ARIZ that does Brest idea framework as for the customer value.

－ARIZ is used nearer oneself more. －

Sony Corp.　Narumi Nagase

The problem is recognized through a variety of Brest practice.

Background

◇ The scene of the problem solving and the scene of the value creation execute Brest very much expecting two or more participants' effects of the bimotored.

- It is a note power especially inside to the customer value creation as ″What from How″, and holding by the diversity talent participation increases exceeding a usual system of development.

The situation to date

It worked on TRIZ device and the organized activity.

◇Problem solving idea of site of research and development and design manufacturing and Brest of invention creation

- The probability of the settling idea of problem solving Brest made an embodiment is high.
- The probability of the settling idea of invention creation Brest patent being applied is high.

☆The convergence result is roughly a surrounding in the area of our findings, and validity and the materialization of the arrangement matter can be almost foreseen.

☆It is easy ..arrangement matter.. to confer while Brest is progressing because our finding, the peripheral domain, and the idea that adjusts directionality work, too.

The problem is recognized through a variety of Brest practice.

Problem

Compared with Brest of the problem solving and the invention creation

◆Brest of a new value creation is extremely happy and the start cuts.

・The probability of leading from the settling idea of Brest to concrete development is considerably low.

★Brest where directionality is adjusted cracks unpleasantly on the surface because it aims at no indiscriminately surrounding in our areas the convergence result of Brest, and the novelty.

★To begin with, there is overreliance of consideration that it is not the one that value on which it works falls from the aim of the new field and development in a new market because the success percentage is low.

Result ・・

It has misgivings about the Brest poverty, the participation desire, and the decrease in the quality of the idea because of the Brest execution of the value creation that happens one after another and the low degree of the success percentage.

・・・***Moreover, what shall we do now though it was called?***

Setting of problem in 'New value creation' Brest execution

Problem

TRIZ device to value creation Brest.

◇Sympathy and the resonance are brewed, and the quality and the efficiency of the idea of the diversity talent are improved in Brest of a new value creation.

◇The member touches value, value is polished, and the place in Brest that can be absorbed in the value creation is offered.

Feature of approach:

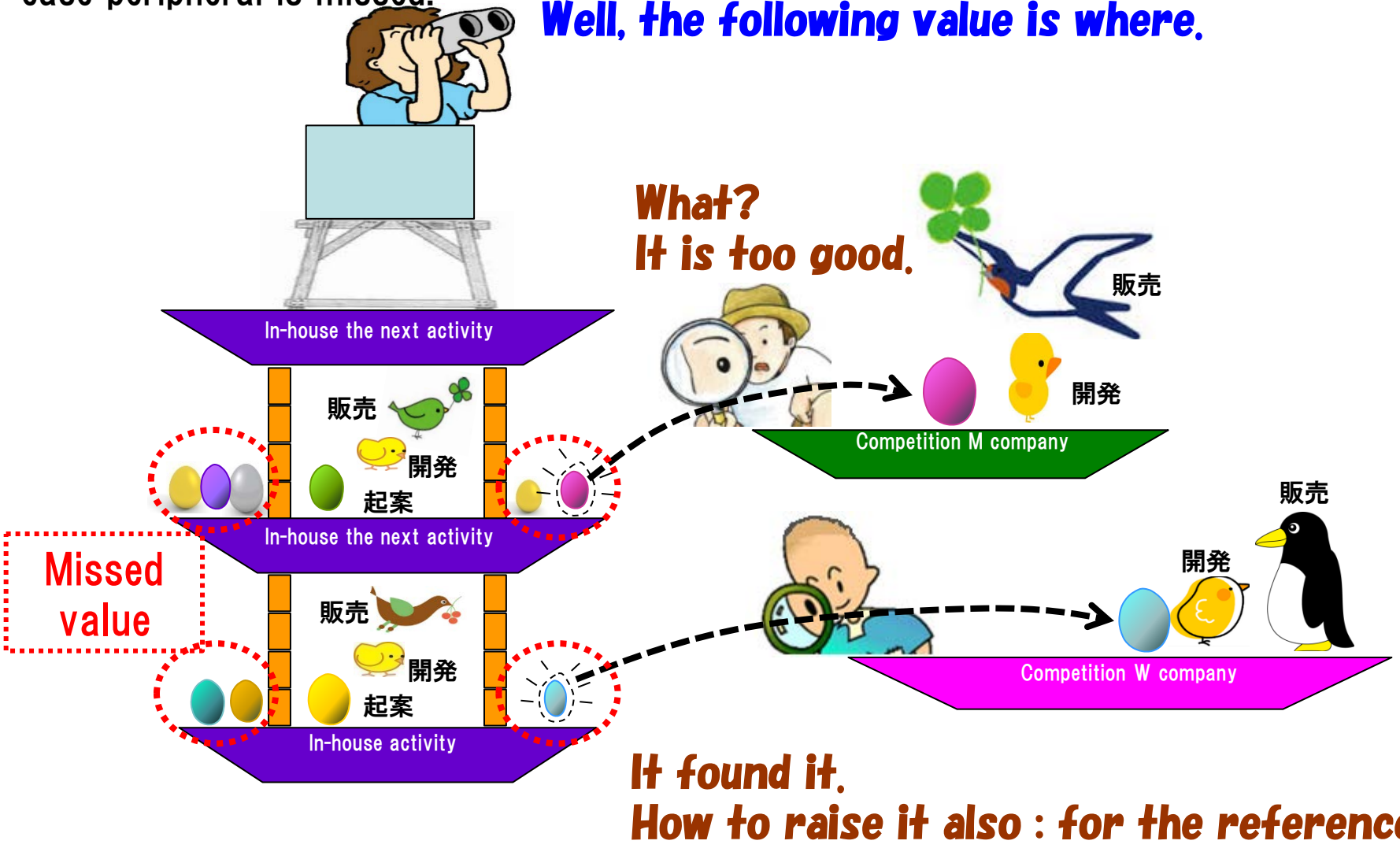
【The solution already problem and the development already case are constructed and the value creation framework to which the starting point also does the idea development is constructed. 】

☆The load of the verification of 'New value creation' in Brest is lightened, and the conference formation with sympathy and the resonance is pressed.

