

經營學碩士學位論文

企業競爭力 強化  
知識經營 活用 實證研究

An Empirical Study on Knowledge  
Management Utilization for Firm's Competitiveness

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2001年 2月

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海運經營學科  
趙 廷 濟

本 論 文 趙 廷 濟 經 營 學 碩 士 學 位 論 文  
認 准 .

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2001 2

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海 運 經 營 學 科 趙 廷 濟

# - 目 次 -

<b>1</b>		1
1		1
2		3
3		4
1.		4
2.		5
4		6
<b>2</b>		8
1		9
1.		9
2.		10
3.		11
2		12
1.		13
2.	(strategy)	15
3.	Process	17
4.	/ (culture/people)	19
5.	(technology)	20
<b>3</b>	<b>가</b>	23
1		23
2	<b>가</b>	23
1.	<b>가</b>	23
2.		25

<b>4</b>		.....	27
1		.....	27
1.		.....	27
2.	4	.....	31
2			
		T - Test	..... 40
1.		.....	40
2.			
		T - Test	..... 42
<b>5</b>		.....	45
1		.....	45
2		.....	46
1.		.....	46
2.		.....	47
<b>參 考 文 獻</b>		.....	48
1. 國內文獻		.....	48
2. 國外文獻		.....	50
3.		.....	53

	■	■	
< 1-1>		.....	2
< 2-1>		.....	10
< 2-2>		.....	14
< 2-3>		.....	16
< 2-4>	Process	.....	18
< 2-5>	/	.....	20
< 2-6>		.....	22
< 4-1>		.....	28
< 4-2>		.....	30
< 4-3>		.....	32
< 4-4>		.....	34
< 4-5>	가	.....	36
< 4-6>		.....	38
< 4-7>		.....	40
< 4-8>		.....	41
< 4-9>		.....	42
< 4-10>		.....	43

	■	■	
< 3-1>		.....	26
< 4-1>		.....	33
< 4-2>		.....	35
< 4-3>	가	.....	37
< 4-4>		.....	38

# **Abstract**

## **An Empirical Study on Knowledge Management Utilization for Firm 's Competitiveness**

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Department of Shipping Management

The Graduate School of

Korea Maritime University

The concept of knowledge management(KM) appeared in the world society, As Europe management conference supported by ILO adapts subject of "Knowledge management(forecast of new opportunity)". recently, Because knowledge management begins to be applied in the whole industrial field. knowledge management has been brought as a best practice that companies can improve and harden their own competitive power basically.

To make KM help for management place, the importance to managers recognition KM and emphasis on company competition are required the gap study of actual use level.

In this study, I will boundly recognition degree of knowledge competition importance with 4 factors, that is there are management

renovation and knowledge ability factor, financial factor, customer values factor and inside processor factor.

I did gap analysis between actual competition and these factors. when I did factor analysis of out side environment factors, that's results consist of complexity of competitive and cooperative companies, change speed of new goods and new tech, variety of customers and simplicity of demand expectation.

then, I did again T-test of the results,

The results of the analysis showed me that korea companies are much interested in KM, and it's appeared that KM is contributing to company competition.

If I conclude with the results of this study, we are interested in the word of KM but do not see the importance of KM. However we have a high level of competition advantages on the contrary korea companies are interested in the change of customer's desire, but don't come up with hold competition advantages so we'll be required much more interest and endeavor in KM and intelligence asset in the future. we find it's important to upgrade inside processor korea is engaged in personnel resource but has to be interested in knowledge share system like KM. In regard to customer value, the understanding of customer's desire has competition advantages and other factors are important nevertheless, we don't have competition of those.

# 1

## 1

1986 (ILO)가  
“ ( )”  
1).

(Best Practice)

30

20

가

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1) , 『LG 』 , LG , 1999.

가  
가  
53%  
, 32% 가

< 1-1 >

2)

	(%)
	53
	32
	12
	3

2) , , ,  
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(Gap) 가 .

2

가

가 .

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가 ,

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가 ,

3

1.

2.

( ) T-

(Factor Analysis)

( )

(Gap Analysis)

Test

4

T -



2

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가

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1

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1 ,

1.

(Nonaka) & (Takeuchi,1995)

(知) (flow)

(stock) 3).

가

가

(Leonard)

(Sensiper,1998)

4).

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3) I. Nonaka and H. Takeuchi(1995), *The Knowledge Creating Company*, New York, Oxford University Press.

(Documarest,1997)

, ,  
5).

2.

