

2001 6

가

가

가

가

2001 6

	
.	.....	1
1.	.....	1
2.	.....	4
.	.....	5
1.	.....	5
2.	.....	6
.	.....	9
1.	.....	9
2.	.....	10
3.	.....	11
.	.....	13
1.	.....	13
2.	SWOT	15
3.	.....	20
4.	.....	23
.	.....	29
.	.....	37
	.....	40
	.....	43
ABSTRACT		53

1.	.....	6
2.	.....	8
3.	.....	13
4.	.....	14
5.	.....	16
6.	.....	17
7.	.....	18
8.	.....	19
9.	.....	20
10.	.....	21
11.	.....	22
12.	.....	23
13.	.....	24
14.	.....	25
15.	.....	26
16.	.....	27
17.	.....	28
. 1	.....	9

2001 3

316

109

SAS(Ststistical Analysis System)

가 25.7% 가 ,
 21.2%, 13.7% .
 1-10 58.6%, 11-50 29.3% ,
 50 86.2% .
 , SWOT ,
 , , .
 , (R&D)
 ,
 · A/ S 가 ,
 · A/ S 가 .
 ,
 51.2%가
 , , ,
 가 .
 62.3%가
 가 ,

, .
 .
 ,
 .

41.2% 가 ,

58.7%,

가 가 43.1%,

. . 31.1%,

가 39.4% 가 , .

가

61.4% 가 .

,

가 .

,

가 가 .

•

1.

1999
 249 126
 50.7% , 44 17.6%, 61
 22.5% 18 7.2%
 80% (Elsevier Advanced
 Technology, Yearbook of Electronics Data, 1999).

1996 6.5% 1997
 4.9%
 가
 7.6%
 (, 2001).

1994 2,639 11.8%
 1998 4,334 69.4%
 3,012 (2 8) .
 7,481 ,
 584 가
 30% .
 가 (, 1999).
 2.3% 가 411
 , 1994
 28.1% 1998 823
 . 2,908 ,
 2,392 , 1,459 , MRI 1,307 ,
 1,046 , 862 , 540 5
 , , (, 1999).
 1999
 478 200 가
 9 2.3% , 100
 12 3.0% .
 3% 가 , 10
 가 75%
 (, 2001).

가

,

가

가

가가

.

, , , ,

(life cycle)가

.

65%

가

(, 2001).

가

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, , ,

SWOT

가

2.

가
SWOT

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가

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SWOT

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1.

(,
1993),
, ,

(, 1996),

•
(KTL)

, ,
(, 2000).

(, 2001),

•

2.

가.

(medical device)

(2 9).

· 3

(1).

1.

		“ ”	
1		가	314
2	· , 가 , · 가	MRI, CT	472
3	· , 가		152

: , , 2001.

·
(medical electronics) (medical)
(electronics) · ·
· · , ,
(
, 1989).

(medical instrument), (medical supplies), (dental
materials) 3가 , 658
(
2000-37 , 2000).

, ,
, ,
, , , 가 (,
1996-389 , 1996).

가

가
(2)

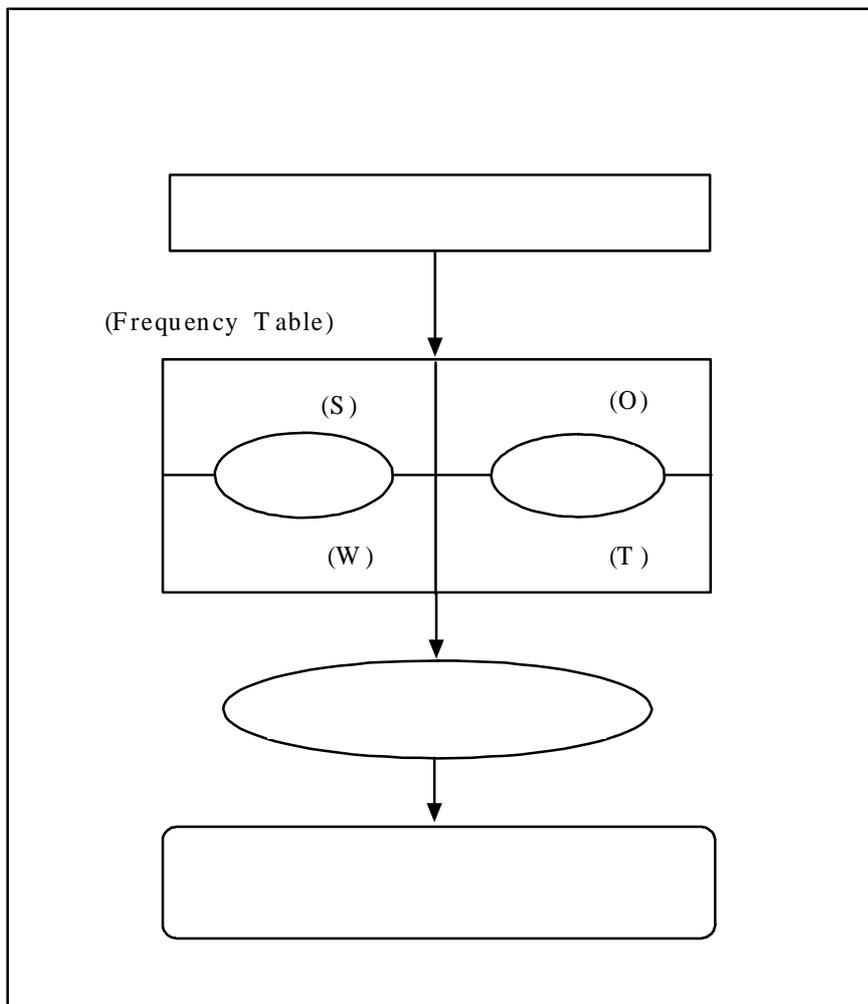
2.

