Issue Paper

2004. 12.

기술창업 활성화를 위한 정책제언

목차

요약

Ⅰ. 문제제기

Ⅱ. 기술창업 현황 및 실태

Ⅲ. 기술창업 애로요인 진단

Ⅳ. 선진국의 기술창업 지원정책

Ⅴ. 정책제언

작성 : 김근영 연구원(3780-8054)
lune@seri.org
이갑수 수석연구원

감수 : 이언오 연구위원(3780-8101)
serileo@seri.org

삼성경제연구소

Executive Summary

.

.

.

2000 . , .

.

2001 [1] .

.

.

25 , ,

, .

.

‘ ’

.

.

,

.

.

.

.

1)

. . .

·

□

- 2004 1~9 9.3%

-

62%

□

-

- ·

- GEM[2] OECD

□

2) GEM(Global Entrepreneurship Monitor): BABSON (LBS)
(nascent
firm) 42 (new firm)

- ,

-

. 3)

1.

□ 2000

- 2003 2000 19.2%

□ 2000

- 2000~2003
. , . ‘ ’

-
· G7

2.

□
2001

3)
. . .

- · · ,

- 2003 2001 32.4%

□ 1999~2000
.

- 39.2%
· 1989

3.

□

-

□ ,

- 2002 19.6% 2003
50.5%

- · 2001

4.

□

- , ,

-

□

- IMD

.

1.

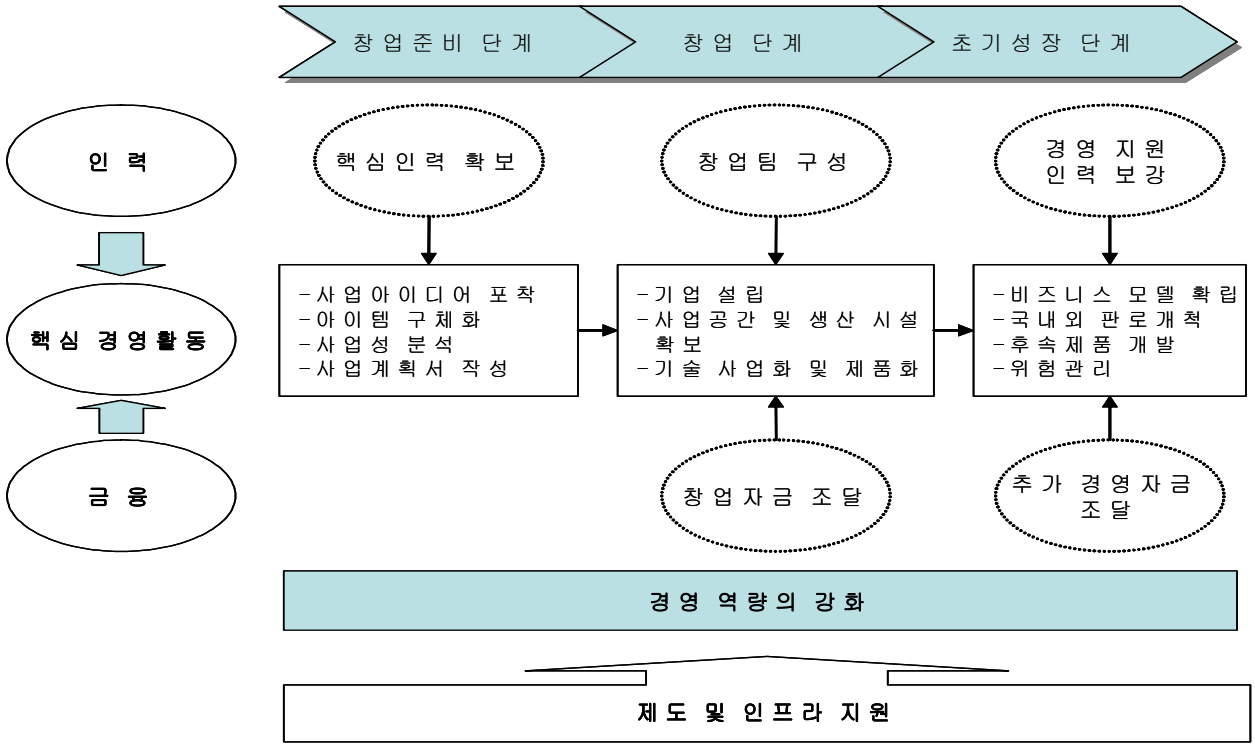
□ 25

□ . . .
4

2.

□ , ,

창업과정의 필요 요소


창업준비 단계
창업 단계
초기성장 단계
인 력
핵심 경영활동
금 융
핵심인력 확보
창업팀 구성
경영 지원
인력 보강
-사업아이디어 포착
-아이템 구체화
-사업성 분석
-사업계획서 작성
-기업 설립
-사업공간 및 생산 시설 확보
-기술 사업화 및 제품화
-비즈니스 모델 확립
-국내외 판로개척
-후속제품 개발
-위험관리
창업자금 조달
추가 경영자금 조달
경영 역량의 강화
제도 및 인프라 지원

(1)

□

-

,

□

-

, ,

-

(2)

□

- ,

-

□

-

- ,

(3)

□

-

- CEO , ,

-

□

-

-

(4)

□

-

-

□

-

□

-

(5)

□

-

-

□ .

-

.

1.

□ (SBA) , ,

- (VC)

- SBA (SBIC: Small Business Investment Company) VC

- SBIR(Small Business Research)

□

- ‘ (SBDC: Small Business Development Center)’

-

· LowDoc

2.

□ 1999 , 36

- ‘ ’ 3

□ , . . ,

-

-

3.

□

- 1993 .

□ ‘ (TBI: Technological Business Incubator)’ .

- , . .

- ,

. ,
2 30 Green
House

□

- ,

4.

□ (NSTB), (EDB)

- ,

-

□ Technopreneurship 21
1999 , , , , 4
4)

□ , .

-

4) http://www.actetsme.org/sing

.

1.

□

-

□

-

2.

□

‘ ’

-

□

- (spin-off)

-

□ ,

- ,

- , ,

- .

3.

□

-

□

- DB

- ,

4.

□ ,

- ,

□ KOSBIR

- ,
‘ (sunset)’

□ , .

- ‘ ’
,

□ . .

-

- ‘ ’ 3 1

□

- ‘
,

-

5.

