



# Game of Conflicts

*A playful way to analyze contradictions in TRIZ*

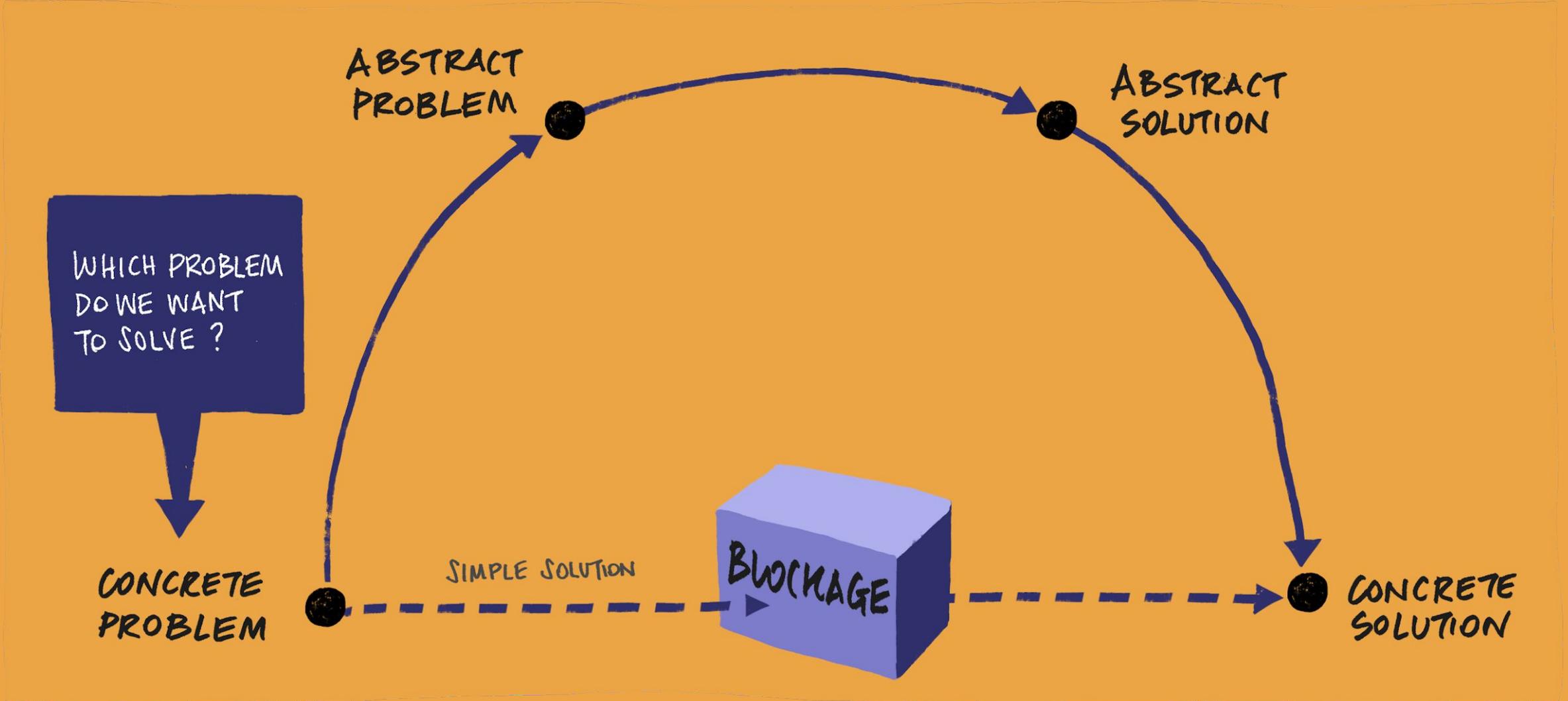
**Eckhard Schueler-Hainsch (ZMI)**

**Moritz Gekeler (Dolaborate)**

**and Roberta Maddalena**

as *Conflict-thinking.com*

from Berlin, Germany



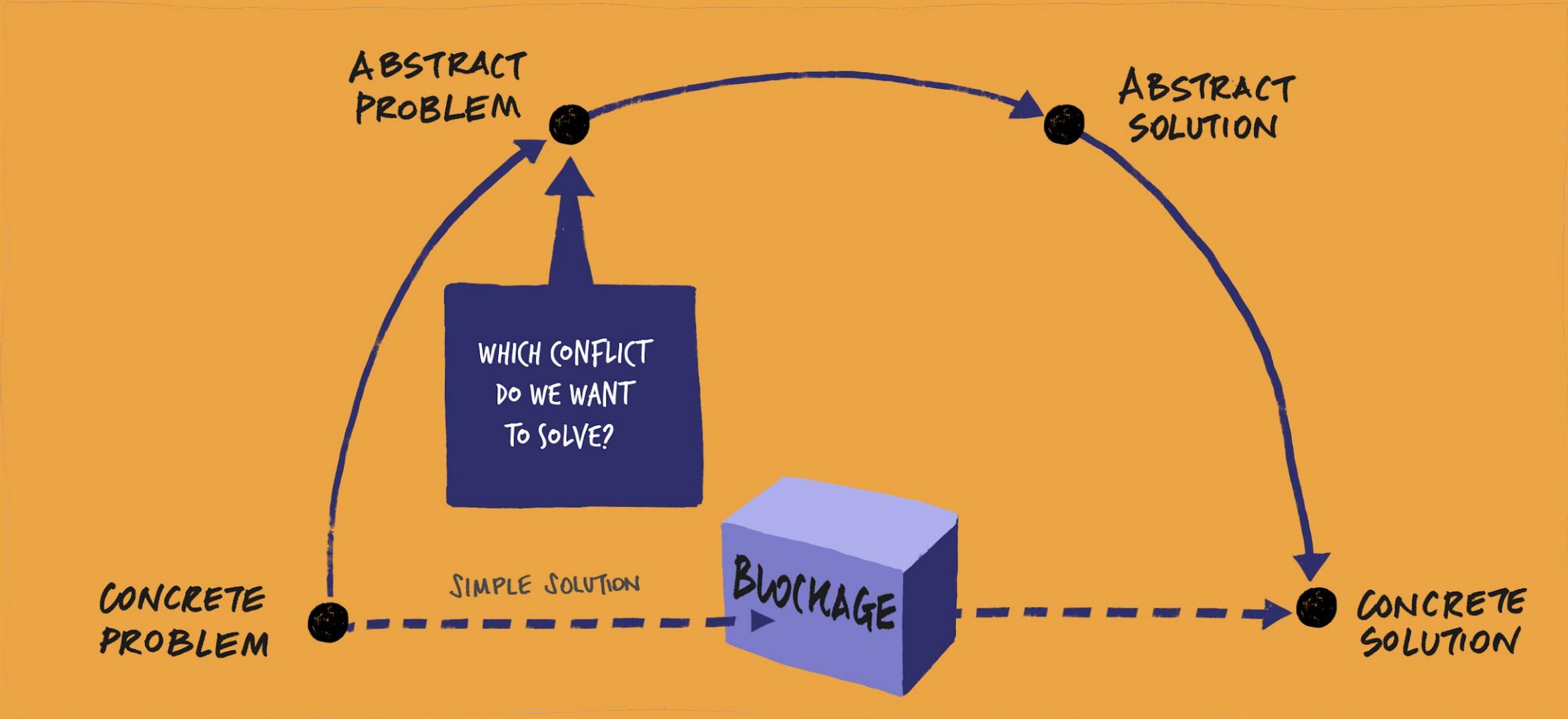
**FEBRUARY 26. Time: UTC.**

|             |  |  |
|-------------|--|--|
| 12:00-12:30 | Valeri Souchkov<br>(IBTA, ICG T&C, The Netherlands)  | TRIZ for Business and Management Training and Certification Curricula              |
| 12:30-13:00 | Mike Iarossi<br>(Redshift Consulting, Australia)   | Rapid Prototyping for Business TRIZ: Accelerating TRIZ solutions using Agile       |
| 13:00-13:30 | Anton Kozhemyako<br>(Business TRIZ Association, Russia)  | Getting started on a business problem  |
| 13:00-14:00 | Rohaya Mohd-Nor, Narayanan Kulathuramaiyer & Mohamad Kadim Suaidi<br>(Universiti Malaysia Sarawak (UNIMAS), Malaysia)        | Constructing an ecosystem for a sustainable innovation culture using TRIZ tools    |
| 14:00-14:30 | BREAK  |  |