		“ ”
		CT, MRI
		B Mode, Doppler, Color, 3D
		Rigid, Flexible
	X-Ray System	Digital X-Ray, Angio System, Dental, Bone Densitometer,
		PET, SPECT
		, , Holter, Vector
		, , ,
		,
		Fetal Monitor,
		,
		,
		PACS,
		,
		, ,
		,
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		,
		,
		, , ,
		,
	가	,
가		,

: () 1996-389 , 1996

1.

SWOT



1.

2.

2001 3

가

316

2001 4 14

4 30

, 316

34% 109

가

가

가

가
3

SAS(Sttistical Analysis System)

•

1.

가 28
 25.7% 가 .
 23 21.1%, . 15
 (3).

3.

	(%)
	15 (13.7)
	3 (2.7)
	23 (21.1)
가	7 (6.4)
	4 (3.6)
가	28 (25.7)
	12 (11.0)
	2 (1.8)
	15 (13.7)

가 1-5 54.1%
 100 6.4%
 . 20 56.0%
 , 5-10 가 31.2%

, 3-5

29.4%, 16

16.5%

(4).

4.

(%)

		*	/	/	가	**
가	1-5	59(54.1)	8(53.3)	11(47.8)	14(50.0)	26(60.4)
	6-10	24(22.0)	2(13.3)	6(26.0)	7(25.0)	9(20.9)
	11-20	15(13.7)	3(20.0)	2(8.7)	3(10.7)	7(16.2)
	21	11(10.0)	2(13.3)	4(17.3)	4(14.2)	1(2.3)
	1-5	33(30.2)	5(33.3)	7(30.4)	11(39.2)	10(23.2)
	6-10	31(28.4)	3(20.0)	8(34.7)	9(32.1)	11(25.5)
	11 -50	32(29.3)	2(13.3)	6(26.0)	7(25.0)	17(39.5)
	51-100	6(5.5)	2(13.3)	1(4.3)	0(0.0)	3(6.9)
	101	7(6.4)	3(20.0)	1(4.3)	1(3.5)	2(4.6)
	20	61(56.0)	8(53.3)	13(56.5)	18(64.2)	22(51.6)
	21-50	33(30.2)	3(20.0)	5(21.7)	8(28.5)	17(39.5)
	51-100	8(7.3)	1(6.6)	3(13.0)	1(3.5)	3(6.9)
	101-200	3(2.8)	1(6.6)	1(4.3)	0(0.0)	1(2.3)
	201-300	2(1.8)	0(0.0)	1(4.3)	1(3.5)	0(0.0)
	301	2(1.8)	2(13.3)	0(0.0)	0(0.0)	0(0.0)
	2	10(9.2)	1(6.6)	2(8.7)	2(7.21)	5(11.6)
	3-5	32(29.4)	6(40.0)	6(26.0)	12(42.8)	8(18.6)
	5-10	34(31.2)	2(13.3)	7(30.4)	6(21.4)	19(44.1)
	11-15	15(13.8)	0(0.0)	6(26.0)	4(14.2)	5(11.6)
	16	18(16.5)	6(40.0)	2(8.7)	4(14.2)	6(13.9)
		109(100)	15(100)	23(100)	28(100)	43(100)

*(%):

, **(%):

2.

SWOT

가.

가 69.6% 가
60.5%, 44.9% .
가 50.4% 가 , · A/ S
46.7%가
19.1% .
가 가
53.3%가 가
가 가 78.4% 가 ,
32.1%, 33.9%
가 (5).

