

# **Full Scheme Thinking and Feature Transfer for Creation of Blue Ocean**

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## **ABSTRACT**

TRIZ has been changed to serve not only technical innovation but also nontechnical improvement. The requirement of contributions to business area seems increasingly higher especially in this period of experience economy. One of the main interesting topics is how to create blue ocean, which could need systematic creativity like what TRIZ can help. In this paper, 'Feature Transfer' coming with 'Full Scheme Thinking of OTSM-TRIZ' is introduced as one of the responses to the demand for TRIZ-based innovation in business area. Search for alternative industries using 'Full Scheme Thinking of OTSM-TRIZ' can provide us with the way to reconstruct the market boundaries. Making a new value curve through ERRC presented in blue ocean strategy is acquired with the modified 'Feature Transfer'.

## **1. INTRODUCTION**

As all of us know well, G. Altshuller's TRIZ has been adapted by his followers and then I-TRIZ, OTSM-TRIZ, TRIZ<sup>++</sup> etc. have been introduced[1-4]. Not only engineering problems but also problems of everyday life including business problems have been attacked by variations of the 'modern TRIZ'. Especially, problems in business area interest TRIZ practitioners in these days. The expansion of TRIZ world looks a 'must' because the supersystem of TRIZ recently comes with two streams of paradigm change.

First, experience economy originated from works of B. Joseph Pine II and James H. Gilmore[5]. In experience economy, the technical evolution of a system must get along with not only IFR in technical point of view - for a system as a commodity or a good - but also IFR in viewpoint of experience and transformation of customers. Experience economy is requiring further and better interpretation of TRIZ tools for effective solving the companies' problems for success in market. TRIZ has to consider how to increase ideality along S-curve of a system as a tool to deliver service, experience and transformation.

Secondly, in business strategy area, ‘blue ocean strategy’ proposed by W. Chan Kim and Renée Mauborgne[6] is being spotlighted because of its capability of creation of new and greatly beneficial markets. Following blue ocean strategy means that we have to introduce a new value curve characterized with focus, divergence and compelling points through ERRC framework. If creativity has to provide novelty and benefits, the ways in ‘blue ocean strategy’ might hold something in common with creativity and then with TRIZ as well.

This paper is supposed to present applications of some tools of modern TRIZ to creation of blue ocean in experience economy. Actually, even if Kim and Mauborgne distinguish between value innovation and technical innovation, the blue ocean can be created through technological innovations just as Kim and Mauborgne mention some examples in their book. But the following discussion is not related to technical creativity but creativity for building new service, experience and transformation through TRIZ.

TRIZ results in IFR for both two conflicting parameters which are of value in the category of red ocean functions. If TRIZ works for red ocean, the results would not belong to blue ocean. The reason is that if we eliminate contradictions involved in red ocean, the conflicting values are of red ocean not of blue ocean.

In blue ocean, with TRIZ, we have to offer divergence against the red ocean. As mentioned above, the main difference between blue ocean and red ocean is located in the divergent value curves. On the contrary, the innovative change through TRIZ in red ocean shows us how to improve the current values, or values of red ocean and keeps the same tendency as the current value curve except the change of the price term. Without the new value curve with focus, divergent, and compelling points, no blue ocean there.

The features of what we call the creation of blue ocean come true through ERRC framework suggested by Kim and Mauborgne. Therefore, if we want to achieve the creation of blue ocean, we have to check how TRIZ tools serve ERRC. That means TRIZ should lead you from the comparison among the alternatives to the result of ERRC framework.

The writer believes that ‘Feature Transfer’[7-8] of TRIZ works in that point for blue ocean strategy. Use of ‘Feature Transfer’ for blue ocean strategy will be presented in the following section.

There is another job of modern TRIZ for blue ocean strategy in experience economy.

In order to identify commercially compelling blue ocean opportunities, Kim and Mauborgne suggest that we should reconstruct market boundaries through ‘six paths framework’. The six paths are as listed below;

- (1) look across alternative industries
- (2) look across strategic groups within industry
- (3) redefine the industry buyer group
- (4) look across to complementary product and service offerings
- (5) rethink the functional-emotional orientation of its industry
- (6) participate in shaping external trends over time

In TRIZ viewpoint of me, these six paths deliver the function of ‘inform us (of the value curves which are already accepted by a lot of non-customers or, at least, will be accepted with high probability)’. If TRIZ can serve more reliable value curves as references than the above six paths framework, it should help reconstruction of market boundaries. I found that ‘Full Scheme Thinking of OTSM-TRIZ’[3,9] works at this point. In order to complement ‘Feature Transfer’ for blue ocean strategy, ‘Full Scheme Thinking of

OTSM-TRIZ' should be built in 'Feature Transfer'.