□

- ,
Business Link .

- ,
‘ ’

□ · · (T-P-M)
‘
,

- ‘
(Demand Pull Strategy) ’

-

-

□

- , ,

□ ·
,

-

- ·

6.

□

-

-

□

-

□

-

7.

□ , ,

-

- (BI)

□

- ,
, ,

·

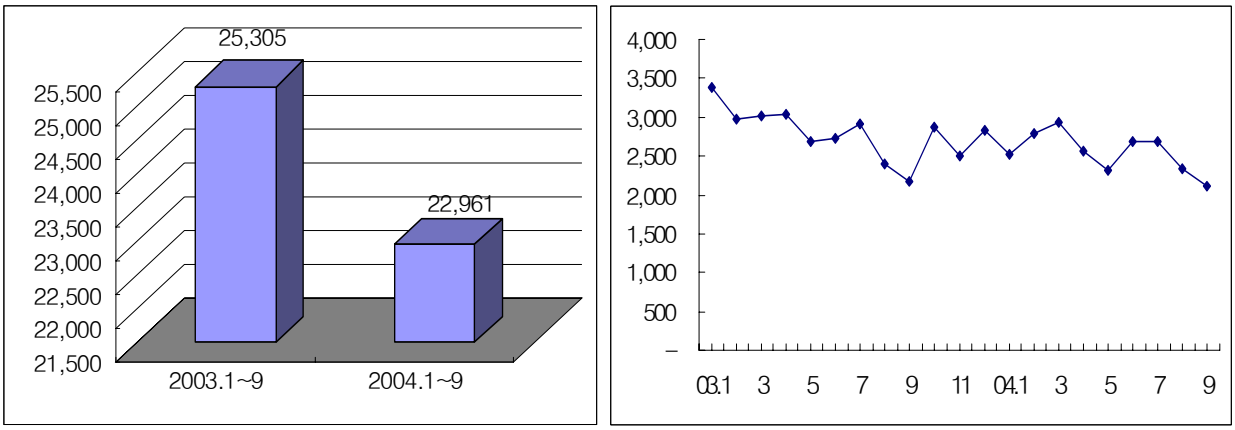
□ 2004 1~9 22,961 9.3%

- 9 2,103 10.0%
· 1999 5 2,085 5 4

- ( ) 13.0
· 17.9

월별 신설법인 수 현황 (2003.1~2004.9)

(:)



: , , (8)

□ 5)

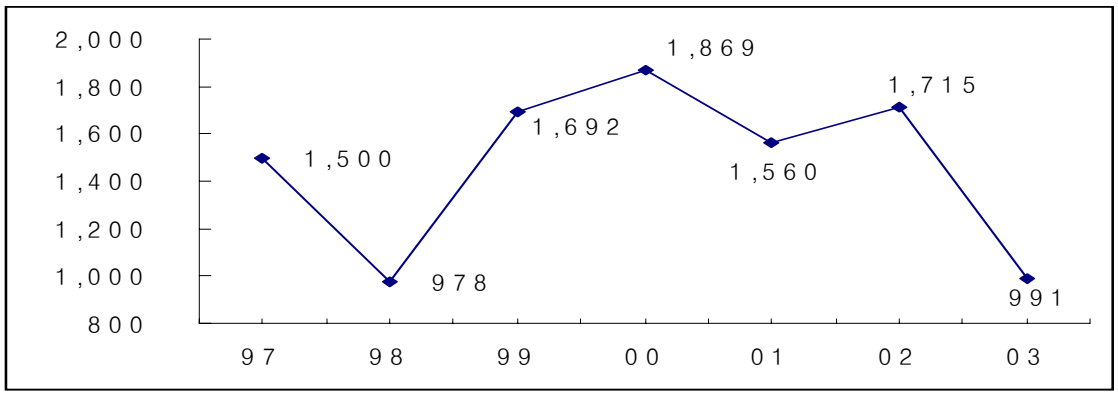
- 2003 991 1,715
42.2%

- 5 (98 ~02) 1,562 36.5%

5)

창업사업계획승인 건수

(:)



:

□

- 6

62% 6)

· (17%), (45%), (22%), (14%), (2%)

□

-

.

-

□

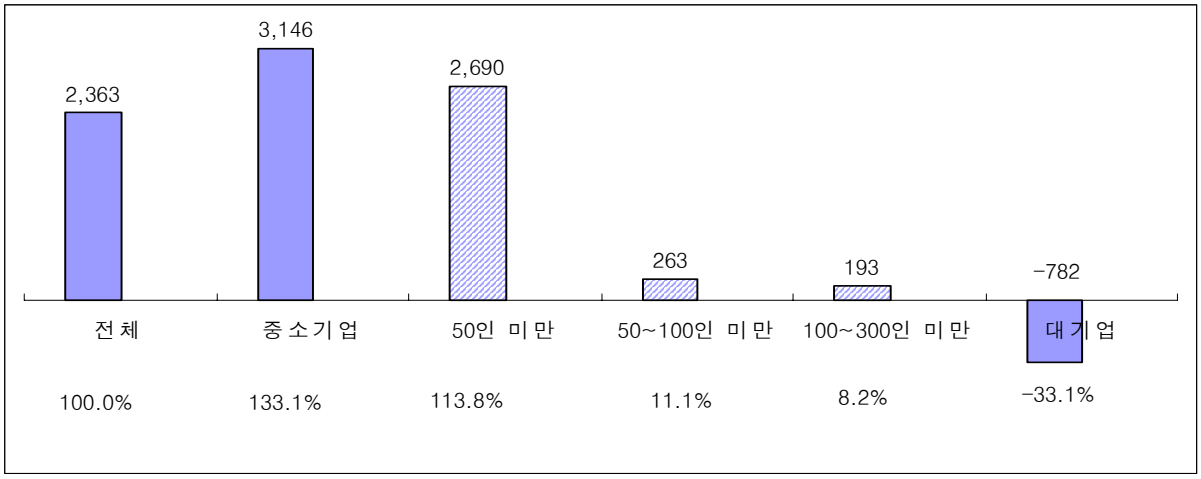
- 10

6) , “ ”, , 2004.6

· 1993 ~2002 236
314 78

중소기업의 고용창출 기여도(전산업, 1993~2002년)

(:)



: 1~299
: , ,

-
· 50 1993 60.7% 2002 69.3%
8.6%p
· 1,000 1993 12.4% 2002 5.3%
7.1%p

□ 7)

- 1999 19 5 2002 32 9
68.7% 8)
· 2.8%

7)

8) , ,

□

- GEM[9] G7 0.76

. 0.53,
0.69

- OECD[10] ,

.

