12.		82
13.	4C	99
14.	Timmers	102
15.	&	110
16.	&	111
17.		117
18.	&	121
19.	Medigate	123
20.	()	128

1.	.....	12
2.	(%)	13
3.	.....	15
4.	.....	16
5.	가	31
6.	.....	37
7. e-	.....	40
8. Timmers	.....	45
9. e-	.....	49
10.	.....	73
11.	.....	108
12.	.....	109

4-5

가

1999

2001

가

100

3

1

2001

4

1999

6

2001

4

B2B,

B2C

e-

가

43

, 51

, B2B가 42

72%, B2C 16 28% 2000
2001 4 34 60%가
가
5 13 ,
11 , 13 , 9 ,
6 50%
가
ASP
, 14 , 29
45% ,
2 4 C Timmers
, 4 C
Contents 5 , Community 7 , Commerce 32 ,
Connectivity 10 가
가
Timmers 11가 3가 가
14 , 가 30 , 15
가 가가
3 5

low commitment , , ,

가 . , 가 가 가
e- 가 e-

가
e-detailing
가 가
. 5 가 가
가 ,

1, 2, 3

가

.

1.

가 .

가 21

, ,

,

가

.

,

,

가 .

,

,

,

.

가

가

.

가 가

가 가

가

.

가

가

2-3

가

가

가

가

가

가

가

가

가

가

가

, 2-3 (, 2000)
가 1 ,

2000 5 100 가
2000 9 3,416 가 (.
, 2000).

가

가

가 1, 2 ,

2000
e- 가
가
(, 2000)가
(
, 2000)
(
, 2000; , 2000; , 1999; , 1998)
가 (, 2000; , 2000; , 2000)
(
, 2000; , 2000; , 2000; , 1995; , 1998)

가 , 가

가

,

가

가

가

2.

1999

2000

(2001. 4)

60%

B2B

B2'B' 'B'

, 가

B2C

B2B

(2001. 4)

3.

가.

, ,
B2B, B2C
1999 6
2001 4
, e-
2000 9 3,416
가 100 가 32

(, 2001)

가 ,

. 2001

2-3

1

4

,

43

51

.

1

,

B2B

(2001. 4)

,

,

.

,

가

2

.

가

,

,

50%

.

.

B2B

가

가

가

(Yin 1989)

(case study)

가

,
(Yin 1989).

“ ”

1.

1969

ARPANET

TCP/IP

1991

WWW (Word Wide Web)

1993

가

가

가

가

가

가

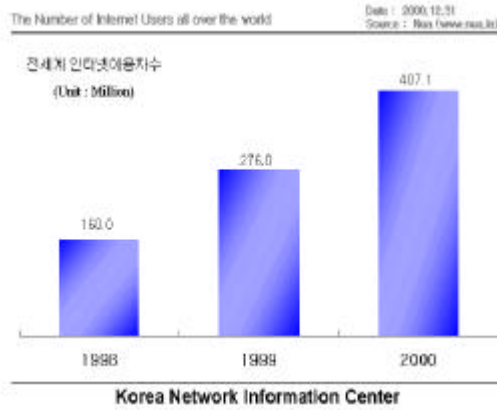
가.

2000

2000 12 Nua (<http://www.nua.ie>)

4 7 (1), eTForecasts(<http://www.etforecasts.com>) 3

7 5 .



1.

1998 8 7 9 가 2000

9 1.9 가 1 5 (eTForecasts, 2000)

, 가 2000 3

33%가 2 7 5 . ,

2000 12 1 9 4 (:44.7%)

, 가 2 ,

6-7 .

Nua 가 , 1
 가 26% (104
 9) 41% (167
) 1
 2005 가 가
 27% (113)
 4% (16), 0.8% (3), 0.6% (2
 4) (1)(2).

1. ()

: Nua , 2000.12

가	()
	167
	113
	104.9
	3
	2.4
	16

백분율 (%)
 전세계 인터넷이용율



2. (%)

가 2000 12 1999 가 가
(KRNIC, 2001).

2000
2000 400 가
[2001]

가
(KRNIC)

KRNIC가 2000 12
' 7 ' ' 1 ' 44.7%,
1,904 (3).
2000 8 3 6.2%
264 가 2000 3 2000 8 가

가 가
 가 (KRNIC, 2001)(2).

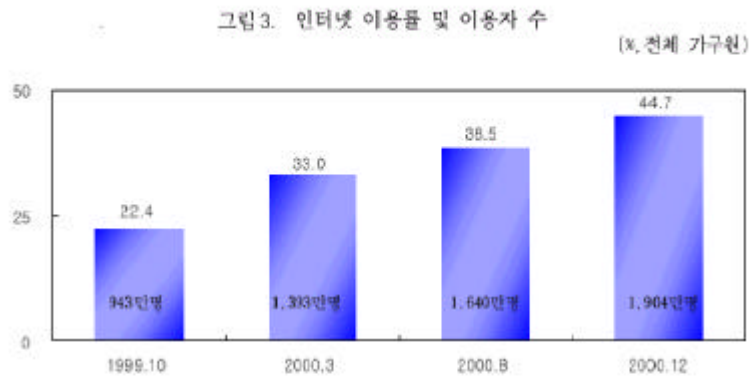


표 2. 인터넷 이용률 및 이용자 수 (%, 전체 가구원)

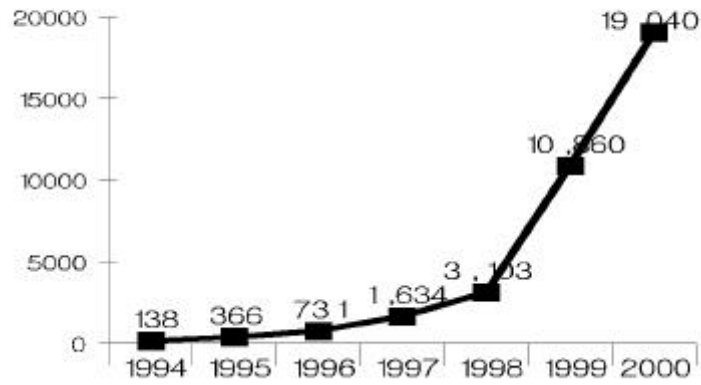
	1999.10	2000. 3	2000. 8	2000.12	2000.8 대비 증가
이용률	22.4%	33.0%	38.5%	44.7%	6.2%p
이용자 수	943만 명	1,393만 명	1,640만 명	1,904만 명	264만 명

가 1994 138 , 1995
 366 , 1996 731 가 가 1998
 가 1998 3,103 1999 1,086 , 2000 1,904
 가 (3, 4).

3.

(: 1,000)

연도	1994	1995	1996	1997	1998	1999	2000
이용자 수	138	366	731	1,634	3,103	10,860	19,040



4.

1,083 , 38.6% 821 50.9%

가 PC 2000 12 71.0% 70.1% 가

가 (LAN)

가 59.5% 가 ADSL(35.4%),

(25.3%)

가

(KIEP)가 ‘

가 ,

24.5% (49.2%), (31.7%) 3

가 가

(<http://www.nielsen-netratings.com>)

가 . . 21 15
1 가
16 17 16 가
2 2

가 2000 51 7354
48 3700 가

(KRNIC, 2001).

가 1995

2.

가.

EC(Electronic Commerce) 1989

1993

가 EC .

20 ,

EDI(Electronic Data Interchange)

/ , ,

/

가
Speed)

lead time

CALS(Commerce At Light

1990

가

(world wide web)

가

가

, ,

.

. 1994

(Electronic Shopping Mall)

가

가

. 1996

.

,

가

가

WTO

(borderless economy)

(borderless competition)

,

가

(, 2000).

.

