



❖ 학습 목표

1.

❖ 학습 내용

1.

2.

3. Brainstorming

4.

5.

1) Storyboarding

5.

2) process Map

3)

4)

5) 5Why's

6)

7) Point Score System

8)

9)

2) Process Map

가 가 ,

/

/

가

/

/

/

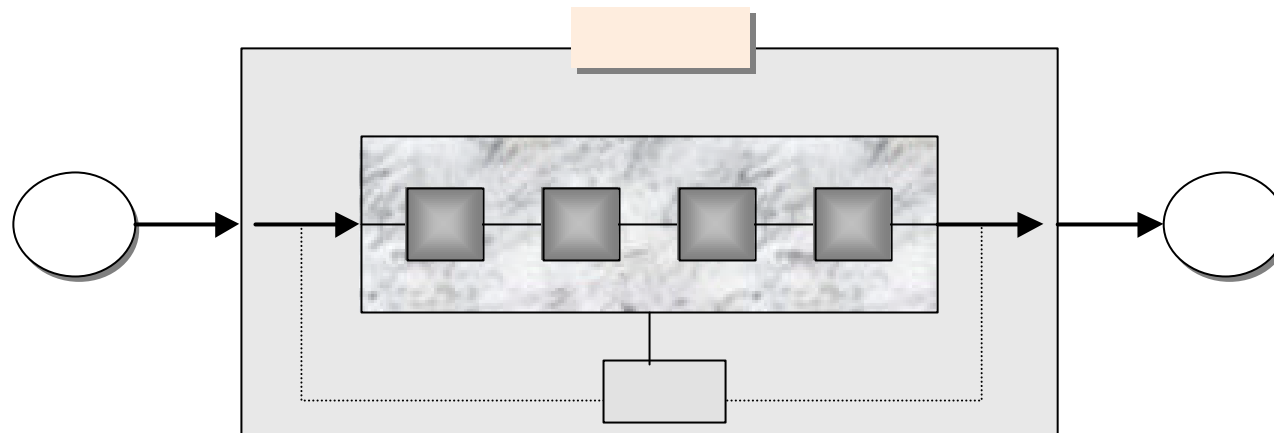
/가

?

Output()

(activity)

(task)