< 2-1 >

	가	가

- 
- 4) Dorothy Leonard and Sylvia Sensiper. "The Role of Tacit Knowledge in Group Innovation", *California Management Review*, Vol.40, No.3, 1998 Spring, p.112-132.
- 5) Marc Documarest, "Understanding Knowledge Management", *Long Range Planning*, Vol.30, No.3, 1997, p.374-384.

\* : , 1998, p.44.

(Nonaka) 가

3.

4

(Nonaka)

6).

(Ruggels,1998)

가

7).

---

6) I. Nonaka and H. Takeuchi(1995), op. cit. New York: Oxford University Press.

7) Ruddy Ruggles, "The State of the Notion : Knowledge Management in

(Quintas,1997)

8).

가 가

2

1990

4가

(Prusak,1995)

---

Practice", *California Management Review*, Vol.40, No.3, 1998 Spring, p.80-89.

- 8) Paul Quintas, Paul Lefrere and Geoff Jones, "Knowledge Management : A Strategic Agenda", *Long Range Planning*, Special Edition; Vol.30, No.3, 1997, p.385-391.

90

가

1.

1991 (Nonaka)<sup>9)</sup> 가 (Harvard Business Review)

가

가

10)

(Edvinsson,1997)

(Skandia)

, (Davenport,1998) 31

4

8

9) I. Nonaka, "The Knowledge Creating Company", *Harvard Business Review*, Nov/Des, 1991, p.96- 104.

10) Marc Documarest, op. cit., Special Edition; Vol.30, No.3, 1997, p.374- 384.

< 2-2> .

< 2-2>

Nonaka (1991)	4
Spender (1996)	.
Appleyard (1996)	
Drew (1997)	
Edvinsson (1997)	Skandia
Documarest (1997)	
Wiig (1997)	가
Ruggles (1998)	431 가 ,
Fahey et al(1998)	11가
Davenport et al(1998)	31 4 8

2. (strategy)

가

(Grant,1996)

가

(resource-based view)

가

11).

(Sanchesl,1996)

12).

(Mowery,1996)

13).

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11) Robert m. Grant, "Toward a Knowledge-based Theory of the Firm", *Strategic Management Review*, Vol.17, 1996, p.109-22.

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< 2-3> .

< 2-3>

Sanches et a.(1996)	
Mowery et al(1996)	
Grant (1996)	
Tsoukas (1996)	3
Quintas et al(1997)	가
Chakrathy (1997)	

---

1996, Special Issue, p.77-92.

### 3. Process

가, , , .

(Schein,1996)

3

14).

가

(Glazer,1998)

가

가

15).

, < 2-4> .

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14) Edgar H. Schein, "Three Culture of Management : The Key to Organization Learning", *Sloan Management Review*, Vol.17 ,1996 Fall, p.9-20.

15) Rashi Glazer, "Measuring the Knower : Towards a Knowledge Equity", *California Management Review*, Vol.40, No.3, 1998 Spring, p.40-54.

< 2-4 >

Liebeskind (1996)	
Schein (1996)	3
Szulanski (1996)	best practice
Jordan et al(1997)	
Lank (1997)	skandanavia 가
Keiner (1997)	learning history
Cliffe (1998)	
Glazer (1998)	가 가

4. / (culture/ people)

가 가 가  
, . 가  
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.  
가 가 가  
, . 가  
.  
.

(Krogh,1998)

가

16).

/

< 2-5 >

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16) Georg von Krogh, "Care in Knowledge Creation", *California Management Review*, Vol.40, No.3, 1998 Spring, p.133- 153.

< 2-5 > /

Sviokla (1996)	4 가 ,
Davenport et al(1996)	30
Kim et al(1997)	가 fair process 3가
Roos et al(1997)	3가
Leonard et al(1998)	
Krogh (1998)	care

**5. (technology)**

가 .  
가 .

(Vian)

17).

(Bawden)

18).

(Schrage)

19).

(Orlikowski)

(Lotus Notes)

20).

< 2-6> .

- 
- 17) Kathleen Vian and Robert Johansen, "Knowledge Structure and Use : Implications for Synthesis and Interpretation", *Temple University Press*, 1983.
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- 20) Wnada J. Orlikowski, "Learning from Note : Organizational Issues in Groupware Implementation", *The Information Society*, 1993, pp.237-250.

< 2-6 >

Vian et al(1983)	.
Bawden (1986)	enabler
Johnson (1987)	,
Scharge (1990)	
Orlikowski (1993)	
Collins (1995)	
Leonard-barton (1995)	

### 3 가

1

(Survey Research)

,  
261 . 500 ,  
2000 9 1 , 9 30  
.

2 가

1. 가

[가 ]

가 .

-1.