B2B

30-35%,

31-33%,

28-31%

가

1.5 가

(16%)가

,

가

0.2% - 0.4% 가

(, 2001. 5).

가 ,

가

,

, , , ,

, , , ,

.

OECD(1997), European Commission(1997)

, ,

, 1999

7 [] ‘

가

,

.

‘

가
(Cyber Space) (,
2000) .
e- ' ,
,
(, 2000).

,
.
2000
1999 9 1,940
2000 89.4% 가 17 4,169 , 2001
30 2003 1
가 (, 2001)(4).
2000 1999 GDP 11%
1,050 ()
1999 0.979% 2000 1.671% 170% 가

939 1,050 110% 가

B2B(Business to Business)

46.9% 8 1,781 , B2C(Business to Customer) 3
 186 (17.3%), B2G(Business to Government) 1.25
 2 , 6 192 . 1999
 B2C 2000
 B2C B2B 가

(5).

4.

	2001	2002	2003	2004	2005
()	29 3,414	48 5,602	78 7,306	123 9,655	187 6,856

5.

	1999	2000
(%)	0.979	1.671
()	9 1,949	17 4,167
B2B	4 7,104	8 1,782
B2C	2 1,731	3 187
B2G	1,507	2,030
	2 1,623	6 0,192

:

, 1999 1,580 2000 1,800 가
 , 1999 7,596 2000 199.4% 가
 2 2,745 , 2001 4
 (, 2001).
 82.8%
 7.9% , 3.9% .
 가 47.5% ,
 가 52.5% .
 1999 9 1,948
 , ,
 가 가
 . 2000 17
 4,166 , ,
 1999 가 가 ,
 1999
 가 ,
 가 17.992% ,
 0.129% 0.508% .
 12 7000
 (3 8000) , (3500) ,
 (2100) , (1700) (6).

6.

(: %,)

	(%)		()	
	1999	2000	1999	2000
	1,918	2,008	6,576,161	12,724,558
가	0,003	0,000	842	0
	0,066	0,091	48,745	101,551
	0,518	1,875	2,120,660	3,835,934
	0,000	17,992	0	355,871
	0,504	0,447	278,403	211,173
	0,717	2,619	167,060	177,402
	0,000	0,000	0	0
	0,000	0,004	0	0
,	0,129	0,508	3,022	10,234
	0,979	1,671	9,194,893	17,416,723

:

.

가 B2B 353 'B2B

78.6%가 가 ,

16.6% .

4.8% 가 ,

(, 2001).

IT B2C B2B

가

가가

가

B2C

B2C

CRM(Customer Relationship Management)

B2B

B2B

SCM(Supply Chain

Management)

2-3

가

가

가

가

2003

가

1

(, 2001).

B2B

가 가

1 (40.1%)

6

(32.2%)

가

B2B

72.3%

,

B2B 가
(, 2001).

· , ·
(ERP EnterpriseResourcePlanning),
(SCM)

가

B2C 2001 1/4 5,253
2000 4/4 362 가(7.4%) ,
가 2001 3 1,915 가(3.0%)
가

(, 2001).

2003 4
2 가 가가 , 0.2-0.4%
가 가 , (. .
) 18 , 25 , 6
50 .
가

가가 가

21

가

3.

1990

B2C

CSN

2000

B2B가

2003

87%

B2B

가

e-

가

가

가

가

가

가

가 가

2000

70

가

가

가

가.

가

가

. Timmers

(1)

(2)

가

(3)

가

(Timmers, 1998).

가

가

가

(project feasibility)

가

가

가

가

가

가

가

가

가

- (1) B2C ,
B2B , C2C
- (2) (source of revenue) , ,
,
- (3) 1 1(1 to 1), 1
(1 to n), (n to n)
- (4) , , , ,
,
- (5) 가

1998

가

, 가
가 .

98 116 1999 1,200
, 99 463 가
25% 가 (. , 2000).

가

(Mahadevan, 2000),

Mahadevan

가

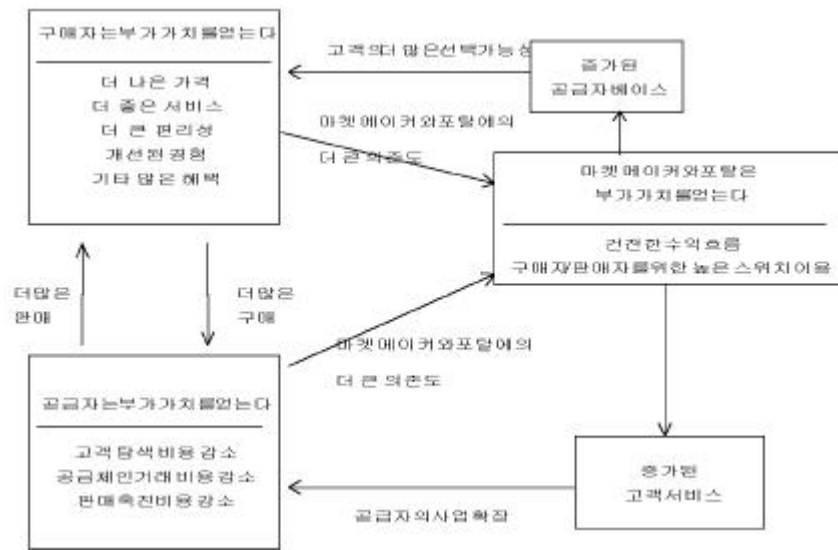
1) 가

가

가

가

B2B
가
(5).



: Business Models for internet-based E-commerce:An Anatomy,B.Mahadevan, 2000

5. 가

가
가 가

3

가
가

가

가

가

가

가

가

가

가

가가

가

가

가

. Priceline.com 가

가

가

가

. Free Markets Online inc

가

가

가 가

가

가

e

가

가

가

가

가

가

가

가

가가

가

가

가

가

가

2)

가

가

가

가

가

amazon.com

가

가

가

가

가

1 가

가

, AOL, CommerceOne, Agriculture

Online

B2C, B2B

가 가

0 가

가

가

가

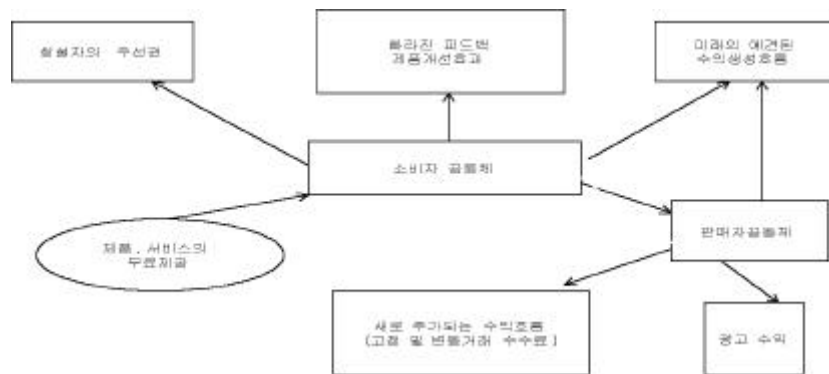
가

가

Hotmail Netscape
 가 . Hotmail
 e

Netscape Linux

(6).



: Business Models for internet-based E-commerce:An Anatomy, B.Mahadevan, 2000

6.