| 14:30-15:00 | Eckhard Schueler-Hainsch, Roberta Maddalena and Moritz Gekeler<br>(Conflict-thinking.com / ZMI Strategy Consulting, Germany) | Game of Conflicts – A playful way to analyze contradictions in TRIZ                |
| 15:00-15:30 | Olga Eckardt<br>(Wilo SE, Sparkling Spring GmbH, Germany)  | Remote work challenges   |
| 15:30-16:00 | Vladimir Petrov & Denys Petrov<br>(Innovation Technology, Israel / Kazakhstan)   | Analysis and practice of solving business problems                                 |
| 16:00-16:30 | Ralf Laue<br>(University of Applied Sciences of Zwickau, Germany)  | The Power of the Ideal Final Result for Identifying Process Optimization Potential |
| 16:30-17:00 | Discussions  |  |

**FEBRUARY 27. Time: UTC.**

|             |  |  |
|-------------|--|--|
| 12:00-12:30 | Show-Jane Lin, Youn-Jan Lin<br>(Taiwan International Innovative Education of Science and Culture Development Council; Institute of Management, Minghsin University of Science and Technology, Taiwan, China) | Resolving the Dilemma of Monitors in Kindergartens by Business TRIZ                        |
| 12:30-13:00 | Dou Erxiang, Zhou Zaolin<br>(Peking University; Bank of China Hubei Branch, China)   | Application of "TRIZ Field +TIF Field" Method in Financial Innovation                      |
| 13:00-13:30 | Han Bing, Wang Wenfu<br>(Tianjin Academy of Science and Technology for Development, Hebei University of Technology, China)   | Solving the problem of construction mode for traditional industry park in the large cities |
| 13:30-14:00 | Youn-Jan Lin, Show-Jane Lin<br>(Taiwan International Innovative Education of Science and Culture Development Council; Institute of Management, Minghsin University of Science and Technology, Taiwan, China) | Using Business TRIZ Method to Improve the Speed of Checkout Process of Convenience Stores  |
| 14:00-14:30 | BREAK  |  |
| 14:30-15:00 | Zhang Ting<br>(Chongqing University of Posts and Telecommunications, China)  | How to use TRIZ on information flow management   |
| 15:00-15:30 | Ives de Saeger<br>(P41, Belgium)   | Smart Cases for Business TRIZ  |
| 15:30-16:00 | Valeri Souchkov<br>(IBTA, ICG T&C, The Netherlands)  | Further development of Business TRIZ   |
| 16:00-17:00 | Discussions  |  |