☆The idea efficiency improvement is attempted by the ARIZ idea framework.

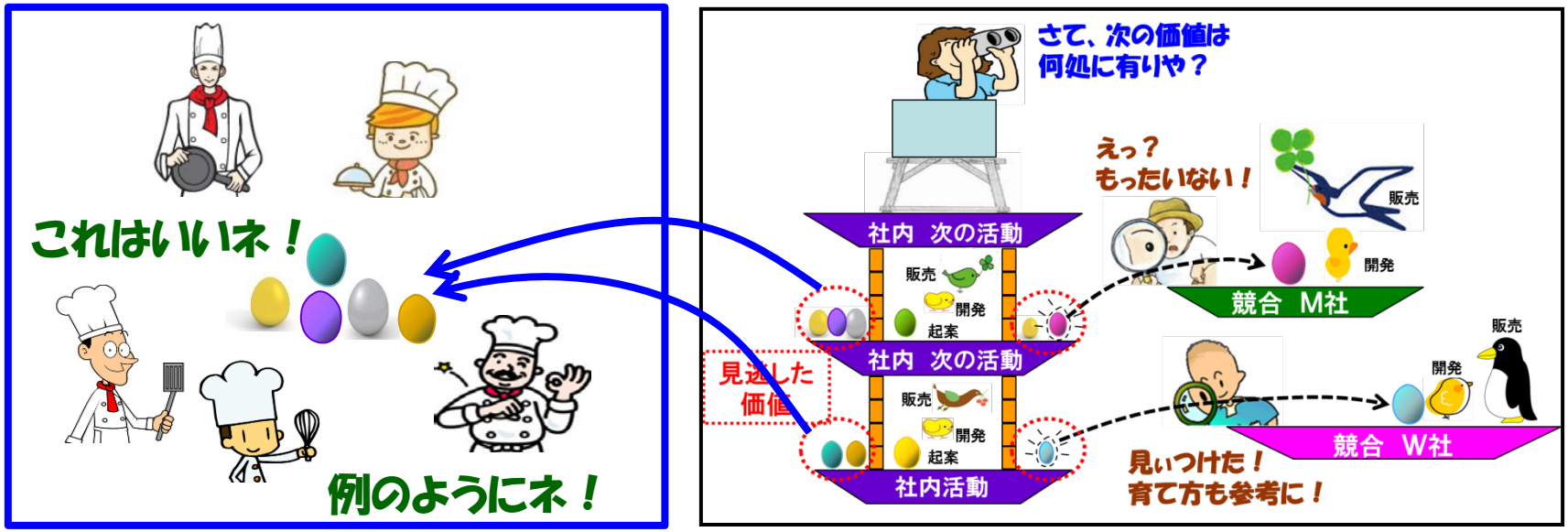
Value that lies scattered in circumference of solution already and development already

■ Unexpectedly, value the solution already problem and the development already case peripheral is missed.



is aim in ″New value″ in the circumference of the solution already and development already.

■ The idea efficiency of Brest of the value creation in the circumference of the solution already and development already is high.



- The necessity for worry about the realization in Brest is a little.
(The realization can be foreseen. or The realization is understood as another discussion.)

☆ The stress to sharing and the conference formation is few.
(Value causes sympathy and the resonance at once.)

