

# Structured Innovation

## Exploring TRIZ - A Systematic Approach to Innovation

a detailed discussion of an innovation method

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### Audience-oriented:

non-scientific management audience,  
such as entrepreneurs, intrapreneurs, or innovation managers

### 1. What is innovation

Innovation is breaking through old thinking patterns and conventional precepts in order to achieve ideal needs more conveniently or efficiently.

### 2. The importance of innovation:

Innovation is also an important part of success. For example, innovation in raw materials increases productivity, and innovation in biotechnology not only protects the environment but also brings huge profits to production companies. The above innovations have more or less promoted the progress and success of the economy and even society.

### 3. Development of TRIZ

TRIZ (Theory of Inventive Problem Solving) originates from the theory of inventive problem solving. It is a systematic innovation method proposed by Genrich Altshuller and his colleagues in the Soviet Union in the mid-20th century.

The TRIZ system summarizes mankind's past ideas on invention and innovation and extracts a series of effective rules to guide people to solve future problems systematically and efficiently.

### 4. Application of TRIZ

The main contents of the TRIZ theoretical system include innovative thinking methods, technological system evolution rules, technical conflict resolution principles, and inventive problem-solving algorithms.

Specific example:

For example, in coal mining, in order to improve the coal production rate, operators hope that the cutting power of the drum shearer will be as large as possible. However, due to geological conditions or technical limitations, the height of the shearer cannot be increased excessively, so people use TRIZ theory defines the ideal formula to obtain the optimal solution of balance.

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