Worsening Feature →

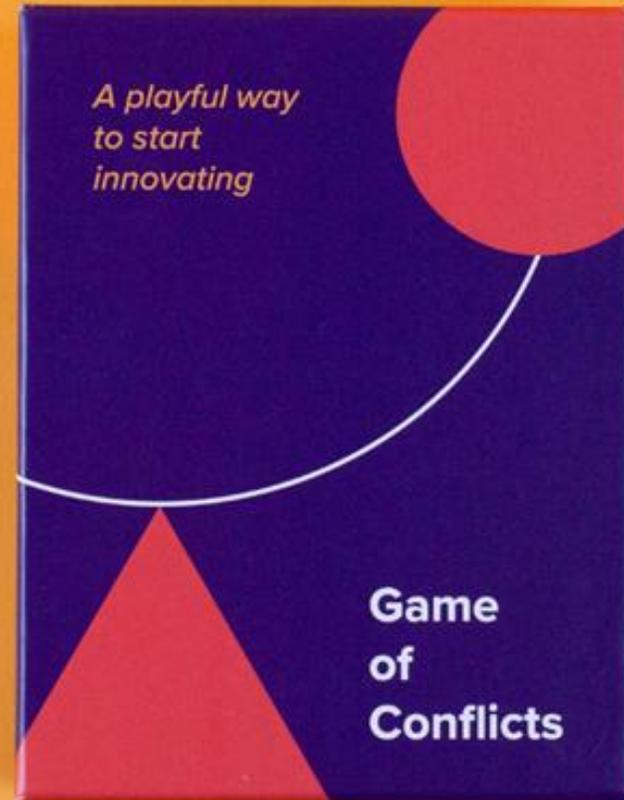
← Improving Feature

| Improving Feature | Worsening Feature                       | Physical |          |          |        |          |       |        |        |   |    |    |    |    |    |
|-------------------|---|----------|----------|----------|--------|----------|-------|--------|--------|---|----|----|----|----|----|
|                   |   | 1        | 2        | 3        | 4      | 5        | 6     | 7      | 8      | 9 | 10 | 11 | 12 | 13 | 14 |
| 1                 | Weight of Moving Object                 | 35 3     |          |          |        |          |       |        |        |   |    |    |    |    |    |
| 2                 | Weight of Stationary Object             | 40 31    | 1 2 17   |          |        |          |       |        |        |   |    |    |    |    |    |
| 3                 | Length/Angle of Moving Object           | 35 31    | 30 15    | 3 1 4    |        |          |       |        |        |   |    |    |    |    |    |
| 4                 | Length/Angle of Stationary Object       | 30 8     | 40 2     | 19 17    | 14 15  |          |       |        |        |   |    |    |    |    |    |
| 5                 | Area of Moving Object                   | 31 17    | 17 15    | 3 31 2 4 | 18 1   | 15 4     |       |        |        |   |    |    |    |    |    |
| 6                 | Area of Stationary Object               | 14 31    | 35 14    | 17 19    | 17 14  | 4 31 7   |       |        |        |   |    |    |    |    |    |
| 7                 | Volume of Moving Object                 | 17 19    | 31 40    | 1 7 4 7  | 15 4   | 17 4 7   | 17 14 |        |        |   |    |    |    |    |    |
| 8                 | Volume of Stationary Object             | 31 35    | 35 2     | 35 3     | 3 1 35 | 1 31 5 4 | 3 31  |        |        |   |    |    |    |    |    |
| 9                 | Shape                                   | 40 2     | 35 40    | 14 30    | 30 4   | 4 30     | 30 4  | 14 35  |        |   |    |    |    |    |    |
| 10                | Amount of Substance                     | 29 30    | 3 15     | 4 14     | 17 14  | 4 17 5   | 17 14 | 14 4   | 14 4 7 |   |    |    |    |    |    |
| 11                | Amount of Information                   | 40 3 2   | 31 9     | 15 3 4   | 30 4   | 2 14 5   | 28    | 2 3    | 7 3 2  |   |    |    |    |    |    |
| 12                | Duration of Action of Moving Object     | 3 10     | 35 40    | 5 2 8    | 17 35  | 3 17     | 31    |        |        |   |    |    |    |    |    |
| 13                | Duration of Action of Stationary Object | 6 9 18   | 28 26    | 7 32     | 17 3 2 | 3 17     | 7 5   |        |        |   |    |    |    |    |    |
| 14                | Speed                                   | 28 17    | 1 35 3 2 | 13 17    | 17 3 2 | 3 17     | 7 5   |        |        |   |    |    |    |    |    |
|                   | Force/Torque                            | 7 13     | 1 35 3 2 | 13 17    | 17 3 2 | 3 17     | 7 5   |        |        |   |    |    |    |    |    |
|                   | Force/Torque exerted by Moving          | 15 19    | 35 3     | 17 8     | 12 9   | 7 5      | 3 35  | 3 30 7 | 18 3   |   |    |    |    |    |    |

How might we create  
an **experience**  
that allows TRIZ teams  
to **playfully** identify  
the **right** parameters?