5.

(%)

	가	" " *	/ /	가	**	
· · (R&D)		49(44.9)	8(53.3)	7(30.4)	13(46.3)	21(48.7)
		24(22.9)	5(33.2)	4(17.3)	5(17.8)	11(25.5)
		28(25.6)	6(40.0)	4(17.3)	7(25.0)	11(25.5)
		27(24.7)	5(33.3)	6(26.0)	5(17.8)	11(25.5)
		31(28.3)	6(39.9)	9(39.0)	4(14.2)	12(27.9)
		45(41.2)	6(39.9)	6(26.0)	14(49.9)	19(42.1)
		76(69.6)	11(73.3)	14(60.8)	21(74.9)	30(69.7)
		46(42.1)	7(46.6)	9(39.0)	16(57.0)	14(32.5)
		66(60.5)	8(53.3)	11(47.8)	22(78.5)	25(58.1)
· A/ S · A/ S		55(50.4)	5(33.2)	16(69.5)	14(49.9)	20(46.4)
		21(19.1)	3(19.9)	6(26.0)	6(21.4)	6(13.8)
		51(46.7)	9(59.9)	13(56.4)	13(46.4)	16(37.1)
		8(7.3)	3(19.9)	2(8.7)	2(7.1)	1(2.3)
		32(29.3)	5(33.2)	10(43.4)	7(25.0)	10(23.2)
		11(9.2)	1(6.6)	4(17.3)	1(3.5)	4(9.2)
가	가	50(45.8)	8(53.3)	10(43.4)	13(46.4)	19(42.1)
	가	45(41.2)	6(39.9)	10(43.4)	12(42.8)	17(39.5)
· ·		66(60.5)	9(59.9)	15(65.2)	16(78.4)	20(46.4)
		25(32.1)	6(39.9)	10(43.4)	9(32.1)	10(23.2)
		37(33.9)	4(26.6)	9(39.0)	10(35.6)	14(32.5)

*(%) : , **(%):

·

·

가 36.6%

가

가

가

, 가

(6).

. 6

(%)

	가	" "	" *	/	/	가	**
· · (R&D)		25(22.9)		3(20.0)	9(39.0)	5(17.8)	8(18.6)
		40(36.6)		6(39.9)	12(52.1)	7(24.9)	15(34.8)
		36(33.3)		3(20.0)	9(39.1)	9(32.1)	15(34.8)
		21(19.2)		1(6.6)	5(21.7)	7(24.9)	8(18.6)
		38(34.8)		7(46.6)	5(21.6)	9(32.1)	17(39.4)
		27(24.6)		6(40.0)	5(21.7)	6(21.3)	10(23.2)
		5(4.5)		0(0.0)	1(4.3)	1(3.5)	3(6.9)
		16(14.6)		2(13.3)	4(17.3)	1(3.5)	9(20.9)
		10(9.1)		1(6.6)	6(26.0)	1(3.5)	2(4.6)
	· A/ S · A/ S		22(20.1)		6(40.0)	3(13.0)	6(21.3)	7(16.2)
		42(38.5)		7(46.6)	3(13.0)	10(35.6)	22(51.0)
		12(10.9)		0(0.0)	3(13.0)	3(10.7)	6(13.9)
		64(58.7)		8(53.2)	12(52.1)	18(64.2)	26(60.4)
		25(22.8)		3(20.0)	4(17.3)	7(24.9)	11(25.5)
		68(62.3)		8(53.2)	14(60.8)	17(60.6)	29(67.3)
가	가	12(10.9)		2(13.3)	3(13.0)	2(7.1)	5(11.6)
	가	19(17.3)		2(13.3)	5(21.6)	3(10.6)	9(20.8)
· · ·		8(7.3)		1(6.6)	1(4.3)	0(0.0)	6(13.9)
		23(21.0)		4(26.6)	4(17.3)	5(17.7)	10(23.2)
		30(27.4)		7(46.6)	3(13.0)	7(24.9)	13(30.1)

*(%) : , **(%):

.
 109 51.2% 56
 가 가
 , 25.6%
 28 가 .
 , ,
 , ,
 가 .
 가
 가 ,
 가 (7).

7.

