General Methodology for Creative Problem Solving and Task Achieving -- Its Plan --

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Abstract

TRIZ has been established as a methodology of 'Invention', and extended to be a methodology of 'Technical Innovation' and further to be a methodology for 'Innovation' including non-technical applications. However, we should better extend it in a more general sense as a methodology for creative problem solving and task achieving. In the present paper I will describe a plan for establishing such a general methodology.

By unifying TRIZ/USIT and various other methods, we should establish a methodology simple and easy to understand and apply. For this purpose we will adopt the Six-Box Scheme as the new paradigm for creative problem solving. We build a methodology for technical fields and another for non-technical fields, in a parallel manner. Using the data flow as the basic representation scheme, we should specify the information necessary for input, intermediate, and output of each stage; the information need to be described in terms of clearly-defined concepts and in some standardized representation methods. The ways of obtaining and deriving such information at each stage may allow alternatives. Besides these logical aspects we should also take consideration of psychological aspects of the problem solver and of the stakeholders.

Under these strategies, we should make a cooperative work of describing various methods including TRIZ/USIT. Such a cooperative work will help to form a common understanding and further to establish a unified general methodology for creative problem solving and task achieving. It will also form the basis of proliferating the general methodology.