

BUSINESS TRIZ ONLINE

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Resolving the Dilemma of Monitors in Kindergartens by Business TRIZ

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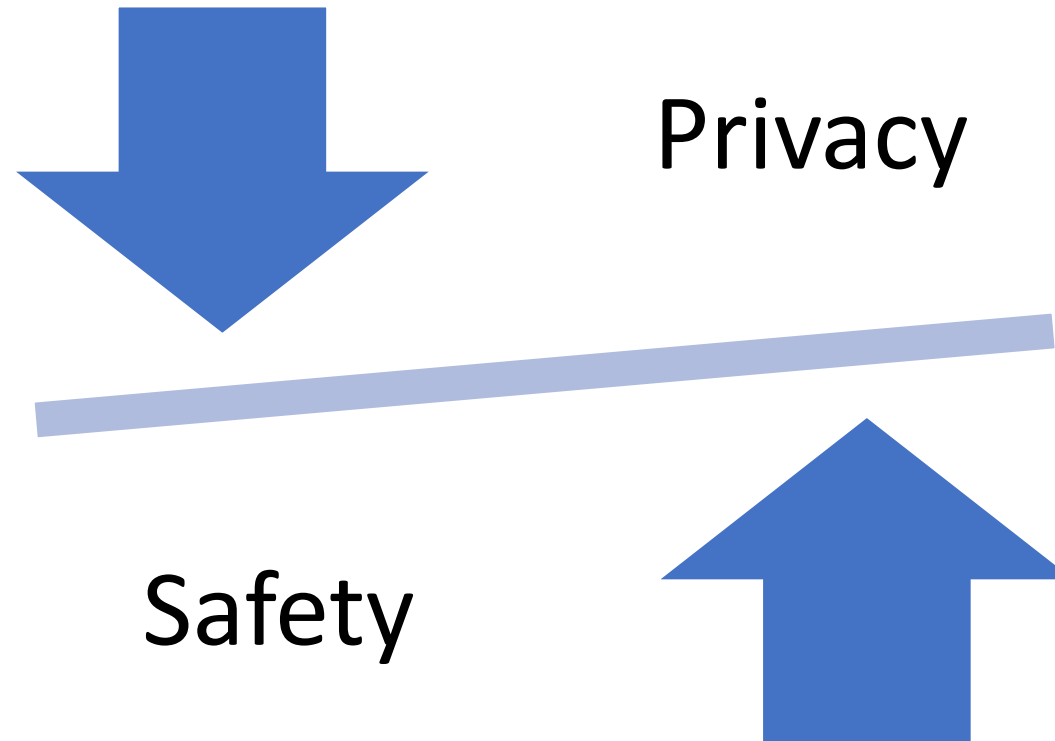
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Background

- Dilemma
 - Safety vs. Privacy



Goal

- Problem
 - How to keep the safety and privacy by monitors at the same time in kindergarten?
- Tool
 - Business TRIZ