Used for search and selection of some existing markets, 'Full Scheme Thinking of OTSM-TRIZ' could give us commercially compelling blue ocean opportunities. 'Full Scheme Thinking' will be the early part of 'Feature Transfer' modified for blue ocean creation.

Finally, what we are trying to do could be briefly shown as presented in Fig.1; how to generate the new strategy canvas.

First, comparison of value curves in current industry,

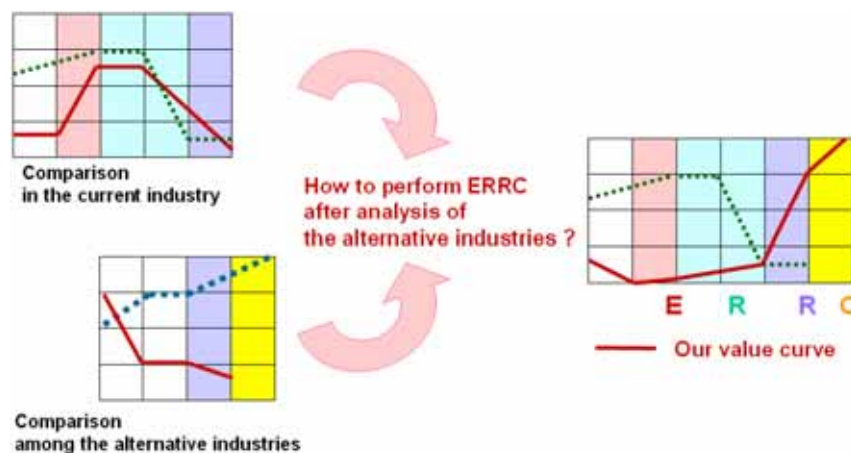
Second, comparison of value curves among alternative industries after 'Full Scheme Thinking',

Third, ERRC through the later stages of 'Feature Transfer'.

'Feature Transfer' adapted in this paper is based on the thinking process introduced by Invention Machine Inc. I will show the detail steps with screen-captured pictures of the module, 'system benchmarking' of Goldfire 2.0. 'Full Scheme Thinking of OTSM-TRIZ' is based on my understanding of lectures and personal lessons by Nikolai Khomenko. However, if any, all mistakes and misunderstandings of the both thinking ways found in this paper belong to me.

Let's examine how 'Feature Transfer' can serve the reconstruction of market boundaries.

**Fig.1** Generation of the new strategy canvas from value analysis of alternative industries



## 2. Feature Transfer to make a new strategy canvas

First of all, it is necessary to leave some comments on the terminology in 'Feature Transfer' and blue ocean strategy.

As you know well, in conventional 'Feature Transfer', we deal with 'competing systems' as candidates for comparison of performance parameters. Among the 'competing system', we select 'alternative systems' in order to transfer some features into the 'base system'. If any performance parameter of a competing system is better than that of our base system, that competing system could be one of the alternative systems.

In blue ocean strategy, 'alternative industries' are identified as industries that have the same purpose but

different functions and forms compared to our current one and ‘substitute’ is for industries which have similar functions and different forms. ‘Alternative industries’ are just one of resources for remaking market boundaries.

In this paper, the expression, ‘industry’ of blue ocean strategy and ‘system’ in TRIZ world are equivalent to each other because we deal with ‘industry’ as a ‘system’. The words, ‘competing’, ‘substitute’ and ‘alternative’ used in ‘Feature Transfer’ and blue ocean strategy, all of them are replaced simply by one word, ‘alternative’<sup>1</sup>, which means that ‘alternative’ industries are equivalent in viewpoint of ‘delivering a certain (and sometimes alternative) value to customers in alternative ways’. Any industry out of the six paths of Blue Ocean Strategy could be called ‘alternative one’ according to the viewpoint of this paper. But, in order to choose a group of alternative industries deserving our attention, we will go along with some axes guided by ‘Full Scheme Thinking of OTSM-TRIZ’.

Additionally, since Goldfire provides us with the templates of this procedure, the ‘parameter’ on the templates of Goldfire corresponds to the ‘(customer) value’ in blue ocean strategy. Therefore, the value curves are expressed by the table of performance parameters appeared in Goldfire.