3)

가

3

가

Infomediary Metamediary

가가

/

가

가,

Del computers Cisco

(infomediation)

가

가 가

(meta mediation)

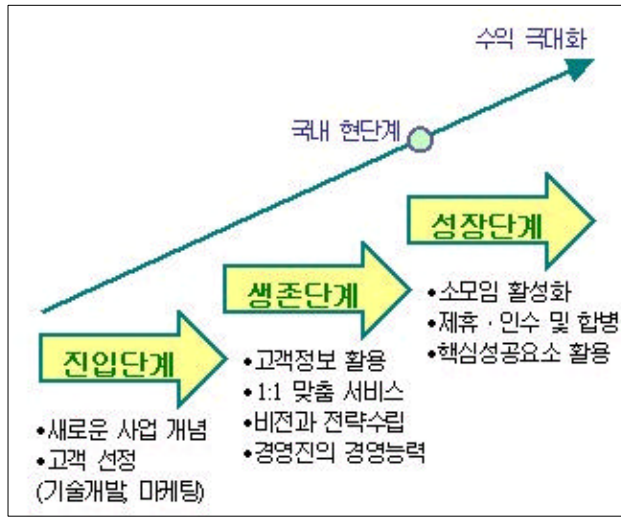
가 . B2B

가가

e-

가 가 (, 2001)(7).

7. e-



: , 2000. 13

가

가

Timmers

Rappa가

1) Timmers

Timmers

가 ,
 , 가
 가 ,
 ,
 가 .

Timmers 11가 (7).

7. Timmers 11가

	B2C	B2B
(e-shop)	0	
(e-procurement)		0
(e-auction)	0	0
(e-mall)	0	
3 (3rd party marketplace)		0
가 (Virtual communities)		0
가 (Value chain intergrator)		0
가 가 (Value chain service provider)		0
(Collaboration platforms)		0
(Information brokers)	0	0
(Trust providers)		0

: EC , , 2000

E - shop()
가

가 , ,
가 , ,

. B2C .

E - procurement()

EDI CALS

, 가, ,
가 ,
, , 가 ,
B2B

E - auction()

, 가
, , 가
가 . 가
가 .

E - mall()

e- shop

가

e- shop

3rd party marketplace(3)

가

가 가

가 ,

가 가 ,

Virtual communities(가)

가

가 가

가

Value chain service provider(가)

,
가

Value chain integrators(가)

가 ,

Collaboration platforms()

, ,

Information brokerage()

, 가

, Yahoo

DB

DB , DB , DB .

Trust and other services()

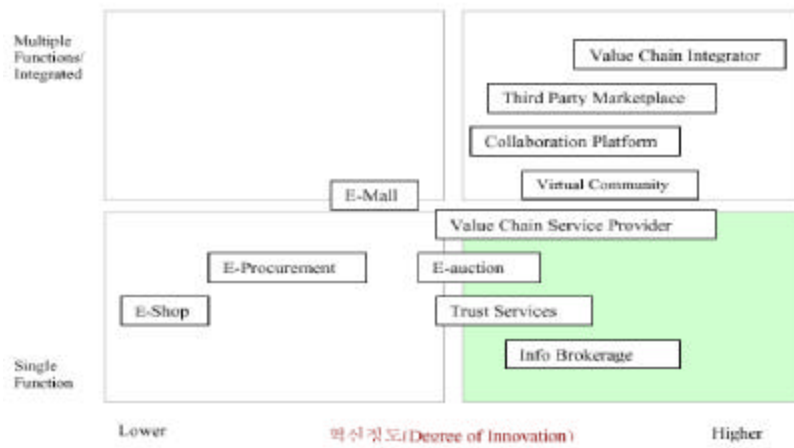
,

,

2) Timmers

Timmers (the degree of innovation) 가 (the extegration of functions) 가 . 가 IT 가 가 . 가 (, 2000)(8).

그림 8. Timmers(1998)의 인터넷 사업 모델 분류



: EC , , 2000

3) Rappa 9가

M. Rappa(1999) 9가

가

(Brokerage Model)

B2B, B2C, C2C

(Advertising Model)

e-mail

가

가

가

Gate way

가

(Informediary Model)

, 가

(Merchant Model)

가 가 ,
brick and mortar 가 .

(Manufacturer Model)

가

가 ,

가 ,

가 .

(Affiliate Model)

가

, purchase point click through
가
가 .

(Community Model)

. B2C B2B .

가 / **(Subscription Model)**

가 가
가 가 가 .

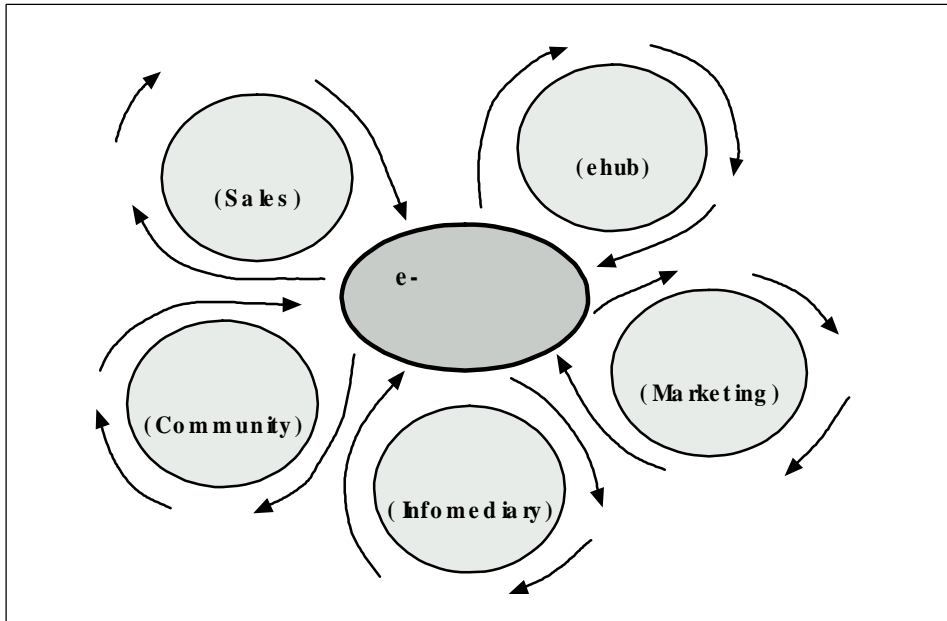
(Utility Model)

가 .

4) 3C(Contents, Community, Commerce)

3C(contents, community, commerce)

(9).



: e-Business System, , 2001. 3

9. e-

, ()

/ , ,

, ,

.

Contents

B2C

customer

, contents

Community

Community

Contents

Community

Commerce

Contents Community

가 , Community 가 (Critical Mass)

, Commerce(,)

가 .

가

가

Connectivity

ASP(ApplicationService

Providers)

가

5)

B2B

가

가

click and mortar

B2C

가

B2B

B2B

B2C

ERP, SCM

CRM

IT

B2B

가

가

가

3 가

가

가

1998 29

2002

500

가

가

(e-bay. Auction),

가

가

(B2B)

가

B2G, B2B, B2C, C2C, P2P(Person to person)

가

가

3

B2B

B2B

B2B .
 B2B SCM
 EDI 가 N:N e-
 e- B2B
 , 가
 .
 e- 40%
 가 ,
 (, 2001).

.

가 .

가 , ,
 가

(First Mover's Advantage)

가 .
 1-2

1 .

가 , ,

5가 (, 2000)

e- , ,

가

가

e
가

e

가

가

가

가

가

가가

가

가

가

(Customer Satisfaction)

(Customer Centric)

가

가

가

1

1

가

‘가

가

가

.

가

가

가

가

M&A

.

1999

25%

.

. .

가

,

(BM)

NIP21(<http://nip21.org>)

.

1.

가
IT
가

가

가

1

가

가

B2B

가

가.

.

.

,

.

,

가

.

가

가

,

.

,

.

.

,

,

1가

1

가

.

,

,

,

.

, ,
 .
 .
 B2B
 , ,
 (.) e-
 (,) .
 B2B(,),
 ()

(First Mover's Advantage)

. B2C
 가
 (, 2000).

