No Need for Methods?

TRIZ -Future-Conference 2007
Why Methods?

All life is problem solving.”
Sir Karl R. Popper

Methods help us to find better solutions.

Methods help us to live better.

Everybody who wants to sell methods (QFD, TRIZ, etc.)
Ends with the following question:

Why so many people don't want to live better?
Acceptance in Industry

Prof. Udo Lindemann (TU Munich):
In industry methods are only accepted if they improve the operational result. No methods are used for strategy development. “We dont have time for methods!”

Dr. Robert Adunka (Siemens):
Project managers do not want to pay for workshops.

David Conley (Intel):
Only 1/3 of the participants of TRIZ traings later on use the methods.

See also results of a survey of Sebastian Schneider (TU Munich)
Lehrstuhl für Produktentwicklung (Prof. Lindemann) 2006
Acceptance of Methods

After teaching problem solving methods and selling TRIZ software for many years I come to the conclusion: “We do not want to live better!”

Why?

We have to try to understand how we produce our problems and how we try to solve them.
Our sensors receive signals from our environment. Our brain constructs then our reality.

What do you recognize?
In which direction do the wheels rotate?

“Science is nothing than perception.”

Platon

Do you still believe in “The Reality”? 
Our Problems

SF-Model:

- Environment
- My perception filters
- My vision “how it is”
- Emotions
- Suppressed emotions
- Suppressed problems

- My acute problem
- Know how experience values and beliefs
- My vision “how it should be”
- Necessities
  - Conscious
  - Unconscious

“how it is”
“how it should be”

Know how experience values and beliefs
Our Problems

We construct our problems from the difference of the “how it is” to the “how it should be”.

Environ-
ment

my perception filters

my vision “how it is”

difference

Emotions

suppressed emotions

suppressed problems

my acute problem

my vision “how it should be”

Know how experience values and beliefs

- conscious
- unconscious

necessities

Know how experience values and beliefs

- conscious
- unconscious

necessities
How to reduce the difference?

- Engineers try to change the world.
- Psychologists and sales men concentrate on the perception.
- Politicians, priests and ethic commissions want to teach us what's right and wrong.

We do not want to solve problems. We only want to prove, that we are right.

Methods may help us to prove, that we are right?
Psychological Defence

If our self-perception is endangered we react with psychological defence reactions.

Freud's daughter classified 11 different kinds of defence reactions.

- Self-perception endangered
  - Uncertainty
    - Fear, distress, conflict
      - Psychological defence
        - Defence succeeded
          - Self-perception approved
          - Frustration
            - Learning effect
              - Perception revised
          - Learning effect
            - Perception revised
          - Flight into illness
            - Drugs consumption
            - Ideologies etc.
Psychological Defence

Defence is a very natural reaction. Each system that survives in nature tries to defend its integrity.

Clever people have to invent more clever reasons why they are against something. Only so they can believe themselves to their arguments.
If people searched for a long time for solutions and the problem is solved very quickly during a workshop. They are not happy. They are humiliated. They think, that it was now proved, that they are stupid.

If you can not find any solutions despite of hard work. You make them happy. It is then proved, that they are not stupid.

People don't want to solve problems. They want to prove, that they are o. k.

Do not sell solutions - sell good feelings!
Reasons against Change

Personal Causes
- habits
- professional incompetence
- emotions (fear)
- envy and jealousy
- comfort thinking
- desire for harmony (change disturbs)

Structural Causes
- economic competition
- organisational reasons
- incentive systems
- Ideology and religion

Methods do not only match with all the above causes, they even expect us to change the way we think. They question the way we have always thought! Isn't this terrifying?
The intellect is a royal attribute. Therefore every attack on it is an offence against the crown.

Balthasar Graciàn

TRIZ is extremely dangerous:

So far I have proved that I have always been successful with my natural intelligence. And now you come and want to teach me thinking or even to sell me software to support my thinking! I do not need a prosthesis for my brain! I am not stupid. I will not let myself be replaced by something like "artificial intelligence".
Edison: “Innovation is 2% inspiration and 98% transpiration.”

TRIZ is for the 2%. 
TRIZ has an especially low acceptance because:

1. TRIZ is not just a new idea, it is a bundle of methods and against our traditional way of thinking.
2. R&D-employes are afraid to loose their face to accept new ideas from others.
3. TRIZ takes time to learn and needs continuous training.
4. For an average R&D employee there is no opportunity to use it often enough to become a TRIZ expert.
Preconditions for Success

3 necessary preconditions for introducing TRIZ and CAI:

1. A champion (better a team of champions)
2. Management support
3. Money to invest in education and probably also in software
Why and How to Continue?

1. Accept the reality. The world did not wait either for TRIZ nor for CAI.

2. Do not try to change the people. Otherwise you respectively they will produce yourself even more problems.

3. Sell your customers what they really need - not what they say they want.

4. Continue to be at least a little bit unreasonable.

The reasonable adapts himself to the world. The unreasonable at least trys to adapt the world to his ideas. Therefore all progress depends on the unreasonable.

George Bernhad Shaw