Business TRIZ Problem Solving Process



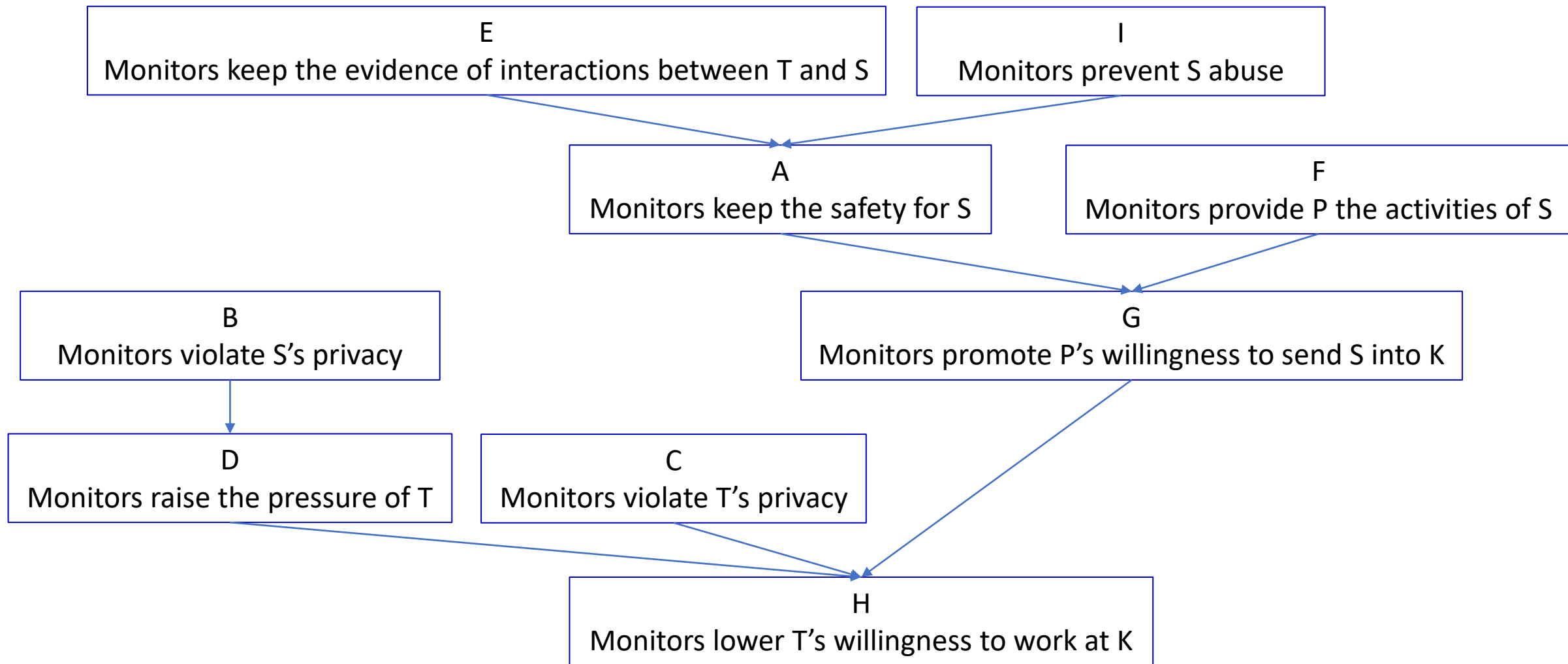
Perception Mapping – Problem and Cause

- Problem Description
 - How to keep the safety and privacy by monitors at the same time in kindergarten?
- What causes the problem (S: student, T: teacher, P: parent, K: kindergarten)
 - Monitors keep the safety for S
 - Monitors violate S's privacy
 - Monitors violate T's privacy
 - Monitors raise the pressure of T
 - Monitors keep the evidence of interactions between T and S
 - Monitors provide P the activities of their children
 - Monitors promote P's willingness to send S into K
 - Monitors lower T's willingness to work at K
 - Monitors prevent S abuse

Perception Mapping

ID	Perception	Lead to
• A	Monitors keep the safety for S	G
• B	Monitors violate S's privacy	D
• C	Monitors violate T's privacy	H
• D	Monitors raise the pressure of T	H
• E	Monitors keep the evidence of interactions between T and S	A
• F	Monitors provide P the activities of their children	G
• G	Monitors promote P's willingness to send S into K	H
• H	Monitors lower T's willingness to work at K	
• I	Monitors prevent S abuse	A