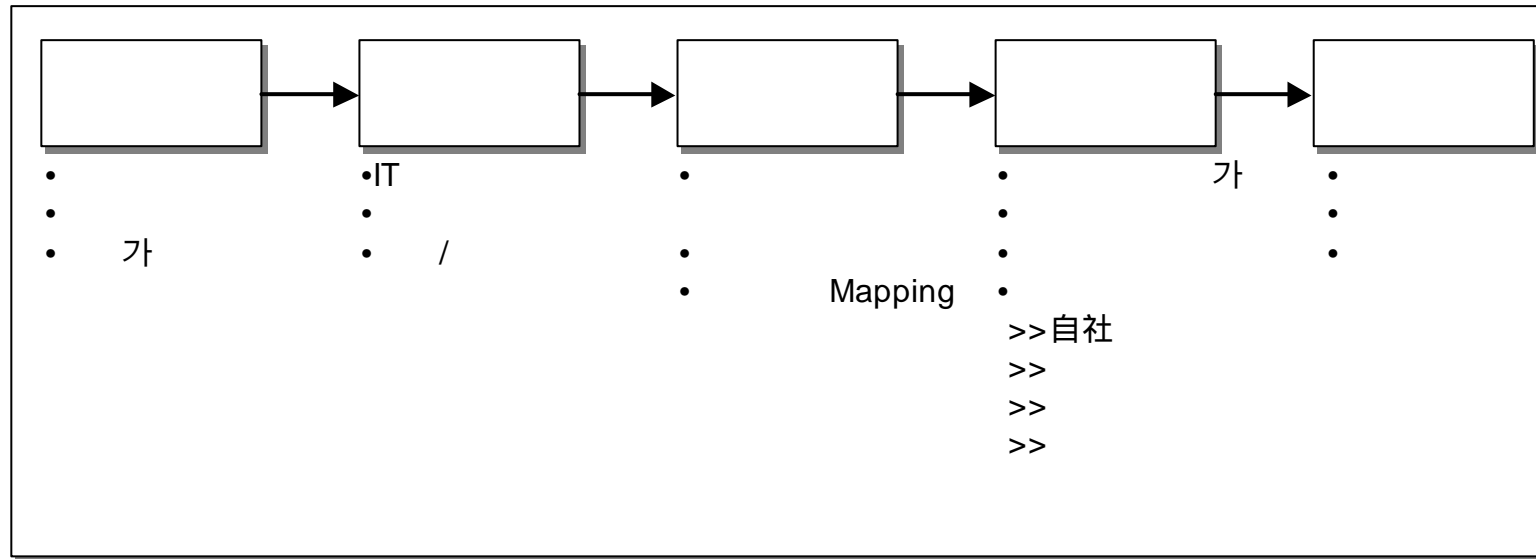


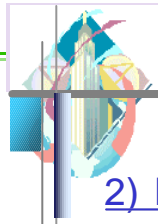


5. Tools

2) Process Map

/



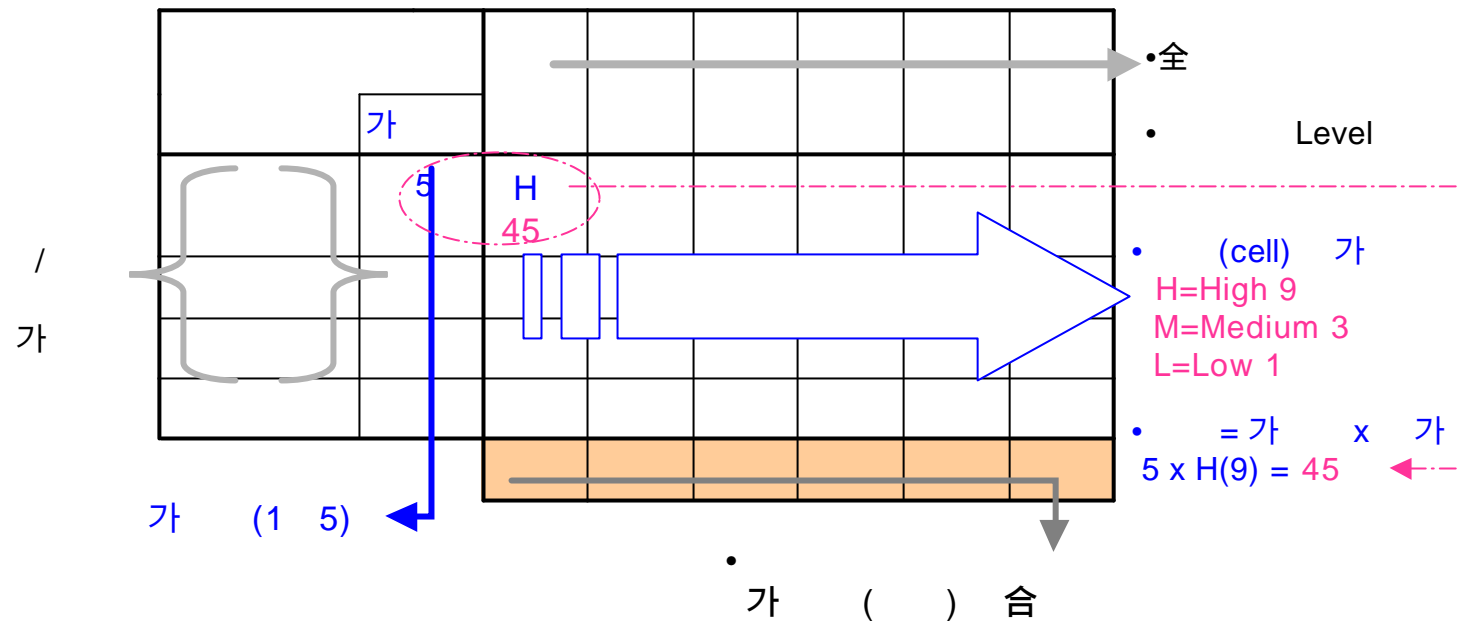


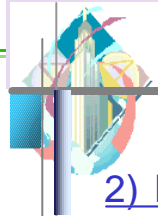
5. Tools

2) Process Map

全 / 가 ,
(activities) (tasks) /
Output Cycle Time

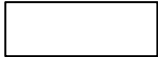
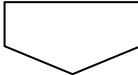
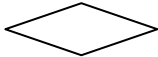

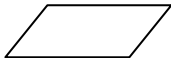


例 :





5. Tools

2) Process Map

					
		• ?			• ,
	(,			()	
)				



5. Tools

2) Process Map

(1) (Top-down Map)

✍

✍

✍

✍

✍

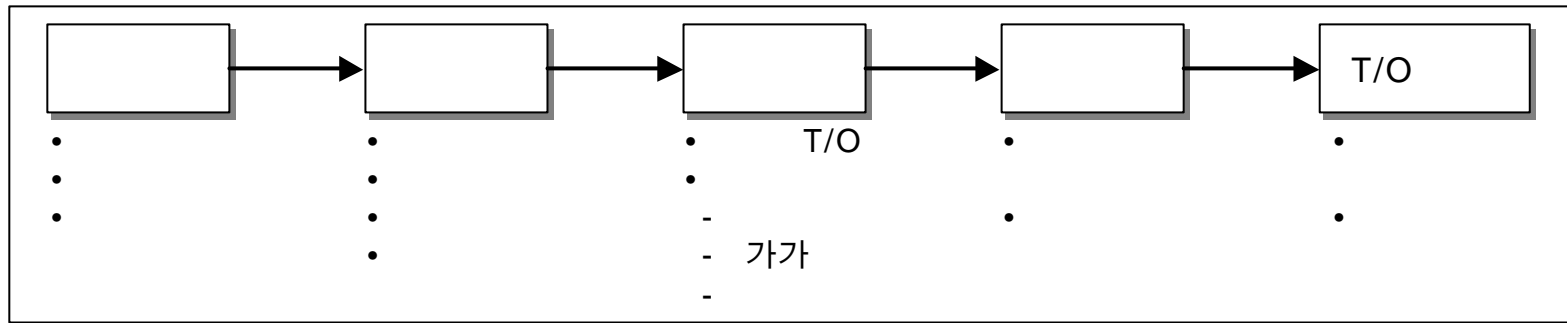
✍

✍

✍

.
.
.
가
.
,
가
() 가
7
/
... 6 7

:



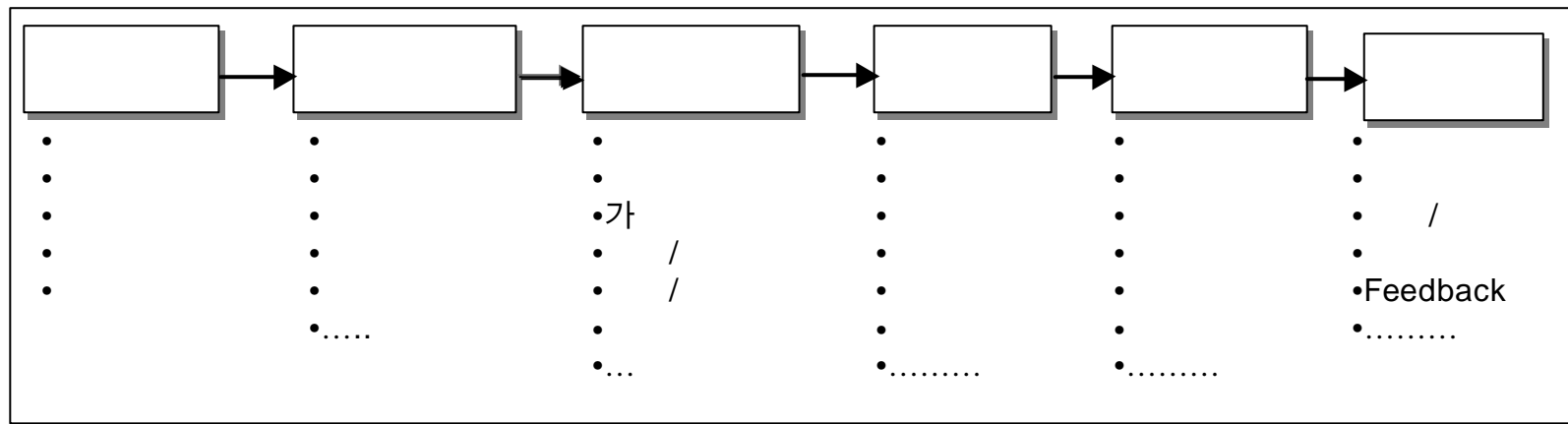


5. Tools

2) Process Map

(1) (Top-down Map)