가

(

, 1999) ,

(57.9%), 가 (20.8%), (15.9%)

가

3 (22.3%), (18.5%), (15.9%)

가

가

가

가

가

가

가 .

가 .

4C

. 가

(Content) 가

(Community) 가

(Commerce)

(Care) (, 2000).

,

,

,

.

,

가

.

가가

,

가 가

OECD

1999

19.3%

62.7%

(, 1999).

30

가

30

가

2000 12

30

43.6%, 40

22.7%, 50

5.7%가

2000 8

30

가 23.1%, 40

가 22.7%, 50

가 32.5%가

가

30

30

30 41%
 e 41% 30
 51% , 가 20 .
 30
 가 30
 30
 가 20
 가

2.

가.

1)

9%
 2.5% 2%
 가

,
,
가 가 가
가 가 .
4 5
가 가 , , , ,

, ,
(B2B)

. SDS 2001. 6 가
()
가 ,

250 60 .
2,088

, .
2001 7 2 1

2)

가

(OCS

Order Communication System),

(EMR Electronic Medical System),

(PACS Picture Archiving & Communication System),

(LIMS)

ASP

, , , , ,

.

.

, , ,

,

가 .

3)

. 7

370

3 9,685

가

9%

3,571

.

e-

가

가

XchangeCamp, SK

가

B2B

B2B

가

가

가

가

B2C

200%

·
1).

가

가

가

1999 6

2001 4

, e-

2000 9

3,416

가

100 가

32

(, 2001)

2001

2-3

1

4

, 43

51

(8).

(8).

8.

2001 4 20

	e-biz			U R L
	B2B			1999.12 www.kpline.com
	B2B			2000. 4 www.pharmsnet.com
	B2B			2000. 2 www.drugN.com
	B2B			1999. 7 www.ipharm.co.kr
	B2C			www.carecamp.com
Xchangecamp	B2B			2000. 4 www.xchangecamp.com
e-	B2B			www.e-medical.c0.kr
	B2B		.OCS.PACS	1983. 8 www.bit.co.kr
	B2B			2000. 2 www.carebest.com
	B2B			2000. 5 www.emedicals.co.kr
	B2B		EMR OCS	1994.12 www.medidas.co.kr
	B2C			1998. 6 www.healthkorea.net
	B2c			2000. 7 www.caremall.co.kr
	B2B			
	B2B			2000. 2 www.medion.co.kr
	B2B		OCS	1999. 1 www.medvan.com
	B2B		EMR OCS CA	1999.11 www.medbank.com
	B2B		EMR OCS	1999.11 www.medicalexpress.co.kr
	B2B		OCS.	2000. 9 www.rxcare.co.kr
	B2B			2000. 1 www.mdilinx.com
	B2B			1999.12 www.mdhouse.com
	B2B			1992. 1 www.onuri.co.kr
	B2B			1993.1 www.medicamp.com
	B2B		.OCS	2000. 1 www.pharmvan.com
	B2B			2000. 3 www.neovortal.com
	B2B			2001. 2 www.bizpharm.com
114	B2B			1998.12 www.medi114.co.kr
	B2B			2000. 5 www.ahyah.com
	B2B			2001. 4 www.kopams.com
	B2C			1993. 1 www.medisay.com
	B2B			2000. 4 www.meditos.co.kr
	B2B			2000. 7 www.medi4you.com
	B2B			2000. 9 www.ezhospital.com
	B2B			2000. 5 www.opendocors.net
	B2B			2000
	B2C				www.pednet.co.kr
	B2C			www.lovenkid.com
	B2C			1999. 1 www.m2comm.co.kr
HNF()	B2B			2000. 8 www.hnf.co.kr
	B2B		MDLIS	1999. 9 www.mdsaver.net
	B2B			1999. 8 www.mdbank.co.kr

	B2B			1999. 4	www.medshop.co.kr
	B2C		가		
	B2B			1999. 12	www-viewmedi.co.kr
	B2B			1992. 1	www.mtongil.com
	B2B				www.tong-il.co.kr
	B2B			2000. 6	www.medismall.com
	B2C		가		
	B2B			2001. 2	www.e-kdm.com
	B2C				
	B2B			2000. 7	www.herbncare.com
	B2C				
	B2B				www.atmedica.co.kr
	B2C			1999. 4	beta.medigate.net
	B2B			1998. 4	www.kimsonline.co.kr
	B2C			2000. 4	www.healthtoday.co.kr
	B2C				www.healthok.com
365Homecre	B2C			2000. 7	www.365homecare.com
Hospitalpage	B2C			2000. 3	www.hospitalpage.co.kr

www.dreamdrug.com

www.dailymedi.com

www.etimesi.com

(*

)

9.

	.e- ..
()	Xchangeamp.e-
(OCS.EMR.PACS)	
()	365 .Hospitalpage
	(). .HNF(). ()
	.HNF.
	114.
	-
	-
	- SDS. :
	- SDS. .365 .
	HNF -
	-
	-
	-
	-
e - biz	
B2C	.365 .Hospitalpage
B2B	.Xchangeamp..e-
	114.
	.HNF.

2)

, () ,
, e-Biz , ,
(9).

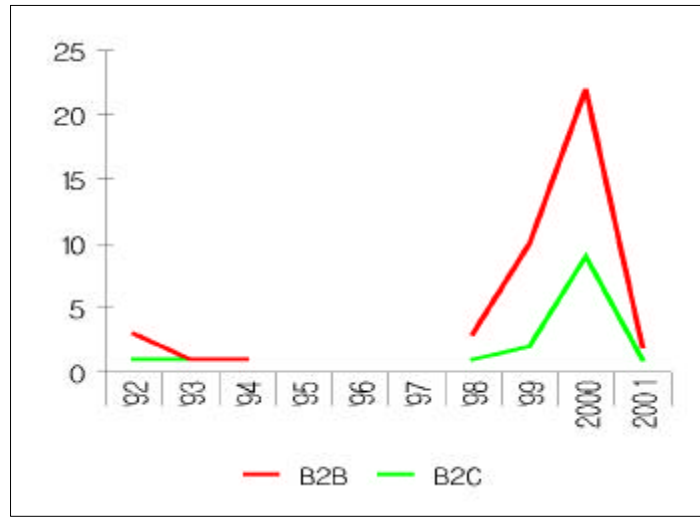
(1)

(
) 2000 34 , 60%
2000 31 54% (10).
가
가 (10).

10.

(2001. 4)

	'92	'93	'94	'95	'96	'97	'98	'99	2000	2001
B2B	3	1	1				3	10	22	2
B2C	1	1					1	3	9	1



10.

(2)

,

,

.

가

IT () SCM, (Buying power) ,

e- 가 ,

, SK,

가 . , , , , , , e- , , , , , , , .

()

가 가

가 가

가

.

. XchangeCamp, e- , , , , , , , , , , .

“

”

1 5000

1

7.43 , 12.9

,

.

OCS, EMR, PACS, LIMS

(OCS)

가

EDI,

ASP,

IC

4가

가

가

EDI

B2C가

B2B

B2C

, Hospitalpage

가

, HNF,

가

(3) e-Biz

B2C B2B

B2B

B2B

9

(4)

가

가

(9).

(5) Contents

·
, , , , e- ,
, , , , , , ,
, , , , 114, , ,
, , , , .
Xchangcamp, e- , , ,
, , , , , , , ,
, , , , , , , ,
, , , HNF, , , , ,

, , , , , .
 , , , , , , , , ,
 , 365 , Hospitalpage .

(6) On-Off line

가 . -
 .
 , , , , , ,
 Xchangecamp, e- , , , , , ,
 , , , , , , , , ,
 , , , 365 .

(7)

(,) (, , , , , , ,)
 , ,) .
 .
(, , ,)

(8)

가 .