# Loss of information **vs.** Productivity





25  
23

### LOSS OF SUBSTANCE



Are we losing any material or matter?  
Is wear and tear a factor?  
Is this permanent or temporary?

### VOLUME OF STATIONARY OBJECT



Is the element/system stationary?  
Do volume, capacity, mass or dimensions matter?  
Does the interior of an enclosure really play a role?

### DURATION OF ACTION BY STATIONARY OBJECT



Is the element/system stationary?  
Does it matter how long the action takes?  
Do frequency or interval play an important role?

### DURATION OF ACTION BY MOVING OBJECT



Is the object/system moving relative to its environment?  
Is the performance time of the object relevant?  
Is it important at what frequency the object is moving?

### USE OF ENERGY BY STATIONARY OBJECT



POWER

### SPEED



FORCE

**LOSS OF INFORMATION**

28  
24



Is data, knowledge or any form of communication important?  
Are you losing information somewhere?  
Is the data always complete and permanent?

VS.

**PRODUCTIVITY**

44  
39



Is productivity or capacity relevant?  
Do you see output rate, performance or yield as an important parameter?  
Is it about mass production, fertility or, instead, idleness or discard?

How did we develop  
a TRIZ-based game for everybody?



# How did we develop a TRIZ-based game for everybody?

- 1) the game had to be **fun, simple and approachable**  
= colorful, with illustrations



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- 1) the game had to be **fun, simple and approachable**  
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- 2) it had to put you in a **playful but involved state of mind**  
= big cards to recall childhood



# How did we develop a TRIZ-based game for everybody?

- 1) the game had to be **fun, simple and approachable**  
= colorful, with illustrations
- 2) it had to put you in a **playful but involved state of mind**  
= big cards to recall childhood
- 3) it had to be **visual, familiar and memorable**  
= everyday life's memories, with a storytelling  
of well known elements or little accidents





JEROME  
DESIGNER  
FROM CANADA  
LIKES PAPER,  
MINIMALISM  
AND EFFICIENCY

ARJUN  
BUSINESS MANAGER  
FROM INDIA  
LIKES NUMBERS, ANSWERS,  
AND TECHNOLOGY

HAYAO  
RISK MANAGEMENT SPECIALIST  
FROM JAPAN  
LIKES STABILITY AND PATTERNS

ANITA  
PRODUCT MANAGER  
FROM ITALY  
LIKES ACTIONS, RESULTS  
AND ORGANIZATIONS

ANDREW  
SCIENTIST  
FROM UK  
LIKES THE MATHEMATICAL  
CHAOS OF NATURE

PARAMETER

MATRIX 2010 NUMBERS

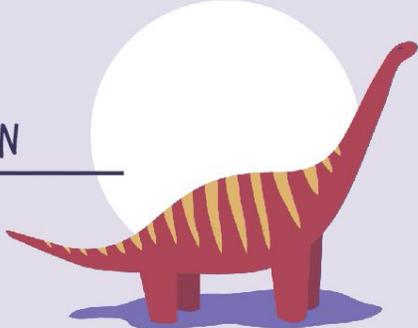
WEIGHT OF MOVING OBJECT

1

1

ORIGINAL TRIZ MATRIX NUMBERS

HELPFUL GORGEOUS ILLUSTRATION



Is the element/system moving in relation to its environment?

Are load, mass, heaviness, lightness important?

Do gravitational forces play a role?

50 or

39 ?

