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신제품 개발조직의 지식역량 향상에 관한 연구

형준 김

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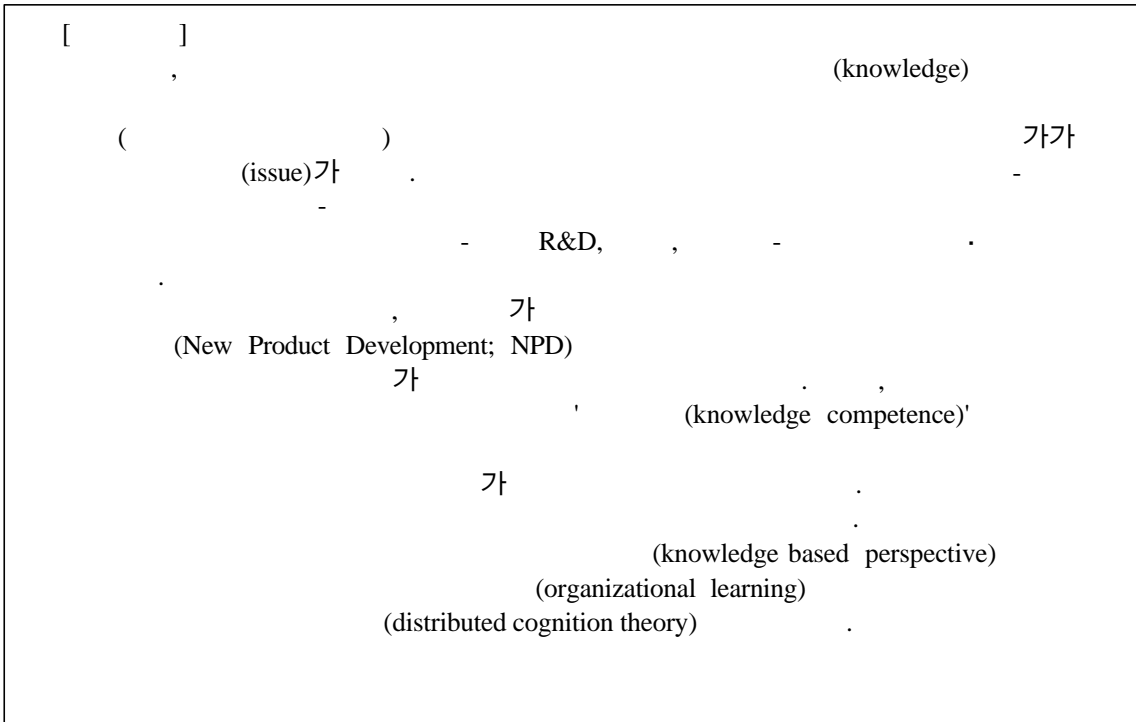
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: 99. 9 : 99.11

1.

1980 30% 1985-90
 42% 가 5 52% 가
 (Kleinschmidt & Cooper, 1995). 60%

1
 가
 (sunk cost) (technology lock-in)
 가 2

(knowledge)
 (; knowledge management)
 (; organizational learning),
 (; learning organization) 가
 ()
 가가 (issue) .
 . , 가
 (New Product Development; NPD)
 가
 (knowledge
 competence)'

1) 54.3%, 59.8%(Scott et al, 1992), 55%(Maidique & Zirger, 1984)

2) () ()
 가

(knowledge based perspective)

(organizational learning) , (distributed cognition theory)

2.

2.1

(communication web), (rational plan)
(disciplined problem solving)
(Brown & Eisenhardt, 1995).

[1] 가

	(Rational Plan)	(Communication Web)	(Disciplined Problem Solving)
	, ,		
	- 가, ,		-
	, ,		
	(X-Functional)		(X-Functional)
		/	
			, .
		가	
()	(, ,)		()

(senior management),

(cognitive theory)

(tautological) ('

(subtle control)', '(vision)', '

가 (Brown & Eisenhardt, 1995).

