



가

An Analysis of National Information Index by Countries

(K.Y. Jee)
(S.W. Kang)
(J.R. Kim) R&D

가 가

가

가

I. 가

가

가 가

가 가

가

가 가



가.

Johnscher[1], Machlup[2], Porat[3],
[4], [5]

가

가

OECD[6], Katz[7]

II.

가가

가

1974

가

35

1.

1985

42

가

4

가



2.

1970 RITE[8] . RI
 TE 가 가 가 , 가 , 가
 가 . RITE 가
 4가 가 가 가
 (, , , , , , ,) 가 가 가
 가 [4] RITE
 TE가 [4] RI 가 ,
 4가 가 가 , , ,
 가 , , 1 GNP , , ,
 가 , RITE , , ,
 RITE
 가 [9] 가
 , , , , , ,



< 1>

1	2	3	
가			PSTN (100) PSDN 가 (100) ISDN 가 (100) (1)
			(1) (1) (1) (1)
			(1) 가 (100) (100) 가 (100) TV (100) PC (100) (1) (100)
			(1000) 가 (100) 가 (100) 가 (100)
			(1) (100) (100) (1)
			(100) (100) (10)

III.

가

< 1>

28

1 , 2 (factor score) ,

3 , 가 가

zero 가

가



가

< 2> 가

2	3		1987	1991	1996
		PSTN	35.7	31.6	31.4
		PSDN 가	254.0	330.4	331.5
		ISDN 가	340.9	303.4	326.6
			369.4	334.6	310.5
			430.1	412.5	430.8
			191.1	112.2	203.7
			324.3	391.7	313.1
			54.4	83.5	52.5
		가	96.0	53.7	72.4
		가	183.7	182.1	168.5
		가	198.2	58.8	104.5
		TV	40.8	16.3	3.5
		PC	44.7	134.5	122.8
			256.0	113.6	156.7
			68.1	206.5	173.9
			112.4	234.5	197.7
		가	33.6	139.5	237.7
		가	274.3	181.2	45.9
		가	332.4	179.0	294.3
		가	359.7	500.2	422.1
			273.6	330.0	364.1
			359.6	73.2	387.5
			33.1	149.9	204.4
			33.6	447.0	44.1
			132.3	100.7	108.9
			70.4	92.7	85.7
			387.4	402.1	407.4
			409.9	404.5	398.0

< 3> ()

가	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
	332.1	371.6	405.0	474.9	501.6	699.4	8,400.8	17,485.7	25,543.6	36,934.1
	285.8	324.9	334.3	348.2	280.0	512.1	3,213.2	6,272.6	10,298.7	14,525.2
	222.8	245.1	245.3	289.2	345.1	542.8	3,766.8	6,588.2	11,856.8	17,321.6
	599.5	712.8	850.4	923.1	1,185.9	1,202.2	2,781.6	6,610.8	9,227.3	11,764.8
	212.8	234.9	261.6	381.9	584.6	1,077.8	1,637.6	3,247.8	4,931.1	8,442.9
	49.6	58.2	69.3	81.9	100.0	209.9	417.5	781.6	1,084.5	1,882.9
	88.5	99.1	109.1	131.1	174.7	435.0	730.4	1,198.7	1,587.6	1,853.6
가	545.8	600.9	647.1	711.4	798.1	1,470.7	2,337.8	3,644.2	9,482.8	10,475.5
	296.9	324.0	335.7	375.7	430.8	755.2	1,872.2	3,522.3	3,903.6	8,299.3
	43.4	49.6	52.0	57.8	66.3	84.5	123.6	236.4	354.8	346.2
	12.6	15.0	16.4	17.7	18.6	28.6	36.8	74.3	110.4	187.0
	12.4	12.9	13.3	13.4	14.1	15.9	17.0	21.1	21.5	25.2
	5.6	6.8	7.0	7.3	8.1	9.9	10.7	12.4	25.1	58.5



< 3> ()

가	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
	5.0	6.2	6.4	6.3	6.2	8.0	8.4	8.3	8.8	13.0
	14.1	15.4	15.1	15.4	15.1	21.7	24.2	26.6	48.7	73.1
	6.4	8.0	7.8	8.1	8.0	10.6	12.3	18.6	25.5	43.6
	7.6	8.6	9.0	8.9	7.9	10.4	10.6	12.6	19.4	24.6

1,883 1,854
1987

가

, 1996

< 4>

1996

(2), (3), (4), (5), (6), (7), (8),

(9), (10)가

1996 (1), (2), (3),

가

(4), 가 (5)가

(6), (7), (8), (9),

(1)

1 가

가

(

가 가).