(9).

1)

43 51
25% 13 ,
25% 13 , 21% 11
17% 9
6% 6 (11).

11.

(: , %)

()					
13(25)	13(25)	11(21)	9(17)	6(12)	52(100)

e- B2B가 42 72% B2C 16 28%
B2C B2B 7 .

2)

(1)

가

가

SCM

EDI

POS(point of sales)

. SCM

가

가 가

, 8

가

가

, 가

IT

가 100%

SDS

가 가

가

가

가

가 가

가

가

가가

20-30%

M&A

가

(2)

가

가

가

e-
가
가

(3)

, , , , .
, , 가 가

250 350 .

가 .

가 .

가 가 OCS 가 가

1990

1983

16

. OCS, HIS, PACS

가

200

EDI

ASP

가

,

가

PDIS,

가

2

2

ASP

ASP

, SDS, ,

, SDS

(4)

가

B2C

B2C

B2B

가

B2C

43

51

B2C

16

28%,

B2B

42

72%

가

B2C

B2C

(, 2000).

가

B2B

B2C

가 B2B, B2C

20

B2C, 365

가 ,

가

가

OK SK 가 B2C 가

24 가

·

1) -

가

B2B

e-

가

가

가

가

가

가

가

가

가

가

(www.drugn.com)

All-line(On/Off-line)

Off-line 가 On-line

Web-EDI

IT 가

SCM

가

e-hospital korea

가
e-hospital korea 40

2)

M&A,
SDS

가

가

가 .

13

, SK , 가 ,

,

, , , , ,

.

3) ASP

ASP

(outsourcing-based business model) .

가

ASP가

,

SCM

,

가

.

가

가

ASP

. ASP

.

ASP

1 5,400

, 2002

400

(, 2000).

ASP

B2B

ASP

가

.

ASP

가

.

,

,

ASP

.

ASP

.

4)

.

가

,

.

,

,

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/

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,

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,

.

가 2,100 ()
)

e ,

가

가 가 가

e- ,

가

가 가

가

2000 82.8%,
7.9%, 3.9%, 5.4% (, 2001).

가 .

2.

가. 4C

Internet (e-Biz)
e- 4C(Contents, Community,
Commerce, Connectivity)
(13).

1) Contents B2C . ,
Mdhouse B2B(Biz Unit)
contents biz . , ezhospital
B2C

customer

contents

Marketing

off-line

e-

2) Community

Medigate가

. Medigate

4

Marketing

가

community

2000 3 hit

I love school

biz 가

가

(BM)

가 .

, , , HNF, , be.MD .

3) Commerce marketplace

Pharmsnet SCM Carebest가 .

2 Marketplace

Margin

가

가 . 가 20-30%가

가 .

off-line Carebest

SCM communication

가 .

가

.

,

, , , e- , , ,

, , , , , , ,

, , , , , .

B2B , B2C

. B2C

biz , ,
 , Hospitalpage, 365homecare, , , .
 4) Connectivity Healthcare (, ,
) 가
 Program connectivity .
 , OCS program
 Program ,
 . ASP()
 Program , ASP
 가 . , ,
 , , , , , 114,
 가 .

13. 4C

Contents	PharmacyOK.	.	.	.
Community	.	.	.	HNF. . be.MD
Commerce	.	.	.e-	.

Connectivity	.	.	114.	.

. Timmers

Timmers(1998) 11가

(14).

e- shop : B2C

e- shop

e- Procurement :

. B2G

B2B

major

e- biz

e- auction :

B2C

Xchangecamp가

e- mall :

e- shop

e- shop

e- mall

가

3rd party marketplace : Pharmsnet, ,
 B2B .

Virtual Community : Community
 , , ,

be.MD가 .

Value Chain service Provider : ,
 Program , ,
 , , .

Value Chain Integrators : 가
 Carebest, , , Xchangecamp가 .

Collaboration platforms :
 , HNF,
 .

Information Brokerage : 가
 .

Trust and other Service :
 .

14. Timmers

e-shop	.Hospitalpage.
e-procurement	.Xchangecamp.e-
e-auction	Xchangecamp
e-mail	omecare. .Hospitalpage.365h.e-
3rd party marketplace	Pharmsnet. .Xchangecamp
Virtual Community	.beMD
Value Chain service provider	114.
ValueChainIntegrators	.Xchangecamp
Collaboration platforms	.HNF.
Information Brokerage	
Trust and other Service	

.

4C Timmers

4C

Contents 5 , Community 7 , Commerce 32 , Connectivity
 10 Timmers 11가 3가
 가 14 , 가 30 ,
 15 가 .

. Timmers 가
가 (value chain integrator, 3rd
party marketplace)

가
(e-mall, value chain service provider,
virtual community) 50% . 4C

. 3

, 가

. ASP

가

가

SCM 가

가

() ,

,

-

,

.

,

가

.

가

가

.

3.

가.

1)

EDI,

B2B

On-line Business

, ,

OCS EMR,

EDI

가

EDI , , , EMR

, ,
가

가
가 EDI

, , , SDS,

OCS, PACS, EMR

S/W가

가 s/w 20

s/w

2)

(1)

(CSN, , ,)

, low

commitment

, ,

,
 . B2B
 3 49.2% 가 2002
 543 , 54.9%
 가 2002 450 (, 2000).
 (B2B)
 가 .

B2B

B2B

가

가 B2B

.

EDI

.

SK

7

.

B2B

가 .

가 가 .

Medi- CALS

,

,

EMR

.

가 .

