



Flow analyse 2.0

Olga Eckardt

Wilo SE, Germany
PMP, Scrum Master, TRIZ practitioner
Senior Business Consultant, Project Manager

Sparkling Spring GmbH, Germany

Director



Definition and Frames

Flow analyse is special case of Functional analyse – ontological approach helps to expect intelligent overtaking of definition, approaches and tools.

A flow is different from a process – flow move (physically) particles, energy or information.

Usage of TRIZ Model in Flow analyze make a picture of flow analyse complete.

Targets: both analyse and synthesis

In case of disadvantages – improve to reach target

Improve flows using evolutionary/development laws

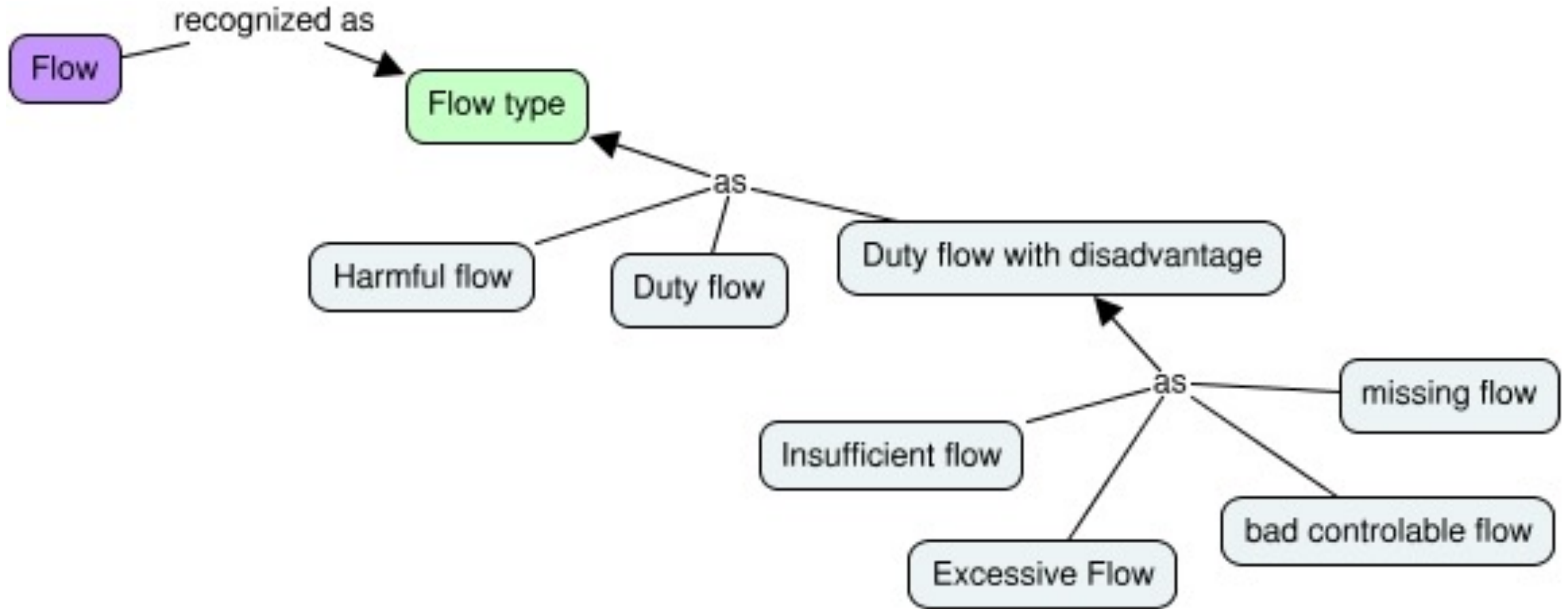
Increase Ideality of flow system, or functionality of flow system