The procedure for making a new strategy canvas by ‘Feature Transfer’ is as below;

- 1) Compare the value curves of the competitors in the current industry
- 2) Search for alternative industries according to ‘Full Scheme Thinking of OTSM-TRIZ’
- 3) Compare the value curves of the alternative industries
- 4) Identify the elements, functions related to the inferior values of the current industry (base industry) to others and define what features must be transferred to the current industry from the superior ones.
- 5) Develop some ideas about how to transfer the features resulted from stage 4 into the current.
- 6) Check if there are any conflicting ways between the current and the results of stage 5.  
If any, just diversify the market.

More detailed explanation is prepared with what Kim and Mauborgne did<sup>2</sup> and following as below.

## **1) Compare the value curves of the competitors in the current industry**

The purpose of this stage is to provide the background of the following stages. Through this stage, we can identify the values and functions of the current industry. The result of this stage should be compared to the requirement based on the fifth stage.

Basically, the same things are to be done at this stage as Kim and Mauborgne shows in their book. If any difference is asking our attention, it should be ONLY ‘value criteria’ that are shown on the horizontal axis. Value is the purpose of a function delivered through a tool. The horizontal axis must exclude tools and

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<sup>1</sup> This was done only on pragmatic purpose. If we give a new adjective to each case, we should face complexity with little advantage.

<sup>2</sup> Wine industry case presented from page 25 in ‘Blue Ocean Strategy’ written by W.Chan Kim and Renée Mauborgne.

functions of the industries. That point of TRIZ is of importance comparing to what Kim and Mauborgne suggest in their book.

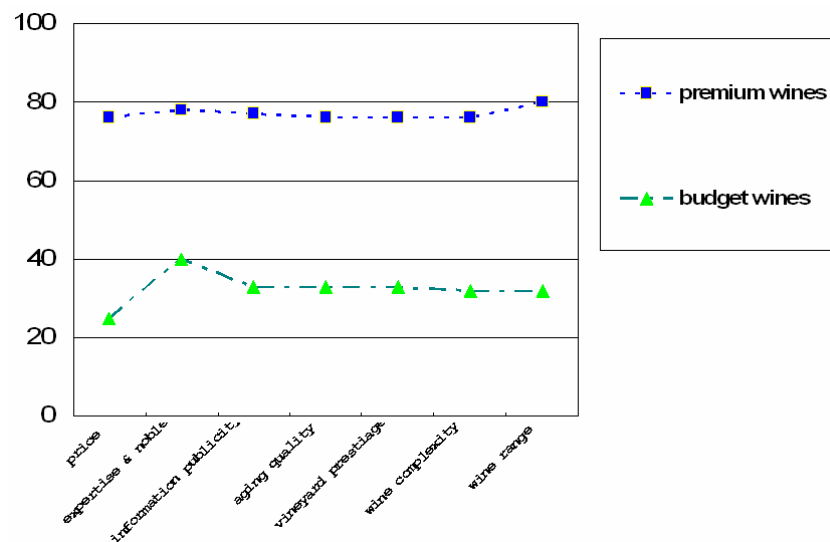
In TRIZ point of view, Kim and Mauborgne look unclear about what are tools for delivering functions, what are functions resulting in values, and what are values for buyers to estimate the industries with.

I changed two words of the strategy canvas presented by Kim and Mauborgne<sup>3</sup> from indication of ‘tool’ into indication of ‘value’ as shown in Fig.2.

- Use of enological terminology and distinctions in wine communication (Kim and Mauborgne)  
→ expertise and noble image
- Above-the-line marketing (Kim and Mauborgne)  
→ information publicity

Except the above things, all information just follows Kim and Mauborgne.

**Fig.2** *The Strategy Canvas of the U.S. Wine Industry in the Late 1990s (adapted from ‘Blue Ocean Strategy’ written by W.Chan Kim and Renée Mauborgne)*



## 2) Search for alternative industries according to ‘Full Scheme Thinking of OTSM-TRIZ’

According to ‘Full Scheme Thinking of OTSM-TRIZ’, we could change our problem model along several viewpoint axes[3, 9, 10] as below;

- a. Abstraction
- b. Purpose<sup>4</sup>

<sup>3</sup> Refer to Fig 2.1 in ‘Blue Ocean Strategy’

<sup>4</sup> Even if this axis doesn’t appear in N.Khomenko’s public materials, he and I agreed that this axis should be included in ‘Full Scheme’ during his visiting South Korea in 1999.