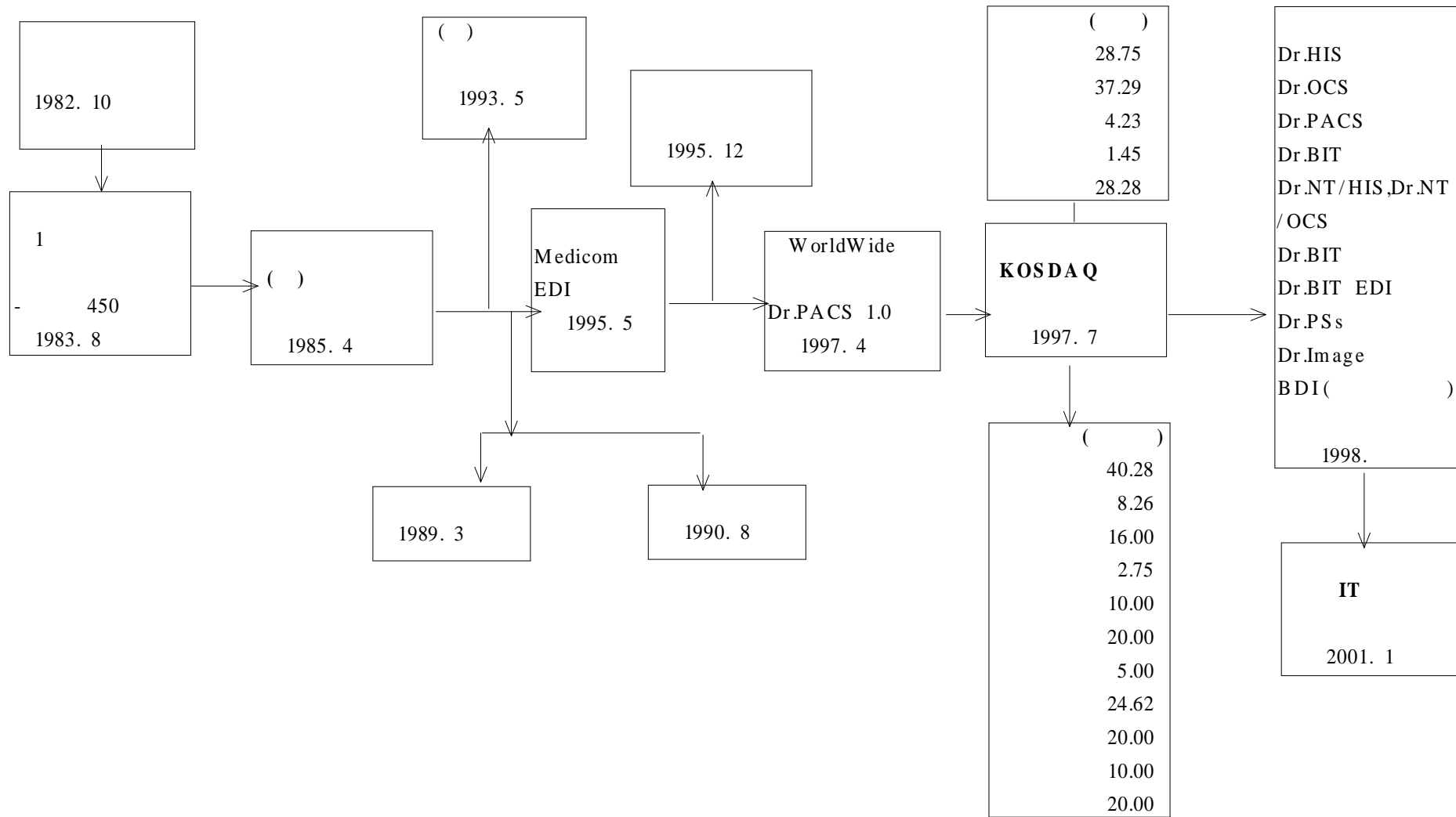
,

.

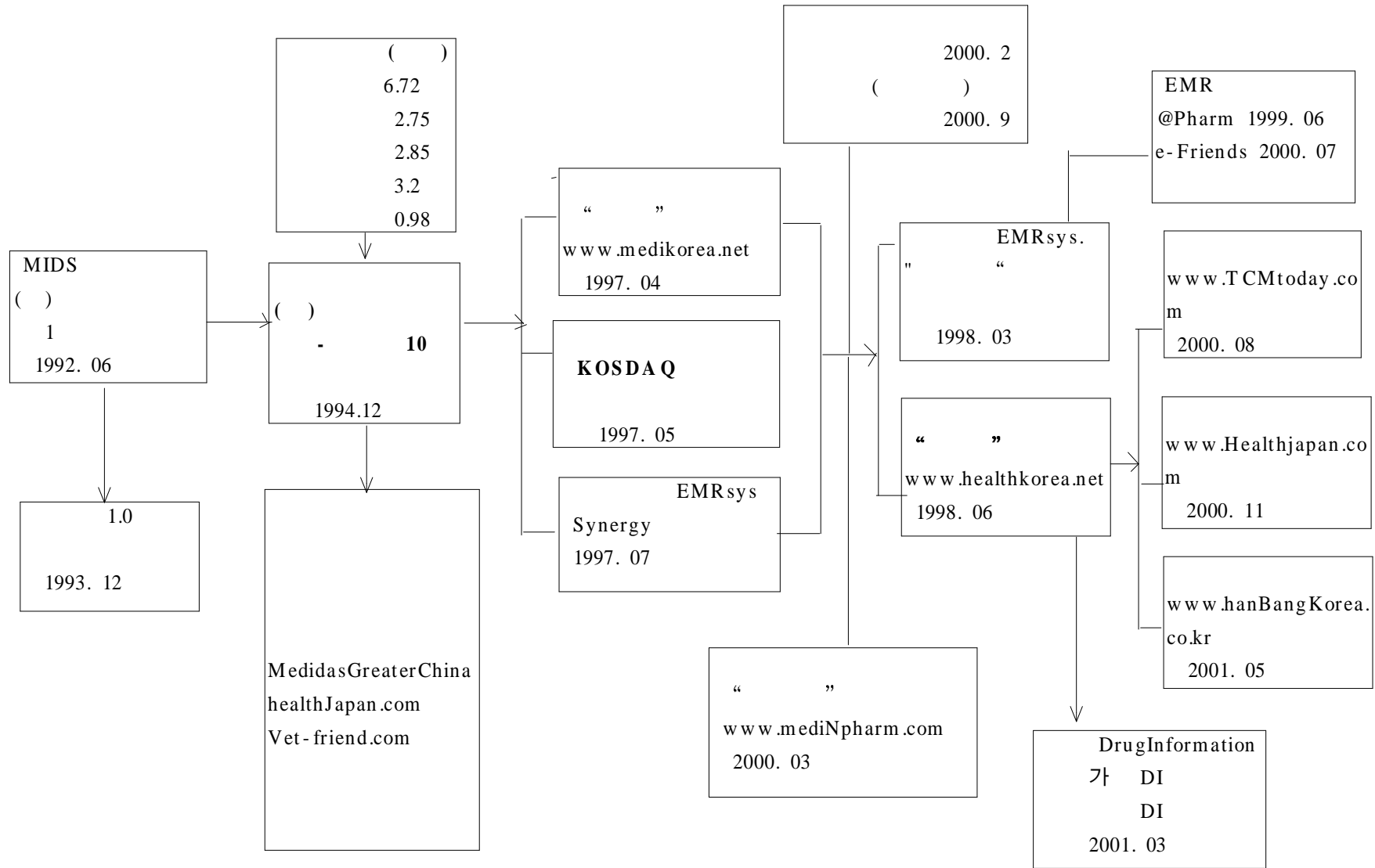
(11, 12)

(15).

11.



12. **Medidas**



15. &

()
Sk (), Zuelling(), B2B()
(), ()MS()
(), (), ()
HealthDirectory.com Vetfriends.com()
Medison Holding Japan()
Wai Kee Holdings, LG ()
, , , , ()
()
SK , TV, ()
ASP , ()
(off-line) e-hospital korea()
()
()

(2)

(MIS), , IT ,
(SI) . 2000 6
SI ASP ,
ASP
가 . ASP
SI S/W
OCS PACS .
1999 160 MIS SI .
3 49.2% 가 543

28% 'e-medicals' 가 .
 EMR, Medi-CALS, CyberHospital SI merchandising .
 1999 121 64%가 가 EMR .
 3 54.9% 가 2002 450 ,
 2002 50%
 B2B, B2C . Medi-CALS Hospital
 3 가 (, 2000. 8)
 (16).

16. &

()	MIS
	ASP
	IT Education Center
	e-medicals B2B (3-5%).
()	EMR(@pharm) .
	Medi-CALS B2B (3-5%)
	CyberHospital B2C
	(SI)

(: , 2000. 8.17)

(3) . B2B

: e- medicals

, ,IT

,

B2B

,

2002 28%

' e- medicals'

, , ,

EDI 100

300 .

B2B , SK

가 ,

3-5% . B2B

: Medi-CALS, Cyber Hospital

B2B

low commitment

EMR

. B2B

Medi- CALS

2002

36%

가

(www.medikorea.net)

(www.healthkorea.net)

가

Cyber Hospital 가

가 ,

B2C

가

2002

50%

(Medi- CALS Cyberhospital)

3

445%, 106% (2002

36% 16%) 가

EMR

Medi- CALS

EMR

EDI

3-5%

B2B

가 .
Cyber Hospital , , Health Mall B2C
 , B2C

(www.mediNpharm.com)

가

@ , .
5
,
, B2B
가
B2B
B2B

·
1)

B2B ,
, 가 .
, .
B2B 가 ,
2 .
B2B ,
,
,
B2B
B2B B2B
가 가
가 가 .
B2B 'B'
가 .
가 100%
EDI 90% .