□

-
.

-

□ .

9) GEM(Global Entrepreneurship Monitor): BABSON (LBS)
(nascent
firm) 42 (new firm)
10) OECD, "The Sources of Economic Growth In The OECD Countries", 2003

- ,

· 90

.

-

.

- 11)

. ,

□

-

.

.

- , ,
.

11) ‘ . ’ ‘
’
(, " ", 2004.7)

·

-

·

□

-

. 12)

1.

□ 2000

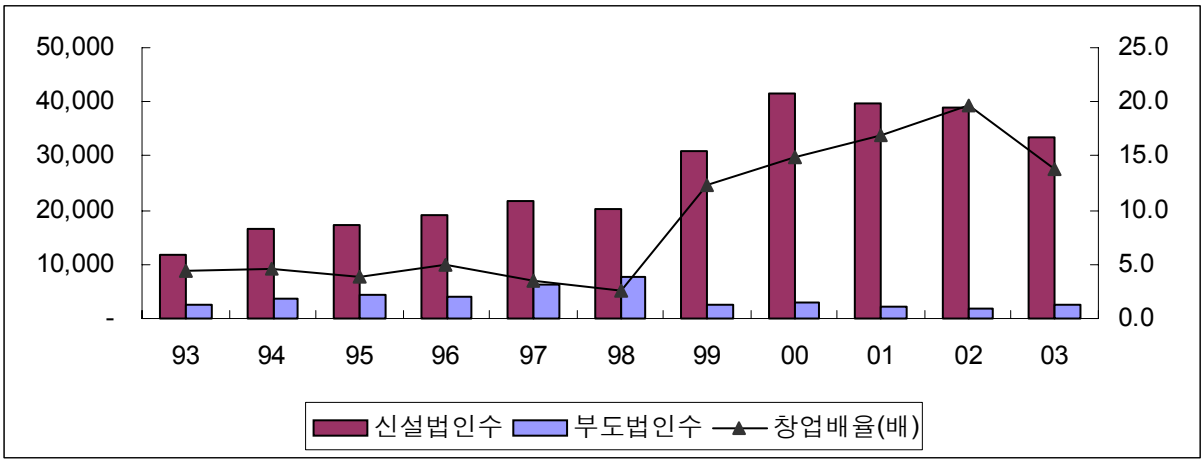
- 2000

· : 41,460(2000) → 33,497(2003): 19.2%

-

· (= /): 19.8(2002) → 13.8(2003)

연도별 신설법인 수 (8대 도시 기준)



: , , ‘http://stat.smba.go.kr'

□

12)

. . .

- 2003 25,249 75.4%

· (22,448) (3,108), (2,079), (1,629)

- 2000~2003 22.0% ,
9.5%

· (-22.8%), (-19.7%)
(2.2%)

지역별 신설법인 수 비교(8대 도시 기준)

(: , %)

2000	29,059	2,589	703	3,251	1,967	1,555	1,595	741	41,460
2003	22,448	2,079	722	3,108	1,629	1,299	1,537	675	33,497
(2003)	67.0	6.2	2.2	9.3	4.9	3.9	4.6	2.0	100
(00~03)	-22.8	-19.7	2.7	-4.4	-17.2	-16.5	-3.6	-8.9	-19.2

: , , ‘http://stat.smba.go.kr'

□ 2000

- 2003 66.5%

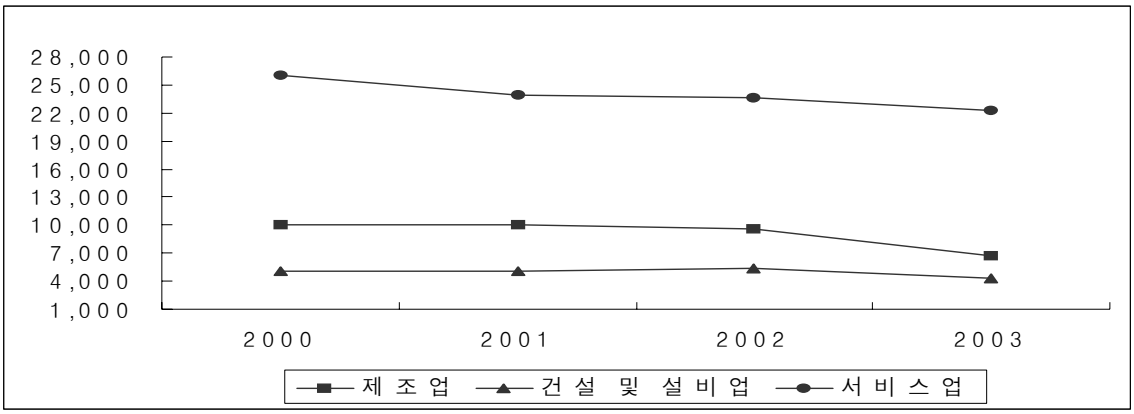
· (66.5%), (20.2%), (12.8%),
(0.2%), (0.3%)

- 2000~2003

· : 9,999(2000) → 6,768(2003): 32.3%
· : 26,022(2000) → 22,262(2003): 15.6%
· : 5,087(2000) → 4,293(2003): 14.4%

업종별 신설법인 수 현황

( )



: , , ‘http://stat.smba.go.kr'

- . , .
‘ ,

· · : 5,756(2000) → 8,753(2003): 52.1%
· · : 244(2000) → 248(2003): 1.6%

□ GEM [13] 2002

- ,

- 2003

13) TEA(Total Entrepreneurial Activity): 18~64
42

총창업활동지수 순위

	2000	2001	2002	2003
	2	4	4	n.a
	n.a	2	6	5
	3	7	11	7
	4	3	15	8
	19	27	21	21
	20	28	37	29
	21	**29**	**37**	**31**

: 1) 2003

2) 'Doing Business 2004'

: GEM, Global Entrepreneurship Monitor: Executive Report ,

□ G7

14)

- G7

-

2.