2.2 : (knowledge embodiment)

(economic rent) (Schendel 1996). - -

(forces)

(; Porter, 1980)

(; Ghemawat, 1986;

Shapiro, 1989) (privileged)

가

(firm specific capabilities)

(isolating

mechanism) (Rumelt, 1984; Teece, 1984; Wenerfelt; 1984; Dosi, Teece &

Winter ,1989; Prahalad & Hamel, 1990; Dierickx & Cool , 1989; Porter, 1990).

(unique bundle)

가

(Barney,

1991).

가

가

(embodied) 가 가
 (Grant, 1996). (core competence; Prahalad & Hamel, 1990)
 (Klein et al. 1978; Amit & Shoemaker, 1993; Peteraf, 1993; Lippman & Rumelt, 1982; Dierickx & Cool, 1989; Barney, 1991).
 (Conner 1991; Kogut & Zander 1992,1996; Conner & Prahalad,1996).

(dynamic capability)
 (firm specific capabilities)
 , 가 .
 ()
 (Dosi, Teece & Winter, 1989; Prahalad & Hamel, 1990; Hayes & Wheelwright, 1984; Dierickx & Cool, 1989).

(learning)
 /
 (Drucker, 1985).

(collective) (team) .
 가
 (embedded)
 , , (gap)

(embodied) (knowledge competence) () () 가 (gap)가 가 가 가 가 가 (Mahadvan, et al., 1998).

(eg; Adams, Day, & Dougherty, 1998; Ottum & Moore, 1997; Methe, Toyama, & Miyabe, 1997; Moorman & Miner, 1997; Song, Souder, & Dyer, 1997; Madhavan R. & R. Grover, 1998; Li Tiger & Calantone, 1998).

(marketing information processing)

가

3. (knowledge competence)

3.1

³ 가(technology push)? 가(market pull) 가 (Price, 1996).

Nelson & Winter(1982) (problem solving) ,
 , (capability) 가
 (knowledge) (knowledge competence)
 , , (organized) (structured)
 (systematic)
 가
 가(What is right)' ' 가 가 가
 (What works or works better)' 가
 (commercial knowledge; Demarest, 1997) (capacity to act; Sveiby,
 1997, p.37)

4
 (Drucker, 1993; Spender, 1996) 가
 가 4 (;
 private goods) (Spender, 1996).

(competence) . Day(1994, p.38)
 (collective learning) Prahalad &
 Hamel(1990)

(knowledge competence)
 가 가 (public goods) (Arrow, 1984)
 가 (appropriability)

(dynamic capability) (process)
' (stock)' 가

3.2

, ,
가
, ,
(Shrivastava, 1983).
(Nonaka, 1990). ,
, (shared interpretation; Sinkula, 1994)
, ,
/
(feedback) / 가 가 가 (Glazer, 1991;
Quinn, 1992). (interface)
(Gupta, Raj, & Wilemon, 1986, p.7) (cross
functional) (Cooper & Kleinschmidt,
1991.p.140). 가

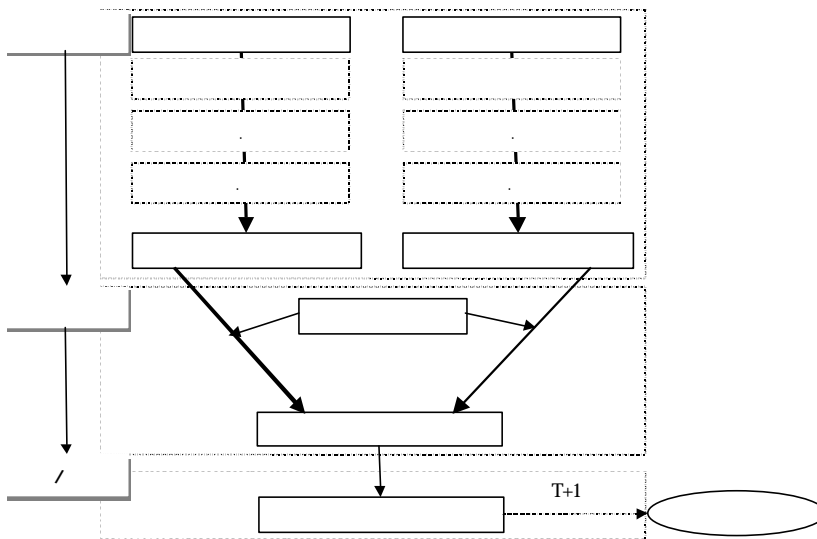
(Slater & Narver, 1995).