2000 8000 ,
5000 ,
90% 가
ADSL
4000 , 6000 ,
70 - 80%
100% 가

B2B

B2B, B2C

가

, needs ,

2) B2B ()

2 B2B

가

가

가 ,

가 가 20-30% 가
가

(1)

17 2000

17.

	2000 4 26	2000 2 8 (2000. 6.15)
	<ul style="list-style-type: none"> ◦ 1997 2 - VT ◦ 2000 4 ◦ 2000 7 () ◦ 2000 8 TOP10 ◦ 2001 1 	<ul style="list-style-type: none"> ◦ 2000 2 .SK. (2001. SK 51%) ◦ 2000 4 ◦ 2000 5 emedicals ◦ 2000 6 ◦ 2000 10 ◦ 2001 3 (SK) ◦ 2001 4

(2)

가가

가

- , ,

.

가

.

SCM

가

N:N

가

가

e-

가

.

e-

, , ,

가

e-

SCM

.

e-

가 ,

. 3%

, 가 5% .

가 가

, , ,

가 .

(3)

e- 가 e-

가 가

가 .

(User)

가

Win - Win 가

PM2000

가 .

640

가

, EDI Web

가 .

User , , SCM

, ,

가 Buying Power가 가
 가
 SCM
 EC
 가 , ,
 , , ,

(4)

(e-)
 22 .

가
 27 .

(5)

가
 , , (: 1829 - 2001 4)
 가 가 , ,

(6)

8 , , , , , , , , ,

(7)

가가

2001

2002

(18).

18. &

2000. 2. 8(	2000. 6)	2000. 4.26
SK.		
가		
e- commerce(SCM)B2B		e- marketplace.B2B
5-8%		3-3.5%,
가 (emedicals)		가
		(1829 : 2001. 4.)

Community

가

가

가

가

Medigate Community

1999 4 . Site Ranking 78 , /

Market Share 1 .

1) : 41,831 (2001 2 15)

35,466 . 6,105 60,000

59% . / /

/ / /

20 -40 .

가

2) contents, community, communication

(19).

19. Medigate

contents	Meditimes : , , ,
	MG , clipping,Medigate ,Impulse
	Academic : Medical search,USMLE, , Guide, , Academic
	SocioEconomic : Legal information &consulting, ,
communication	Cultural : / , , , , , , Iboard,RadioDoctor()
	Webmail, ,Messenger,E- card,
community	Bord : Freeboard Muzzima Salon OpenBoard Jumi2Doc Academic Doc2Doc
	CUG(Closed User Groups) Medigate , , / , / , . , , , , / , / , .
	Clubs : , , , , / , / , ,

3)

20 -40

,
가 ,

, , 1 가

Kmaweb, Mdhouse, Be.md, Medipark

가 , ,
positioning .

가

4)

e-detailing 22-44 /

e-detailing .

annual plan

, 가
 .
 2000 (2000) ,
 10-20% 10%
 22-44 / 가 .
 e-detailing solution .
 , journal article review,
 , Q&A ,
 , Sample , PMS , ()Medion ,
 , 1 1 information category

.
 2 가
 5 ,
 .
 가 , ,
 가 가

1)

(Mahadevan, 2000).

3가 가

.

,

.

.

가 가

‘ 가 ‘

가

.

.

,

(

)가 (

)

()

.

가 , , 1 가 가

.

(,)

.

가

.

(,)

가 가 가
가 .

B2C ,
가 .

B2B

가 .

가가 가

. B2B MRO

가
가

5
(20).

20.

()

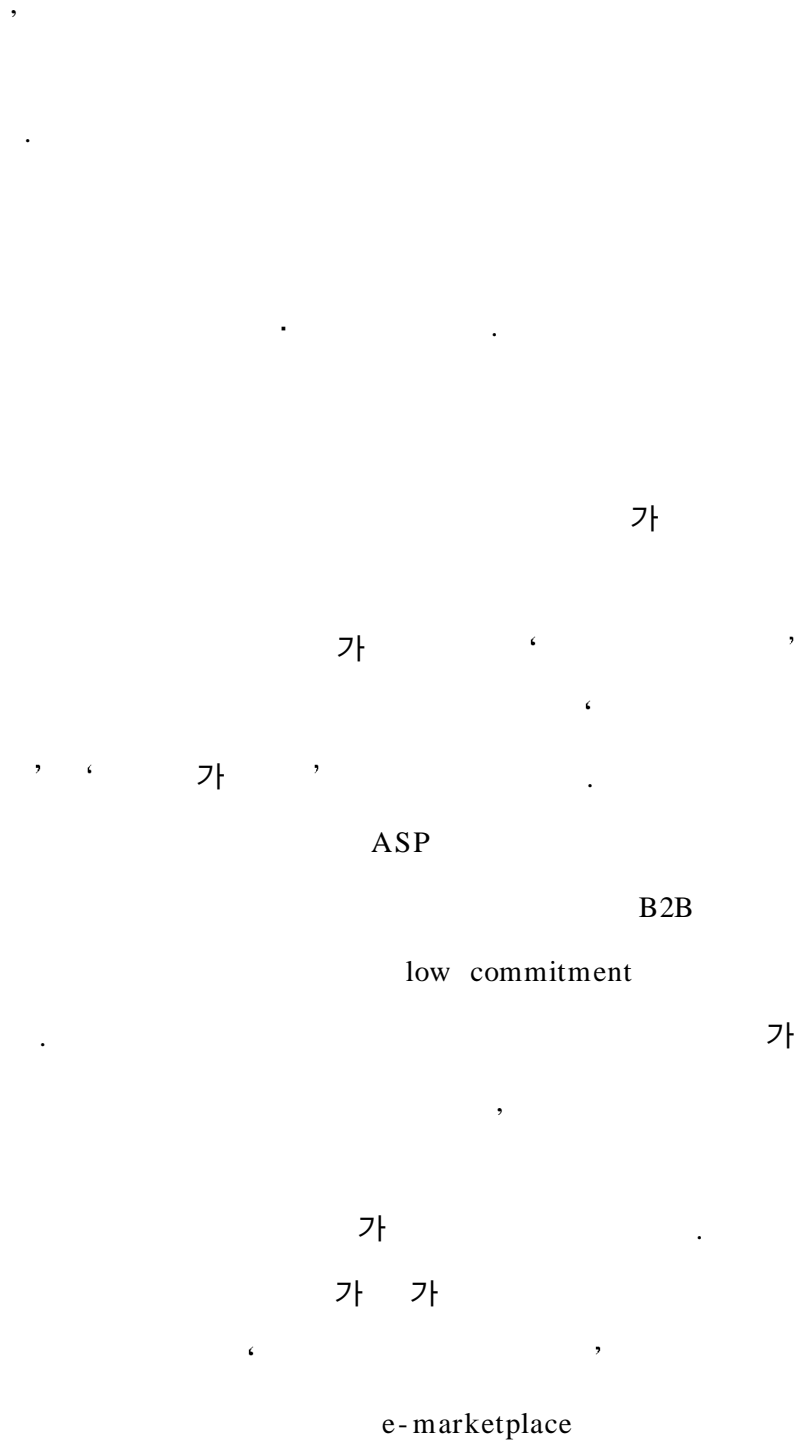
<가 Value Streams>					
(virtual communities)	0	0	0	0	0
	0	0	0	0	
			0	0	0
가 가	0	0	0	0	0
< Revenue Streams>					
	0	0		0	
	0	0	0	0	
	0	0	0	0	0
가			0	0	
			0		0
	0	0	0	0	0
< Logical Streams>					
			0	0	
			0	0	
	0	0			

2)

가 가

5

5



가 ‘ ’

가 가 가 가 가

‘ ’ ‘ ’ ‘ ’ 가

5 가

‘ ’ ‘가 가 ’ ‘ ’ 4

가 ,가

‘ ’ ‘ ’가

4 ‘ ’ 가 ‘ ’

B2B

가 가 가

가

, 가 , ,
가 .