『It touches value, value is polished, and it is absorbed in the value creation.』

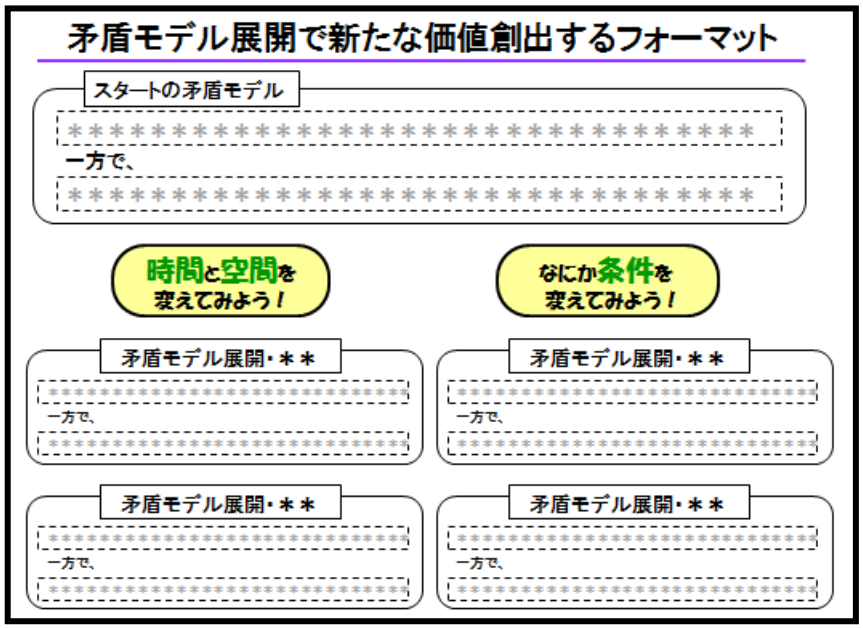
About the idea framework

■ Definition of ″Idea framework″ in this announcement

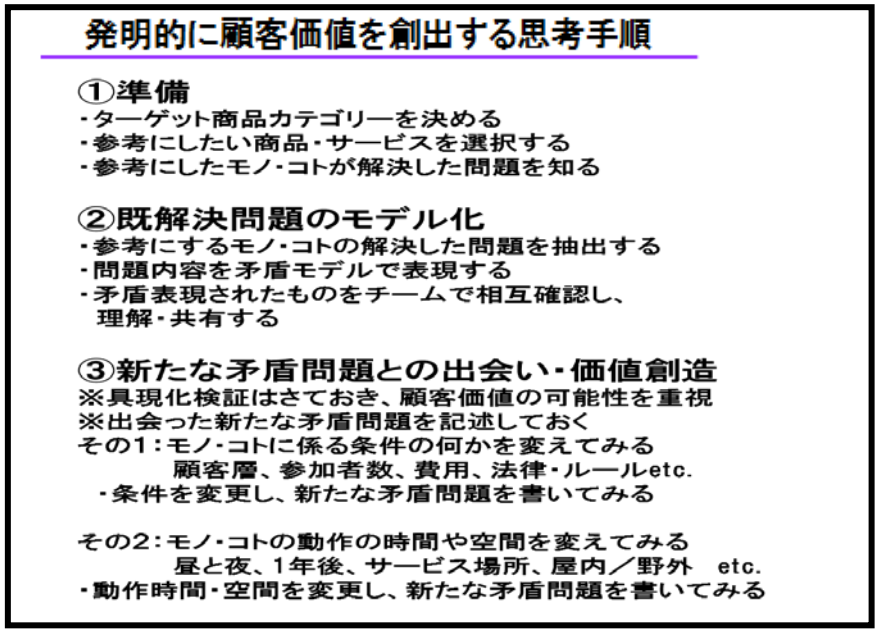
①Offer of format that can share content of development of idea delicious

②Specification of work procedure and action flow of idea development

Idea development format (example)



Idea work procedure (example)



Composition and large item of "ARIZ85C" to be used

Reference(a)NikkeiBP Chapter of theory「Technique of classical TRIZ」
第Ⅲ章 ARIZ Algorithm of Inventive Problem Solbing
(b) Ideation Japan：Mr. Kurosawa「TRIZ cram school」Homepage
http://www.trizstudy.com/altshuller1985ariz85c.html

ARIZ85C

Part1 Analysis of problem
Part2 The problem model's analysis
Part3 Formulation of ultimate ideal solution (IUR) and physical contradiction
Part4 Concentration and use of SFR (material and place resource)
Part5 Application of knowledge base
Part6 It changes in the problem or it replaces it.
Part7 Analysis of method of solving physical contradiction
Part8 Application of solution concept
Part9 Analysis of problem solving process

Composition and item list of "ARIZ85C"

Reference(a)NikkeiBP Chapter of theory「Technique of classical TRIZ」
Chapter Ⅲ ARIZ Algorithm of Inventive Problem Solbing
(b) Ideation Japan：Mr. Kurosawa「TRIZ cram school」Homepage
http://www.trizstudy.com/altshuller1985ariz85c.html

Analysis of Part1 problem
1_1 Form "Minimum problem".
The combination 1_2 confrontations or components are defined.
Express a graphical model (composition) for a confrontation 1_3 initial.
Select the model for the analysis after 1_4 this.
Strengthen 1_5 confrontations.
Form 1_6 problem model.
Apply solving systems 1_7 standard.

The Part2 problem model's analysis
Define 2_1 action area (Operational Zone).
Define 2_2 action time (Operational Time).
Define the resource of 2_3 material resource and the place.

Formulation of ideal solution (IUR:Ideal Ultimate Result) of ultimate Part3 and physical contradiction
3_1 Clarify IUR (ultimate ideal solution).
3_2 Emphasize the structure of IUR-1.
Write a fundamental confrontation for 3_3 macro level.
Write the structure of a fundamental confrontation for 3_4 macro level.
Write the structure of ultimate ideal solution (IUR-2) of 3_5.
Think about a solution of the problem fundamental 3_6.

Concentration and use of Part4 SFR (material and place resource)
4_1 Use and model SLP.
4_2 Fall from IUR by one step.
4_3 is used mixing the material that has become empty.
4_4 Use of "Nothing"
Use of 4_5 derivative quality
Use of place of 4_6 electricity
4_7 Use of combination of "Place perception material"

Application of Part5 knowledge base
The system of a standard solution is applied to 5_1 physical problem.
Application examination of 5_2 non-standard problem solving concept
Solution examination of 5_3 physical contradiction by principle of separation
The deletion of the physical contradiction is examined by 5_4 natural effect and the phenomenon.

It changes in the Part6 problem or it replaces it.
When 6_1 solution object is obtained, a concrete measure of the principle accomplishment is examined in the diagrammatic illustration.
A main problem is selected again when cannot 6_2 solutions.
Physical contradiction of the other is selected, and the problem is changed, except for no 6_3 solutions.
It tempers with a super-system and problems are formulated most when not solving it ..6_4.. still.

Analysis of method of solving contradiction Part7 physical
Verification and correction of 7_1 solution concept
Prior evaluation of 7_2 solution concept
Investigation of early [shizai] of 7_3 solution concept
Confirmation of the next sub-problem of 7_4 new system and influence that should be considered

Application of Part8 solution concept
Definition of change of system ..8_1.. new
Check on current of the times adaptability of 8_2 of new system
8_3 solution concept is misappropriated to other problems.

Analysis of Part9 problem solving process
Logical verification of problem solving ..9_1.. actual in process
Acquisition of new knowledge base from 9_2 solution concept

Use main item from "ARIZ85C" to new value creation

The main use item

Analysis of Part1 problem
1_1 Form "Minimum problem".
The combination 1_2 confrontations or components are defined.
Expres[illegible]ntation 1_3 initial.
Select
Strengt[illegible] confrontations.
Form 1_6 problem model.
Apply solving systems 1_7 standard.

Problem definition and modeling

The Part2 problem model's analysis
Define 2[illegible]
Define [illegible]
Define [illegible]ource of 2_3 material resource and the place.

Ascertainment of solution area

Formulation of ideal solution (IUR:Ideal Ultimate Result) of ultimate Part3 and physical contradiction
3_1 Cl[illegible]
3_2 Er[illegible]
Write a fundamental confrontation for 3_3 macro level.
Write the structure of a fundamental confrontation for 3_4 macro level.
Write the structure of ultimate ideal solution (IUR-2) of 3_5.
Think about a solution of the problem fundamental 3_6.

Problem and positioning of ideal

Concentration and use of Part4 SFR (material and place resource)
4_1 Use and model SLP
4_2 F[illegible]
4_3 is[illegible]me empty.
4_4 U[illegible]
Use of 4_5 derivative quality
Use of place of 4_6 electricity
4_7 Use of combination of "Place perception material"

Problem solving by resource maximum use

Application of Part5 knowledge base
The system [illegible]
Application [illegible]
Solution examination of 5_3 physical contradiction by principle of separation
The deletion of the physical contradiction is examined by 5_4 natural effect and the phenomenon.