- c. System Scale
- d. Time
- e. Variation of value
- f. Anti-System Scale
- g. Chance

•••••

Searching for compelling blue ocean opportunities corresponds to the stage of problem description in OTSM-TRIZ viewpoint. OTSM-TRIZ recommends the deployment of the problem descriptions in various points of view for finding most effective solutions. This idea is adopted for blue ocean strategy.

Let me explain this approach in more detail with the case, ‘Yellowtail’, an example borrowed from the book of Kim and Mauborgne<sup>5</sup>.

First of all, identify the main function of the interested industry based on the first stage.

What is the main function of ‘wine providers’ for customers ? : to deliver wine

Next, we can get the several alternative candidate industries according to ‘Full Scheme Thinking’.

Along ‘abstraction’ axis, industries for ‘delivering alcohol’ might be alternative just as what is introduced in the book of blue ocean strategy. We can find more industries ;

Industries to deliver fruit beverage, industries to deliver just any kind of beverage,...

→ It could correspond to ‘looking across alternative industries’ of blue ocean strategy. Blue ocean strategy says alternative industries are related to the same purpose. However, its examples can be seen from different point of view.

Along ‘purpose’ axis, industries for enjoying oneself, industries for consoling oneself, industries for making oneself calm, etc. might be alternative.

→ It could also include ‘looking across alternative industries’ of blue ocean strategy.

Actually, any kinds of amusement industries deserve to be compared to in this case.

As mentioned above, the case of Kim and Mauborgne is different.

Along ‘system scale’ axis, there would be two kinds of candidates that we must think about.

In supersystem level, industries to deliver complementary services/products exist.

→ It could include ‘looks across to complementary product and service offerings’ of blue ocean strategy. For example of this ‘Yellowtail’ case, the wine glass industries, the restaurants consuming a lot of wines with sweet atmosphere, etc. could be mentioned.

In subsystem level, ‘to deliver wine’ groups that have different target market.

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<sup>5</sup> Refer to pp. 30-35 in ‘Blue Ocean Strategy’

→ It could include ‘looks across strategic groups within industry’ of blue ocean strategy.

Unfortunately, ‘Yellowtail’ case has no good candidates as we know well based on the strategy canvas at the first stage.

Along ‘time’ axis, there would be two kinds of candidates that we must think about.

In short-time and ‘wine’ viewpoint in supersystem scale, we can think about each main character at each stage of the life cycle of wine.

→ It could include ‘redefines the industry buyer group’ of blue ocean strategy.

In long-time and ‘to deliver wine’ viewpoint in supersystem scale, we have to think about the trends.

→ It could include ‘participates in shaping external trends over time’ of blue ocean strategy.

Along ‘variation of value’ axis, we have to find some kind of features which must be varied on purpose until we get any useful effect.

→ It could include ‘rethinks the functional-emotional orientation of its industry’ of blue ocean strategy.

Along ‘anti-system’ axis, we can suggest a new industry which might not be supported by blue ocean strategy. For example, wine could be combined with some ingredients to prevent the drinkers from being intoxicated.

→ Apparently, it could include ‘looks across to complementary product and service offerings’ of blue ocean strategy because ‘anti-system’ usually appears before or after the operation of the ‘system’ as a kind of complementary service, experience and transformation. However, it is just one case of variation according to ‘anti-system’ axis.

Along ‘chance’ axis, we might develop several different and new wine groups which are for every different situation with different amount of drinking. For example, an industry to deliver alcoholic beverage(including wine) for parties, an industry to deliver alcoholic beverage(including wine) for airplane companies, an industry to deliver alcoholic beverage(including wine) for cooking, etc.

Six paths framework of Blue Ocean Strategy doesn’t cover this alternatives.

We could continue to deploy the alternative industries according to the other axes of ‘Full Scheme Thinking’. In this paper, only examples corresponding to ones of ‘Yellowtail’ presented by Kim and Mauborgne are shown to continue in order to present the support of TRIZ for blue ocean strategy.

### **3) Compare the value curves of the alternative industries**

As a result of searching for alternative industries through ‘Full Scheme Thinking of OTSM-TRIZ’, we got several groups for the stage, ‘comparison of the value curves of the alternative industries’. If possible, it may well be recommended for each group to pass the following stages. In this paper, the group of ‘abstracted function’ is selected for discussion related to what Kim and Mauborgne did.