:



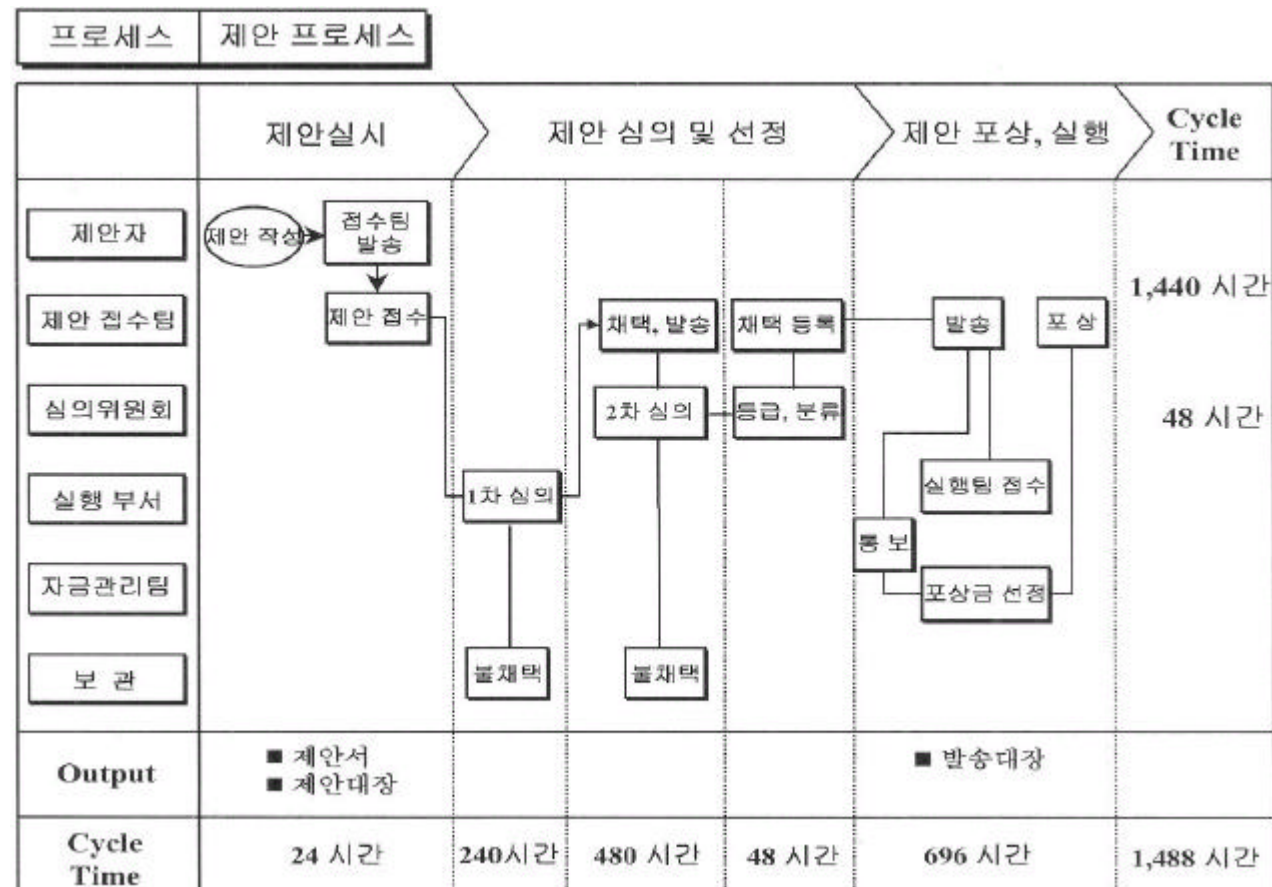


5. Tools

2) Process Map

(2) (Cross Functional Process Map)

/ ()
 가 (,)
 (input), (output) (activity)
 Flow



(2)

(Processing Time)