가 .

3(< 4>) 6

(< 5> < 6>)

가

(2,753)

(208,960),

(53,317),

가

(1,221)

가 가

가

가 가

가

가

가



가

< 4>

가	1987		가	1991		가	1996	
	599.5	1		1,185.9	1		36,934.1	1
가	545.8	2	가	798.1	2		17,321.6	2
	332.1	3		584.6	3		14,525.2	3
	296.9	4		501.6	4		11,764.8	4
	285.8	5		430.8	5	가	10,475.5	5
	222.8	6		345.1	6		8,442.9	6
	212.8	7		280.0	7		8,299.3	7
	88.5	8		174.7	8		1,882.9	8
	49.6	9		100.0	9		1,853.6	9
	43.4	10		66.3	10		346.2	10
	14.1	11		18.6	11		187.0	11
	12.6	12		15.1	12		73.1	12
	12.4	13		14.1	13		58.5	13
	7.6	14		8.1	14		43.6	14
	6.4	15		8.0	15		25.2	15
	5.6	16		7.9	16		24.6	16
	5.0	17		6.2	17		13.0	17

< 5> 2

가									
	1987	1991	1996	1987	1991	1996	1987	1991	1996
	292.2	852.7	4,367.3	277.6	488.6	105,857.0	426.7	163.6	578.1
	202.1	383.3	14,831.7	245.2	304.9	28,089.1	410.4	152.0	655.0
	184.4	579.9	26,825.8	226.8	284.5	24,682.8	257.5	152.9	456.3
	248.7	624.4	20,628.0	1,294.6	2,802.4	14,217.9	255.3	130.9	448.5
	238.7	1,301.8	8,421.4	137.9	305.1	16,498.8	262.0	146.9	408.6
	41.9	100.0	792.3	39.2	100.0	4,681.8	67.9	100.0	174.6
	60.8	241.7	618.8	98.7	175.5	4,666.9	106.0	107.1	275.1
가	828.4	1,401.6	3,663.8	521.7	647.4	27,184.3	290.6	345.3	578.5
	140.0	355.8	1,302.2	442.6	633.1	23,055.4	308.3	303.8	540.5
	54.2	109.5	354.8	55.1	67.1	639.5	21.0	22.4	44.3
	6.9	13.0	73.3	12.2	23.3	459.5	18.8	19.7	28.2
	0.6	1.0	26.6	1.2	2.7	4.6	35.6	38.7	44.5
	1.8	2.9	12.5	6.1	10.0	147.8	9.2	11.5	15.4
	1.0	1.7	10.6	3.1	5.8	13.0	10.9	11.4	15.6
	2.5	5.8	26.5	16.2	14.3	162.9	23.6	25.3	29.9
	0.7	1.1	33.3	3.3	9.4	73.9	15.2	13.6	23.7
	1.1	1.4	32.0	3.3	6.0	16.3	18.6	16.3	25.6



< 6 > 3 (I)

가									
	1987	1991	1996	1987	1991	1996	1987	1991	1996
	267.0	1,363.3	8,148.5	317.5	342.0	587.1	330.9	443.0	2,753.8
	128.5	481.6	29,303.1	275.6	285.1	360.4	404.0	371.8	442.5
	125.4	901.6	53,317.1	246.4	294.2	334.5	378.0	308.5	416.0
	213.4	966.8	40,919.7	284.1	282.0	336.2	486.1	469.9	488.1
	154.0	2,167.1	16,131.6	323.4	436.5	711.2	209.5	244.6	342.7
	26.3	100.0	1,329.4	57.5	100.0	255.3	69.4	100.0	187.3
	32.9	370.7	1,089.1	88.7	112.7	148.5	181.1	175.2	235.0
가	208.0	642.6	2,647.1	1,442.8	2,160.7	4,680.5	899.5	650.1	825.6
	108.4	403.8	2,063.8	171.7	307.8	540.6	745.8	719.0	2,160.1
	13.2	31.3	206.3	95.2	187.8	503.4	100.3	93.3	103.5
	2.6	5.9	96.2	11.3	20.2	50.3	23.0	30.4	32.5
	0.3	0.5	48.8	1.0	1.5	4.5	2.4	4.1	4.5
	0.7	1.7	16.7	2.9	4.1	8.3	11.9	17.8	21.5
	0.4	0.8	14.8	1.7	2.5	6.3	6.2	11.1	5.9
	0.9	4.9	37.3	4.1	6.6	15.7	30.9	23.3	20.9
	0.5	0.8	60.8	0.9	1.4	5.7	6.5	16.9	22.5
	0.4	0.5	58.2	1.8	2.3	5.9	6.5	11.8	13.4