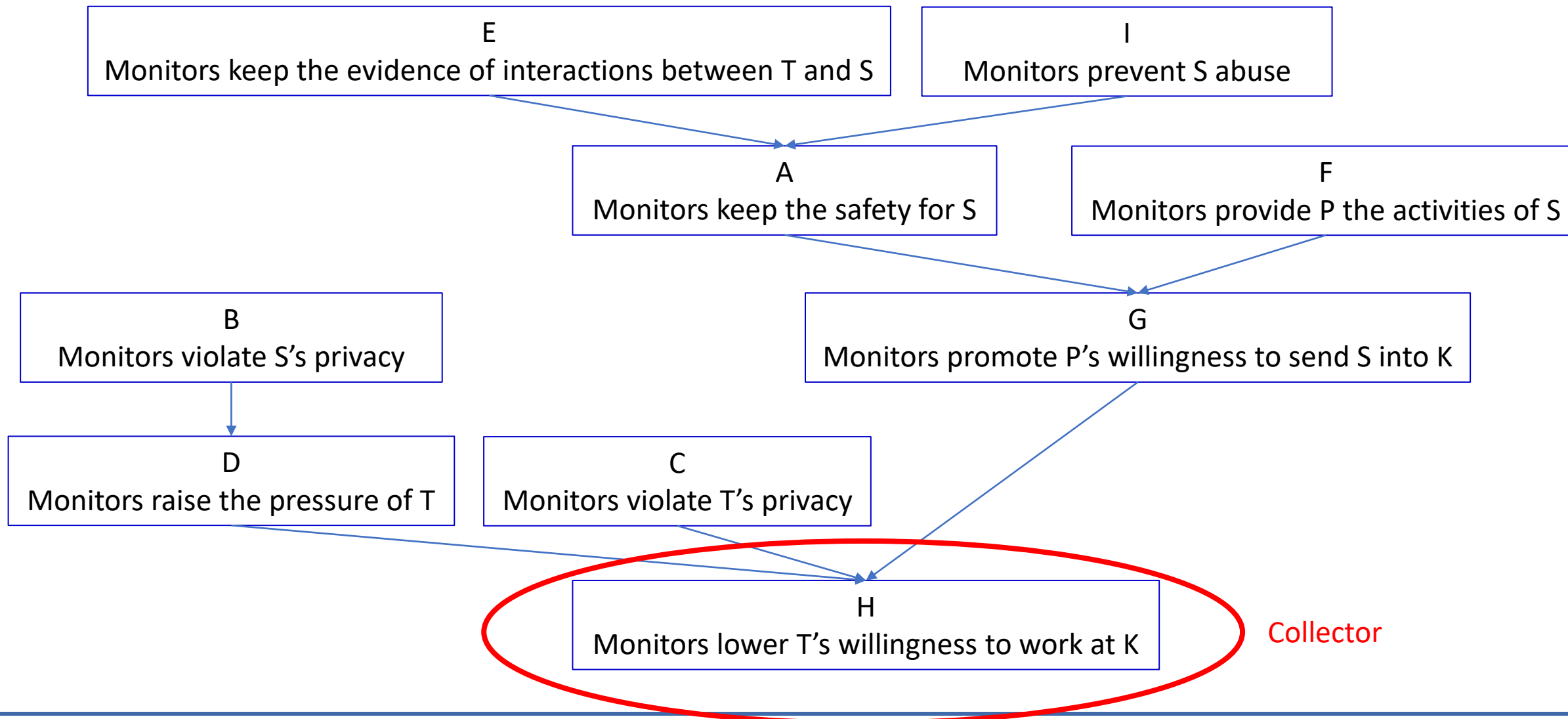
Perception Mapping



Most Important Factor

ID	Perception	Lead to	Score
• A	Monitors keep the safety for S	G	1
• B	Monitors violate S's privacy	D	0
• C	Monitors violate T's privacy	H	0
• D	Monitors raise the pressure of T	H	0
• E	Monitors keep the evidence of interactions between T and S	A	0
• F	Monitors provide P the activities of their children	G	0
• G	Monitors promote P's willingness to send S into K	H	1
• H	Monitors lower T's willingness to work at K		2
• I	Monitors prevent S abuse	A	0