—

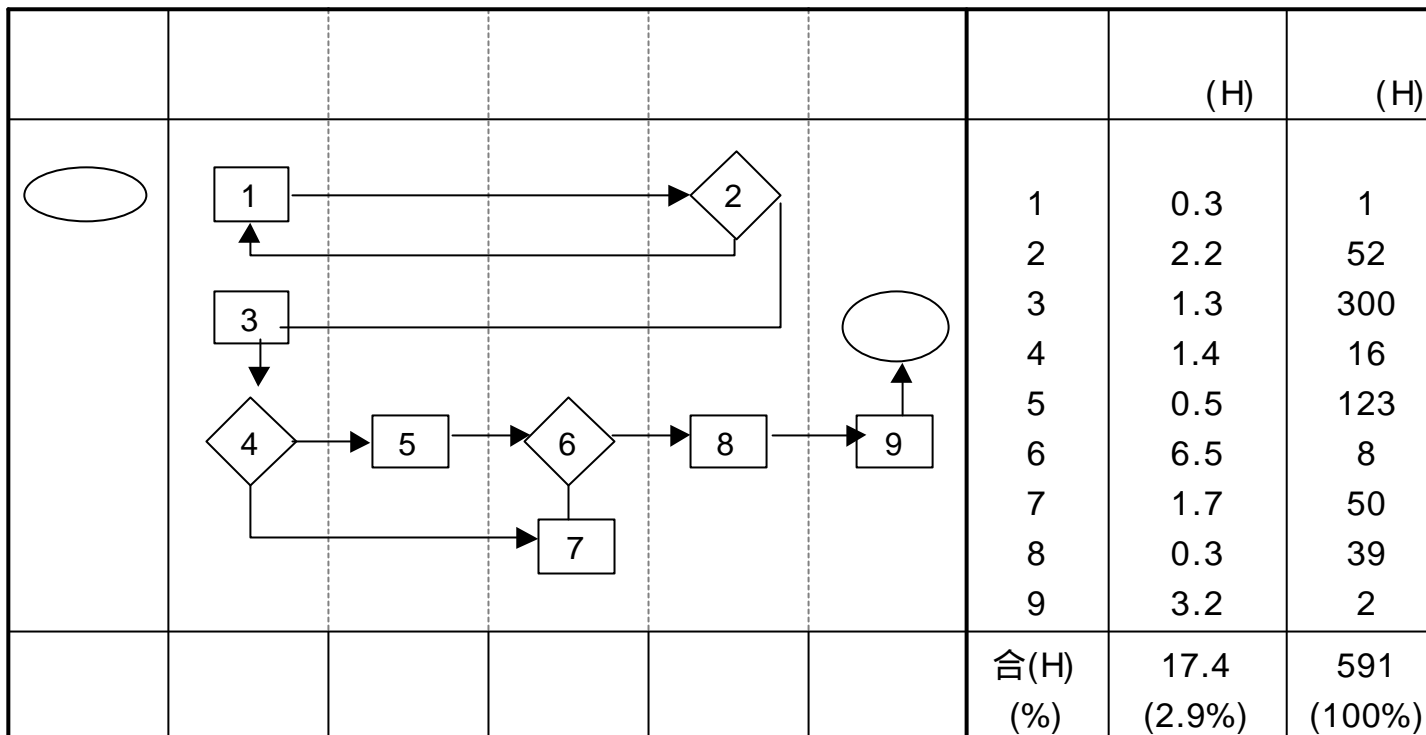
■ ■ ■

(Cycle Time)

—

, 前

合





5. Tools

2) Process Map

(3)

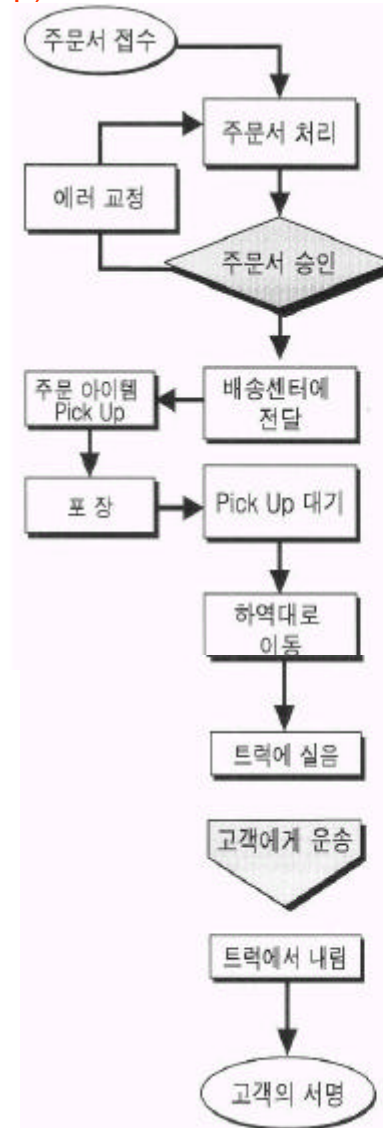
(Detailed Process Map)



가

가

(,)



- 프로세스: 주문이행
- 시작 : 고객의 주문 접수
- 끝 : 고객이 인수증에 서명

활동	시간(분)			비용 (백만/년)
	RVA	BVA	NVA	
주문서 처리	15			65
주문서 승인		20		
에러 교정			110	
배송센터에 전달			100	15
주문 아이템 Pick Up	10			25
포장	5			25
Pick Up 대기			35	3
하역대로 옮김			15	5
트럭에 실음	5			30
고객에게 운송	75			250
트럭에서 내림	5			34
고객의 서명		5		30
합 계	115	25	260	482

사이클타임 계산
 $115\text{분(RVA)} \div 400\text{분(총)} = 0.3 \text{ 효율}$

◆ 시간(사이클타임)

범 주	예
• RVA (Real Value-Added)	고객의 기대를 만족시키기 위해 꼭 필요 (사후 서비스, 상품개발)
• BVA (Business Value-Added)	관리지원 프로세스로 고객에 가치를 제공해주지 못함 (기록, 영수증 송부)
• NVA (Non Value-Added)	고객에게 가치를 증대시키는 것보다 시간이나 비용을 증가 (재작업, 대기, 보관)

$$\text{사이클타임 효율성} = \frac{\text{RVA}}{\text{RVA} + \text{BVA} + \text{NVA}} \times 100(\%)$$