HELPFUL PARAMETER QUESTIONS

# How does it work?





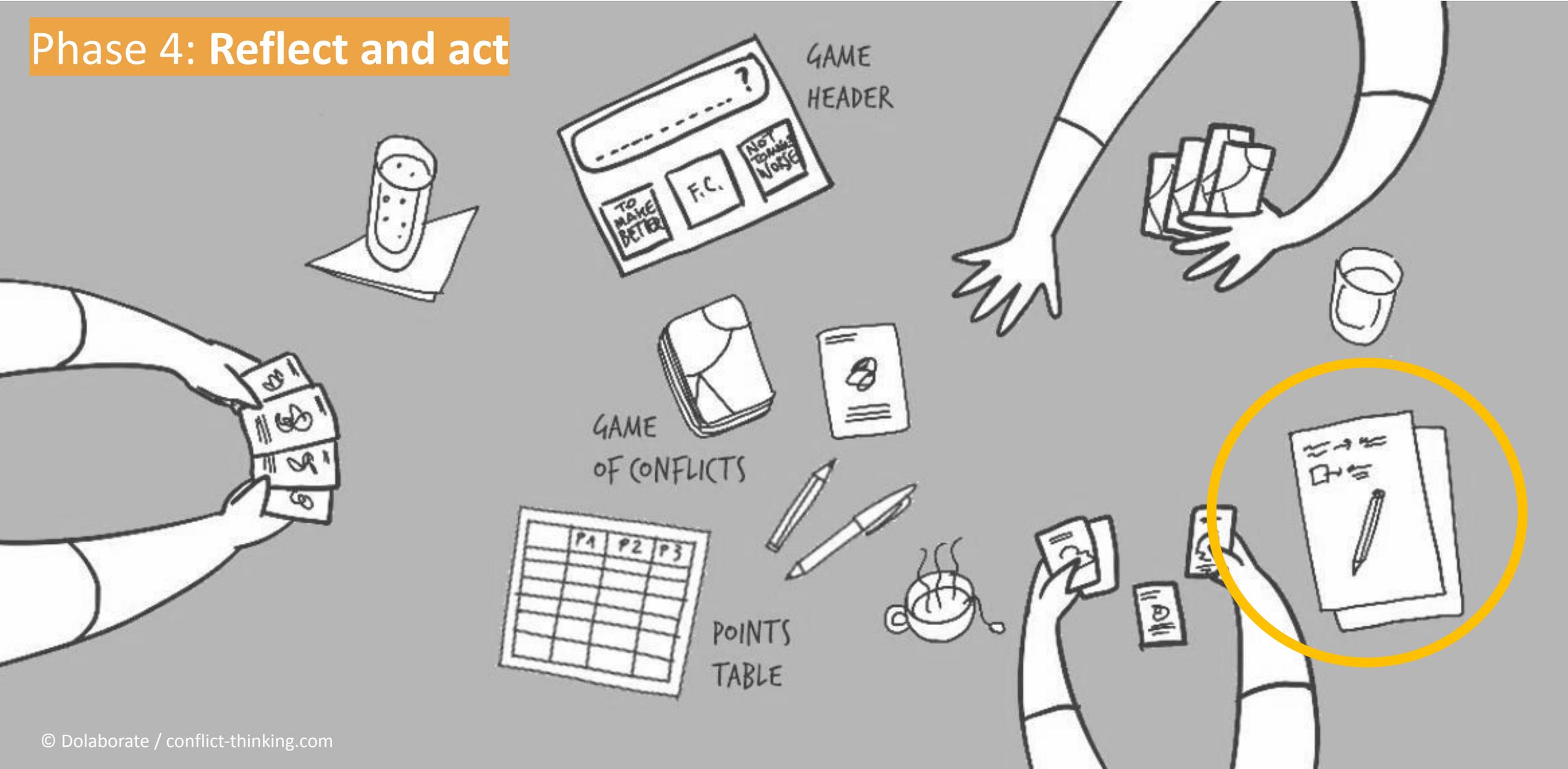
Phase 2: Go for the best cards



Phase 3: Identify conflicts



Phase 4: Reflect and act



Just another thing...