Problem solving from ancient wisdom

It changes in the Part6 problem or it replaces it.
When 6_1 solution object is obtained, a concrete measure of the principle accomplishment is examined in the diagra[illegible]
A main problem is selected again when cannot 6_2 solutions.
Physical contradiction of the other is selected, and the problem is changed, except for no 6_3 solutions.
It tempers with a super-system and problems are formulated most when not solving it ..6_4.. still.

Redefine of problem

Analysis of [illegible]
Verification [illegible]
Prior evaluat[illegible]
Investigation of early [shizai] of 7_3 solution concept
Confirmation of the next sub-problem of 7_4 new system and influence that should be considered

Verification and correction of solution

Application [illegible]
Definition of [illegible]
Check on cur[illegible]
8_3 solution concept is misappropriated to other problems.

Application and misappropriation of solution

Analysis of Part9 problem solving process
Logical verif[illegible]
Acquisition [illegible]

Making of solution process knowledge

Example of describing analysis of problem of ARIZ and confrontation (contradiction) model

Tool: Thermos

There is a useful action.

Contents are kept warm.

There is an adverse effect

It is not easy to carry.

Problem of cool beverages

Tool:
PET bottle

There is a lack action.

Contents are kept warm.

Adverse effect none

It is not easy to carry.

Introduction of component "X" to be solved conveniently

Tool: Thermos

There is a useful action.

Contents are kept warm.

There is an adverse effect

It is not easy to carry.

X

Maintaining the heat-retaining property
The carrying character is improved.

Problem of cool beverages

The carrying character improves the heat-retaining property maintaining it.

X

Tool:
PET bottle

There is a lack action.

Contents are kept warm.

Adverse effect none

It is not easy to carry.

Model selection and definition of operation time and space

The model's selection

持ち運び性は維持しつつ
保温性を良くする　X

ツール：
ペットボトル

不足作用あり

有害作用なし

中身を保温する

持ち運びしにくい

Expected operation space and time

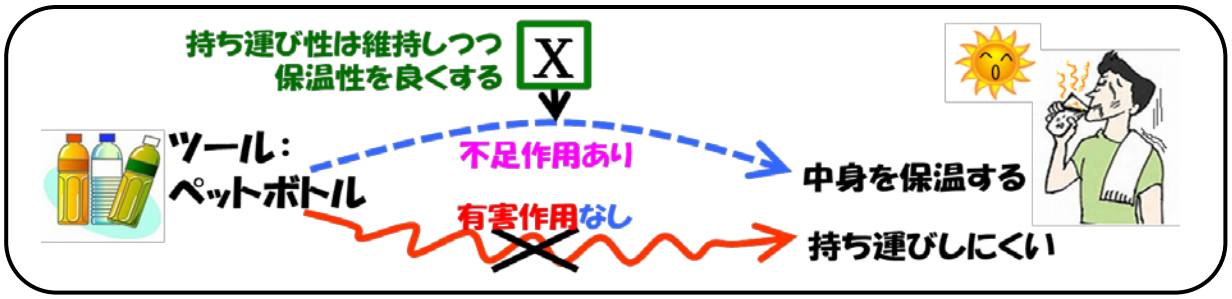
Outdoor is good while it is drinking.

Though it is also good to use the PET bottle cover・・・・

I manage to want to solve it as TRIZ practitioner due to the minimum problem.

SFR use examination for acquisition of component "X"

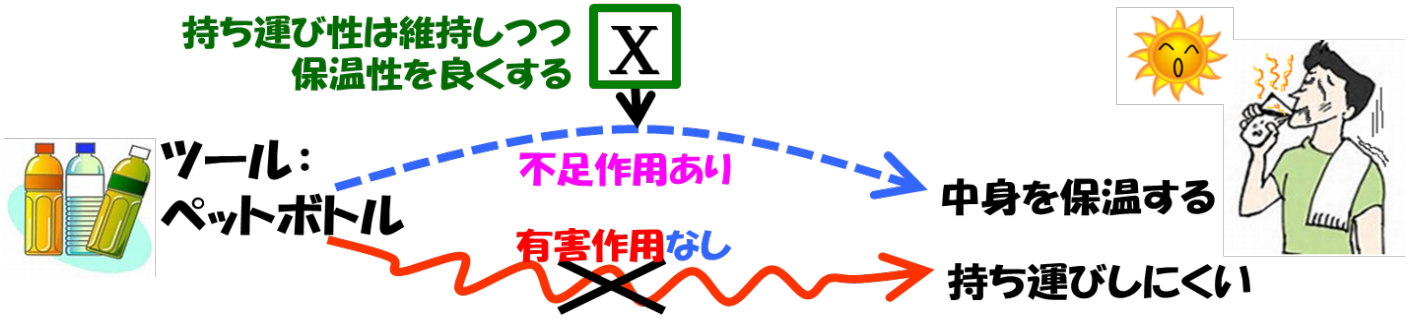
■PET bottle and peripheral SFR(Substance and Field Resources) Making to list



	SFR	Performing of SFR component "X", expectation, and IUR
PET bottle Main body of container	Weight of PET bottle Hardness of PET bottle Size of PET bottle Flat of PET bottle	The weight of the PET bottle improves and the carrying character improves the heat-retaining property maintaining it. The hardness of the PET bottle improves and the carrying character improves the heat-retaining property maintaining it. The size of the PET bottle improves and the carrying character improves the heat-retaining property maintaining it. Flat of the PET bottle improves and the carrying character improves the heat-retaining property maintaining it.
Cap of PET bottle	Size of cap Flat of cap	The size of the cap improves and the carrying character improves the heat-retaining property maintaining it. Flat of the cap improves and the carrying character improves the heat-retaining property maintaining it.
(contents)Juice	Temperature of juice Latent heat of juice Viscosity of juice	The temperature of the juice improves and the carrying character improves the heat-retaining property maintaining it. The latent heat of the juice improves and the carrying character improves the heat-retaining property maintaining it. The viscosity of the juice improves and the carrying character improves the heat-retaining property maintaining it.
Label	Area of label Heat transfer property of label	The area of the label improves and the carrying character improves the heat-retaining property maintaining it. The heat transfer property of the label improves and the carrying character improves the heat-retaining property maintaining it.
Circumambient air	Temperature of circumambient air Humidity of circumambient air Heat transfer property of circumambient air	The temperature of air improves and the carrying character improves the heat-retaining property maintaining it. The humidity of air improves and the carrying character improves the heat-retaining property maintaining it. The heat transfer property of air improves and the carrying character improves the heat-retaining property maintaining it.