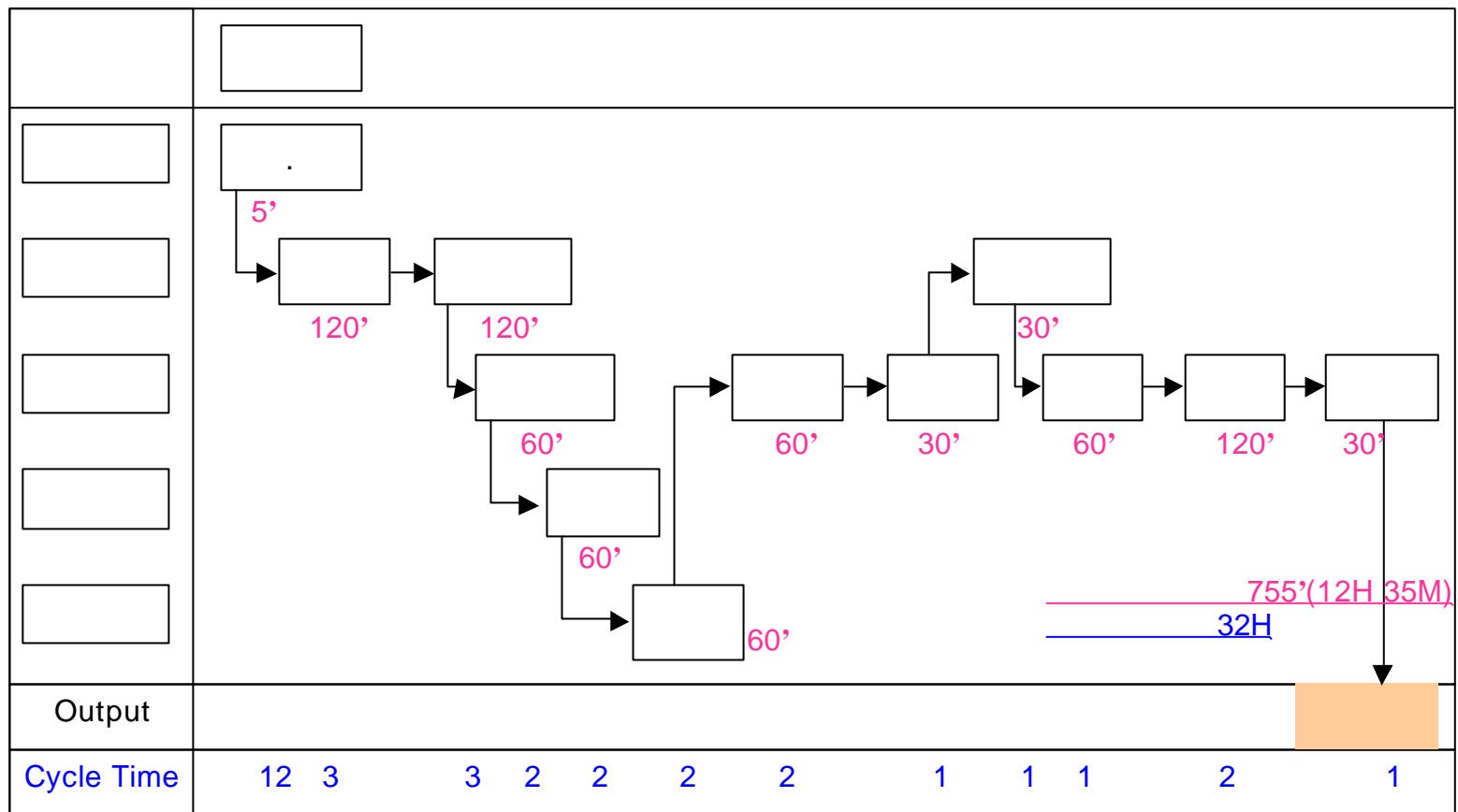


5. Tools

2) Process Map

(3) (Detailed Process Map)

•예) : 가 A/S





5. Tools

2) Process Map

(3) (Detailed Process Map)

PT = Process Time

CT = Cycle Time

•예) : 가 A/S...

N O	(sub-process)		Time			Input		Output				
			PT	CT		File		File				
1	/		5'	12h	500 /							
2			120'	3								
3		"	120'	3								
4			60'	2								
5			60'	2								
6			60'	2							가	
7			60'	2								
8			30'	1								
9		"	30'	1								
10			60'	1								
11			120'	2								
12		"	30'	1								
		"										
			75 5'	32 h								



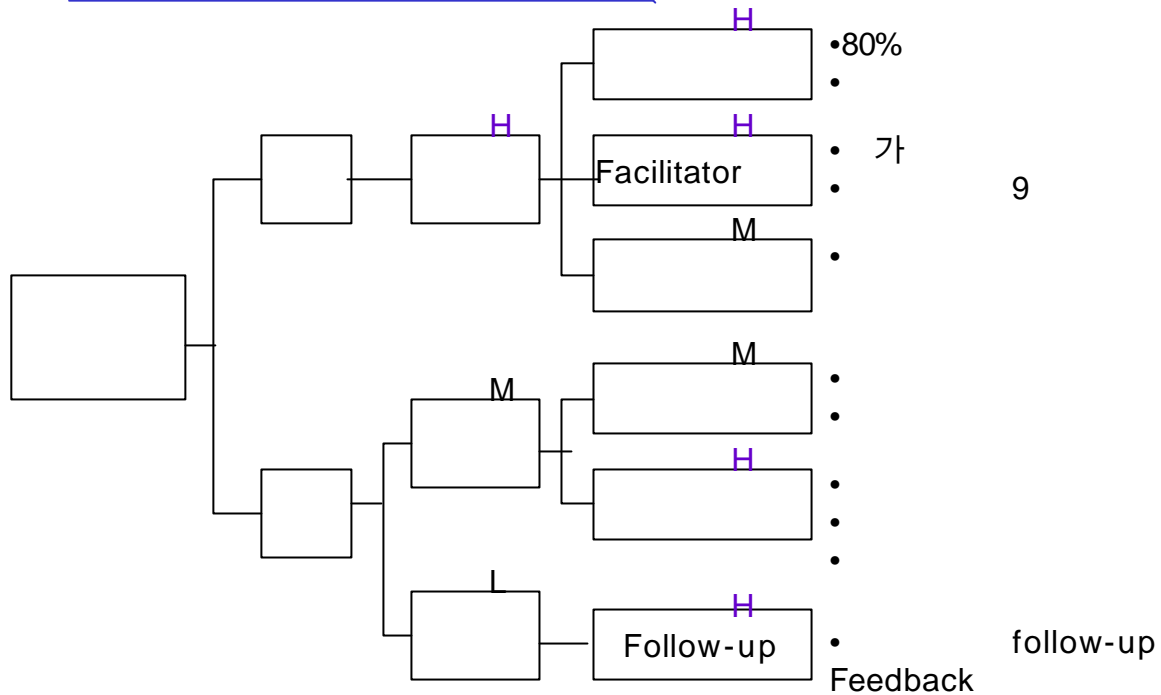
5. Tools

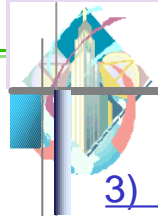
3) (Structure Tree, Logic Tree, Systemic Diagram)

가

✍ () /
✍ / , 가 1 2 .
✍ (: Pay-off Matrix / Dotting / H(high), M(medium), L(low)
✍ 가 / ()