□

- · · ,

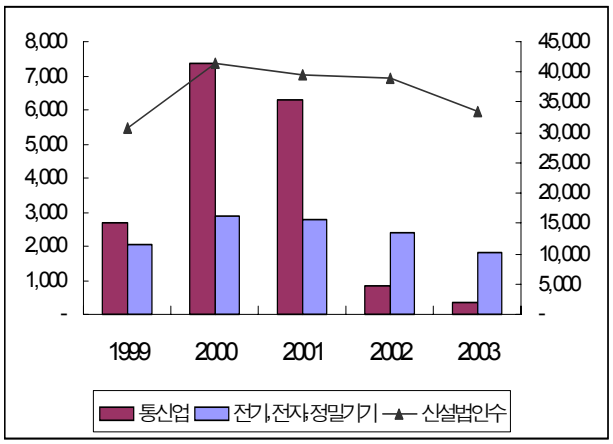
14) · · , “ -GEM ”, , 2001.9

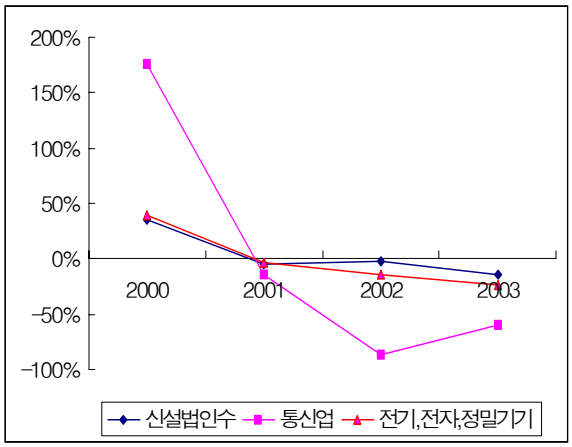
· : 7,343(2000) → 336(2003): 95.4%

· · · : 2,876(2000) → 1,825(2003): 36.5%

기술관련 업종 창업 추이 (8대 도시 기준)

신설법인수_ 전년대비 증감율





: , , ' http://stat.smba.go.kr'

□ [15] 2001

- 2001 11,392 2003 7,702 32.4%

[16]

· : (74.2%), (18.9%), (6.8%)

· : GDP 3%, 4%, 2% [17]

벤처확인 기업수 연도별 현황

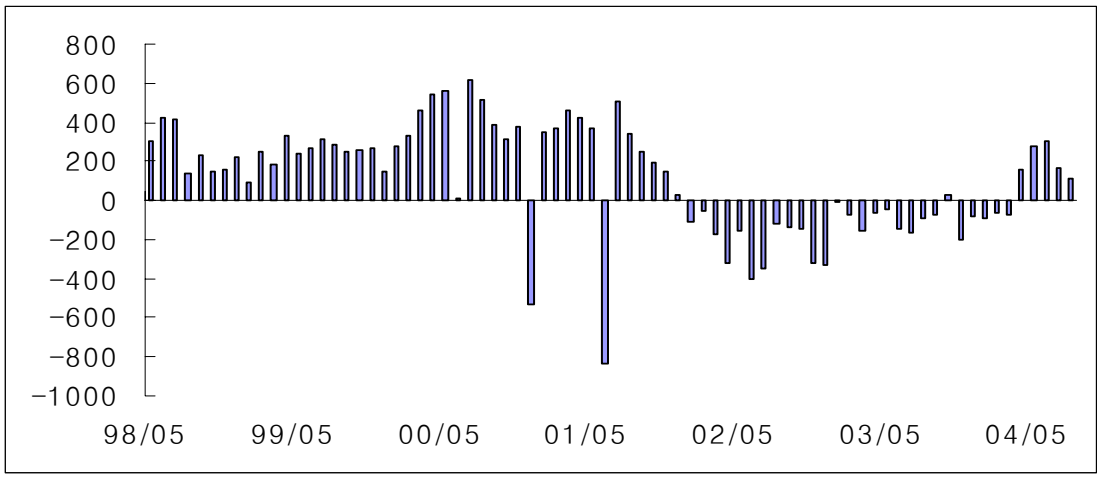
	1998	1999	2000	2001	2002	2003
	2,042	4,934	8,798	**11,392**	8,778	**7,702**

15) ' , ,
, , ,

16)

17) , " ", 2004.7

벤처확인 기업수 월별 증감현황 (1998.5~2004.8)



: 2000 12 2001 6

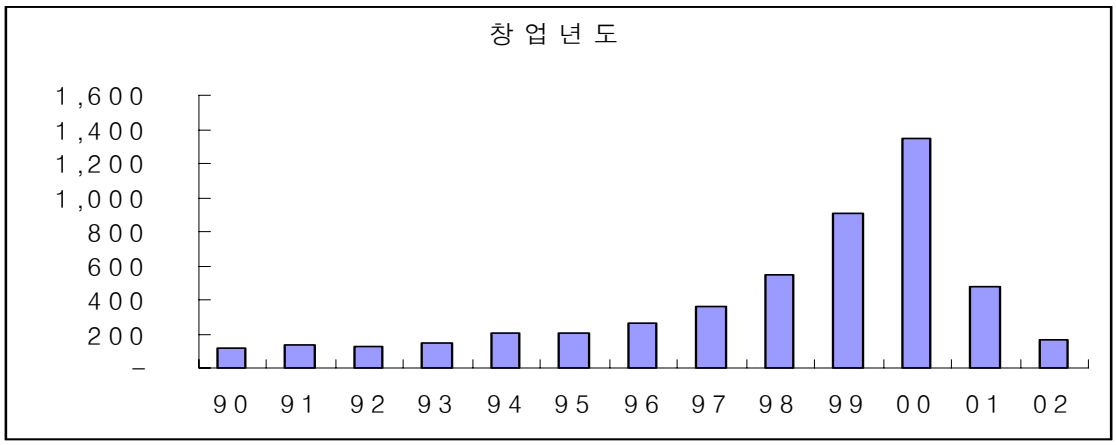
: , ,

□

- 1999 2000 2,259
39.2% 8 [18]

창업년도별 벤처기업 분포

( )



: 1989 726

: , , 2003. 9

18)
2003

창업시기별 벤처기업 분포

89	90 ~98	99 ~00	01~03	
73.1 (12.7)	2,108 (36.6)	2,259 (39.2)	658 (11.4)	5,756 (100.0)

: , , 2003. 9

□ 30

- · 36.6% 1989 20.5%

· 1999 · ,

벤처기업 창업자 특성

20	30	40	50						
228 (4.0)	**2,552** **(44.5)**	2,266 (39.5)	691 (12.1)	**4,145** **(72.3)**	543 (9.4)	190 (3.3)	339 (5.9)	95 (1.7)	425 (7.4)

831 (14.5)	1,269 (22.1)	**2,793** **(48.7)**	847 (14.8)	**3,059** **(53.3)**	501 (8.7)	1,048 (18.3)	462 (8.1)	667 (11.6)	5,737 (100.0)

: , , 2003. 9

3.