< 7 > 3 (II)

가									
	1987	1991	1996	1987	1991	1996	1987	1991	1996
	224.2	534.2	208,960.2	755.4	229.7	1,043.8	98.0	97.5	112.3
	86.3	238.0	55,735.6	740.7	220.4	1,221.6	80.1	83.6	88.4
	75.6	260.5	48,949.6	438.4	221.7	822.7	76.5	84.2	89.9
	2,103.0	5,134.9	27,947.8	446.6	188.0	810.5	63.9	73.8	86.6
	66.2	365.7	32,655.0	428.7	196.7	712.2	95.3	97.2	105.0
	9.0	100.0	9,176.3	46.6	100.0	228.9	89.1	100.0	120.3
	16.3	175.9	9,098.8	118.6	108.0	428.8	93.5	106.3	121.5
가	143.9	644.7	53,542.9	147.1	233.3	661.6	434.0	457.4	495.4
	139.4	547.2	43,950.7	83.1	60.3	492.1	533.5	547.2	588.9
	9.9	40.8	1,175.5	20.1	19.8	62.2	21.8	24.9	26.5
	1.5	16.3	886.6	9.8	7.0	17.3	27.9	32.4	39.1
	0.1	1.3	4.7	0.8	0.3	2.2	70.4	77.0	86.7
	0.2	2.2	274.1	1.8	2.5	5.5	16.6	20.5	25.2
	0.1	0.6	20.1	3.9	2.4	7.4	17.8	20.4	23.7
	1.5	5.4	304.9	3.9	2.1	6.7	43.3	48.5	53.2
	0.1	1.9	125.2	11.2	8.9	21.9	19.1	18.3	25.5
	0.1	0.3	19.2	9.7	2.9	15.2	27.4	29.6	36.0



가

(1,329) (255)
, (235) 가 가
(428)가
가
, 가
,
,
,
,
가 17
, 8
,
(304), (87),
(61) 가
, 가
가

V.

,
,
가 가
. 1992 1994

[1] C. Johnscher, Information Resources and Economic Productivity, Information Economics and Policy, Jan. 1983.
[2] Machlup, Fritz. The Production and Distribution of Knowledge in the United State, New York: Princeton University Press, 1962.
[3] M. Porat, The Information Economy: Definition and Measurement, Washington, D. C.: U. S. Government Printing Office, 1977.
[4] , 가
, 89-04, 1989.
[5]



- , 1996.
- [6] OECD, "Information Activities," Electronics and Telecommunications Technologies, Vol. I, II, 1981.
- [7] R.L. Katz, The Information Society: An International Perspective, 1988.
- [8] RITE, , 1970.
- [9] , 가 , NCA VII-RER -9689, 1996. 12.
- [10] , " ;" 10 2 , 1997, pp. 275 –291.
- [11] , , 1997.
- [12] , , 1995.
- [13] , 1995. 9., 1995. 12., 1996. 3 1996. 6., 1996. 9.
- [14] , 1996 , 1996.
- [15] , 97 , 97-07. 1997.
- [16] ITU, Yearbook of Common Carrier Telecommunications Statistics, 1995.
- [17] ITU, ITU World Telecommunication Indicator Database, Telecommunication Indicator, <http://www.itu.int/ti>.
- [18] ITU, Statistical Yearbook 1993, 1994.
- [19] ITU, Asia-Pacific Telecommunication Indicators 1993, ITU, Geneva, 1993 and 1997.
- [20] ITU, Americas Telecommunication Indicators 1990, ITU, Geneva, Switzerland, 1992.
- [21] , , SAS , , 1989.
- [22] , , 1982.
- [23] LA. Guttman, A New Approach to Factor Analysis, New York, Columbia University Press, 1954.
- [24] RITE, , , 1983.
- [25] OECD, Performance Indicators for Public Telecommunications Operators, 1990.
- [26] OECD, Usage Indicators—A New Foundation for Information Technology Policies, 1993.