Understand what happen or can happened in this flow system

New points

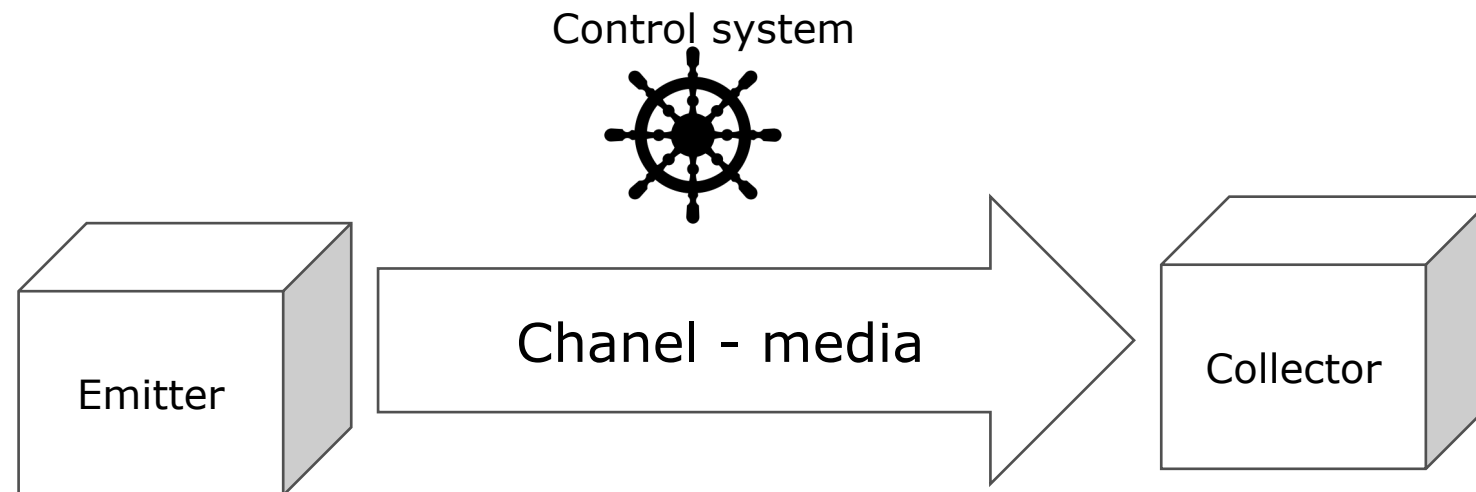
- Anti-Flow - A flow which is opposite to a flow given – moving in the opposite direction, or opposite for another parameter.
- Main Flow, Additional Flow, Auxiliary Flow
- Component and parameter analyze in Flow – determine measured parameter and its costs.
- Convolution of flows – other flow overtook the responsibilities, flows are minimized going from push to pull approach, flow is obsolete due to rebuild of the system, flow eliminated and moved to sub- or super- systems.
- Expansion of flows system
- Degree of Ideality in the flow – will be degraded by components, as well as looked from flow system point of view
- Excessive Flow, Insufficient Flow
- Flow-Ideal Modeling and Ideal Flow, Flow-Oriented Search, Generalized Flow