(%)

	“ ” *	/ / 가 **
	56(51.2)	8(53.3) 13(56.5) 16(57.1) 19(44.1)
	21(19.1)	3(19.9) 5(21.7) 8(28.5) 5(11.5)
	16(14.6)	2(13.2) 2(8.7) 7(24.9) 5(11.5)
	23(21.0)	3(19.9) 4(17.3) 10(35.7) 6(13.9)
	24(21.9)	2(13.3) 8(34.7) 9(32.1) 5(11.5)
	23(21.0)	3(19.9) 7(30.4) 9(32.0) 4(9.1)
	19(17.3)	1(6.6) 5(21.7) 7(24.9) 6(13.9)
가	4(3.6)	1(6.6) 1(4.3) 2(7.0) 0(0.0)
	20(18.3)	4(26.6) 3(13.0) 5(17.7) 8(18.5)
(KTL)	28(25.6)	4(26.6) 9(39.0) 10(35.6) 5(11.6)

*(%) : , **(%):

62.3%, 54.9%, 53.2%

60.4%, 가 (51.3%) 가

79.9%가

73.8%가

가 (8).

8.

(%)

	“ ” *	/	/	가	**
	68(62.3)	12(79.9)	13(56.4)	18(64.2)	25(58.0)
가	56(51.3)	9(59.9)	11(47.8)	15(53.5)	21(48.7)
	66(60.4)	9(60.0)	17(73.8)	16(57.1)	24(55.7)
	60(54.9)	10(66.6)	13(56.4)	16(57.1)	21(48.7)
	43(39.3)	3(20.0)	10(43.4)	13(46.4)	17(39.4)
/	28(25.6)	5(33.2)	5(21.6)	8(28.5)	10(23.2)
	53(48.5)	7(46.6)	12(52.1)	16(57.1)	18(41.7)
가	16(14.6)	0(0.0)	5(21.6)	5(17.8)	6(13.8)
	58(53.2)	7(46.6)	17(73.8)	15(53.5)	19(44.1)
	31(28.3)	5(33.2)	7(30.3)	8(28.5)	11(25.5)

*(%) : , **(%):

3.

가.

SWOT

5 (

.)

87.1%가 FDA(Food &

Drug Administration), CE(Communaute Europeenne)

가 가 .

. , , , .

(9)

9.

(%)

	*	/	/	가	**
.	64(58.7)	8(53.3)	14(60.8)	19(67.8)	23(53.4)
	76(69.6)	10(66.6)	16(69.5)	20(71.3)	30(69.7)
	77(70.6)	9(59.9)	15(65.1)	22(78.5)	31(72.0)
	85(77.9)	10(66.6)	20(86.9)	25(89.2)	30(69.7)
가 (GMP,CE)	95(87.1)	13(86.6)	21(91.2)	23(82.1)	38(88.3)
	78(71.5)	10(66.6)	18(78.2)	20(71.3)	30(69.7)

*(%) : , **(%) :

A/ S

A/ S

, 가 , 가
 83.4% ,
 32.0% (10).

10.

(%)

	*	/	/	가	**
· A/ S	99(90.7)	12(79.9)	21(91.2)	27(76.4)	39(90.6)
· A/ S	94(86.1)	13(86.6)	20(86.9)	26(92.7)	35(81.3)
	92(84.4)	12(80.0)	19(82.5)	26(92.7)	35(81.3)
가	91(83.4)	14(93.3)	19(82.5)	23(82.1)	35(81.3)
	35(32.0)	7(46.6)	9(39.1)	5(17.7)	14(32.5)
	95(87.1)	13(86.6)	18(78.2)	25(89.2)	39(90.6)

*(%) : , **(%):

가

,
 40.3% , 9.1%

18.3% . 가
 26.6% (11).

11.

(%)

	*	/	/	가	**
	100(91.6)	13(86.6)	22(95.5)	26(92.7)	39(90.6)
	91(83.4)	11(73.3)	16(69.4)	26(92.8)	38(88.3)
	44(40.3)	5(33.2)	8(34.7)	10(35.7)	21(48.8)
	10(9.1)	1(6.6)	1(4.3)	3(10.7)	5(11.6)
(M&A)	20(18.3)	4(26.6)	2(8.7)	7(25.0)	7(16.2)

*(%) : , **(%):

4.

가.

가 4가 가 41.2%

22.9%

(digital library)

18.3%

가

(12)

12.

(%)

	*	/	/	가	**
	19(17.4)	1(6.6)	5(21.7)	6(21.4)	7(16.2)
	25(22.9)	4(26.6)	3(13.0)	5(17.8)	13(30.2)
	45(41.2)	8(53.3)	9(39.1)	13(46.4)	15(34.8)
Digital Library	20(18.3)	2(13.3)	6(26.0)	4(14.2)	8(18.6)
	109(100)	15(100)	23(100)	28(100)	43(100)

*(%): , **(%):

58.7% 64

가

가

A/S

(13).

13.