Creation of acquisition idea of "X" from SFR list

The model's selection



Expected operation space and time

Outdoor is good while it is drinking.

Idea of problem solving

①Adiabaticity of X = air

To the PET bottle outer
The rib structure is installed.
With the label film
The air layer is made.
The heat-retaining property is improved.

②Latent heat of X = juice

A part of the juice is frozen.
It does, and the frozen part.
By melted ..drink.. latent heat
The juice is done and
[hiya] ..keeping up.. is done.

③Humidity of X = air

To the surface of the PET bottle
It ..inclusion.. soaks, and the water of water.
To the cooling by evaporation
Therefore, the PET bottle
[Hiya] ..keeping up.. is done.

The problem is aim in the value buried in the solution and the circumference.

PET bottle beverage that has improved heat insulation

Tool:
PET bottle

The thermal barrier has been formed with the surface rib and the label.

There is a useful action. X → **Contents are kept warm.**

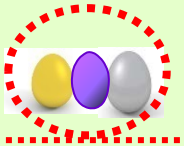
Adverse effect none ✕ → **It is not easy to carry.**

Outdoor, it is cold and it is delicious while it is drinking. ！

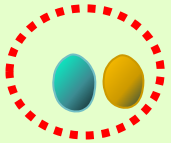
Problem solving、Besides, it not worthy?

◇ Strengthening the invention it, is it thought about the alternative more?

◇ If it wants to tie to a new value creation, let's do very.
⇒Is the remainder problem dug up?



Missed value？



◆ ***Let's challenge in ARIZ because it is special. ！！***
Let's work on the value creation due to the minimum problem. ！！

Definition of length of effectiveness: Use of T1・T2・T3 development

■ The time that can be used resource is defined, and the idea is created.

☆ To make the restoration after the fact etc. the range of consideration, it develops with T3 (after the fact) though it defines in ARIZ85C around immediately before the problem generation.

Example of developing "Fire digestion and measures"

	T1: Prior Usual disaster prevention	T2: Extinction of site	T3: After the fact Settlement of a fire
Combustible Removal	・The combustible to surroundings of the house It doesn't put it. ・Installation of fire prevention endurance wall	・Combustible removal of surrounding ・Interception of fuel ・Site collection of fuel	・Announcement strengthening of disaster prevention ・New city planning plan ・City planning without garbage ・Misfortune [mo] construction and standard updates
Combustion condition Reduction and disappearance	・Management of ignition thing ・Settlement thoroughness of fire ・Digestive organization and digestive manual ・Regional fire fighting group and digestive organs ・Installation of sprinkler	・Scatter of digestive ・Scatter and CO2 filling of water ・Sprinkler operation ・Close of fire door ・Interception of electricity	・Disaster prevention case making ・Construction project of fire prevention water tank ・City planning not guilty
Incineration thing Removal and reproduction	・Struck garbage depository securing ・Emergency vehicle road maintenance ・Securing of evacuation area ・The fire insurance and household goods insurance	・Complete isolation of high temperature area ・Isolation of combustion material ・It runs away.	・Combustion damage material removal ・Cleaning of stricken area ・Deletion of carbonization part ・Reinforcement of incineration part

T1・T2・T3 development of "Value of PET bottle"

- Brest example of familiar ideal convenience and value

Operation space element"Customer's space"

	T1: Prior	T2:	T3: After the fact
PET bottle The beverage Person who buys it	When you buy it At any time Anywhere It is possible to buy it.	When drinking Solution. A hot day When it is cold Delicious dish [i] The drop of water It doesn't adhere. ..good..	When you dispose Easily It collapses. It wants it.
PET bottle The beverage Person who sells it	When cooling it It is quick. Cooling [Tai]	When selling it It gets wet. In case of not being It is glad.	When you relocate The wound It is not easy to adhere. ..good..
PET bottle The beverage Person who makes it	When you procure it Seat Then, it keeps it. However, [raku].	When stuffing The mouth is wide. It becomes independent. ..good..	When you ship it With no space between Can packing Tub [i]

Modeling of new value solution already problem peripheral

It touched by a different operation space/the hour. "New value"

A:「In refrigerator」 ⇒ ? ⇒I want you to get cold early.
B:「At recycling」 ⇒ ? ⇒I want you to collapse easily.
X:「at ＊＊＊」 ⇒ ? ⇒＊＊ becomes bad.

Modeling examination of PET bottle beverage of "New value"

PET bottle beverage that has improved heat insulation

Tool:
PET bottle

The thermal barrier has been formed with the surface rib and the label.

X

There is a useful action.

Contents are kept warm.

Adverse effect none

It is not easy to carry.

It gets cold early in the refrigerator.

It is not easy to crush when there is a rib.

＊＊ worsens.

X'

It behaves conveniently.
(To what wind.)

Modeling of new value solution already problem peripheral

■ Modeling of new value "Cold early in refrigerator PET bottle"

Improvement heat insulation＋Cold early PET bottle beverage

Tool:
PET bottle

The thermal barrier has been formed with the surface rib and the label.

X

There is a useful action.

Contents are kept warm.
It is not easy to carry.

Adverse effect none

It cools it with the refrigerator early while having the heat-retaining property.

X'

It gets cold early in the refrigerator.

The bottom are a lot of ri… …al barrier.
However,, It on, Beca… …efrigerator
The realization ca… …one's ingenuity ,,so… ・・・

It waits for a moment.