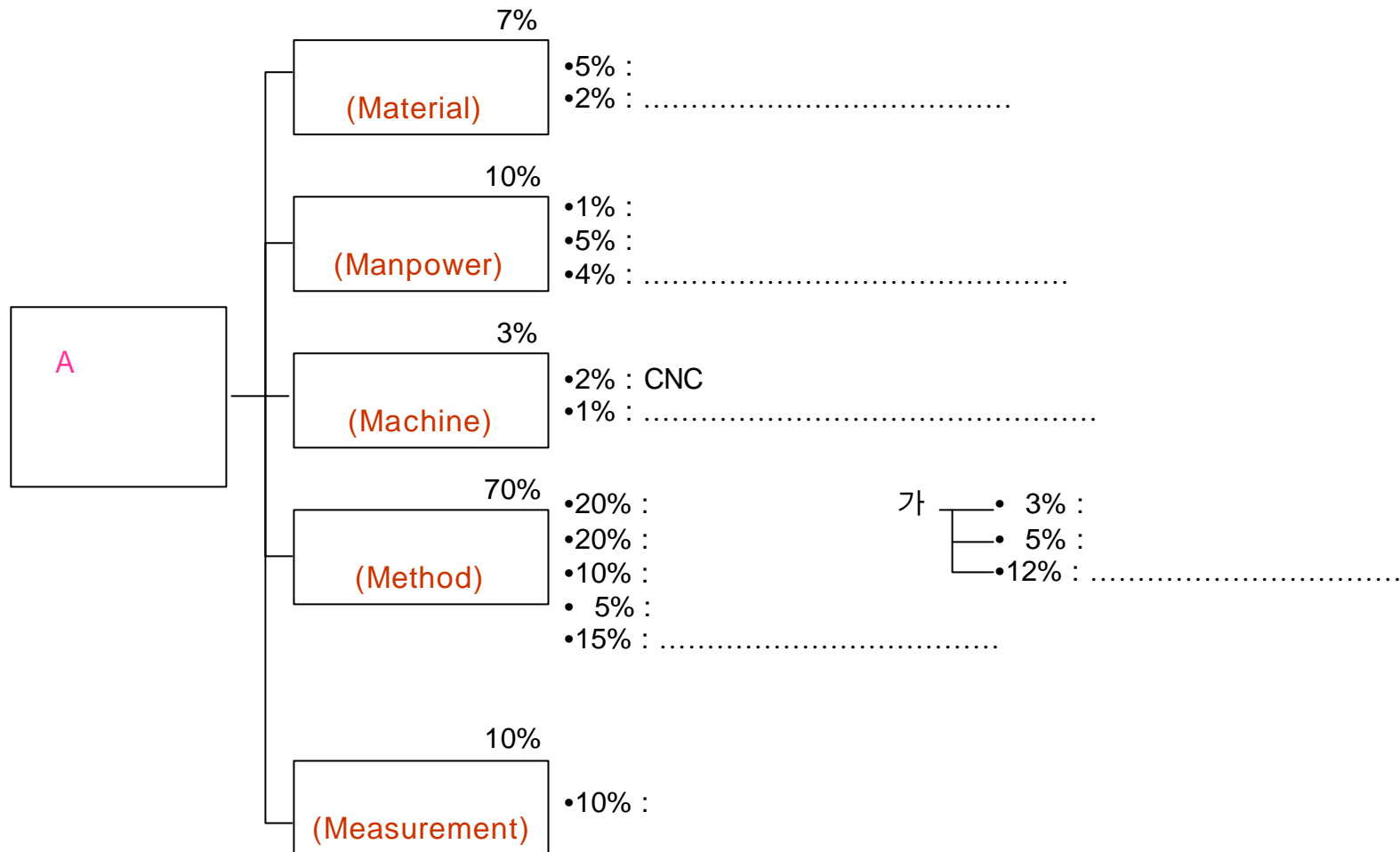
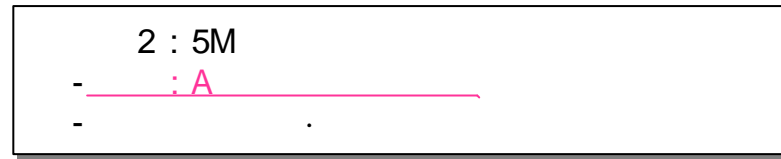
1 :

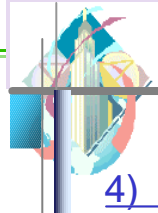




5. Tools

3) (Structure Tree, Logic Tree, Systemic Diagram)



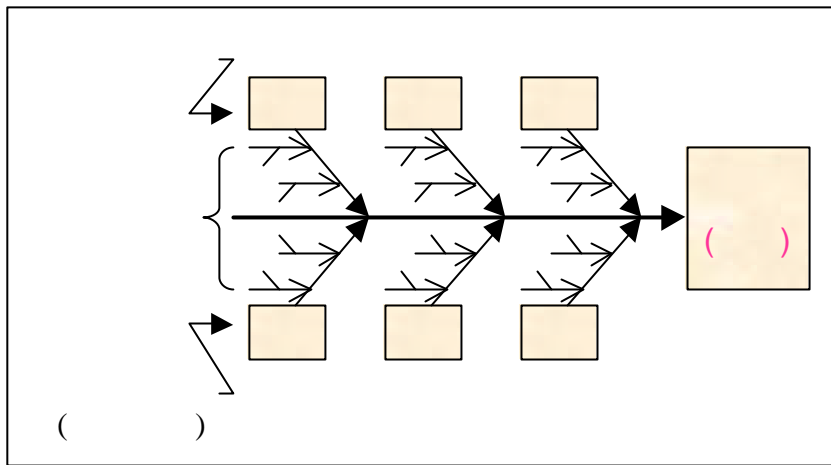


5. Tools

4) (Fishbone Diagram, Ishikawa Diagram)

() () 가 () ,
() ()

()		() , 가 , ,
()		()



• ()

- (Man), (Machine), (Material), (Method), (Money), (Environment), (Technology), (Structure), (Process), / (Policy), 4P(Product/Price/Place/Promotion)