((inimitableness): Day, 1994; Prahalad
& Hamel, 1990) (immobility)
가 (Day, 1994). 가 가

가 가 (undiminishableness: Prahalad & Hamel, 1990) 가

(receptive capacity),
 (combination capacity),
 (coordination capacity), (gap)
 (maintenance · transformative capacity)

[1]



4.

4.1 (receptive capacity)

가 - (intangibility)

, , () -

(intangibility)

가

가

[3]

	· 가 가 (가)
	·
	·
	·

(information

impactedness)

(hidden information)

(hidden action)

(Arrow, 1985; Bergen et al, 1992)⁵.

가 (incentive),

(incomplete

contract)

⁶.

가

(Reed & DeFillipi, 1990; Baradwaj, Varadarajan, & Fahy, 1993)

[4]

		· (locus) ·
		· ·
	(filtering)	· 가 가 ·

⁵

가

⁶

(),

(Gurbaxani & Whang, 1991)

(Huber, 1982),

(Choudhury & Sampler, 1997).

(information

transmission cost)

1999.9

		· (, ,) ·
		·

(scanning)

(locus)

(monitoring)

(network externality) 가

(communication goods) 가

가

(von Hippel, 1982).

(filtering)

(trust)

가 가

가? 가

가

(: ,

)

(/

) (Aoki, 1990; Mody, 1993).

‘ , ‘

(learning by doing)

가

(가)

가

(Heide & Weiss, 1995).

가 가

, 가

(eg: Madhok, 1995; Chiles & McMackin, 1996).

가

가

(Brusco, 1982; Axerlod, 1984; Weitz & Zap, 1995).

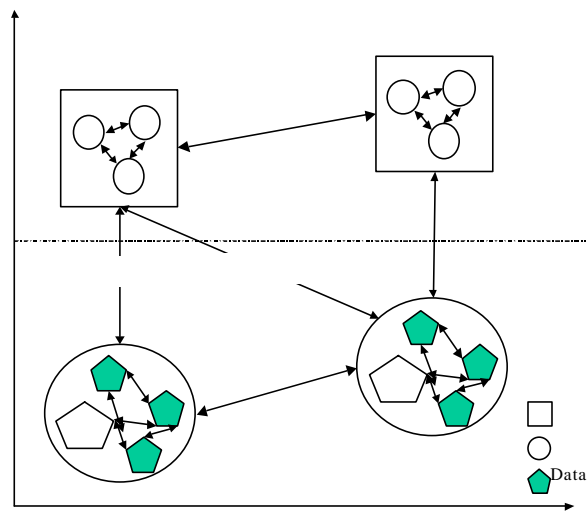
4.2 (combination capacity)

(Simon, 1985),

(eg; Granovetter, 1973)

(complexity)

[2]



(in-level)

- (cross-level)

(articulation)

(internalization)

(Hedlund, 1994).

(skill)

(routinize)

가 가

(embodiment)

가 (Lynn, 1998; Madhavan, et al., 1998).

(reflection)'

(Nonaka, 1987;

Hedlund, 1994).

(cross-level)

(expansion)

(appropriation)

([2]).

(team)

(Madhavan & Grover, 1998).

(solitary)

가

가

(Patel, Kaufman & Madger, 1996 p.140).