가 .

-2.

가 .

-3. 가  
가 .

-4. 가 .

[가 ]

-1. .

-2. .

-3. .

-4. .

.

가

가

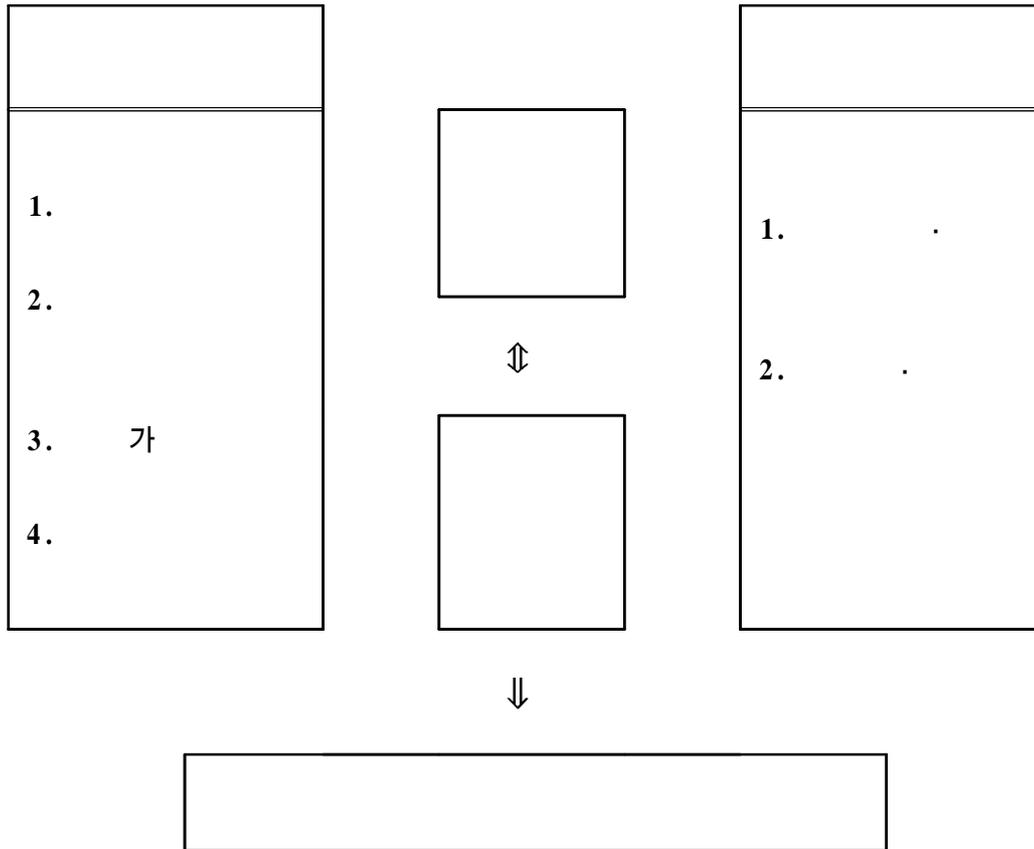
가

가

가  
가



< 3-1 >



4

1

4 ( , , 가 , ) ,

1.

Alpha (Reliability) Cronbach's  
(Construct Validity)  
(Factor Analysis)

가  
(principal components) ,  
가



(Determinant of Correlation Matrix) .0000000 ,  
가 KMO  
(Kaiser-Meyer-Olkin Measure of Sampling Adequacy) 0.948  
, (Bartlett)  
(Bartlett Test of Sphericity) 3416.386 ,  
0.00000 가 .  
, 4 가 ( )  
) , 8 가 ( ) ,  
5 가 , 5 가  
( 가 ) .  
, (Alpha )  
) , 가  
88.93 % , 89.88 % , 83.12 % , 85.26  
%

가 .

< 4-2 >

		(Factor)				(Comm unality)
		1	2	3	4	
( 1)	가  ,	<b>.722</b>	.171	.139	.248	.631
		<b>.619</b>	.314	.210	.202	.567
		<b>.615</b>	.355	.260	.182	.606
		<b>.590</b>	.342	.297	.260	.621
		<b>.537</b>	.321	.292	.250	.538
		<b>.536</b>	.396	.339	.269	.476
		<b>.529</b>	.399	.241	.187	.488
		<b>.504</b>	.314	.251	.228	.467
( 2)	,	.263	<b>.818</b>	.168	.238	.823
		.251	<b>.722</b>	.300	.206	.717
		.363	<b>.635</b>	.250	.226	.648
		.321	<b>.550</b>	.268	.284	.558
( 3)	가	.196	.214	<b>.742</b>	.214	.680
		.258	.237	<b>.720</b>	.223	.690
		.213	.178	<b>.547</b>	.244	.436
		.292	.223	<b>.516</b>	.315	.501
		.350	.266	<b>.512</b>	.205	.497
( 4)	가	.185	.233	.233	<b>.659</b>	.577
		.357	.192	.227	<b>.640</b>	.625
		.252	.181	.297	<b>.510</b>	.444
		.305	.287	.286	<b>.473</b>	.481
		.238	.372	.280	<b>.436</b>	.464
		10.265	.918	.773	.580	
		46.660	4.174	3.512	2.638	

, , 가  
,  
.