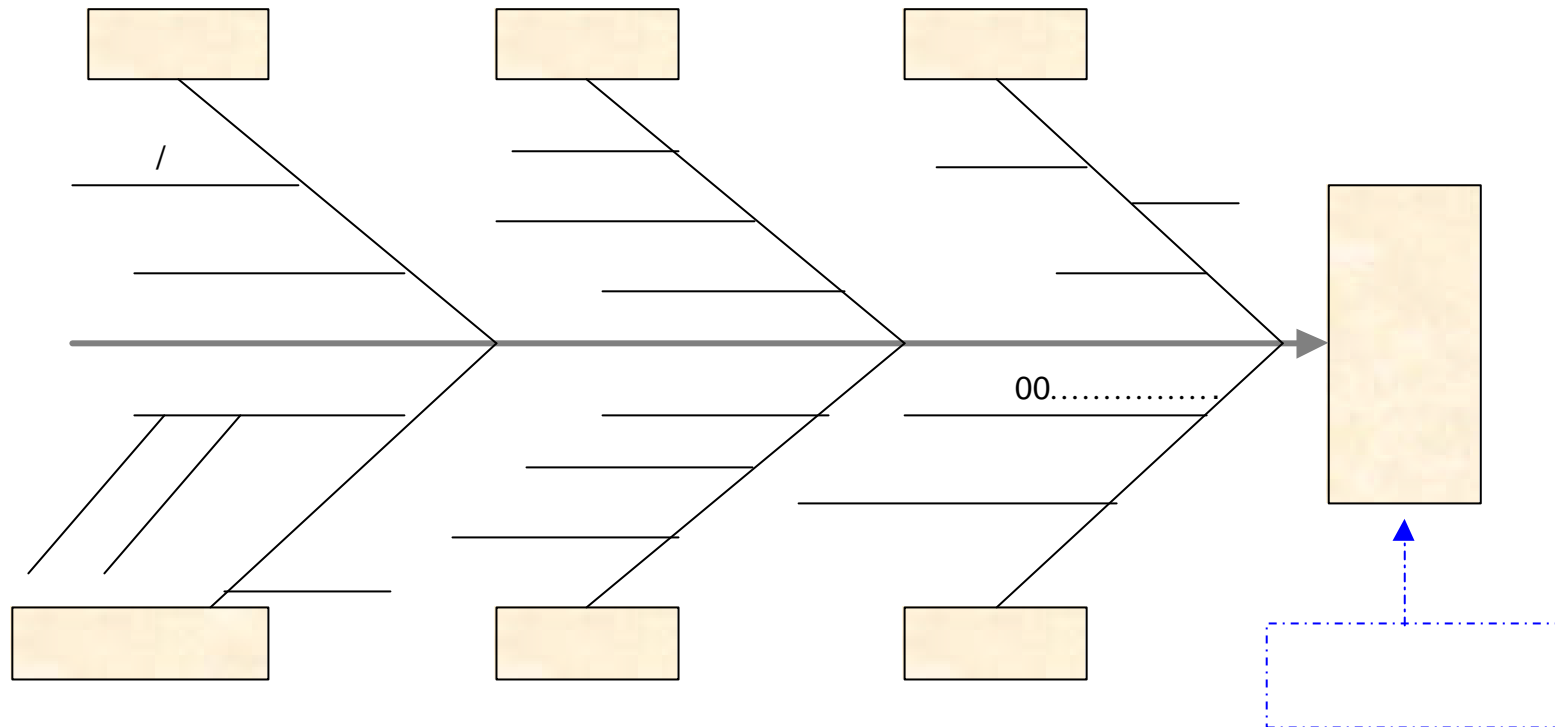


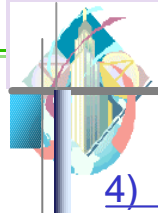
5. Tools

4) (Fishbone Diagram, Ishikawa Diagram)

1 :

((/) : positive)

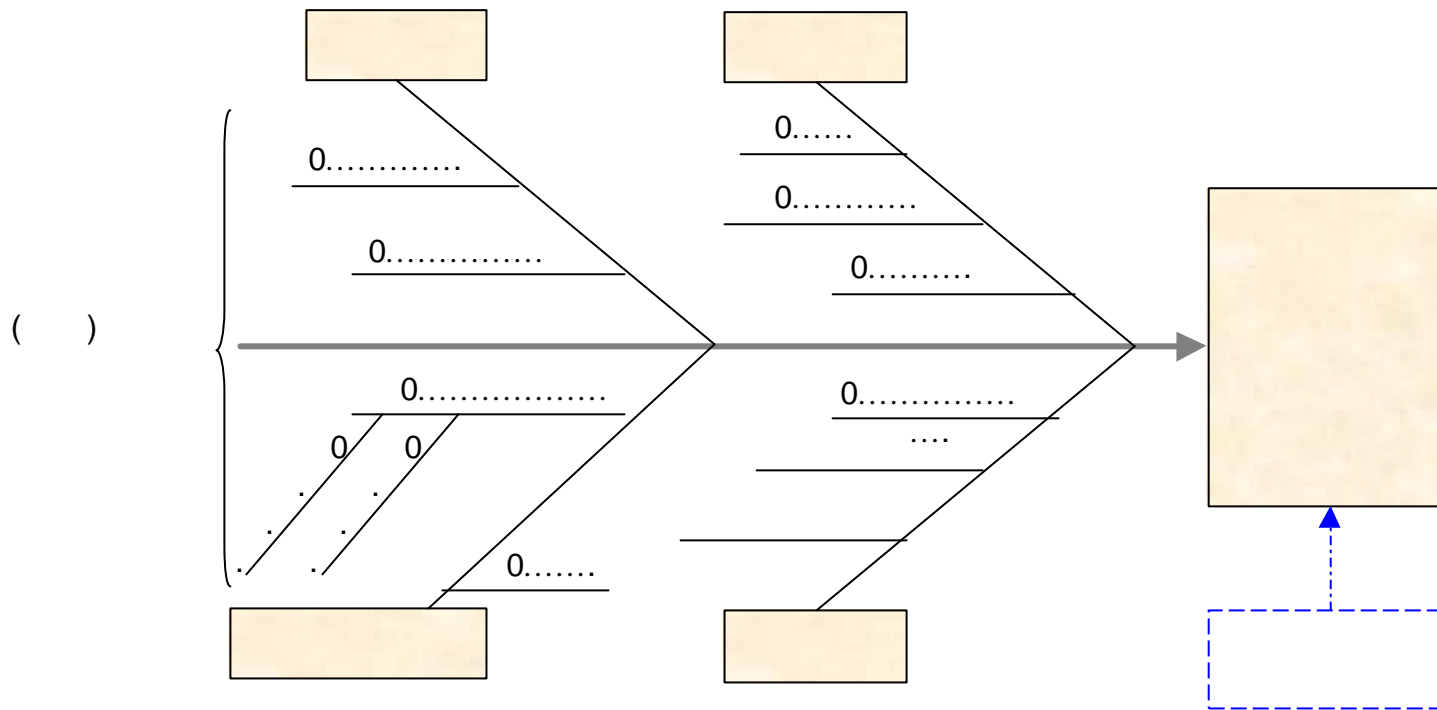


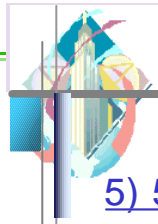


5. Tools

4) (Fishbone Diagram, Ishikawa Diagram)