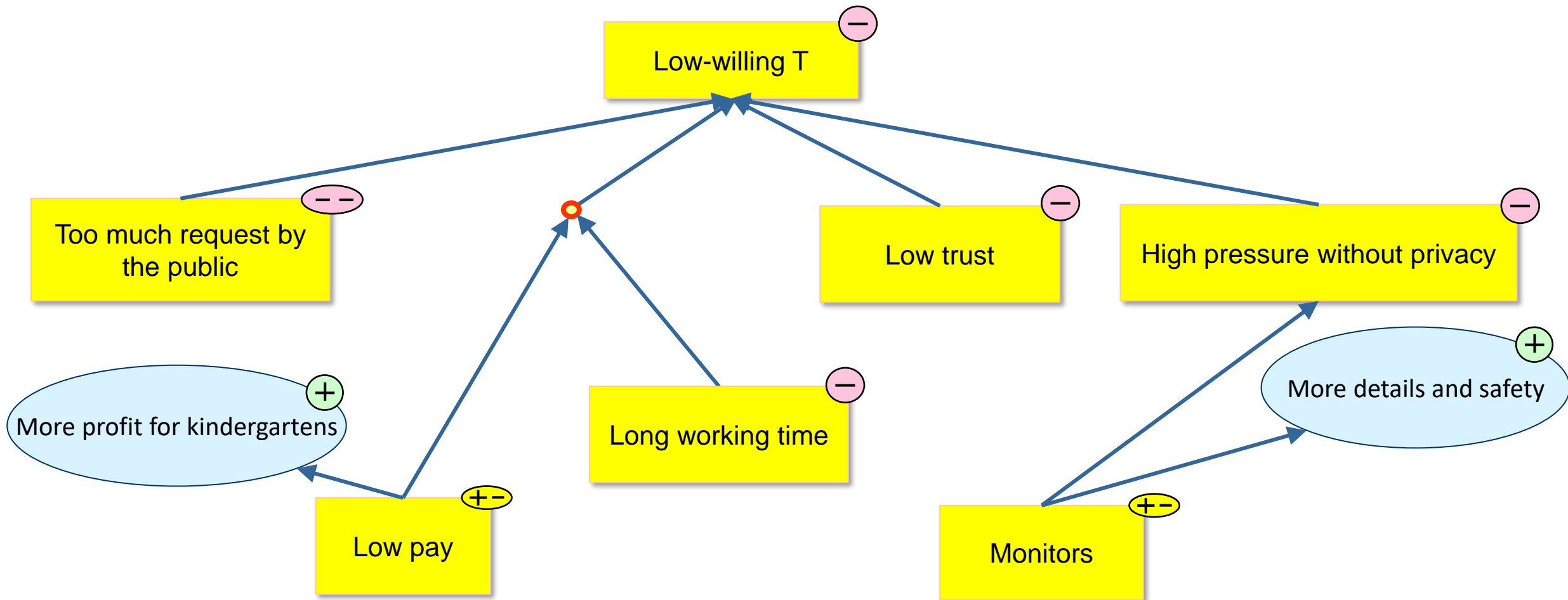
Perception Mapping



Innovation Situation Questionnaire (ISQ)

QUESTION	ANSWER
1. Describe the existing innovative situation in free words	Monitors lower teachers' willingness to work at kindergartens due to high pressure without privacy
2. Describe a system (product) which has to be improved (limit it to those parts which can be changed by you)	<ul style="list-style-type: none"> • Monitor, Teacher, Willingness, Kindergarten, Pressure, Privacy • Monitors
3. Describe a key problem and the goal of improvement	Monitors increase teachers' pressure without privacy
4. Present a list of principal demands and requirements to the future solution (5-10 requirements). Try to be as specific as possible	<ul style="list-style-type: none"> • Teachers' pressure is down • Teachers' willingness is up • Parents' satisfaction is same or up • Children's safety is maintained • The cost less than 300 dollars
5. Are there any known solutions to solve the problem/challenge presented? If yes, mention them and specify why each of them cannot be used in your situation	<ul style="list-style-type: none"> • Monitors are controlled by teachers • Monitors are watched just if necessary • Monitors focus on children instead of teachers
6. Are there any ideas on the improvement that have been proposed? Describe ideas which have been already obtained (if any). Specify against each idea why it can not be used	<ul style="list-style-type: none"> • None of them increase teachers' willingness effectively