(Gap Analysis) 가 .

4

, 5  
(normalized value) , 가  
가 . 가  
,  
,  
.

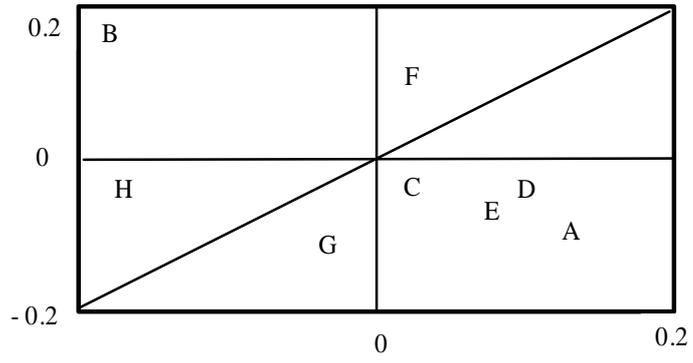
**2. 4**

1)

가 1-1 < 4-2 >



< 4-1 >



A :

B :

C : ,

D :

E :

F :

G : 가

H :

2)

가 1-2

< 4-3>

3.9272    3.3372    t = 8.403    0.0000

가 .

가 .

< 4-4>

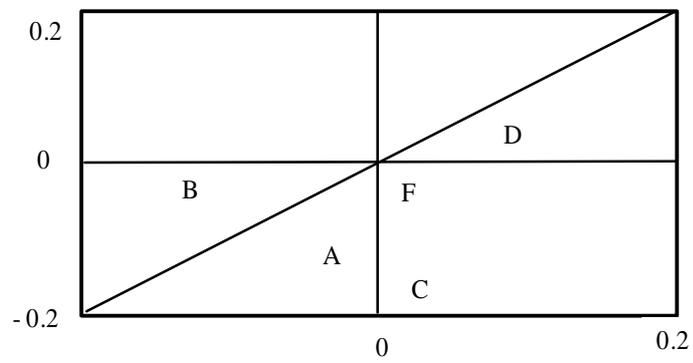
			t -	
	3.5813	3.1196	4.737	0.000***

\* ( p<0.01 : \*\*\*, p<0.05 : \*\*, p<0.1 : \*)

, 2 , ,

가

< 4-2 >



- A :
- B :
- C :
- D :
- E :
- F :

3) 가

가 1-3 가 < 4-4>

4.1663 3.6345 t = 9.430 0.0000

가 .

가 .

< 4-5> 가

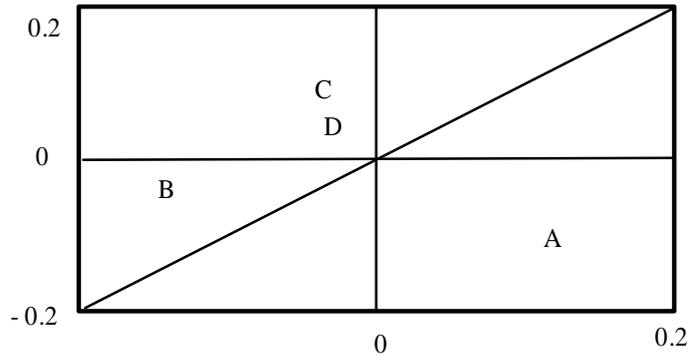
			t -	
가	4.1663	3.6345	9.430	0.000***

\* ( p<0.01 : \*\*\*, p<0.05 : \*\*, p<0.1 : \*)

, 2 , , , . , , .

< 4-3>

가



A :

B :

C :

D :

4)

가 1-4 가

< 4-5>

4.0912

3.5977

t = 8.336

0.0000

가 .

가

.