(well-coordinated)

(collective knowledge; Spender, 1996)

가

(dialogue)'

(Hedlund, 1994).

가

(Hedlund, 1994).

(:dialogue)

(:reflection)

(knowledge vector) /

가

(:shared mental model) ,
 (redundancy) (Grant, 1996;
 Madhavan & Grover,1998; Mody, 1993, Nonaka, 1990).
 가
 가 가 (Grant, 1996; Nonaka
 & Takeuchi, 1995, pp. 80-81).
 (messages transmitted
 in the back channel: Yngve, 1970)'가
 (Pinto, Pinto, & Prescott,
 1993) 가
 (Hudlund & Nonaka, 1993).
 (link)가
 (Meyers & Wilemon, 1989; Mezas & Glynn, 1993).

[5]

	.	Grant, 1996; Nonaka & Takeuchi, 1995
	.	Hudlund & Nonaka, 1993; Meyers & Wilemon, 1989; Mezas & Glynn, 1993
	.	Teece, 1998; Madhavan & Grover, 1998

가

(Bower & Hilgard, 1981).

가

가

(Mezas & Glynn, 1993; Nonaka, 1990).

(Rogers & Rogers, 1976)

가

(information gate-keeper)

(Mahadvan, et al, 1998; Teece, 1998; Mahadvan, et al, 1998).

4.3 (coordination capacity)

Grant(1996)

(:) 가 가

가 . 가

. Grant 가

(combination capacity) 가

(coordination capacity)

(integration) ' (cross-functional linkage)' ' (collaboration)' 가

(Jassawalla & Sashittal, 1998).

(R&D- -) 가

(goal)가 (eg; Song & Parry, 1993; Gupta & Wilemon, 1988; Lilien & Yoon, 1989; & , 1989).

가

(trust) . (faith) (Kreitner & Kinicki, 1992) JIT(Just in Time)

(eg; Zand, 1972, 1981).

()

()

가

(Mahadvan & Grover, 1998).

가 ,

(Zand, 1981)

(cross-functional)

(Hedlund & Nonaka, 1993).

4.4 (maintenance · transformative capacity)

(path-dependent)

(techniques)

(Allen, 1966; Laudan, 1984; Rosenberg, 1982)

(Crane, 1972).

(David, 1985; Dosi, 1982)⁷ .

⁸가

가 .

(Garud & Nayyar, 1994)

가,

(organizational memory: Levitt

& March, 1988; Walsh & Ungson, 1991)

(inter-temporal)

(synthesis)

⁷ (restructuring)

(time lag)가 (Garud & Nayyar, 1994).

⁸

가 (Wilson & Hlavacek, 1984).

(Garud & Nayyar, 1994) (procedure),
/ (Foster, 1971; Slater &
Narver, 1995) (turnover)
(Slater & Narver, 1995; Walsh & Ungson, 1991).

(Garud & Nayyar, 1994). 가 가

(Garud & Nayyar, 1994).
(competence trap: Levitt
& March, 1988) (core rigidity: Leonard-Barton, 1992)
(Dickson,1992) .
(unlearning) 가
(Schein,1990,1993).

5.

가? () , , .

5.1 :

(learning intent)가
(Hamel, 1991). Edmund & Husserl(1968) (consciousness)

가 (frame) (Nonaka, 1994).

(self-

fulling) (self-actualization)

(Weick, 1979). 가

가

가

가

가

(Searle, 1983, p.166; Nonaka, 1994).

(Mody, 1993)

. Nonaka(1994)

(; fluctuation)

Proposition 1:

5.2 :

가 (transparency)

(Hamel, 1991).

(Hamel, 1991).

가

(paradox)

(knowledge link)

가

가

(flexibility)

(Volberda, 1997).

),

(),

() 가

가

가

⁹ (eg; Cohen & Levinthal, 1990; Daft & Lewin,

1993; Liebskind et al., 1996).

(Camagni, 1989; Teece, 1989).