RCA+: Root Conflict Analysis



Ranking Contradictory Problems in Priority

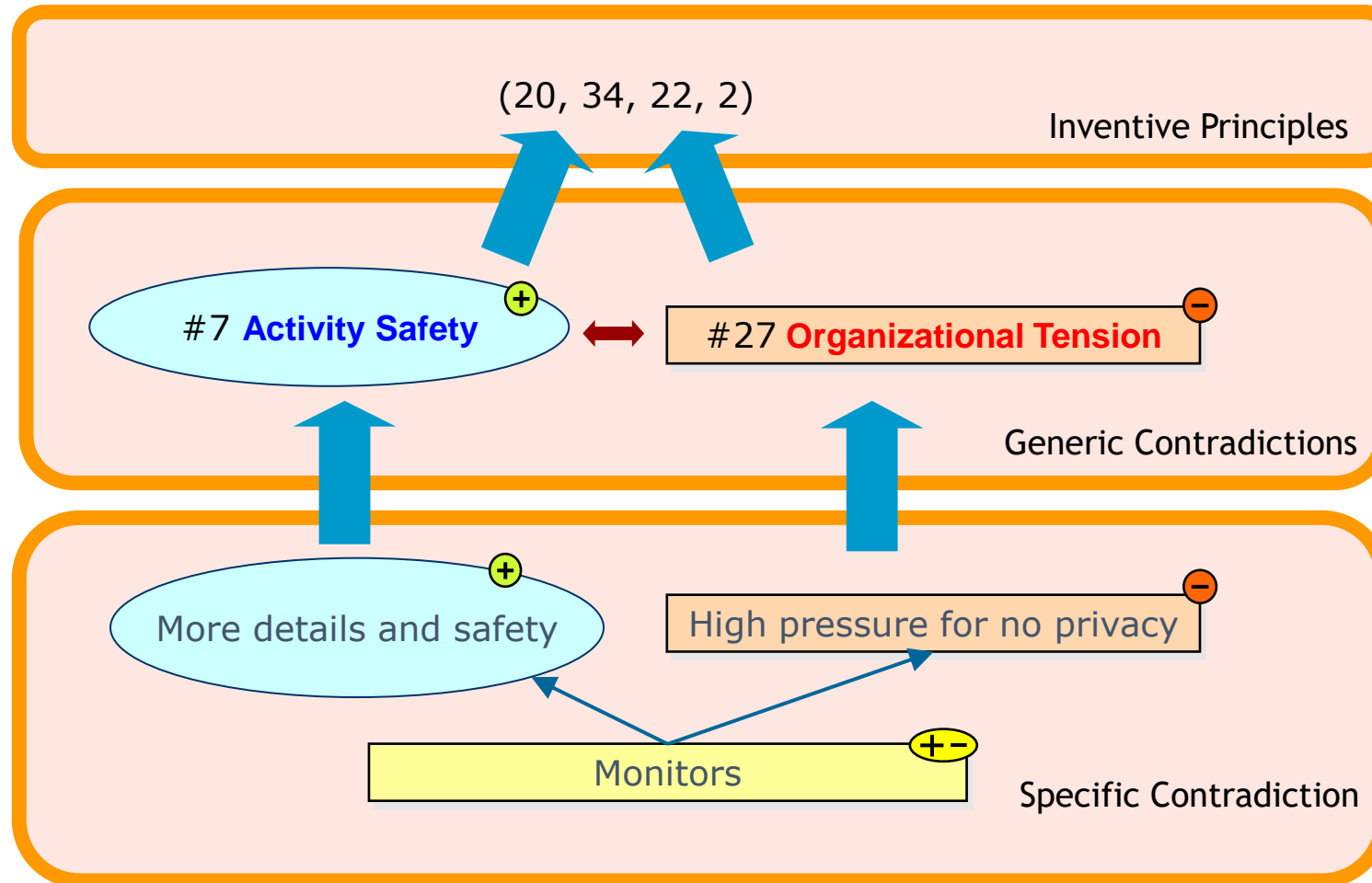
- Ranking Contradictory Problems (Binary Problems Ranking)