One of the abstracted forms of the function ‘to deliver wine’ : to deliver alcohol




Alternative industries : to deliver beer, to deliver cocktail, to deliver wine (our current industry)

Important values : Easy drinking, Ease of Selection, Fun and Adventure

(all of values are based on the work of Kim and Mauborgne)

As mentioned before, system benchmarking module of Goldfire might replace the comparison of the value curves. Anyone can draw the value curves instead of system benchmarking module of Goldfire. In Fig.3, an example of this stage is shown about ‘Yellowtail’ case based on the work of Kim and Mauborgne. Three industries are compared qualitatively. The words of Goldfire must be interpreted according to our viewpoint of blue ocean strategy. ‘System’ corresponds to ‘Industry’.

**Fig.3** Comparison of important values of alternative industries (adapted from ‘Blue Ocean Strategy’ written by W.Chan Kim and Renée Mauborgne)

System	Easy Drinking (K1)		Ease of Selection (K2)		Fun and Adventure (K3)		Rating
Beer	5,00	▼	5,00	▼	1,00	▼	88.00 
Cocktail	5,00	▼	1,00	▼	5,00	▼	88.00 
Wine	0,00	▼	0,00	▼	0,00	▼	0.00 

#### **4) Identify the elements, functions related to the inferior values of the current industry (base industry) to others and define what features must be transferred to the current industry from the superior ones.**

Actually, this stage is not so different from the original ‘Feature Transfer’ process except that our current industry must be the base industry even though any value is not superior to others.

In this case, we follow the procedure related to the value, ‘Ease of Selection’ among the above three values. Wine industry, as our base industry, is inferior to the other industries on ‘Ease of Selection’. The first question proposed by ‘Feature Transfer’ is ‘what element of our current industry is most responsible for the inferior customer value?’.

This stage must be classified into two cases.

The first case is that the base industry has no element to serve for the purpose of the interesting value. This case very often happens due to the characteristic of the process for blue ocean creation. We compare alternative industries which may deliver totally different functions. Especially, in experience economy, there should be new values through novel functions delivered by the industries which are pretty old in viewpoint of industrial or service economy. In this case, it is recommended to skip the earlier steps, (a) and (b). Go to the step (c) and identify the element of the superior industry which is responsible for the superior value.

Secondly, if there is any element responsible for the inferior value, just follow the conventional ‘Feature



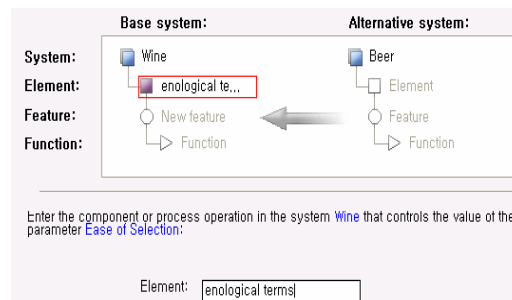
Transfer’. This step could be done as shown in (a) of Fig.4.

Just as the conventional ‘Feature Transfer’ does, the next step (b) is for identification of the function delivered by the element proposed at the previous step.

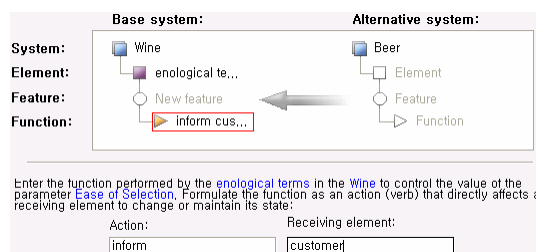
The step (c) has to be modified for experience economy. The same procedure as the conventional ‘Feature Transfer’, but with a different thinking way. In experience economy, the main role of an industry has been shifted from several individual functions to an integrated package of many functions. Sometimes, we cannot find the element of the superior industry which delivers the function found at the step (b). For example, if we compare movie theaters and family restaurants in viewpoint of ‘family affinity’, we could find completely different elements with different functions for the purpose of the same value. Therefore, abstracting the result of step (b) is generally recommended. After that, we could find the corresponding element of the superior industry. The result of the step (b) should be interpreted according to abstraction axis of ‘Full Scheme Thinking of OTSM-TRIZ’. The step (d) is just like the way of the conventional ‘Feature Transfer’. The step (b), (c), and (d) for the case ‘Yellowtail’ were done like shown in Fig.4.