Modeling of new value solution already problem peripheral

- Modeling of new value "Cold early in refrigerator PET bottle"

Please note it.

Instantly, this problem solving and realization
To the idea creation though it seems will run
Let's pay attention to the existence of the value now.

The solution of the problem : to "New value".
Do you connect?First of all, that is important.

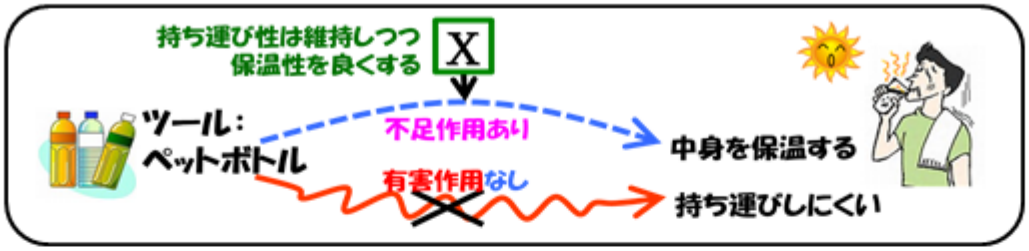
Well, the bottom are a lo… …s the thermal barrier ・・・.
However, contents … …d of the refrigerator ・・・ -.
The realization … …s one's ingenuity ..so…

It waits for a moment.

The solution already problem is used for "New value creation" more.

■ To the idea that ties from SFR information to a new value creation

■ペットボトルおよび周辺のSFR(Substance and Field Resources)のリスト化



	SFR	SFRが構成要素「X」を演じてくれる・期待・IUR
ペットボトル 容器本体	ペットボトルの重さ ペットボトルの硬さ ペットボトルの大きさ ペットボトルの平らさ	ペットボトルの重さが持ち運び性は維持しつつ保温性を良くする ペットボトルの硬さが持ち運び性は維持しつつ保温性を良くする ペットボトルの大きさが持ち運び性は維持しつつ保温性を良くする ペットボトルの平らさが持ち運び性は維持しつつ保温性を良くする
ペットボトルのふた	ふたの大きさ ふたの平らさ	ふたの大きさが持ち運び性は維持しつつ保温性を良くする ふたの平らさが持ち運び性は維持しつつ保温性を良くする
(中身)ジュース	ジュースの温度 ジュースの潜熱	ジュースの温度が持ち運び性は維持しつつ保温性を良くする ジュースの潜熱が持ち運び性は維持しつつ保温性を良くする
ラベル	ラベルの大きさ	ラベルの大きさが持ち運び性は維持しつつ保温性を良くする
周囲の空気	周囲の空気の温度 周囲の空気の伝熱性	空気の温度が持ち運び性は維持しつつ保温性を良くする 空気の伝熱性が持ち運び性は維持しつつ保温性を良くする

SFR that develops for problem solving
The parameter is changed, and a cheerful idea has been acquired.

I want to use it for this and a new value creation more.

Modeling of new value of use and circumference of SFR list

■ The idea that ties to new value by using the SFR list is developed.

	SFR	Value development according to parameter change (10 times and 1/10)
PET bottle Main body of container	Weight of PET bottle Hardness of PET bottle Size of PET bottle Flat of PET bottle	Do when the weight of the PET bottle decreases to 1/10? Do when the hardness of the PET bottle decreases to 1/10? When the size of the PET bottle increases by a factor of ten, it is not possible to have it b heavy. It is breakable though piles up easily when flat of the PET bottle increases by a factor of ten.
Cap of PET bottle	Size of cap Flat of cap	It effuses suddenly when the size of the cap increases by a factor of ten. Do when flat of the cap becomes 1/10?
(contents)Juice	Temperature of juice Latent heat of juice Viscosity of juice Pressurizing level of juice	When the temperature of the juice exceeds 80℃, it transforms it. Do when the latent heat of the juice becomes 1/10? It doesn't go out when the viscosity of the juice increases by a factor of ten. It ..pressure of the juice.. explodes ..ten times (10 atmospheres)...
Label	Area of label Heat transfer property of label	When the area of the label increases by a factor of ten, it is wrapped by the label. When the heat transfer property of the label increases by a factor of ten, it is not possible to have it because the hand is cold.
Circumambient air	Temperature of circumambient air Humidity of circumambient air Heat transfer property of circumambient air	It transforms it though ⇒ can be sterilized when the temperature of air exceeds 100℃. Do when the humidity of air increases by a factor of ten? Do when the heat transfer property of air increases by a factor of ten?
Person's hand	Temperature of person's hand The grip of person's hand	When the temperature of person's hand increases by a factor of ten, it melts and it tr When the grip of person's hand becomes 1/10, it cannot have the PET bottle delicious.

Modeling of new value of use and circumference of SFR list

■ The idea that ties to new value by using the SFR list is developed.

	SFR	Value development according to parameter change (10 times and 1/10)
PET bottle Main body of container	Weight of PET bottle Hardness of PET bottle Size of PET bottle Flat of PET bottle	Do when the weight of the PET bottle decreases to 1/10? Do when the hardness of the PET bottle decreases to 1/10? When the size of the PET bottle increases by a factor of ten, it is not possible to have it b heavy. It is breakable though piles up easily when flat of the PET bottle increases by a factor of ten.
Cap of PET bottle	Size of cap Flat of cap	It effuses suddenly when the size of the cap increases by a factor of ten. Do when flat of the cap becomes 1/10?
(contents)Juice	Temperature of juice Viscosity of juice	When the temperature of the juice exceeds 80℃, it transforms it. It doesn't go out when the viscosity of the juice increases by a factor of ten.
Label	Area of label Heat transfer property of label	When the area of the label increases by a factor of ten, it is wrapped by the label. When the heat transfer property of the label increases by a factor of ten, it is not possible to have it
Circumambient air	Temperature of circumambient air Humidity of circumambient air Heat transfer property of circumambient air	It transforms it though ⇒ can be sterilized when the temperature of air exceeds 100℃. Do when the humidity of air increases by a factor of ten? Do when the heat transfer property of air increases by a factor of ten?
Person's hand	Temperature of person's hand The grip of person's hand	When the temperature of person's hand increases by a factor of ten, it melts and it transforms it. When the grip of person's hand becomes 1/10, it cannot have the PET bottle delicious.