(%)

	*	/	/	가	**
	15(13.7)	3(20.0)	2(8.7)	5(17.8)	5(11.6)
	17(15.6)	1(6.6)	4(17.3)	3(10.7)	9(20.9)
	8(7.3)	1(6.6)	1(4.3)	5(17.8)	1(2.3)
A/S	5(4.5)	1(6.6)	2(8.7)	2(7.1)	0(0.0)
	64(58.7)	9(60.0)	14(60.8)	13(46.4)	28(65.1)
	109(100)	15(100)	23(100)	28(100)	43(100)

*(%) : , **(%):

가

가 43.1%

가 ,
 가
 65.2%, 53.3%
 가 가 21.4%
 14.6%
 가 가 39.2% 가
 14.6%
 가 20.0% 가 (14).

14.

(%)

	*	/	/	가	**
가	47(43.1)	8(53.3)	15(65.2)	6(21.4)	18(41.8)
	22(20.1)	0(0.0)	5(21.7)	6(21.4)	11(25.5)
	8(7.3)	2(13.3)	1(4.3)	1(3.5)	4(9.3)
	16(14.6)	2(13.3)	0(0.0)	11(39.2)	3(6.9)
	16(14.6)	3(20.0)	2(8.7)	4(14.2)	7(16.2)
	109(100)	15(100)	23(100)	28(100)	43(100)

*(%) : , **(%):

.
 5가 가
 . .
 31.1% 가
 , 가 .
 . .
 . 가
 , 가
 가 가
 (15).

15.

(%)

	*	/	/	가	**
	28(25.6)	5(33.3)	4(17.3)	6(21.4)	13(30.2)
.	11(10.0)	0(0.0)	3(13.0)	4(14.2)	4(9.3)
가	23(21.1)	1(6.6)	4(17.3)	6(21.4)	12(27.9)
.	13(11.9)	2(13.3)	3(13.0)	3(10.7)	5(11.6)
. .	34(31.1)	7(46.6)	9(39.1)	9(32.1)	9(20.9)
	109(100)	15(100)	23(100)	28(100)	43(100)

*(%) : , **(%):

39.4% 43 가 , 가
 가 가
 가 56.5% 가 ,
 가 20.0% 가 ,
 가 21.4% 가 (16).

16.

(%)

	*	/	/	가	**
	13(11.9)	1(6.6)	1(4.3)	6(21.4)	5(11.6)
(R&D)	43(39.4)	7(46.6)	13(56.5)	10(35.7)	13(30.2)
	8(7.3)	1(6.6)	2(8.7)	1(3.5)	4(9.3)
	13(11.9)	1(6.6)	2(8.7)	2(7.1)	8(18.6)
	4(3.6)	0(0.0)	1(4.3)	1(3.5)	2(4.6)
	17(15.6)	3(20.0)	3(13.0)	5(17.8)	6(13.9)
	11(10.0)	2(13.3)	1(4.3)	3(10.7)	5(11.6)
	109(100)	15(100)	23(100)	28(100)	43(100)

*(%) : , **(%) :

, 5가 61.4%
 67 가
 () 가 가
 ,
 17.4% . .
 가 가
 ,
 가 가
 . 가 가 (17).

17. .

(%)

	*	/	/	가	**
가 .	11(10.0)	2(13.3)	2(8.7)	1(3.5)	6(13.9)
. 가	67(61.4)	9(59.9)	16(69.4)	20(71.3)	22(51.1)
	11(10.0)	1(6.6)	3(13.0)	3(10.7)	4(9.3)
	19(17.4)	3(20.0)	2(8.7)	4(14.2)	10(23.2)
	1(0.9)	0(0.0)	0(0.0)	0(0.0)	1(2.3)
	109(100)	15(100)	23(100)	28(100)	43(100)

*(%) : , **(%) :

•

1.

2001 3

가

615

.

313

.

, SWOT

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,

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,

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,

,

.

가

가

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가

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/

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/

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5

가

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SWOT

, ,
 가
 . . .
 가 .
 가 .
 , 2 . 5 . 10 . 10 .
 .
 , . ,
 . , , .
 가 , 가 가
 .

2.

가.

SWOT

, 가 , 가
10 , 99 가 58.6% , 99
10 79.3%(,1999) 20%
, 50 가 86.2%
99 88.5%(,1999)
가
. ,
. ,
. , , ,
. , , ,
가
가
- A/ S 가

가 .

가

가 1990 45 1995 60

5.7% , 2003 7.7%

(, Yearbook of World Electronics Data, 2000)

가

62.3%가 가

1999 126 (50.7%),

44 (17.6%), EU가 61 (24.5%) 가

18 (7.2%)

가 54.9%

· CT · MRI 26.5%, 64.3%,

9.2% GE, Siemens, Philips,

Toshiba, Picker 5 70%

(, Elsevier Advanced Technology, 1999).