Flow



Components

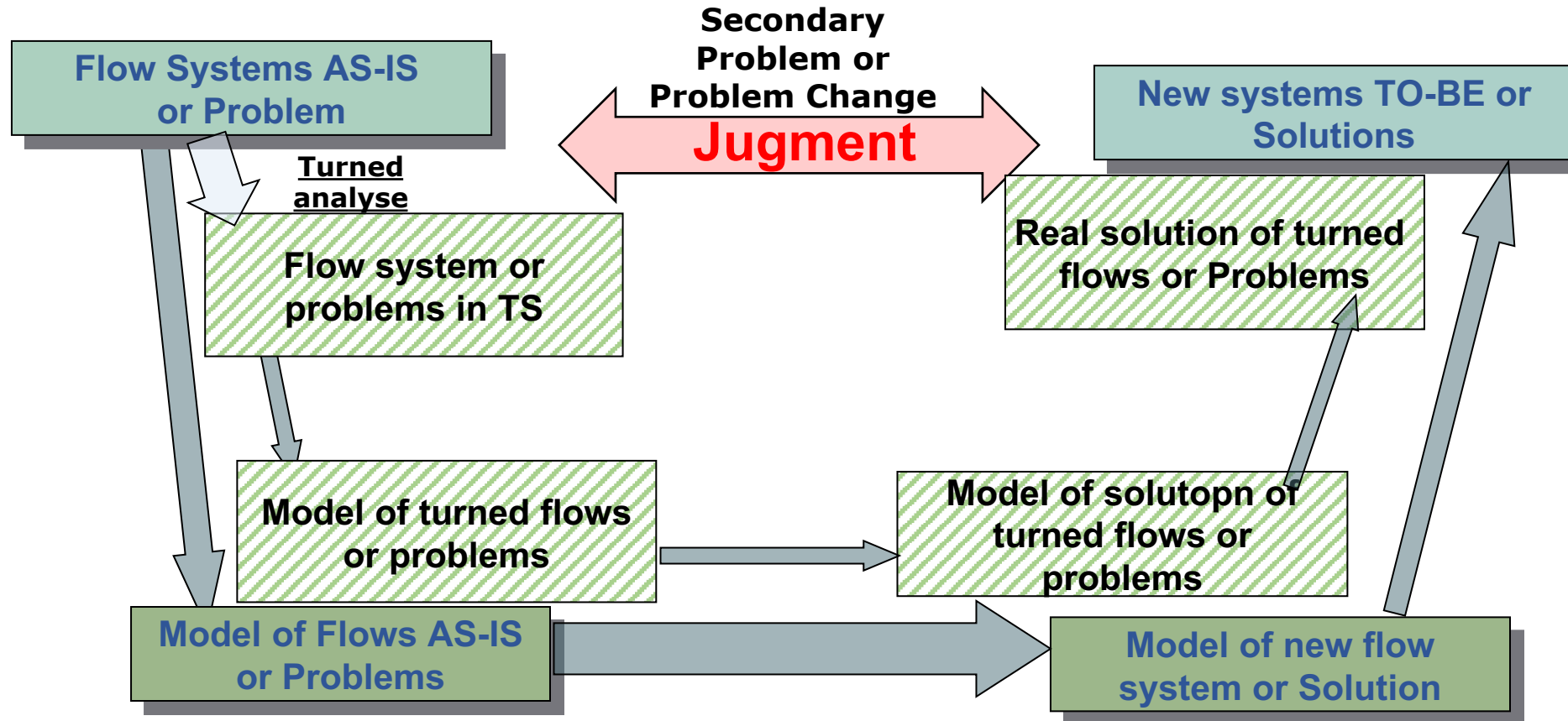
- Control system – valve/pump – push/pull systems
- Flow value – cost analyse should be done on the level of system, flow, but as well on component level
- Emitters (source of currency, or source of potential, passive)
- Collectors (passive or active requestor)
- Ideal Controlling system
- Elimination controlling flows



Insides

- Bottel-neck + turbulence after with lower presure
- Insufficient Flow or not enough sensitive Collector
- Flow Grey zones – or black boxes
- Non-our flows – background, undetected – not belonged to our system but influence
- Pull system – mainly able to give more efficiency
- Convolution of flows in super system
- Natural of uncontrolled flows with propped Pull/Potential Collector

TRIZ Model in Flow Analyse



Summary

- Usage of TRIZ Model
- Turned usage of analyse via TRIZ Model give us part of flow analyse which was never decribed
- Stricted classification – more transparecny
- Transparency – “Operational Zones” determination
- Each flow should take a part of Added-Value Chain
- Flow value – cost analyse, from super- and sub- system point of view

Questions