**Fig.4** Identification of the feature to be transferred (screen-captured on running Goldfire )

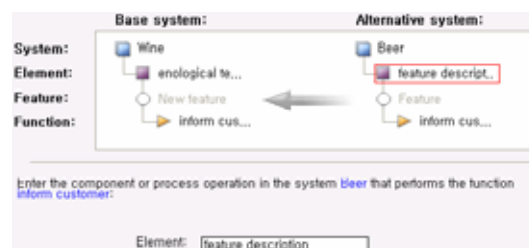
**(a) Identification of the element which is most responsible for the inferior value**



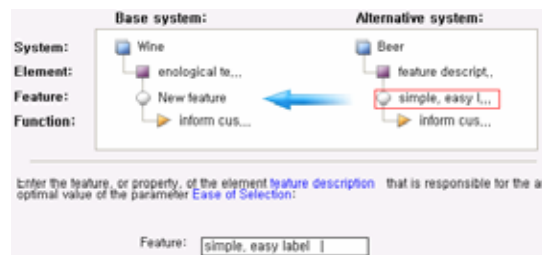
**(b) Identification of the function delivered by the above element**



**(c) Identification of the corresponding element of the superior industry**



***(d) Identification of the feature of the above element***



**5) Develop some ideas about how to transfer the features resulted from stage 4 into the current.**

As many of us have experienced, this stage has some problems only if we face administrative contradictions. After getting any ideas to transfer the features, we might be ready to welcome technical and physical contradictions.

In viewpoint of ERRC framework of blue ocean strategy, this stage provides the answer to the following question ;

‘What factors must be raised or created?’

For example, the result of this stage in case of ‘Yellow tail’ is ‘offering simple and easy (explanation) label’ to inform customers of the features of the wine. Comparing to the strategy canvas of the current industry at stage 1, we seems to have physical and technical contradictions.

The label has to say in enological terminology for high expertise.

→ The current industry point of view

However, the label has to say in simple and easy words for improving ease of selection.

→ The suggested blue ocean industry point of view

Even though this contradiction can be eliminated through ‘Separation upon condition’, they are not the target of TRIZ tools for elimination of contradictions. We will follow a different way.

**6) Check if there are any conflicting ways between the current and the results of stage 5. If any, just diversify the market**

This stage is different from the conventional ‘Feature Transfer’. There might be no need to eliminate the technical or physical contradiction when we are creating a kind of blue ocean. The conflicts in this stage might show us the different value curves.

If two values between ‘current’ and ‘blue ocean’ contradict with each other along the conflicting ways, we have to draw two different value curves. Two different value curves are for two different markets. Of course, one belongs to red ocean and the other does to blue ocean. Therefore, only your decision remains whether or not you invest in the suggested blue ocean. Regarding ERRC of blue ocean strategy, this stage provides the answer to the question, ‘what factors must be eliminated or reduced?’.

‘Yellowtail’ is the result of taking the new value curve suggested at the above stage, ‘labels of simple and easy words’, just like what Kim and Mauborgne shows.

On the contrary, if any conflict happens among the results of stage 5 NOT between the current and the newly suggested, we have to formulate the contradictions more exactly in order to eliminate them[10].

After completing the stage 6 for all inferior values of the current industry, we can get the new value curve of the blue ocean, which we have to move into.

From here, another example will be shown. The ‘current industry’ is ‘TRIZ service industry in South Korea’. Let’s suppose that we should bring out a new value curve for ‘TRIZ practitioners in South Korea’.

The whole procedure is following as below.

## 1) Compare the value curves of the competitors in the current industry

First of all, we have to check the ‘value criteria’ for TRIZ service industry in South Korea. How to list the value criteria depends on the situation. (Of course, how to list the value criteria for a certain industry could be done according to ‘Full Scheme Thinking of OTSM’. However, this paper is not supposed to cover them.) For example, they could be like the following;

Expertise : Customers check the certificates and experiences of TRIZ practitioners.

Confidence : Practitioners have to confront with doubtful asking about solution sets of TRIZ.

Qualification : Frequent asking, ‘Please show us the successful cases of TRIZ application.’

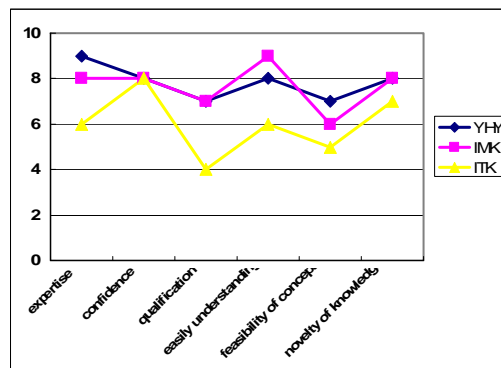
Easily Understanding : However awkward TRIZ is, your lectures must be easy to understand.

Feasibility : The solution concepts should be realized, ‘Right now!’.