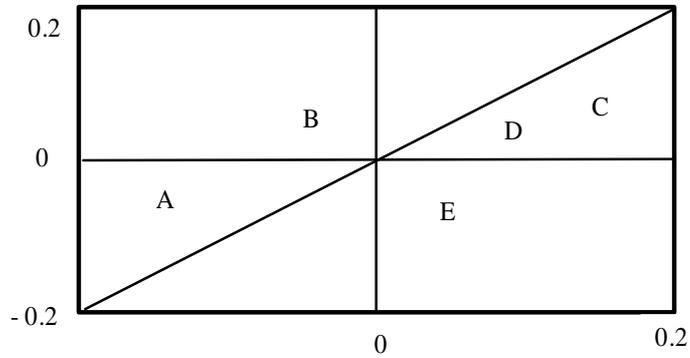
< 4-6 >

			t -	
	4.0912	3.5977	8.336	0.000***

\* ( p < 0.01 : \*\*\*, p < 0.05 : \*\*, p < 0.1 : \* )

, 2 , ,

< 4-4 >



A :

B : 가

C :  
D :  
E :

가

2

### T - Test

T - Test . 2  
( , . ) .

< 4-7 >

. ( 1)	/ 가
. ( 1)	

1.

1  
, (Determinant of Correlation Matrix) .00000 , 가  
KMO (Kaiser-Meyer-

Olkin Measure of Sampling Adequacy) 0.818 ,  
 Bartlett (Bartlett  
 Test of Sphericity) 505.286 , 0.00000  
 가 .

< 4-8 >

		(Factor)		(Comm unality)
		1	2	
· ( 1)	/ 가	<b>.848</b>	.253	.783
		<b>.692</b>	.207	.521
		<b>.517</b>	.266	.338
· ( 1)		.173	<b>.612</b>	.405
		.154	<b>.593</b>	.376
		.309	<b>.577</b>	.429
		.394	<b>.510</b>	.415
		1.769	1.498	
		25.276	21.396	

, 3 가 ( ·  
 ) , 4 가 ( ·  
 ) .  
 , (Alpha )

70% ( )가  
가 .

2.

**T - Test**

1)

< 4-9 >

	.		t -	
	3.5996	3.2051	5.083	0.000***
	3.5639	3.1016	4.760	0.000***
가	3.8165	3.4453	4.962	0.000***
	3.7173	3.4734	2.849	0.005***

\* ( p<0.01 : \*\*\*, p<0.05 : \*\*, p<0.1 : \*)

가 II < 4-9 >

3.5996 3.2051 , 3.5639  
 3.1016, 가 3.8165 3.4453, 3.7173 3.4734  
 t 5.083, 4.760, 4.962, 2.849 0.0000  
 가 . ( .  
 )  
 가 .

2)

< 4-10 >

			t -	
	3.6047	3.2292	4.810	0.000***
	3.5813	3.1196	4.737	0.000***
가	3.8341	3.4565	5.018	0.000***
	3.7870	3.4290	4.259	0.000***

\* ( p<0.01 : \*\*\*, p<0.05 : \*\*, p<0.1 : \*)

가 II < 4-10 >

3.6047	3.2292	,	3.5813	3.1196,	가
3.8341	3.4565,		3.7870	3.4290	t
4.810,	4.737,	5.018,	4.259	0.0000	
	가	.		(	)
					가

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T - Test 가 가  
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2.

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. ,  
. ,  
. , 21 가  
.

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### 3.

- <http://www.lgeri.com> (LG )
- <http://www.hri.co.kr> ( )
- <http://www.posri.re.kr> ( )
- <http://www.km21.net> (21 )
- <http://www.mk.co.kr> ( )
- <http://www.kpgm.com> (KPMG)
- <http://mofis.kaist.ac.kr> (KAIST )
- <http://www.mocie.go.kr> ( )

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( , , 가 )

가 .

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**\*Tel) 051-410-4335, 011-596-4385**

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[1]

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1. ? \_\_\_\_\_

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3. \_\_\_\_\_

4. , ,

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(3) ( )

(4) ( )

(5) , ( )

5. .( )



1	2	3	4	5
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(5)

1	2	3	4	5
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1	2	3	4	5
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(6)

( , , )

1	2	3	4	5
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1	2	3	4	5
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(7)

1	2	3	4	5
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1	2	3	4	5
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(8)

( , )

1	2	3	4	5
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1	2	3	4	5
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(9) 가

1	2	3	4	5
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1	2	3	4	5
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(10)

1	2	3	4	5
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1	2	3	4	5
---	---	---	---	---

(11)

1	2	3	4	5
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1	2	3	4	5
---	---	---	---	---

(12)

( )

1	2	3	4	5
---	---	---	---	---

1	2	3	4	5
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(13)

1	2	3	4	5
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1	2	3	4	5
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(15)

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