No	Problems	1	2	SCORE
1	Monitors increase teachers' pressure without privacy		+1	+1
2	Low pay decreases teachers' willingness	-1		-1

- Contradictory Problems Priority

No	Problems	SCORE
1	Monitors increase teachers' pressure without privacy	+1
2	Low pay decreases teachers' willingness	-1

Contradictions Matrix



Contradictions Matrix

- Positive Effect Parameter: 7
- Negative Effect Parameter: 27

	-27: Organizational Tension
+7: Activity Safety	20, 34, 22, 2

Inventive Principles Proposed

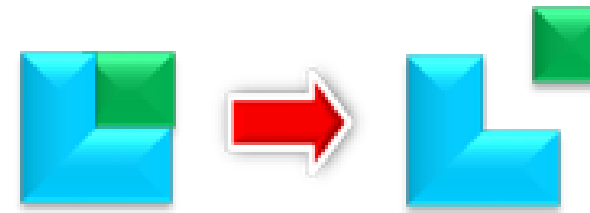
- 20 Action Continuity

- Continuous in time, space or process



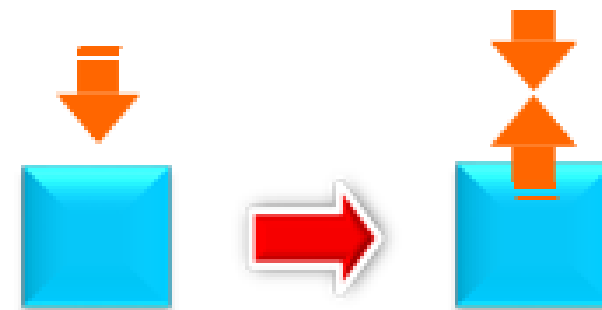
- 34 Discard and Recover

- Just introduce necessary parts



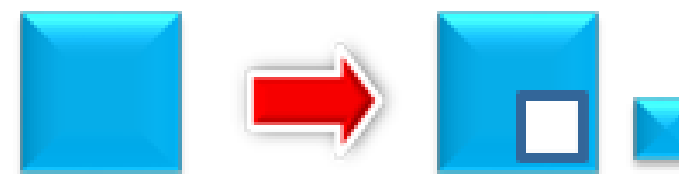
- 22 Blessing in Disguise

- Inverse harmful factors to useful effects



- 2 Taking Away

- Remove or isolate the negative parts



Ideas from Inventive Principles

- 20 Action Continuity
 - Monitors work all day long to let teachers and children get used to
- 34 Discard and Recover
 - Monitors work just for special needs or certain space
- 22 Blessing in Disguise
 - Take monitors as a stage for teachers' show and interaction with parents
- 2 Taking Away
 - Monitors are in disguise

Solutions

NO	Ideas
1	Monitors work all day long to let teachers and children get used to
2	Monitors work just for special needs or certain space
3	Monitors are the stage for teachers' show and interaction with parents
4	Monitors are in disguise