‘Novelty’ of knowledge : Customers like to find some unfamiliar technical knowledge by software.

Fig 5 shows the comparison of value curves with respect to three different TRIZ practitioners, YHY, IMK, and ITK. The value curves are drawn according to the above six values.

**Fig.5** The Strategy Canvas of the TRIZ Service Industry in Korea



## 2) Search for alternative industries according to ‘Full Scheme Thinking of OTSM-TRIZ’

First of all, identify the main function of the interested industry based on the first stage.

What is the main function of ‘TRIZ service industry’ for customers ? : to inform customers of TRIZ

Along ‘abstraction’ axis :

- industries to inform customers of thinking ways to make models to present problems and solutions
- industries to inform customers of thinking ways to make models to present information
- industries to inform customers of thinking ways to treat the description of information
- industries to inform customers of thinking ways to treat information
- industries to inform customers of how to treat information

Along ‘purpose’ axis :

- industries to improve the creativity of the customers
- industries to facilitate the customers’ idea generation
- industries to solve customers’ problems
- industries to make customers get what they want

Along ‘system scale’ axis :

- in supersystem level, the customers of the customers whom the TRIZ practitioner work for, the competitors of the customers, and the providers of something for the customers etc.
- in subsystem level, any kinds of TRIZ practitioners with modern TRIZ and TRIZ software, any kinds of subgroups as components of the customers.

Along ‘time’ axis :

- In short-time and ‘problem’ viewpoint in supersystem scale, industries for not-yet-happening problems, for happening problems, and for already-happened problems.
- In long-time and ‘to inform someone of TRIZ’ viewpoint in supersystem scale, industries for experience and transformation economy world, industries for knowledge and wisdom economy world etc.

Along ‘variation of value’ axis : If we change the scale of main objects of expertise,

- the experts who have the experiences directly related to the system of the current problem
- the experts who have treated the supersystem containing the system of the current problem

Along ‘anti-system’ axis : industries to deliver any kinds of information and knowledge to lead the customers to attach to (or surrender to) the current structure and running ways of their own systems

Along ‘chance’ axis : regular education services, just request-based education services, facilitation

services only for idea generation stage of a project, and project management services etc.

### 3) Compare the value curves of the alternative industries

Just as other TRIZ tools suggest, every direction proposed above must be followed individually. In this paper, we are following only one among the deployed above, as an ‘easy’ example.

One of the higher purpose forms of the function ‘to inform customers of TRIZ’ :

to facilitate the customers’ idea generation

Alternatives : Based on the writer’s observation about the current situation in South Korea,

TRIZ practitioners (our current industry),

Professional idea generation facilitators (those who serve many kinds of idea generation methods ‘except TRIZ’ for the purpose of this example )

Internal idea generation facilitators (those who are working for customers’ company not just for facilitation of idea generation)

Important values : short time for learning, less information required for application,

coverage of the methods, effectiveness

(all of values are based on the writer’s observation.)

In Fig.6, the rating the alternatives according to the values is shown. ‘short time for learning’ and ‘less information required for application’ are rated by the criterion that the minimum value is the best.

**Fig.6** Comparison of important values of the alternatives

System	short time for learn... (K1)	less information req... (K2)	coverage of the meth... (K3)	effectiveness (K4)
TRIZ Practitioner	10,00	10,00	5,00	10,00
Professional Idea Generation Facilitator	2,00	1,00	10,00	1,00
Internal Idea Generation Facilitator	2,00	1,00	10,00	3,00

### 4) Identify the elements, functions related to the inferior values of the current industry (base industry) to others and define what features must be transferred to the current industry from the superior ones.

As Fig 6 presents, in case of TRIZ practitioners, all values except ‘effectiveness’ are lower than others. In this paper, we will treat only ‘coverage of the method’ as an example. Like the previous example, the following procedure is just the same as the conventional ‘Feature Transfer’ does. It is presented in Fig.7. ‘Sol’ at step (a) stands for ‘solution’ and ‘KN’ at step (c) does ‘knowledge’. The clue to improve ‘coverage of the method’ of TRIZ practitioners is that any knowledge for solution concepts must be very well known to customers.

