

Creative Problem Solving Technique

Part 5. Refining Your Ideas



Retaining Advantages And Eliminating Disadvantages

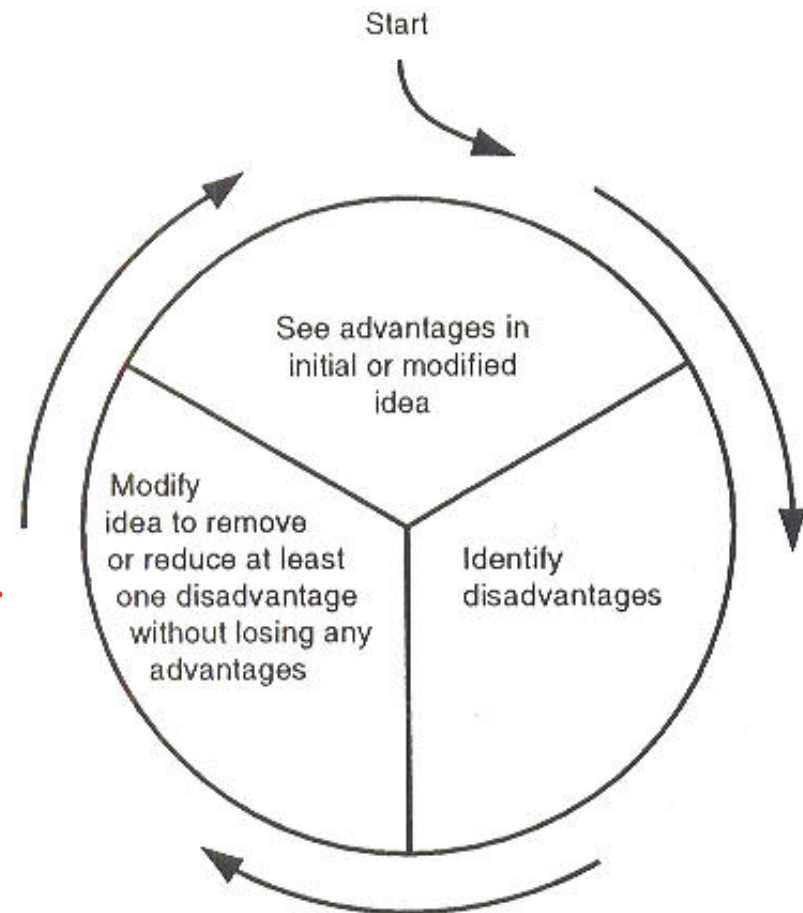
장점은 다듬고 단점은 제거하라



Retaining Advantages And Eliminating Disadvantages

Refinement consists of improving an idea by representing the following sequence until the refined idea no longer contains any significant disadvantage:

1. Identify an idea's advantages.
2. Identify at least one of the idea's **disadvantages**.
3. Modify the idea to **eliminate** at least one **disadvantage**, **without losing** any of the **advantages**.



Evaluating Throughout The Creative Process

창조적 과정 전반에 걸쳐 **아이디어를 평가하라**

Evaluating ideas occurs throughout the creative problem solving process, not only near the end of the process.



Incorporating Advantageous

Aspects Of Other Ideas

다른 아이디어의 장점과 **결합시켜라**

Extracting useful concepts from other ideas is one of the most powerful tools of creativity.

Keep in mind that there is no need to copy an **entire** idea.

Only copy the part or parts that offer the advantages you want to incorporate into your solution.



Finding Flaws And Weaknesses **Early**

결점이나 약점은 **초기에 발견하라**



Finding Flaws And Weaknesses Early

Early in the refinement of an idea, use **testing** to look for flaws And weaknesses.

Testing avoids unexpected damage and wasted time.
In addition to reducing the risk of damage, testing a new idea On a small scale reduces the risk of investing lots of resources Such as time, money, and effort - into an idea that might later need to be abandoned.

Another way to reduce risks is to test just a **partition** of what you're creating.

You must intentionally look for weaknesses or flaws in hopes of Finding any that exist.



Imagining Exaggerated Specific Cases To Determine Effects

효과를 결정하기 위해 과장된 특정 사례를 상상해보라



Imagining Exaggerated Specific Cases

To discover flaws and weaknesses in your creative solutions, imagine specific cases that are exaggerated in ways that reveal disadvantages. Then, further refine your creative idea by Eliminating these disadvantages.

In choosing how to exaggerate, keep in mind that an exaggeration can be an exaggerated sameness, not just an exaggerated difference.



Anticipating Possible Negative Consequences

발생할 수 있는 부정적 결과를 **예상해보라**



Anticipating Possible Negative Consequences

Spend time anticipating any consequence that could make your creative idea fail to accomplish what you really desire.

Recognize the potential for disaster when creating something that can reproduce itself, whether through biochemical or electronic reproduction.

In considering whether something is unethical, go beyond asking "Would it hurt anyone?" to ask "Would it be OK if everyone who wanted to behave that way did behave that way?"

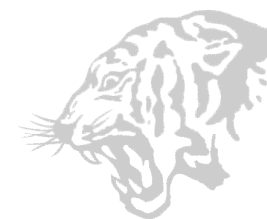
Don't misinterpret either of the following to indicate that you've already found all the flaws and weaknesses in an idea:

- Having spent some time looking for flaws and weaknesses.
- Successfully finding and eliminating many flaws/



Simplifying

단순화시켜라

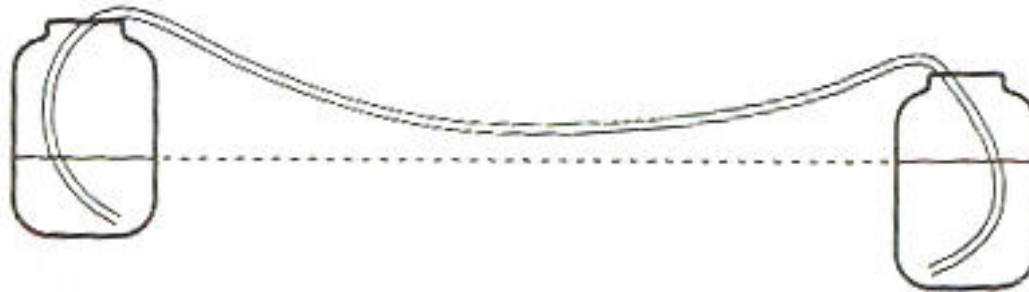


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Simplifying

Complexity in what you create is always a disadvantage. The best solutions are the **simple** ones.

If you find that a solution you've created is complicated, reconsider your design. Simplify it. But, don't **oversimplify** it, don't confuse simplicity with laziness, and don't just shift the complexity to someone else's area of responsibility.



Creating Supporting Enhancements

창조적 아이디어를 뒷받침 해 줄 수 있는
또 다른 생각을 창조하라



Creating Supporting Enhancements

To fully refine a creative solution, it might be necessary to create a secondary, supporting creative idea.

Countless creative ideas have become successful only after a supporting enhancement transformed an otherwise unworkable idea into a practical one.

Supporting enhancements might seem like minor enhancements, but they're just as important as the basic creative solutions they make practical.



Providing **A Bridge** From The Old To The New

낡은 것에서 새로운 것으로 통하게 하는 **다리를 제공하라**



Providing A Bridge From The Old To The New

When creating something new, design it to facilitate a smooth transition from the old to the new.

This is especially important when creating something you hope will be used by many people.

When designing a creative solution that involves lots of people, there should be provisions for the new to be compatible with, or to exist alongside, the old. When this isn't done, attempts at innovation appropriately fail.