()

가

(organic) 가

(eg; Burns &

Stalker, 1971, 1995; Capon et al., 1992). Miles & Snow(1992)

(Mintzberg, 1987; Gupta & Govindarajan, 1991;

Hart, 1992; Woodman, Sawyer, & Griffin, 1993)

가

(eg; Stata, 1989; Tushman & Nadler,

1986) (Cohen & Levinthal, 1990; Henderson & Clark, 1990)

(eg; Mezias & Glynn, 1993)

⁹ 가

. Hagedoorn & Schakenraad(1994)

(hazard) 가

가 가
(Hagedoorn, 1995)

Proposition 2:

.

Proposition 3:

.

5.3

가 (Gulati et al., 1994)

(Macneil 1980).

. Nonaka(1994)

가 (intention)¹⁰

Nonaka 가

가

가 (autonomy) 가

(Nonaka, 1994).

가 가 (Cohen et al., 1972).

(Morgan, 1986) (self-organization)

가

¹⁰ Edmund & Husserl(1968) (consciousness)

(Nonaka, 1994).

(Nonaka, 1994). 3M

() ()
(/)

(approval)

(Brown & Eisenhardt, 1995). Imai et al.,(1985) Tacheuchi & Nonaka(1986)

() (subtle control)

(delegation)

(Brown & Eisenhardt,

1995)

()

(Zirger & Maidique; 1990; Cooper & Kleinschmidt, 1987; Souder & Song, 1998).

Proposition 4:

5.4 (infrastructure)

(information technology)

(enabler)

(customized product)

(infrastructure)

가

()

(, :)

)

(appropriability) (architecture)

Proposition 5:

, /

[6]

()	(Learning Intent);
	, (fluctuation)
	():
	: / /

6.

(Competitive Force)

(Strategic Conflict)

(firm specific resource)-

(firm specific competence)-

()

가가 가

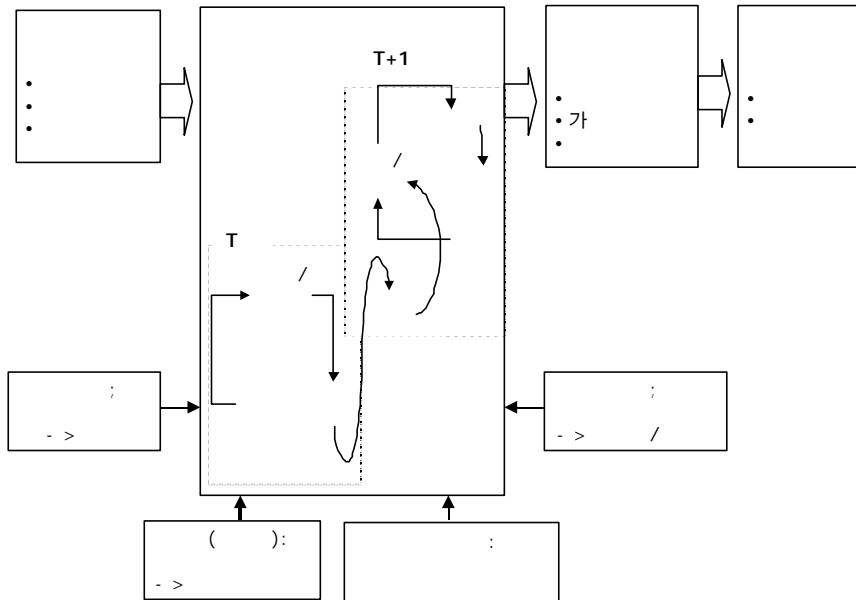
가

(Team)

가 . ,

가

[3]



(1992), " ,
 (1992), 「 , : .
 . (1995), 「 , : .
 , (1989), " , " , 11 , 1 ,
 pp.133-162.

(1994), " 가
 - " ,
 (1995), " - "
 .
 (1992), " - " ,
 (1995), " - " ,

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