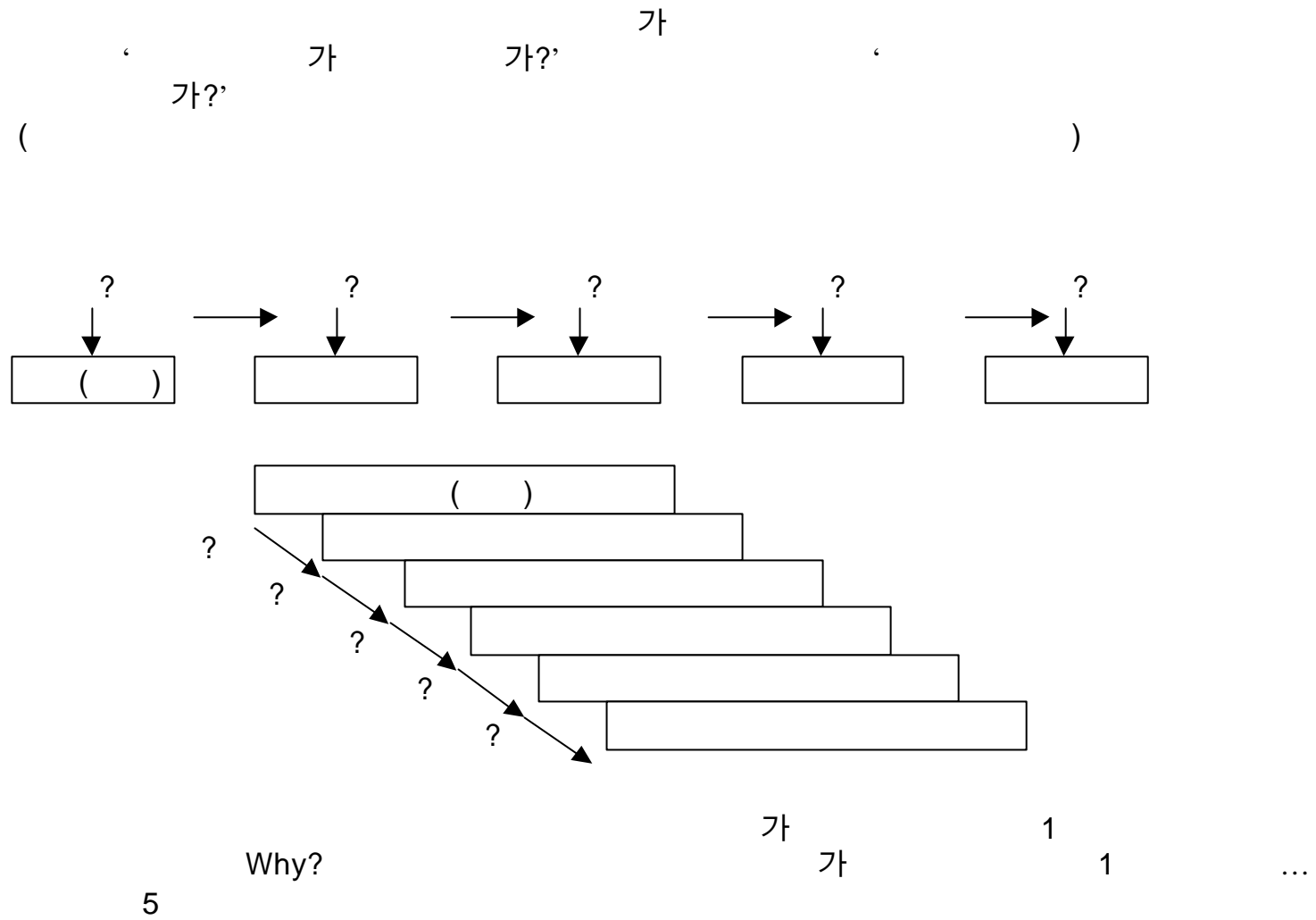
2 : Fishbone(negative)





5. Tools

5) 5 Why's





5. Tools

6) (Decision-Making Matrix, Criteria Rating)

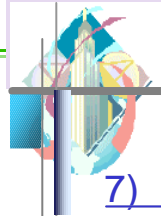
가 / 가

가 : 3 5 (가 1 100%가)
가 5 () 3 ()
가 (Action Plan)

: 가 가

	가					
					가 합	
	30%	40%	20%	10%	100%	
가	1.2	0.8	0.6	0.2	2.8	
가						

5 가 (: 가 30% X 가 = 30% X 4 = 1.2



5. Tools

7) (Point Score System)

가

가

가

가

:

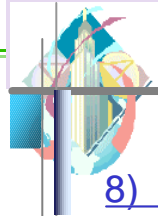
가가

가가

100
가 가

합

	1	2	3
30	15	10	5
20	10	5	5
50	10	30	10
100	35	45	20



5. Tools

8) (Paired Comparison)

2

2
가

	1	2	3	4
1				
2	1			
3	1	2		
4	4	4	4	

1 = 2	2
2 = 1	3
3 = 0	4
4 = 3	1

~~~~

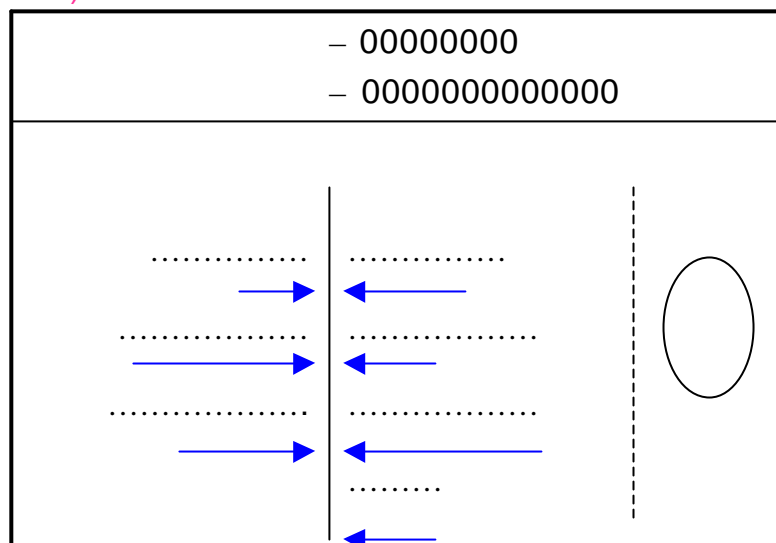
/

()

☐ ☐ ☐ ☐ ☐

가

- 00000000
- 00000000000000



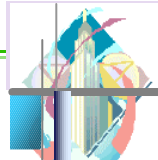
Or

```

: 00000000000000000000000000000000

```

: 0000000000000000000000000000			
	가		가
1. 0000000000	30	1. 000000	10
2. 0000000	20	2. 0000000000	30
3. 0000000	50	3. 00000000	20
		4. 000000000000	40
	100		100



5. Tools

9) (Force Field Analysis)