60.4%가

가 51.3%가

가 '96 '99 1.0 2.3%
 가 , '91 236 '98
 823 250% 가 15.8% 40.5% 가
 가 가
 (, ,).

54.9% 7.1%, 5.0%,
 EU 5.0%, 2.3%
 (,1998),
 가 53.3%
 가 .

SWOT

가 .
 , FDA, CE 가
 가 가 가
 1995 WTO
 , (block)

가 .

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가

가 .

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가
가 가 .

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가

(,

, 1998).

FDA, TUV, CE

.

가

ISO 9000

, KGMP

가

가 가

SWOT

가

가

1,184

55%

1997

6,500

20%

1999

R&D , 2000).

가

1995 2001 1.306
 (, , 2001) ,
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 가
 가
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 , 2001).

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21

가

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가

가

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SWOT

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가

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A/ S

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가

17가

FDA, CE, ISO 9000

가

가

· A/S

가

가

가

가

가 가

SWOT

가

가

가

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 . , 1988
 .
 . , 1989
 . 1984; 7(2): 14-16
 . 1995; 92-95
 . ; 1997
 6(4): 84-91
 . 1997; 10(6): 68-69
 .
 . , 1996
 . , 2000
 . , 1989
 . , 1999
 . , 1995
 . , 2001
 . , 1998
 . R&D , 2000
 . , 2000
 . 가 , 2000
 .

1987; 6(2): 22-25

2000; 7(1) 4-20

, 1998

1997; 5(1) 8-17

, 1993

, 1999

1999; 10(4): 25-36

가

2000; 7(1): 55-68

1999; 4(1): 4-7

1999; 5(1) 4-17

1982; 7(1): 295-97

, 2001

CE

1999; 4(2) 26-38

, 1987

, 2000

, 1998

. 21

, 1995

, 1997

1999; 5(1): 45-67

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Electronics Data, 1998

U.S Dept of Commerce. U.S Industry & Trade Outlook, 1999

1.

(%)

	가					
	(R&D)	6(5.5)	43(39.4)	35(32.1)	24(22.0)	1(0.9)
		6(5.5)	19(17.4)	44(40.3)	32(29.3)	8(7.3)
		7(6.4)	21(19.2)	45(41.2)	36(33.0)	0(0.0)
		10(9.1)	17(15.6)	61(55.9)	20(18.3)	1(0.9)
		10(9.1)	21(19.2)	40(36.7)	32(29.3)	6(5.5)
		10(9.1)	35(32.1)	37(33.9)	21(19.2)	6(5.5)
		21(19.2)	55(50.4)	28(25.6)	5(4.5)	0(0.0)
		10(9.1)	36(33.0)	47(43.1)	16(14.6)	0(0.0)
		18(16.5)	48(44.0)	33(30.2)	10(9.1)	0(0.0)
		· A/S · A/S	13(11.9)	42(38.5)	32(29.3)	20(18.3)	2(1.8)
	5(4.5)		16(14.6)	46(42.2)	35(32.1)	7(6.4)
	14(12.8)		37(33.9)	46(42.2)	10(9.1)	2(1.8)
	1(0.9)		7(6.4)	37(33.9)	46(42.2)	18(16.5)
	3(2.7)		29(26.6)	52(47.7)	22(20.1)	3(2.7)
	2(1.8)		8(7.3)	31(28.4)	44(40.3)	24(22.0)
가	가	13(11.9)	37(33.9)	47(43.1)	11(10.0)	1(0.9)
	가	10(9.1)	35(32.1)	45(41.2)	14(12.8)	5(4.5)
	· ·	13(11.9)	53(48.6)	35(32.1)	8(7.3)	0(0.0)
		6(5.5)	29(26.6)	51(46.7)	22(20.1)	1(0.9)
		7(6.4)	30(27.5)	42(38.5)	27(24.7)	3(2.7)

2.

(%)

	11(10.0)	45(41.2)	44(40.3)	6(5.5)	3(2.7)
/	5((4.5)	16(14.6)	50(45.8)	33(30.2)	5(4.5)
	4(3.6)	12(11.0)	53(48.6)	32(29.3)	8(7.3)
.	7(6.4)	16(14.6)	47(43.1)	36(33.0)	3(2.7)
	3(2.7)	21(19.2)	52(47.7)	32(29.3)	1(0.9)
	2(1.8)	21(19.2)	48(44.0)	30(27.5)	8(7.3)
	3(2.7)	16(14.6)	55(50.4)	31(28.4)	4(3.6)
가	4(3.6)	18(16.5)	45(41.2)	24(22.0)	18(16.5)
	3(2.7)	17(15.6)	69(63.3)	14(12.8)	6(5.5)
(KTL)	5(4.5)	23(21.1)	47(43.1)	31(28.4)	3(2.7)

3.

