

Appendix L

An Autonomic Thinking Method for Creative Thinking with the PMD Method

by

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Summary

This article describes further developments which should be added to the conventional PMD method.

These developments are used when creating or realizing new things within organizations or by individuals, with the PMD Method as the starting point for “Changing knowledge to wisdom” and the “Advanced project management method”.

The use of these further developments of PMD opens the autonomic thinking method for creative thinking based on PMD method.

We have recently come to feel that this mechanism may be the basic mechanism of natural creativity.

1. Knowledge required to use this method

The following knowledge is required to use this method.

- (1) The PMD Method (method of purpose and measure diagram)
- (2) Theme PMD Method
- (3) Step-lists Method
- (4) 3-5 Improvement Method
- (5) FBS Method
- (6) Relationship between PMD, Steplists, 3-5 Improvement, FBS Technique (See Figure 1)Illustration 1

2. Articles required to further understand this method

- (1) Method for Changing knowledge to wisdom : Appendix G of this book
- (2) A Procedure and Format for the Thinking and Action of "Abduction, Verification, Evaluation and Decision Making" to Reveal Rational Past Mechanisms and to Create Future Mechanisms : Appendix H of this book

3. Effective applications of this method

The method must be appropriately applied when organizations or individuals have to start or create subject/theme or new mission and /or New things.

1. Procedure

will explain the procedure using Figure 2.

- (1) People meet together and decide on a temporary theme or subject name of what to do.
- (2A) Based on this temporary name, create and choose the best expression of the using the Theme PMD Method.
- (2B) Make PMD under the best chosen subject or theme name, by having the following Questions.
 - A. What are we going to do with it (the subject or theme) ?
 - B. What do we at least have to do ?

This will create the Theme positioning PMD

(3) Make deploying PMD based on concerned Key theme in theme positioning PMD, by having the questions above. again.

(4) Create and find the more concentrated or focused Key word by having the following Questions.

This will be the development PMD which shows what must be developed at first time.

- A. So what to do? (Understand, Agree, Positioning to do, To do what)
- B. What is it? (Understand, Acknowledgement, positioning, development)
- C. What does it mean? (Meanings, positioning for means or as the measures)
- D. What is it used for? (Market, Need, Want creation)
- E. What can we do with it? (Creation of possible usage)
- F. What will we be able to do with it? (Creation of usage or purpose and its evaluation)
- G. What conditions should be added and what can we do? (Search for realistic and practical conditions)
- H. What will we be able to do and what conditions should be added to realize it? (Verification of realistic conditions)

By doing these, the participants arrange the PMD for development.

Through above process, we can see the “positioning PMD,” “Deploying PMD” and “development PMD” for what should be deepened, focused deployed and developed at first time as the drilled portion.

At this time, if the we could not have the PMD connected from both the upper side of the purpose–measure or the lower side of the measure by any means , it means that there is no feasibility or realization possible of that subject.

Some time to complete the PMD and to get the Key word expression, we feel and have to identify the existence of the blank card within the PMD and need to fill the blank card with proper expressions.

To fill the blank card , we or you have to do the following:

- A. Sleep holding the PMD with blank card. Or sleep under the desk where PMD placed. Or keep PMD in your pocket.
- B. Change or create the measure, method, conditions or add the knowledge. And add the new expressions.

By doing this, we can connect all of the PMD.

After that, you ask yourselves questions A to H under (4) again and explain the contents to others.

If the cards are connected in PMD without feeling the gap among them, the possibility of realization of this subject or theme will go forward.

In this situation, the understanding of the “A procedures and Format for abduction, verification,

evaluation, decision-making of the past and future mechanism will be very helpful.

After that, follow the usual way;

- (5) Based on the above PMD, create the procedure to realize the objective result or goal using Steplists.
- (6) Based on the above procedure, create the idea to fill the function of the objective of the upper FBS structure (basic idea) using the FBS technique.
- (7) Against the above the idea for the function of FBS structure (basic idea), ask questions of (4) to verify and evaluate the idea and confirm it.
- (8) Using the final PMD, Steplist and FBS and through mutual modification (including renaming the subject or them name) of relationship, create the concrete procedure to realize of objective result and realize the concrete project.