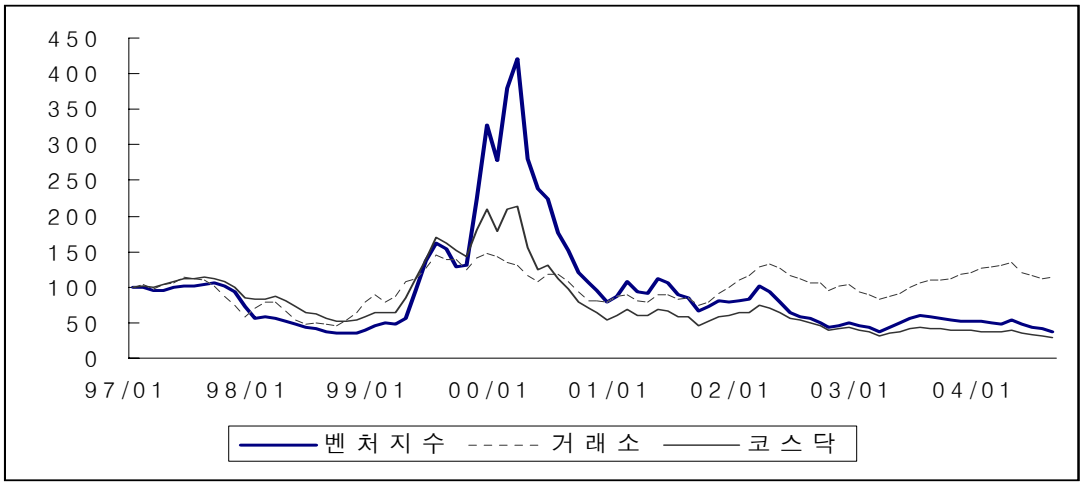
□

-

· : 6,751.83(2000 3) → 590.34(2004 8): 91.3%

-

지수별 추이(1997.1 ~ 2004.8)



: http://www.kosdaq.com( ), http://www.kse.or.kr( )

: 1997.1=100

- ,

□ ,

- 2002 19.6% 2003 50.5%

벤처기업의 자금사정

(: , %)

406(7.2)	843(14.9)	1,563(27.5)	1,820(32.1)	1,042(18.4)	5,674(100)

: , , 2003. 9

□ 2001

- 2000 194 2002 78 59.8% , 1 4,341 8,084 43.6%

연도별 창업투자조합 결성실적

	1998	1999	2000	2001	2002
( )	15	82	194	106	78
( )	1,055	4,885	14,341	9,993	8,084

: 2001 2002
: , , 2003. 9

- 2000 1,901 2 75
2002 1,460 5,652

연도별 창투사 신규 투자실적 추이

	1999	2000	2001	2002 *
( )	9,502	20,075	8,893	5,652
( )	1,457	1,901	1,117	1,460

: 2002 12
: , , 2003. 9

4.

□ .

-
. ,

□

-
. . , .

.

□

- .

. . , ,

.

□

- ,

.

창업관련 지원정책 현황

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

:

□

- 1999

-

· 2000

□

-

1999

· 1999 546 2003 216

- ,

(2003 15)

창업지원사업의 추이

(단위: 억 원)

	1999	2000	2001	2002	2003
	17	24	26	29	29
	446	828	755	285	302
·	556	507	305	304	231

:

□

- 1999 0.75 2003 0.82

-

· / : 1.67 (1999) → 2.32 (2003)

· / : 2.94 (1999) → 5.08 (2003)

-

· 2,849 2003

72.6%

(: 1,886 , : 181 , · : 782)

창업보육센터 현황

(: , , ,%)

	2000	2001	2002	2003
	220	261	275	289
	2,917	4,339	4,628	4,884
	2,188	3,297	3,717	4,020
/	75.0	76.0	80.3	82.3
	3,645	6,475	8,295	9,315
	6,442	15,531	19,762	20,409
	-	1,921	2,443	3,909
( )	195	995	1,577	2,849

:

□

- 1999 7,620 2000 2,115

2001

- 2003

14.3%

창업지원 자금 규모

(: ,)

	1999	2000	2001	2002	2003
	7,500	2,115	2,600	2,500	3,200
	7,620	2,115	2,660	2,700	3,200
	2,442	1,032	1,274	1,126	1,447
	38	108	59	180	456
	27	73	41	135	363

:

□ [19] ,

- 12 145 104

· : 22
· : 1 [20](GNI) 17.7%,
· : 1 332.0%

- , , , ,
,
· OECD

19) World Bank, Doing Business in 2005 , 2004
20) 2003 1 (GNI) 12,020

국별 창업 및 폐업 환경 비교

	( )	( )	(% 1 GNI)	( )	(%)
	12	22	17.7	1.5	4
OECD	6	25	8.0	1.6	6.8
	2	12	0.2	2.0	4
	5	5	0.6	3.0	8
	7	8	1.2	0.8	1
	5	11	3.4	1.1	8
	2	2	2.1	1.0	8
	11	31	10.6	0.5	4

: World Bank, Doing Business in 2005 , 2004

□ IMD 2004

5.46 (10) 39

- 2002 7.19 18

·

1.