(%)

	18(16.5)	50(45.8)	29(26.6)	7(6.4)	5(4.5)
가	7(6.4)	49(44.9)	39(35.7)	11(10.0)	3(2.7)
,	27(24.7)	39(35.7)	26(23.8)	14(12.8)	3(2.7)
(R&D)	15(13.7)	45(41.2)	36(33.0)	11(10.0)	2(1.8)
	10(9.1)	33(30.2)	36(33.0)	28(25.6)	2(1.8)
(M&A)	2(1.8)	26(23.8)	39(35.7)	39(35.7)	3(2.7)
	10(9.1)	43(39.4)	34(31.1)	16(14.6)	6(5.5)
가	4(3.6)	12(11.0)	45(41.2)	44(40.3)	4(3.6)
	17(15.6)	41(37.6)	35(32.1)	9(8.2)	7(6.4)
	9(8.2)	22(20.1)	41(37.6)	36(33.0)	1(0.9)

4.

(%)

<	>					
	·	1(1.9)	63(57.8)	35(32.1)	8(7.3)	2(1.8)
		10(9.1)	66(60.5)	26(23.8)	7(6.4)	0(0.0)
		24(22.0)	53(48.6)	29(26.6)	3(2.7)	0(0.0)
		16(14.6)	69(63.3)	24(22.0)	0(0.0)	0(0.0)
	가 (GMP,CE)	47(43.1)	48(44.0)	14(12.8)	0(0.0)	0(0.0)
		19(17.4)	59(54.1)	29(26.6)	2(1.8)	0(0.0)
<	>					
	· A/ S	62(56.8)	37(33.9)	9(8.2)	1(0.9)	0(0.0)
	· A/ S	49(44.9)	49(41.2)	13(11.9)	2(1.8)	0(0.0)
		29(26.6)	63(57.8)	16(14.6)	1(0.9)	0(0.0)
	가	29(26.6)	62(56.8)	16(14.6)	1(0.9)	0(0.0)
		7(6.4)	28(25.6)	37(33.9)	32(29.3)	5(4.5)
		29(26.6)	66(60.5)	14(12.8)	0(0.0)	0(0.0)
<	>					
		55(50.4)	45(41.2)	8(7.3)	1(0.9)	0(0.0)
		42(38.5)	49(44.9)	16(14.6)	2(1.8)	0(0.0)
		7(6.4)	37(33.9)	55(50.4)	9(8.2)	1(0.9)
		1(0.9)	9(8.2)	42(38.5)	50(45.8)	7(6.4)
	(M&A)	2(1.8)	18(16.5)	40(36.7)	39(35.7)	10(9.1)

()

?

(Weakness) , 가 가 (Strength) (Opportunity) (Threat)

가 가

2001. 4. 13

6

68

1. (" ") ?

		" "
.		CT,MRI, , ,
.		EKG, , , , ,
		, , , ,
		, 가
		, ,
가		, ,
		, ,
		PACS, DDR, OCS
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1가		()

2. 가 ?
1 5 6 10 11 20 21

3. '99 10 75% .
?
1 5 6 10 10 50 51-100 101

4. '99 50 가 85% .
?
20 21 50 51 100 101 200
201 300 301

5. .
?
2 3 5 6 10 11 15 16

: (Strength), (Weakness)

가 가 .

(5 · 4 · 3 · 2 · 1 “ ”)

		5	4	3	2	1
	.	5	4	3	2	1
		5	4	3	2	1
	.	5	4	3	2	1
	(R&D)	5	4	3	2	1
		5	4	3	2	1
		5	4	3	2	1
		5	4	3	2	1
		5	4	3	2	1
		5	4	3	2	1
	· A / S	5	4	3	2	1
	· A / S	5	4	3	2	1
	.	5	4	3	2	1
	.	5	4	3	2	1
가	가	5	4	3	2	1
	가	5	4	3	2	1
	.	5	4	3	2	1
	.	5	4	3	2	1
		5	4	3	2	1

: (Opportunity)

(5 · 4 · 3 · 2 · 1 “ ”)

	5	4	3	2	1
.	5	4	3	2	1
	5	4	3	2	1
.	5	4	3	2	1
	5	4	3	2	1
	5	4	3	2	1
	5	4	3	2	1
가	5	4	3	2	1
	5	4	3	2	1
(KTL)	5	4	3	2	1

: (Threat)

(5 · 4 · 3 · 2 · 1 “ ”)