**Fig.7** Identification of the feature to be transferred (screen-captured on running Goldfire )

**(a) Identification of the element which is most responsible for the inferior value**

	Base system:	Alternative system:
System:	TRIZ Practitioner	Professional Idea G...
Element:	scientific_tech...	Element
Feature:	New feature	Feature
Function:	Function	Function

Enter the component or process operation in the system [TRIZ Practitioner](#) that controls the value of the parameter [coverage of the methods](#):

Element:

**(b) Identification of the function delivered by the above element**

	Base system:	Alternative system:
System:	TRIZ Practitioner	Professional Idea G...
Element:	scientific_tech...	Element
Feature:	New feature	Feature
Function:	Inform of s...	Function

Enter the function performed by the [scientific & technical Sol DB](#) in the [TRIZ Practitioner](#) to control the value of the parameter [coverage of the methods](#). Formulate the function as an action (verb) that directly affects a receiving element to change or maintain its state:

Action:  Receiving element:

**(c) Identification of the corresponding element of the superior industry**

	Base system:	Alternative system:
System:	TRIZ Practitioner	Professional Idea G...
Element:	scientific_tech...	KN out of cus...
Feature:	New feature	Feature
Function:	inform of s...	inform of s...

Enter the component or process operation in the system [Professional Idea Generation Facilitator](#) that performs the function [inform of solution concepts customer](#):

Element:

**(d) Identification of the feature of the above element**

	Base system:	Alternative system:
System:	TRIZ Practitioner	Professional Idea G...
Element:	scientific_tech...	KN out of cus...
Feature:	New feature	awareness of ...
Function:	inform of s...	inform of s...

Enter the feature, or property, of the element [KN out of customers](#) that is responsible for the high value of the parameter [coverage of the methods](#):

Feature:

**5) Develop some ideas about how to transfer the features resulted from stage 4 into the current.**

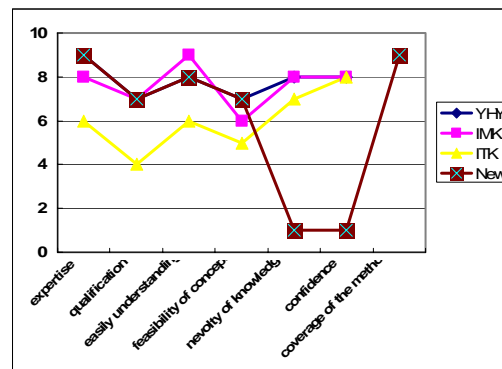
In the case of technical problem solving, many customers like to examine scientific and technological effects because they may find some new knowledge or unfamiliar effects to use for solutions from time to time. The scientific and technological effects as a solution data base must be a strong tool due to 'unawareness' of the customers in red ocean. However, the very same point could be an obstacle to deploy TRIZ in non-technical problem area. If possible, as modern TRIZ has been developed, some common sense in every

kind of knowledge area should be accumulated and classified as a solution data base. That is for ‘raise or create’ of ERRC.

### 6) Check if there are any conflicting ways between the current and the results of stage 5. If any, just diversify the market

Regarding ‘awareness of customers’ related to the solution data base, the writer’s decision is ‘eliminate or reduce’ of ERRC. Any kinds of technical words in TRIZ solution sets should be ignored. I believe that, without 40 principles, scientific effects, and field information for 76 standards, TRIZ sure works. TRIZ has creative imagination tools, separation rules, and multi-screen method etc for idea generation. These tools can operate only with information out of customers. If we do so, the doubt about 40 principles, scientific effect etc disappears as a result. This short operation of ‘Feature Transfer’ begot a new value curve as shown in Fig.8. Therefore, we can run two different services for both engineering problem solving and idea generation for any kinds of needs.

*Fig.8 The New Strategy Canvas of the TRIZ Service Industry*



## 3. CONCLUSIONS

In experience economy, TRIZ is required to interpret use of its tools further in viewpoint of improving customers’ experience and transformation. The requirement drives TRIZ application to Biz problems. In other side, blue ocean doesn’t seem to be created by elimination of certain contradictions in red ocean because it features a new value curve with focusing, divergent, and compelling points compared to the current industry, or the industry of red ocean.

The modified ‘Feature Transfer’ is proposed to help creation of blue ocean. To support the six ways of blue ocean strategy for remaking the market boundaries, ‘Full Scheme Thinking of OTSM-TRIZ’ is built in ‘Feature Transfer’. According to ‘Full Scheme Thinking of OTSM-TRIZ’, we could deploy more various alternative candidates for design of a new value curve.

ERRC framework of blue ocean strategy can be achieved

- (1) by transferring features from superior industries to current industry (as ‘raise or create’) and

(2) by selecting a new value curve through 'Feature Transfer' if there happens any contradiction in implementation of the way to transfer a feature from the superior industry to the current industry(as 'eliminate or reduce').

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### About the Author

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