□ 25

조사 개요

· : 2004 8 1 ~ 9 15
· : 25 6 14 ( ) 2 , · 3
· :
· : , ,

- [21] , , , ,

· : (15), (10)

- 4 12 , 4 13

· (3), (9), (13)

- 16
10

· [22]: (16), (5), (4)

---

21) , , , 4 .
‘ ’ IT, NT, BT, ET ,‘ ’ .
,‘ ’ IT , ,

· (·): (18), (3)

□ · · ·

4

-

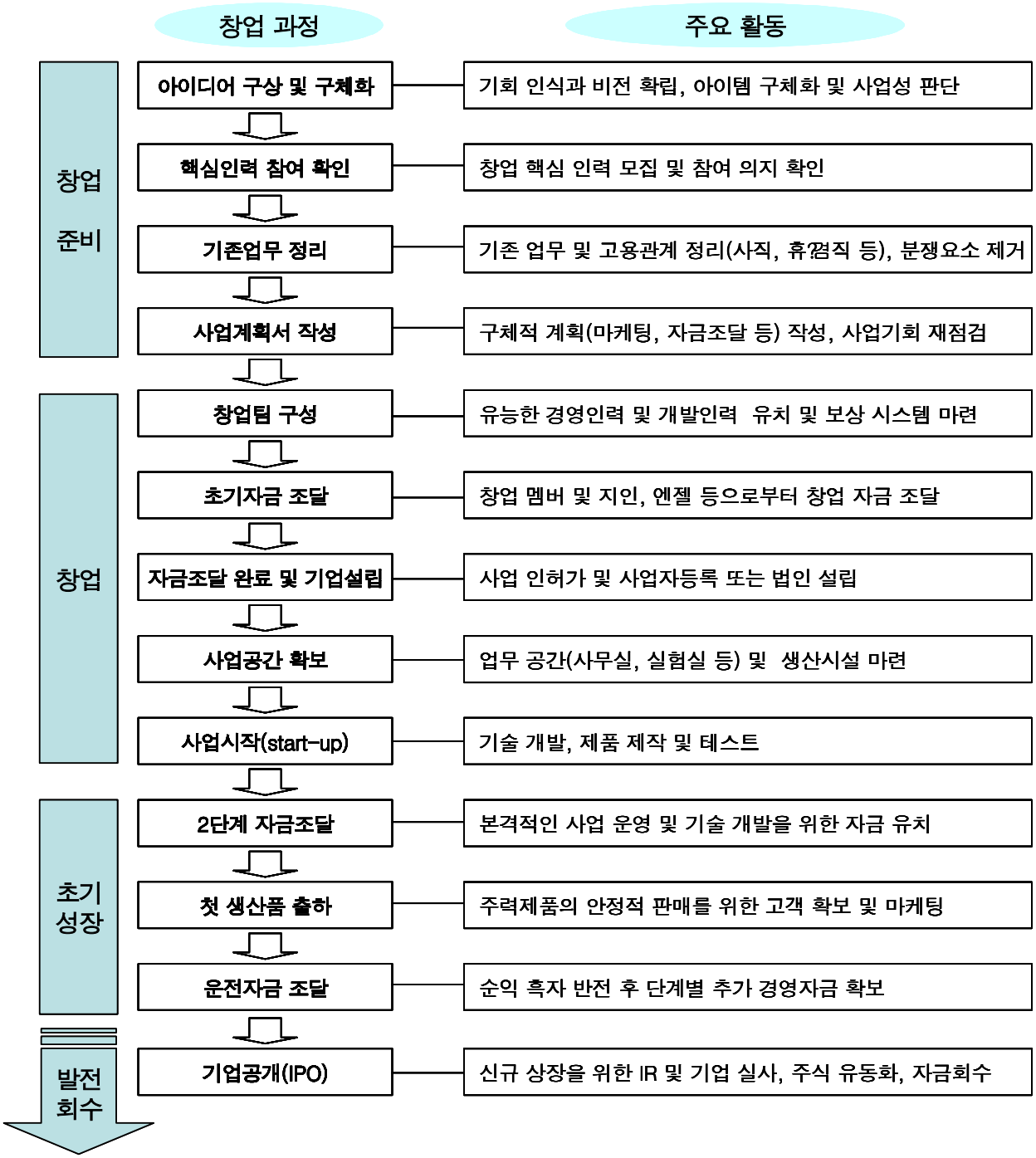
-

-

- ,

22) ·

창업 단계별 주요 활동



: L. , A to Z (: PC , 2000), pp26~28

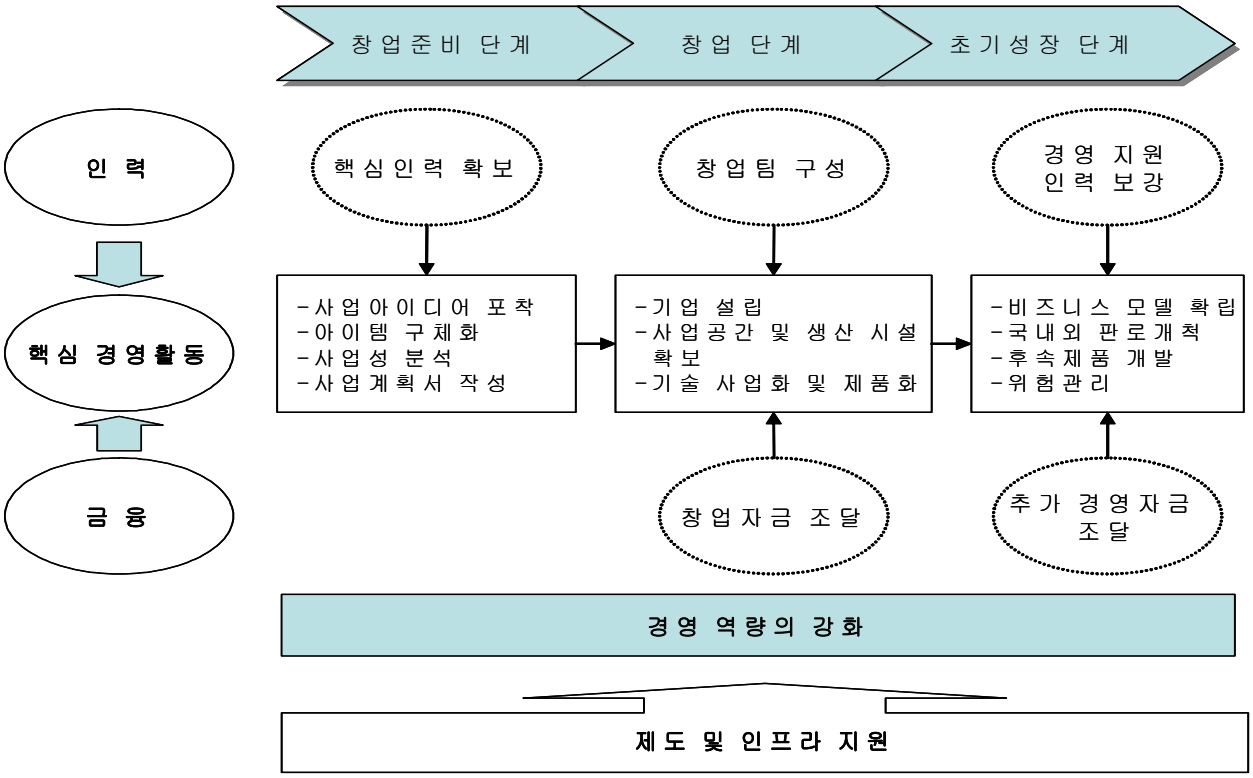
면담업체 개별 특성

					BI	
1	2004.4		94 GHz MIMIC			
2	2003.12					
3	2003.12					
4	2003.7		Low SAR Antenna			
5	2003.5					
6	2003.2					
7	2003.2		SW			
8	2003.1					
9	2002.12					
10	2002.1					
11	2001.7					
12	2000.12		TFT-array			
13	2000.7					
14	2000.7		,		-	-
15	2000.7		SW			
16	2000.3					
17	2000.2					
18	1999.12		BSS(Billing Service System)			
19	1999.1		MP3		-	
20	1998.5				-	-
21	1998.4		CAP( )		-	-
22	1998.1					
23	1997.8		NMS(Network Management System)			
24	1996.1		,			
25	1988.7		TMS( )		-	-

2.

□ , ,

창업과정의 필요 요소



(1)

□

-

- ,

· (pool)

기업 면담 사례: 해외인력의 활용

- A
- 2
-
-

- . .

.

,

기업 면담 사례: 실험실 창업 질적 활성화 필요

- B .
-
- B

.

- , ,

□

-

- , , ,

.

□

-

.

스톡옵션 관련 규제 강화

-
· 40%
· 5,000 3,000
·

-
·
·

(2)

□

- ,

· ,

-

·

□

-

□

-

-

-

□

-

-

기업 면담 사례: 판로 확대 어려움

- C - C 15% - -

기업 면담 사례: 해외 진출 필요자원 부족

- D . - . - . -

(3)

□

-
. .

-

- CEO ,
,
. .

-

. ,

기업 면담 사례: 기술평가 시스템 미비