	5	4	3	2	1
가	5	4	3	2	1
,	5	4	3	2	1
(R&D) ·	5	4	3	2	1
	5	4	3	2	1
(M&A)	5	4	3	2	1
	5	4	3	2	1
가	5	4	3	2	1
	5	4	3	2	1
	5	4	3	2	1

SWOT

(5 · 4 · 3 · 2 · 1 " ")

	5	4	3	2	1
	5	4	3	2	1
	5	4	3	2	1
	5	4	3	2	1
가 (GMP,CE,TUV)	5	4	3	2	1
	5	4	3	2	1

(· A/S)	5	4	3	2	1
(· A/S)	5	4	3	2	1
	5	4	3	2	1
가	5	4	3	2	1
	5	4	3	2	1
	5	4	3	2	1

	5	4	3	2	1
	5	4	3	2	1
	5	4	3	2	1
	5	4	3	2	1
(M&A)	5	4	3	2	1

가 . 가 " "

1. 가 ?

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· Digital Library
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2. 가 ?

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A/S
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3. 가 ?
가

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4. 가 가 ?

가

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5. 가 ?

(R&D)

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6. 가 가 ?

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ABSTRACT

A Study on Awareness on Policies to Strengthen Competitiveness of Korean Electronic Medical Devices Industry

Kang Ho Kim
Dept. of Hospital Administration,
Graduate School of Health Science
and Management,
Yonsei University

(Supervised by Professor Seung Hum Yu, M.D., Dr.P.H.)

This study set out to analyze strengths, weaknesses, opportunities and threatening factors of Korea's electronic medical devices industry and to grasp what kind of competitive power it has, which were followed by a few suggestions for government policies to support the industry. Questionnaires were distributed to 316 manufacturers of electronic medical devices in March, 2001.

109 of them returned the questionnaires, which were statistically processed with SAS(Statistical Analysis system). The results were as follows:

First, out of the manufacturers who responded to the questions, the manufacturers of home medical devices were the most with 25.7%, followed by those of treatment and operation equipments with 21.2% and lastly those of X-ray and medical imaging equipments with 13.7%.

58.6% of the manufacturers turned out to yield 0.1 - 1 billion won for the annual production while 29.3% of them 1.1 - 5.0 billion won. And 86.2% of them participating in the study had less than 50 employees, which showed how small-scale business they ran.

Second, the SWOT analysis told that source technology, functions of a product, design and endurance were considered as strengths in terms of product competitiveness which is one of internal factors. And they regarded a poor level of high-tech technology, lack of skilled technical hands, and poor investment in R & D as weaknesses.

In terms of marketing competitiveness, independent brand image and the strong network of domestic sales and after-sales support were considered strong while scarce information of foreign markets was said to be insufficient, and an international sales network and an international after-sales support system were weak.

Third, the research went on to investigate the awareness of external opportunities. As many as 51.2% of the subject members said they saw the home and foreign market size of electronic medical devices as an opportunity. But, there were only a few of them who found an opportunity in all kinds of the government's financial support policies, policies to promote venture firms and the policies for supporting exports. At the question of threatening factors, 62.3% of the manufacturers who returned the questionnaires said that they considered the market dominance by technologically advanced countries as the biggest threatening factor. Other major threatening factors mentioned by them included foreign quality certifications demanded by importing countries and domestic consumers who had this reluctance to use Korea-made products and had that preference for foreign products.

Fourth, the research was conducted to see what they thought of the directions of policies taken to support the electronic medical devices industry. The biggest percentage of 41.2% of the subjects insisted that mutual acknowledgement systems of quality certification between Korea and advanced countries should be established in order for such policies as support quality and technology development to work. The biggest 58.7% said there should be a policy that encourages national and public medical centers to use domestic medical equipments in order to support marketing in the Korean medical devices market. The biggest 43.1% said more support for the manufacturers to participate in foreign fairs were needed in promoting marketing in the world market. The biggest 31.1% thought that a certain system should be set up in joint research works among the industry, the colleges, and the research institutes in order to raise more skilled technical manpower. The biggest 39.4% proposed a financial support policy should take the way to expand R & D funds, and the biggest 61.4% were of the opinion that standards and testing methods should be more loosened and time to get a permission should be shortened in the respect of institutions and laws.

In conclusion, this study made the greatest result of grasping priorities in the government's support policies and the actual competitive power of medical devices manufacturers and with the purpose of promoting Korea's electronic medical devices industry. There were a few limits in the study. The registered questionnaire method gave a hard time in figuring out what were the opinions on strategic plans. And the support policies were limited in that they only suggested a comprehensive direction based on the priorities. Accordingly, future studies on this area should try to look into strategic plans in more diversified viewpoints and apply support policies, to my best acknowledgement.