4. **Effects (Results from the above procedure)**

- (1) By the first PMD creation, we can see and establish the Keyword and Direction of value for future abduction/hypothesis set up (step 1-2) in figure 2 .
- (2) Through the arrangement of the deployed PMD and developed PMD (step 3-4), we can focus on what must be done at this moment and its necessary and essential conditions.
- (3) By using the result above we can create the pre planned phased procedure to realize the objective result of main Key word under the established direction of value.
- (4) By having the result of step above, we can obtain the process Gantt chart for confirmation, verification, evaluation and decision make for full scale development. Then we can proceed the deductive implementation phase of development.

Also, by doing these we can create a new want, usage, need and process from them. (This means the modification of the PMD.)

By the combination of purpose, needs and measure, the new direction of values can be created. (That means a new PMD will be created.)

5. **The future development**

We will create New value by the PMD in cyberspace among the people who are related to any theme or subject in the internet era.

This realization creates the new social significance in the world.

Figure 1 Relation of PMD, Step-Lists, FBS and 3-5 Phase Improvement

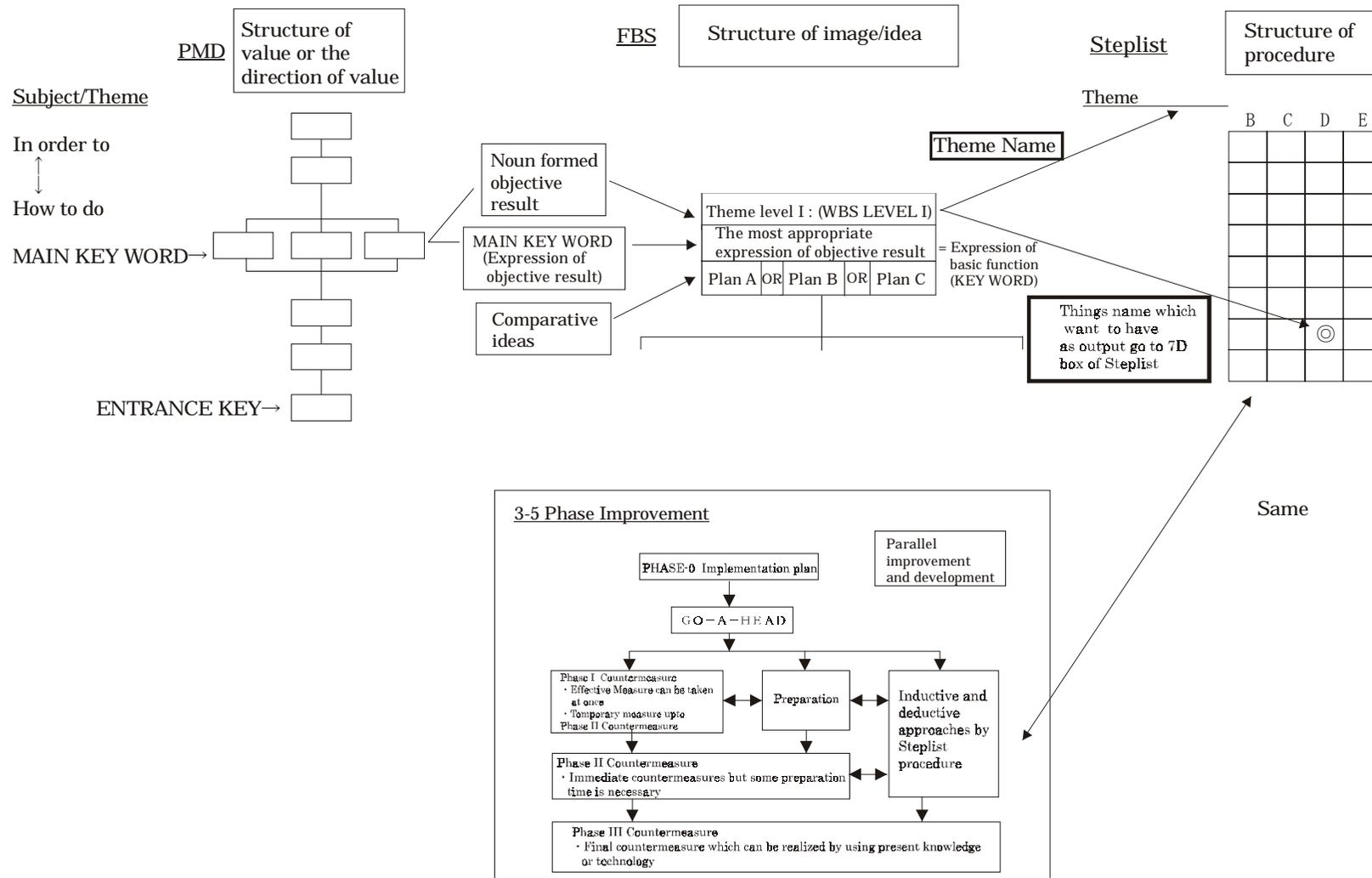
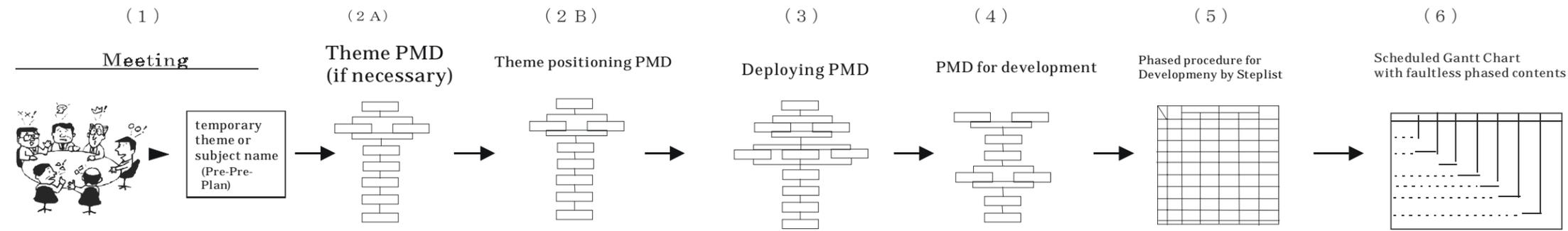