Chance.

Chance.

Chance.

The SFR development use is an advantage size.

There is a finding as a solution already problem.
The evaluation of value becomes complete easily.

The conception of the means seems to be also easy.
The sense of security improves the recognition of value.

The realization cost is also roughly cheap.

In addition, further・・・It is re-aim around the solution already contradiction model.

■ Creation of "New value" in addition ..use of contradiction model of solution already..

PET bottle beverage that had problem

Tool:
PET bottle

There is a lack action.

Adverse effect none

Contents are kept warm.
It is not easy to carry.

PET bottle beverage that has improved heat insulation

The thermal barrier has been formed with the surface rib and the label.

Tool:
PET bottle

There is a useful action.

X

Adverse effect none

Contents are kept warm.
It is not easy to carry.

Contradiction problem of disposition of the case⇒「The second loach」There is contradiction. ??

■ Problem solving of securing safety for gas writer's infant

I want to ignite it easily.

I want to coexist it.

They do not want to ignite it.

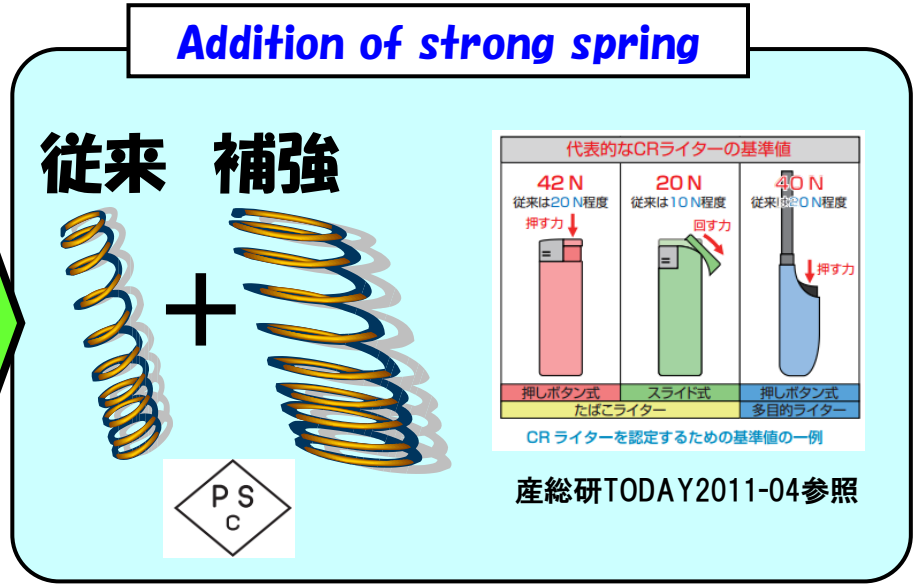
It is possible to ignite very conveniently, and safety is secured for the infant.

The adult wants to ignite it easily.
In one side
For the infant, they do not want to ignite it easily.

Child resistance mechanism (CR) restriction writer change
It separates on the condition. :Making of infant's being not able to operate ignition by strengthening spring power

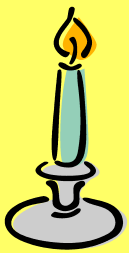
Meeting "New value" in circumference of solution already contradiction

■ Should the solution it ・・・ : the problem in the CR gas writer change.



It seemed that a disposition of the case. ・・

Firmly.
The ignition is impossible.
It has a pain in the hand.



Meeting value contradiction = new

They do not want to ignite it.

Less than 51 months

I want to ignite it easily.

I want to coexist it

The grandma easily secures safety for the ignition and the infant.

「The second loach」
Contradiction

This is an unsettled contradiction problem. !
There is a possibility of a new commodity proposal. ! ! ? ?

For the infant, they do not want to ignite it easily.
In one side
The grandma wants to ignite it easily.

Meeting value contradiction = new new

「*The second loach」Contradiction*、 It noticed.

◆ Even if it is already a solution, the contradiction modeling is done.
⇒Characters etc. are changed.
⇒It meets unsettled contradiction.
⇒The possibility of ″New value creation″ is obtained.

「The second loach」 Contradiction

This is an unsettled contradiction problem. !
There is a possibility of a new commodity proposal. ! ! ? ?

For the infant, they do not want to ignite it easily.
In one side
The grandma wants to ignite it easily.

Let's develop new contradiction.

New contradiction and start model

Let's change time and the space. !

Let's change some conditions.

It is attention to value.

The problem solving is a deferment.

New contradiction model A

The writer is handled within the range though the writer is not handled beyond the limits of the decided time.

New contradiction model M

The grandma is made to handle the writer though mother doesn't allow them to handle the writer for the child.

New contradiction model

It is possible to ignite it as a writer when it is near though it is not possible to ignite as a writer when it is far from the place in the buddhist altar.

New contradiction model N

It is not possible to ignite as a writer if there is no incense stick to be near, and it is possible to ignite it as a writer when is.

New contradiction model X

It is possible to ignite it as a writer while the child is playing while helping it is not possible to ignite it as a writer.

Idea framework
&
Value creation format

Framework where value is created by contradiction model (example)

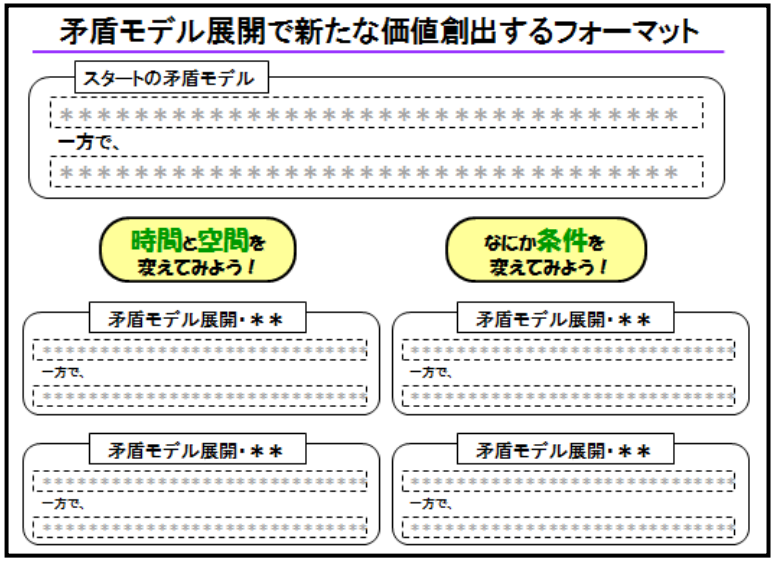
Procedure of idea

①Preparation
・The target commodity category is decided.
・The commodity and the service that refers are selected.
・It knows the problem that mono-Koto who had referred solved.