... our Conflict Canvas



**Game of Conflicts**

## Conflict Canvas

Use this canvas to identify and document conflicts which should be solved in your innovation project. Fill a new canvas for each new conflict you are looking at. The rating will help you later to decide, which conflict to work on first. Make sure the team gets a clear understanding of the conflicts you are talking about. Formulate the questions which arise from the identified conflicts. A visualization in form of a sketch or a diagram might help you do that.

**PARAMETERS IN CONFLICT**

What do you want to make better?

What don't you want to make worse?

**VISUALIZATION**

Make a sketch or diagram which visualizes the conflict.

**DESCRIPTION**

What exactly is in conflict here?  
List some of the qualities / issues.

**WHY**

Describe why this conflict is a problem. What causes the conflict?

**NEW QUESTIONS**

What questions arise because of the identification of this conflict?

**ANALOGY**

Do you find similar conflicts in other areas?

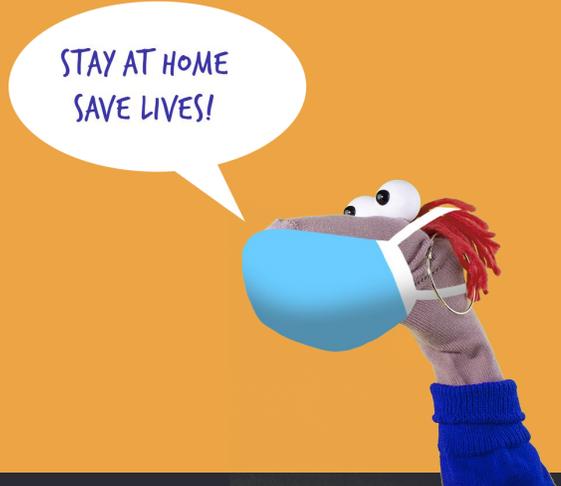
**RATING**

How important is it to solve the conflict?

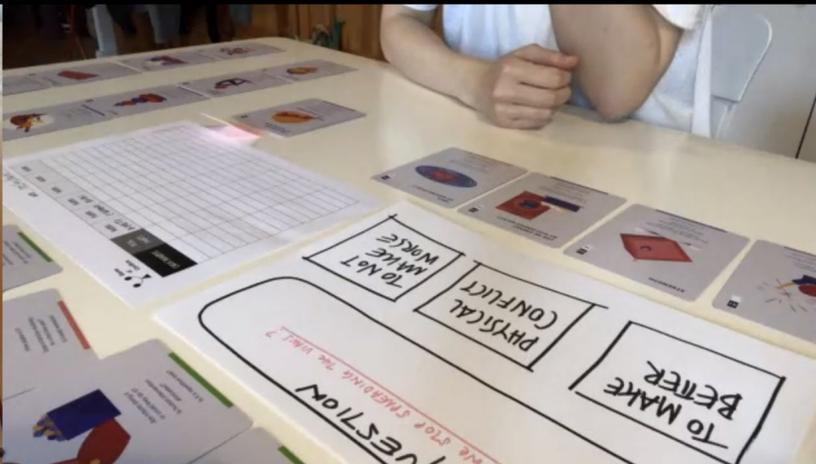
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≡ **Besprechung mit Eckhard** 3 von 4 im Anruf | 28:55 | Katalog Rasteransicht + 



≡ **Besprechung mit Eckhard** 3 von 4 im Anruf | 2:00:20 | Katalog



S Eckhard Schüler-Hainsch ... Roberta Maddalena ...

Teilen Beenden 🔊 📺 📞

Chat Bildschirm teilen Hand heben Reagieren Mehr

S Eckhard Schüler-Hainsch ... Roberta Maddalena ...

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Teilen Beenden Chat Bildschirm teilen Hand heben Reagieren Mehr

Last but not least:

Our experiences ...

Thank you!

Moritz, Eckhard, Roberta

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