- E

- E

-
.

-
.

-
. ,

.

- ,

기업 성장단계별 금융시장 존재 여부

: , “ ”, 2004.7

기업 면담 사례: 미래 성장성과 전략적 필요 과소평가

- F

- F

.

- F

.

□

-

기업 면담 사례: 업종 특성 반영한 자금지원 필요

- G

.

-

-

□

-

(4)

□

-

.

.

-

. , .

.

기업 면담 사례: 벤처 버블 붕괴가 창업의 기회

- 2003 H - . . - .

- , . . ,

기업 면담 사례: 창업보육센터 입주 유인 감소

- J

- J

. , .
.

-

□

-

.

-

기업 면담 사례: 공동 생산시설 확충 절실

- K 2~3

. 1
1

-

-

(5)

□

-
· · ,

창업관련 절차 및 규제 현황

- 2004 3~4 1 · · : 1 5 (1) · : 180 · : 68 (30 , 21 , · 13 , 4) - ‘ ’ · 30 20 · · 48 65 ·

-
·

□ ·

-

.

1.

□ (SBA) , ,

- Angel, VC

- framework , ,
,

□ ‘ (SBDC: Small Business Development Center)’

- SBA , , , ,
SBDC

- SBDC

- SBDC (SCORE: Service Corps of Retired Executives)
. ,
. , , . ,

□ (VC)

- VC

· VC 80% ,

- VC

- VC
VC
· VC
M&A

□ VC SBA
(SBIC: Small Business Investment Company)

- 1958 SBIC SBIC 1/2
SBA

- SBA , ,
SBIC
· SBIC 1 1 SBA
SBA [23]

- SBIC VC ,

· VC SBIC

- SBIC 3

23) , “ ”, , 1998, p.487.

.

SBA , Angel

ACE-NET(Angel Capital Electronic Network)

□

SBIR(Small Business Research)

- SBIR 1982

- 1

- SBIR

- 1990 ,

미국의 중소기업 기술혁신촉진 프로그램(SBIR)

	- · 1 2.5%	
screening	1	- 6 10
	2	- 1 2 75
	3	- , SBIR

:

□

- LowDoc
  · (SBA) 15 (10
) ‘1 ’
  . . . ,

2.

□ 1999 , 36

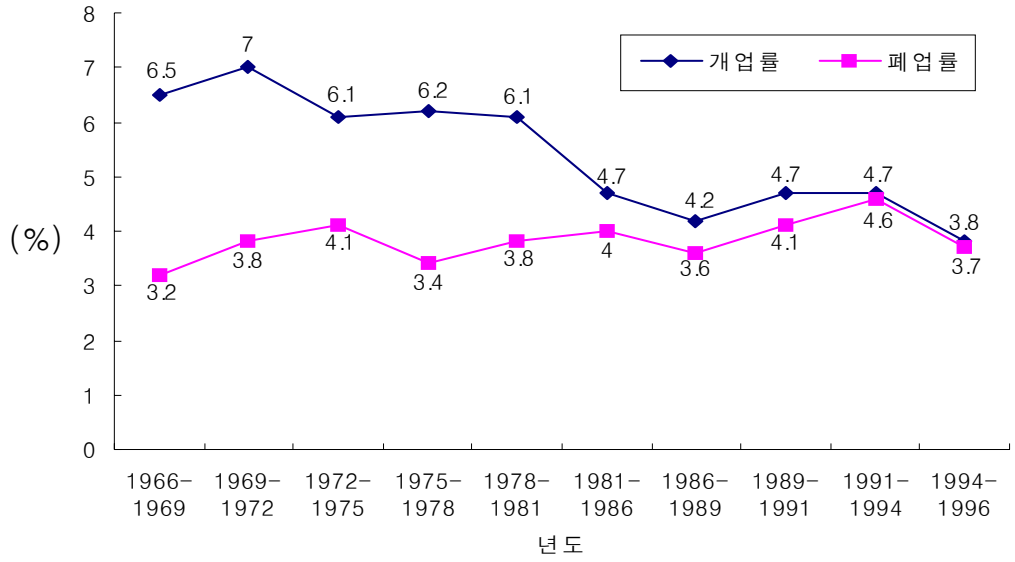
- 1963 , ‘ ’
  , ‘ ’

- ,
  , ‘ ’
  .
  · 1960-70 7% 1990 3%

- 1999
  ,
  .

