

# **Contradictory Business Processes and Schematization**

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#### INTRODUCTION

- Published by Anton P. Kozhemyako (2019)
- Proposed way to use schematization on business processes so TRIZ can be used on them
- Developed a Method for determining the operational zone in Organisational-Managerial Tasks (OMTs)

## **Organisation and Management**

- 3 forms of management activities:
  - Organisation The process of forming systems
  - Leadership the setting of tasks
  - Management the change of a performers activity

Can all be called "organisational-managerial"-tasks = OMTs

## **Organisation and Management**

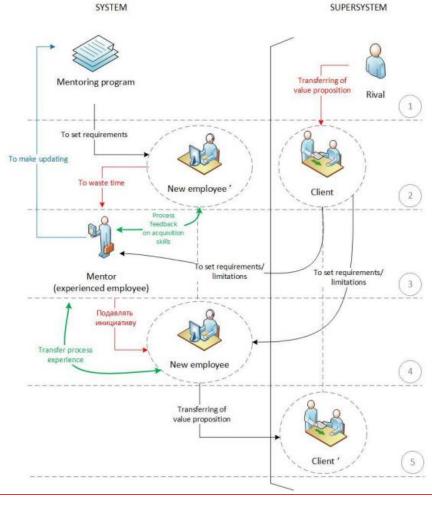
- Most OMTs are trivial everyday tasks
- More complicated OMTs demand more sophisticated solutions
- But: TRIZ is unreliable to use due to human element

Kozhemyako's Proposal: Use of Schematization

- Method formed by Moscow Methodological Circle lead by Schedrovitsky
- Means to solve problematic situations in organisation and management
- Schematization is trying to look at the business system from a bird's-eye view

- Components (1):
  - System Framework system in which analysis takes place
  - Elements subjects and objects of the system
  - Levels the element with the higher level manages the lower element
  - Connections describes Interactions between elements
    - Line a relation
    - Arrow a function
    - Double Arrow a process

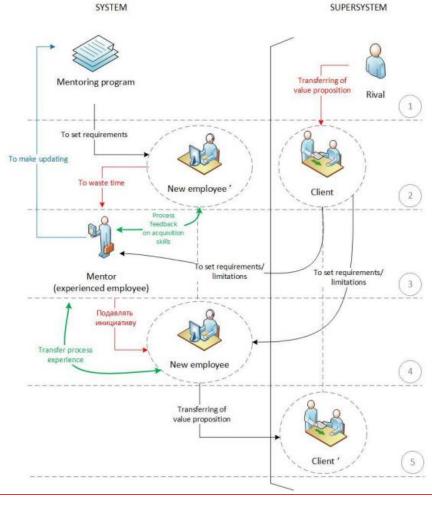
- Components (2):
  - Generalized objects a role within the system. Specifies requirements of an Element
  - Filling (Content) specifies a generalized object



 Schematization only a tool for primary analysis and should be combined with TRIZ tools

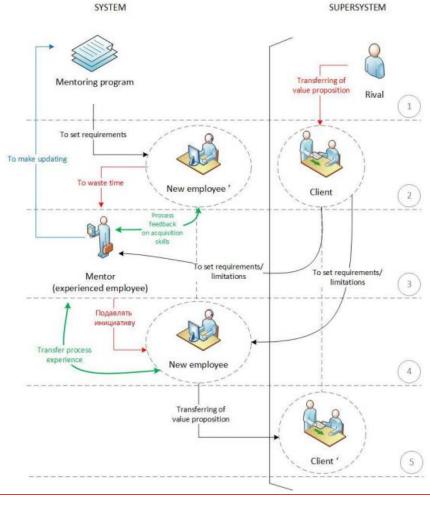
#### **Contradictions**

- Remodelling requires the main technical contradiction to be found
- Technical contradiction is a pair of 2 opposing goals requiring the same resource
- This pair forms the operational zone = location of conflict



#### **Contradictions**

- Present in the operational zone:
  - Tool performs negative impact
  - Product receives negative impact
  - Environment surrounds the conflicting pair
- Now we can find the resources used by each element
- The goal is to use each resource in the most optimal way



#### **Criticism**

- Lacking clear rules and guidelines
- Some concepts need a more detailed definition
- Operational zone can become too big

#### References

- Anton P. Kozhemyako Special Features of the Use of TRIZ for Solving Organisational-Managerial Tasks (OMT): Schematization of an Inventive Situation and Work with Contradictions <a href="https://github.com/wumm-project/LeipzigSeminar/blob/master/Material/Kozhemyako-19-en.pdf">https://github.com/wumm-project/LeipzigSeminar/blob/master/Material/Kozhemyako-19-en.pdf</a> Accessed 7 July, 2021
- TRIZ Review: Journal of the International TRIZ Association MATRIZ Vol 2, #1, April 2020 <a href="https://matriz.org/wp-content/uploads/2020/04/TRIZ-Review-vol-2-1-April-2020.pdf#page=82">https://matriz.org/wp-content/uploads/2020/04/TRIZ-Review-vol-2-1-April-2020.pdf#page=82</a> Accessed 9 July 2021
- MATRIZ Scientific Adviser Review <a href="https://matriz.org/wpcontent/uploads/2019/08/Anton-Kozhemyako Advisor V.Souchkov ed.pdf">https://matriz.org/wpcontent/uploads/2019/08/Anton-Kozhemyako Advisor V.Souchkov ed.pdf</a> Accessed 10 July 2021
- MATRIZ Official Critique to the TRIZ Master Thesis <a href="https://matriz.org/wpcontent/uploads/2019/08/Anton-Kozhemyako Opponent I.Ilyin ENG.pdf">https://matriz.org/wpcontent/uploads/2019/08/Anton-Kozhemyako Opponent I.Ilyin ENG.pdf</a> Accessed 10 July 2021
- BMTRIZ Getting started on a business problem <a href="https://bmtriz.ru/speech-of-antonkozhemyako-in-the-business-triz-online-winter-2021-getting-started-on-a-businessproblem/">https://bmtriz.ru/speech-of-antonkozhemyako-in-the-business-triz-online-winter-2021-getting-started-on-a-businessproblem/</a> Accessed 12 July 2021



# **Thank You for Listening!**

**Lukas Heink**