•

1.

1997

VT

4-5

가

1999

2000 , 2001

가

100

, ,
.

가

3

1 2001 4 ,

1999 6 2001 4 B2B, B2C

, e-

가

43 , 51

, B2B, B2C B2B 42 72%,

B2C 16 28% 2000 2001 4

34 60%가 2000 31

54% .

, 5

13 25%,

11 21%,

13 25%, 9 17%,

6 12% .

, 8 19%, 6 14%,

29 67% .

45%

, , 가

(50%) 가 .

ASP

2 Timmers 4 C
Timmers
, Contents 5 , Community
7 , Commerce 32 , Connectivity
10 가
, Timmers 11가 3가 가
14 , 가
30 , 15 가
가
가
가
3 1,2 5
low commitment

가 .
가 가
e- 가 e-
가 가
가 .
e-detailing 가
가 .
5 가
1, 2, 3
가

2.

가
가
2,000
가
가 , 가 ,
가

가

가

100

가

가

5 가

가

가

가

가

가 가

가 .

5

가 ,

,

.

· , 2000

· , 2000

· B2C , , 2000

· , 1995

· e-Business, , 2000

· , 2000

· e-Business Systems, , 2001

· 가 1998:361- 365

· , , 2000

· , 2000

· EC , , 2000. 5

. (Potal Sites) -가
가 -,
, 2000.

. , ,
2000

. . , ,
1999

. -
1999 -, ,

. . 2000;2(1):101- 113

. , 16
, 2000

. . 235
, 2000. 3.

. ,
, 1998

. , 16
, 2000

. ,

, 2000

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, - , 1998. 4. 2

, B2B , 2001. 5

(www.dreamdrug.com/cgi-bin/search_view.cgi?id=)

(www.dailymedi.com)

(www.maeilbiznews.co.kr/)

(http://www.mocie.go.kr/dub04/subindex_06.html),

, 2001. 1

(www.ecommerce.go.kr)

, 2000. 8. 17

(www.yakup.com)

(www.hani.co.kr/survey/3rd/record/josa3.html)

(www.etimesi.com/news/detail.html)

, ‘越’ , 2001. 5. 22

, (2001 3 1/4

), 2001. 5

(www.ked.co.kr)

(http://www.krnic.net)

, 2001

(http://www.kiec.or.kr)

(www.eiak.org)

CDNow (www.cdnw.com)

e@ble (www.epage.co.kr/enable/)

Network wizard (www.nw.com/zone/www/top.html)

Abstract

A Case study on e-Commerce in Healthcare Sector - Centering the B2B e-commerce business model -

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Graduate school of
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Yonsei University

(Directed by Professor Myong-Sei Sohn, M.D, Ph.D.)

In recent 4 5years period thanks to the expansion of Internet, e-commerce has become much more popular business in many industries. e-Commerce in Health and Medical industry, however, was not a popular system mainly due to the restrictions which had existed characteristically in the industry. The medical and pharmacy separation system has changed the tendency. Thousands of medical sites and more than 100 e-commerce business were newly born during the period of second half 1999 and 2001. The new era of e-commerce business in the Health and medical industry actually begins now.

In spite of appearance of many new smaller e-business firms, however, many of them at the same time had to disappear due to the absence of proper benefit models, fluctuation of sales, uncertainty of practical environment etc. Future for the firms who survive up to now

is not so bright as well. Their external expansion does not comply with the lack of sufficient actual benefit and as result many of the e-business firms are suffering from their bad financial management status. In the circumstances there could be hardly any scientific researches and analysis of the firms and the market situation so far.

In this paper I'd like to find out the e-commerce situation of the Health and Medical industry from the viewpoint of the whole e-business situation in Korea. With the findings I wish to look ahead the future of the firms and the market situation of e-commerce in the Health and Medical industry. My study is consisted of 3 stages.

At first stage, I collected and classified datas of the e-business firms in the Health and Medical industry as of April 2001. Objects were the e-business firms which had been operating B2B or B2C from June 1999 till April 2001. I checked firms and medical portal sites with e-commerce and/or e-market place as searching tool and selected 43 actually operating firms and 51 sites.

They were classified in 3 different ways. Firstly, according to the classification of types and periods of the firms 42 firms belonged to B2B which was 72% of the total firms, 16 firms to B2C and was 28%. 34 of them were founded within the period of 2000 till April 2001 which was 60% of the total firms which means the fact that the separation system was momentum for the expansion of e-commerce. Secondly according to the calssification into 5 groups with their commodities 13 firms were medicament distributors, 11 firms were medical information suppliers, 12 were medical instrument and

equipment dealers, 9 general shopping malls, 6 others. Dealers of medicament and medical instruments took 50% of total e-commerce business to show the activeness of e-commerce in this business area. Medical information suppliers possessed better business activity and technology than the other business area and they accepted ASP method. Thirdly according to the classification with the back ground of the founders 14 firms were established by medicals and pharmacists, 29 were established by venture businessmen and normal people. Medical professionals launching into the business could be remarkably acknowledged in this area. Other facts found in this research were that 45% of the total firms were operating both on and off-line business together, specialized medical consultants with the concept of marketing came into the e-commerce business area, companies in same business line including medical institutes tended towards merging into bigger firms, huge shopping malls.

At second stage, I intended to analyze firms according to the 4C theory of business model theories and the theory model of Timmers.

As result according to 4c theory 5 firms were contents type, 7 were community type, 32 were commerce type, 10 were connectivity type and some firms were mixed with multiple types. This classification shows the fact that the model is on the way from its maturing stage into growing stage. According to the summarized 3 classifications of Timmers' original 11 model classificatins 14 firms were value chain integrated models, 30 were multiple service types, and 15 were basic models. Some firms were mixed with multiple model types. We now

can understand that the majority of the firms already has fully grown model with high value added services.

At third stage, I selected 5 excellent companies for the case study of their business details. Beat computer and Medidas were the low commitment models with the characteristics of lower operation cost and higher margin, main benefit structure of rental fees and commissions. They were active in aligning, investing inland and overseas for the various benefit sources. According to the commodity characteristics they were different from medicament distributors in their model structure. Pharmsnet and Carebest had excellent value flow structure. Pharmsnet was in e-market place with commission as their main benefit source. Carebest was in e-commerce with commodity distribution margin as their main benefit source. Management consulting was their additional service to the customers. Both companies had differences from each other not only in their structural elements but also in their business model types. Medigate was a highly specialized advertising business model with e-detailing. Advertising fee was their main benefit source and the company was considered of indirect benefit creating factors due to their commodity characteristics. Common features of these 5 companies were that they all had high value added business models, maximized indirect benefit rate through rational management system, and with the strategy of securing long-term benefit sources they could maintain competitiveness and the differentiation with other companies.

Through the 3 stage research I can come to the conclusion that the e-commerce market of the Health and Medical industry in Korea is at

moment in the period of searching its possibilities from the industrial viewpoint. Various directions of the developments including strategical alignments and business diversifications are under study. Many companies already possessed highly grown models but only a few of them have established creative benefit models of their own. Korean companies are trying to find out proper e-commerce benefit models in many directions.

Continuos reserach and development for the benefit models together with internal reforms, external improvements of environment in its regulations and systems are the key-factors of the competitiveness for the Korean companies and the development of the e-commerce in the Korean Health and Medical industry.

key words : e-commerce, business model, benefit model, Healthcare and Medical industry, B2B, B2C, medical and pharmacy separation, medicament distributors, medical information suppliers, medical instrument and equipment dealers.