- ,
  ‘ ’

일본의 開 · 廢業率 추이(非1차산업, 연평균)



1: = (-)/
/ (%)

2: = -

: , , , 2000, p. 5

□ ‘ ’ 3

- 3

- ‘ ’ ‘ ’ ‘ ’

. ‘ ’
,

-

,

□ ,

- 2001 10 , 5 18 36

- , ‘
’ 2002 10 ‘ ’ 2003 1

□

- , ,

- , Angel, VC

- ,

- , , ‘
,

□ , ,

- , , ,
,
. ,

□

- , , ,

- , ‘ ’, OB .

.‘ ’

□

- , VC

,

- 1999 ,

. ‘

,

3.

□

- IT, , , ,

.

- 1993 .

요즈마 펀드(YOZMA Fund)

- .
  1993 1
.' ' ' (initiative)'

-

- 1997

- 50
.

□ ‘ (TBI: Technological Business Incubator)’ .

- 1991 ,
TBI
. 1990

- TBI R&D
, R&D
. TBI

- TBI 2 15 (US$)
85%
. 3% ,

- , . .

Incubator for Technological Entrepreneurship Kiryat Weizmann Ltd.

TBI , Weizmann Institute of Science

□ ,

- 1984

-

마그넷(Magnet) 프로그램

- . - 65%

: (“ ”, 2000. 9)

' . '

- Green House , 2 30

□

-

. .

- , funding

· : 1 ( ), 2 ( ), 3 ( )
· 40% Gilat Satellite Network,
Check Point

-

· “Microsoft R&D ”( )

- ,

· Red Herring “ ‘
(Land of milk and honey)’ ‘ (money)
’ ”

4.

□ (NSTB), (EDB)

- Technopreneurship 21 , ‘
’

- ,

-

□ Technopreneurship 21
1999 , , , , 4
24)

- , ‘ ’ ,
, , concept
. , ,

- , Singapore
One 99.9%

. , , , , VC

· (Science Park ,) ‘ ’ ‘
’ .

- , 1999 ‘Technopreneur Investment
Incentive Scheme’

· ‘ (Bankruptcy
procedures and laws)’

· THO(Technopreneur Home
Office), (
2)

24) http://www.actetsme.org/sing

- ‘TIF(Technopreneurship Investment Fund)’

· , 2001 VC 100 (S$)

□ , .

- ,
, 6:4

·

1.

□

-

- . . .

- ,

-

□

-

-

2.

□

‘ ’

- ,

,

□

- (spin-off)
  .
  .

마쓰시타 전기의 분사 창업 육성제도

- 2000 ‘ (PSUF) ’ 100 ‘ ’ ,

□

-

□ ,

-

영국 쉘(Shell)사의 LiveWIRE(영국)

- LiveWIRE - 16~30 , , / 100 - 1982 50 2

: , , 2003.11

□ , ,

-

- , ,

□ ( )

- ,

- .

. ( ) ‘ ( ) ’
,

-
. ( ) (,
), - ‘ ’

3.

□

-

. , , .

- ‘ ’

. ‘

(debtor-in-possession system) ’

□

-

,

- DB

-

. ,

4.

□ ,

- ,

- R&D

,

‘ ’

- ,

□

- ,

- ‘ (sunset)’

□ KOSBIR

- ‘ ’ ‘ ’

□ , .

- ‘ ’

- ‘ ’

, .

(Co-financer)

. ,

,

* 실제로 프랑스에서 지난 2002년 중 보증회사가 보증한 기업 가운데 52%(약 2만 6,300여개)가 창업기업으로 조사

□ . .

- , .
,

-
. ,

. ,

-
, Relationship Manager
.
. ,

- ‘ ’ 3 1

□

- ‘
,
.

- ( )

.
,

□ .

-

· · 30%

5

· ,

5.

□

-

- ( ) ,

,

- ,

□

- ,

Business Link ·

· ,

- ,

‘ ,

□ · · (T-P-M)

‘

,

- ‘ ’

- ‘
(Demand Pull Strategy)’
· reference
,

- ,

□

-

-

□

-

- ,

- mentoring
· ( ) 1 1

□ R&D
‘ ’

- ,

.

- BI

□

- ,

. .

- , ,

□ . .

- , ( )

- ,

□ , 5 ,

- ,

-

.

□ .

- ,

6.

□

-

. 15
‘1 ’ (LowDoc
)

-

□

-
. 2000

. 1 OECD
1

□

-

-

. , . ,

-

. , ,

· filtering

□

-

· 1999

‘THO(Technopreneur Home Office)'

-

. ,

‘ ,

7.

□ , ,

- ,

-

. ,

- (BI)

· BI , BI

□

-
·

- , , ,

포항 테크노 파크

- 2000 , · · - , , (RIST), · · · 2003 1,325

: “ ”, , 2004.9.9

, “ ”, , 2004.6
· , “2003 IT : OECD ”,
KISDI, 2003
· , “ -
”, , 1998
· · , “ -GEM
”, , 2001.9
, “ ”, 13
4 , 2000
, “ ”, KAIST,
2004
, “ : ”, , 2001
, “ ”, 20 1 , 1998
, “ ”, ,
1998
, “ - ”,
1997
, “ ”, , 1993
L. , A to Z (: PC , 2000),
, " ", 2004.7
, “ ”, 2004.7
, ,
, , (8)
, ,
, ,
, , 2003.11
, “ ”, 2000. 9
. .
, , , 2000

http://stat.smba.go.kr/ (,)
http://www.kosdaq.com/ ( )
http://www.kse.or.kr/ ( )
http://www.digitalsme.com/ ( )
http://www.venturenet.or.kr/ ( )
http://www.venturenet.or.kr/ ( )
http://www.sbc.or.kr/ ( )
http://www.changupnet.go.kr/ ( )
http://www.kova.or.kr/ ( )
http://www.kvca.or.kr/ ( )
http://www.actetsme.org/ (APEC Center for Technology Exchange and Training for Small and Medium Enterprises)
GEM, Global Entrepreneurship Monitor: Executive Report ,
OECD, "The Sources of Economic Growth In The OECD Countries", 2003
World Bank, Doing Business in 2005 , 2004