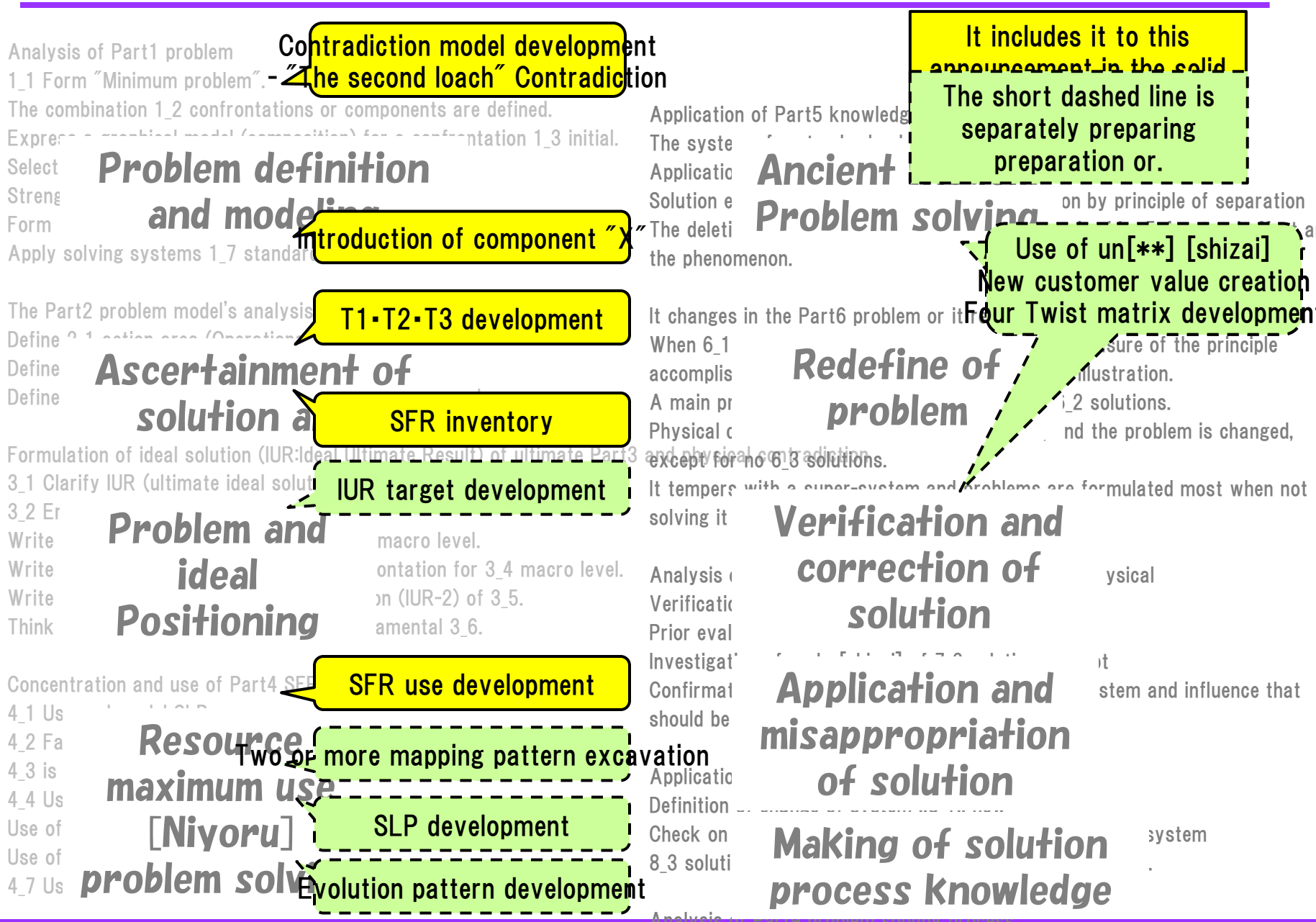
②Modeling of solution already problem
・The problem to solve mono-Koto who refers is extracted.
・The contradiction model expresses the content of the problem.
・The one that the contradiction expression was done is confirmed mutually in the team.
It understands and it shares.

③Meeting and value creation with new contradiction problem
- The possibility of the customer value is valued without mentioning the realization verification.
- A new contradiction problem meeting is described.
The 1: Something of the condition lying mono-Koto is changed.
Range of customers, size of the turnout, cost, and law and rule etc.
・It modifies conditions, and a new contradiction problem is written.

The 2: Time and the space of mono-Koto's operation are changed.
It is service place and room/outdoors etc one year later at daytime and night.
・The operation time and the space are changed, and a new contradiction problem is written.



Value creation framework group that uses "ARIZ85C"



Summary

◇Compared with Brest of the problem solving and the invention creation, to improve ″New value creation Brest″ of an inefficiency old model、The idea process where ARIZ was used is examined.

◇Feature of approach

Construction of 'It is a value creation framework to which the starting point also does the idea development as for the solution already problem and the development already case'.

◇Sympathy and the resonance are brewed.

'It touches value, value is polished, and it is absorbed in the value creation' It offers it as new Brest that can be done.

It proposes to the people who worry in past Brest, and the cooperation of labor practice is being promoted.

Thank you for listening.

—ARIZ is used nearer oneself more. —

Sony Corp.　Tokumi Nagase