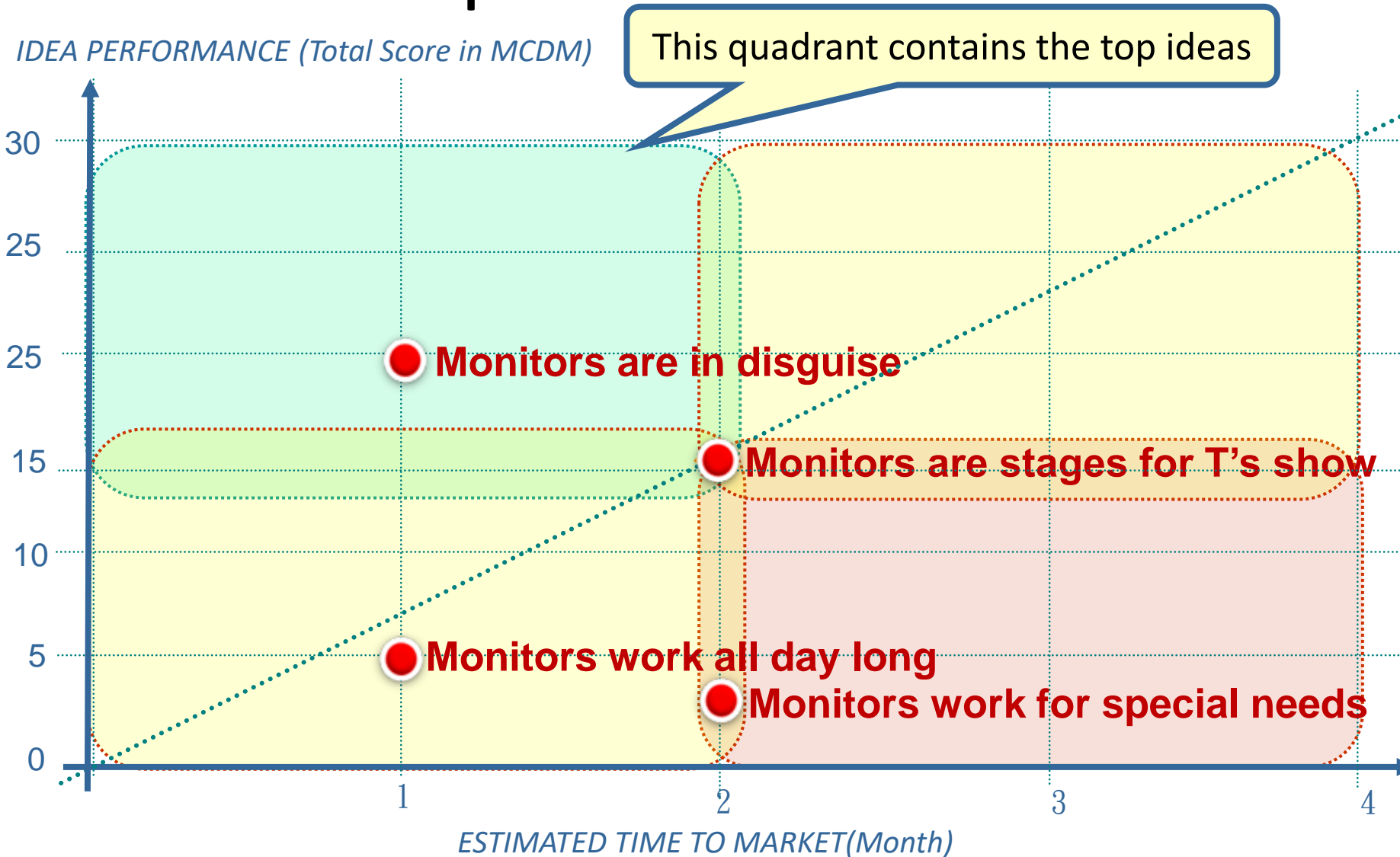
Evaluation and Ideas Landscaping

Idea #	Ideas	1. T's pressure	2. T's willing	3. P's satisfaction	4. C's safety	5. Cost	Total score	Final rank
	Weight - >	4	6	8	10	3		
1	Monitors work all day long	-1	-1	1	1	-1	5	3
2	Monitors work for special needs	1	1	0	-1	1	3	4
3	Monitors are stages for T's show	1	1	1	0	-1	15	2
4	Monitors are in disguise	1	1	1	1	-1	25	1

Estimating Time to Market (ETM)

NO	Ideas	Time to market
1	Monitors work all day long	1 month
2	Monitors work for special needs	2 months
3	Monitors are stages for T's show	2 months
4	Monitors are in disguise	1 month

Ideas landscape



Priority of ideas

Priority	Ideas
1	Monitors are in disguise
2	Monitors are stages for teachers' show
3	Monitors work all day long
4	Waiting-time shown online

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