Figure 2 :An Autonomic Thinking Process for Creative Thinking with the PMD Method

(Modified from Kishigami's graduating paper of Mster course of Asahi University 1999)



(1) Meeting Hold a meeting. Make a consensus to realize the theme. This output will be the very basic idea. (Note) Creative start can develop wider creativity from "theme or subject" than from ideas. (This is explained in "Advanced project management method" (Chapter 2.4.8-(3)) The output of meeting is the Temporary name of the project.

(2A) Arrange theme PMD if necessary, to create and choose the most appropriate name of project. If necessary, hold a meeting (including members who are not related to this theme) based on the theme with consensus. Find the "most appropriate theme or subject name" by using theme PMD method to describe the contents exactly.

(2B) Theme positioning PMD Next, create the PMD to position the theme. At this stage, participants pay attention to the theme positioning. It is necessary to write a card, which has verb-noun expressions to create the PMD. And, it is necessary to include the cards, e.g. "proceed the development" and "Use the DTCN method." This PMD is called "Theme positioning PMD."

(3) Deploying PMD Some time after making positioning PMD, create the PMD which satisfies the customers, expands the market, gains the proper profit and contributes to society. This is called the "Deploying PMD."

(4) PMD for development Based on the positioning PMD and Deploying PMD, create a PMD with the viewpoint of what should be thoroughly developed. If necessary, involve the personnel two or three times to create PMD how to develop effectively to reach the most focused objective result.

(5) Step list for development procedure Create the faultless phased development procedure by using Steplist method to realize the PMD of (4). If all the procedural elements are not connected well in relationship of input and output, the creation of this phased procedure does not work out. In that case, we have to wait for a time, or to continue working in order to get suitable input and output relationship and conditions to connect necessary elements of procedure.

(Note) It is possible to check the feasibility - whether we can arrange acceptable step lists for a phased procedure or not.

(6) Gantt chart scheduling we have to understand that Gantt chart scheduling must contain procedural elements of input or output relationship scheduling in behind which will be described by the contents of Steplists.