



Using S&T Tree pattern to communicate the need for new procedures in a TOC implementation

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Jelena is the author of the book *Behind the Cloud – Enhancing logical thinking*. The book presents new developments in the area of working with assumptions.

Together with Oded Cohen, Jelena has co-authored the book *Theory of Constraints Fundamentals*.

She has authored numerous articles on TOC concepts and implementation, and has contributed to and edited several TOC books.

Jelena is Founder and Co-President of the International Alliance of TOC Practitioners – TOCPA.



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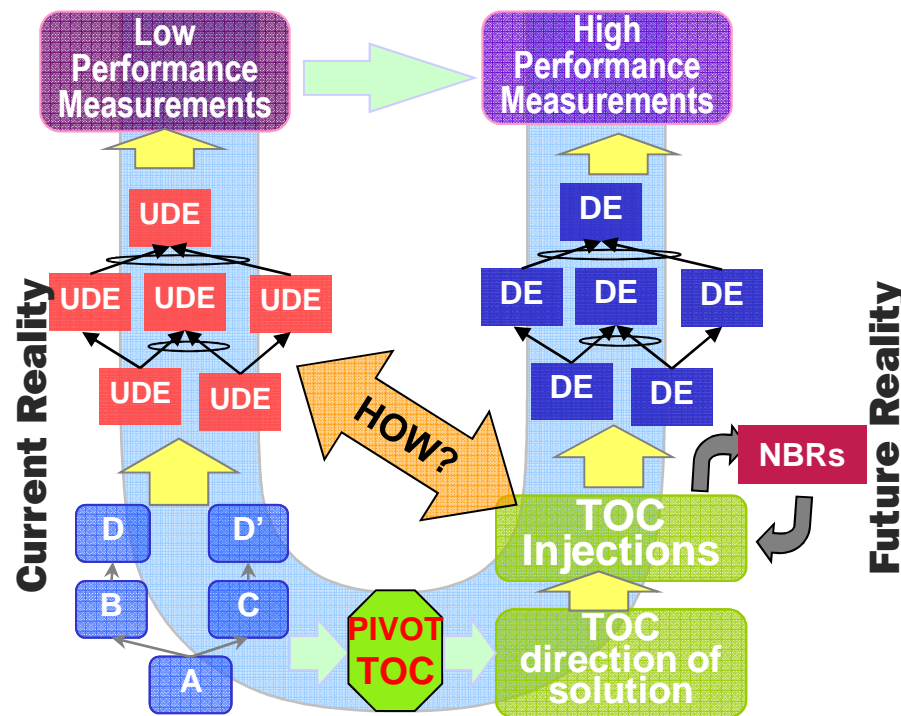
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Bringing in a new solution

A new solution will not work without new procedures – when WHAT is changed, it requires changing HOW.



Developing procedures is usually perceived as the final stage of preparatory work for implementation.

However, often there is a need to communicate the justification for the new procedures to bosses, peers and subordinates:

- Do we need the new procedure at all? (Layer 1)
- How do we know that it is through this new procedure the Injection will give us promised benefits? (Layers 2 & 3)



Understanding the Gap WHAT and WHERE

The understanding that a system change is needed is usually triggered by realization of the Gap in performance

Two processes:

1. Identifying UDEs and building UDE Clouds

UDE is expressing **WHAT is bad**

2. Building the Deployment Chart to identify **WHERE in the processes** this UDE is "programmed" into the system

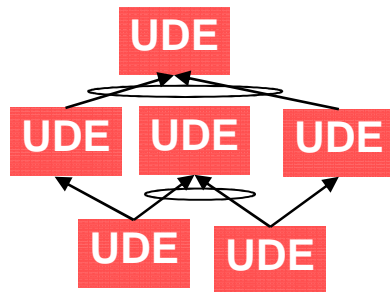


1 – Process of identifying UDEs and building UDE Clouds

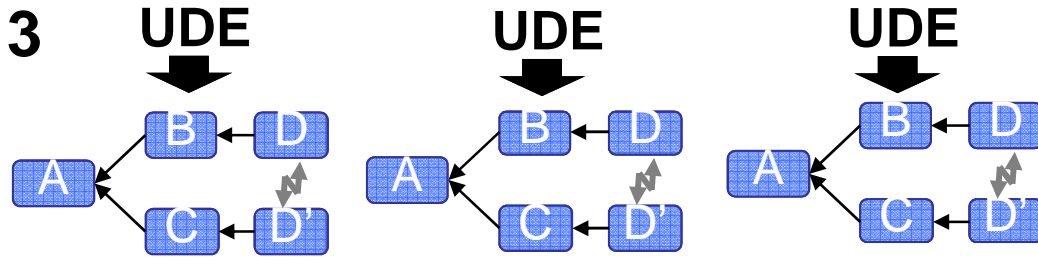
1 List of UDEs

UDE1: xxxxxxxxxx
UDE2: xxxxxxxxxx
UDE3: xxxxxxxxxx
UDE4: xxxxxxxxxx
UDE5: xxxxxxxxxx

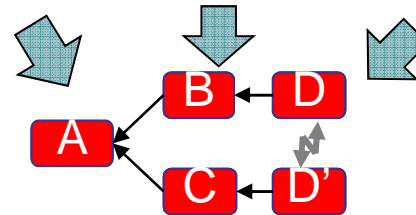
2 UDE Map



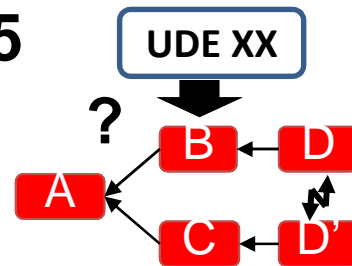
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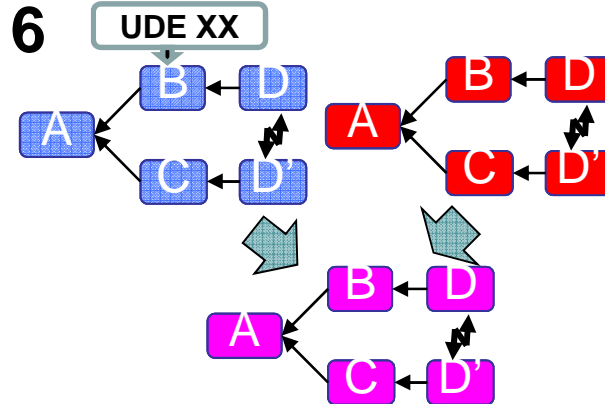
4



5

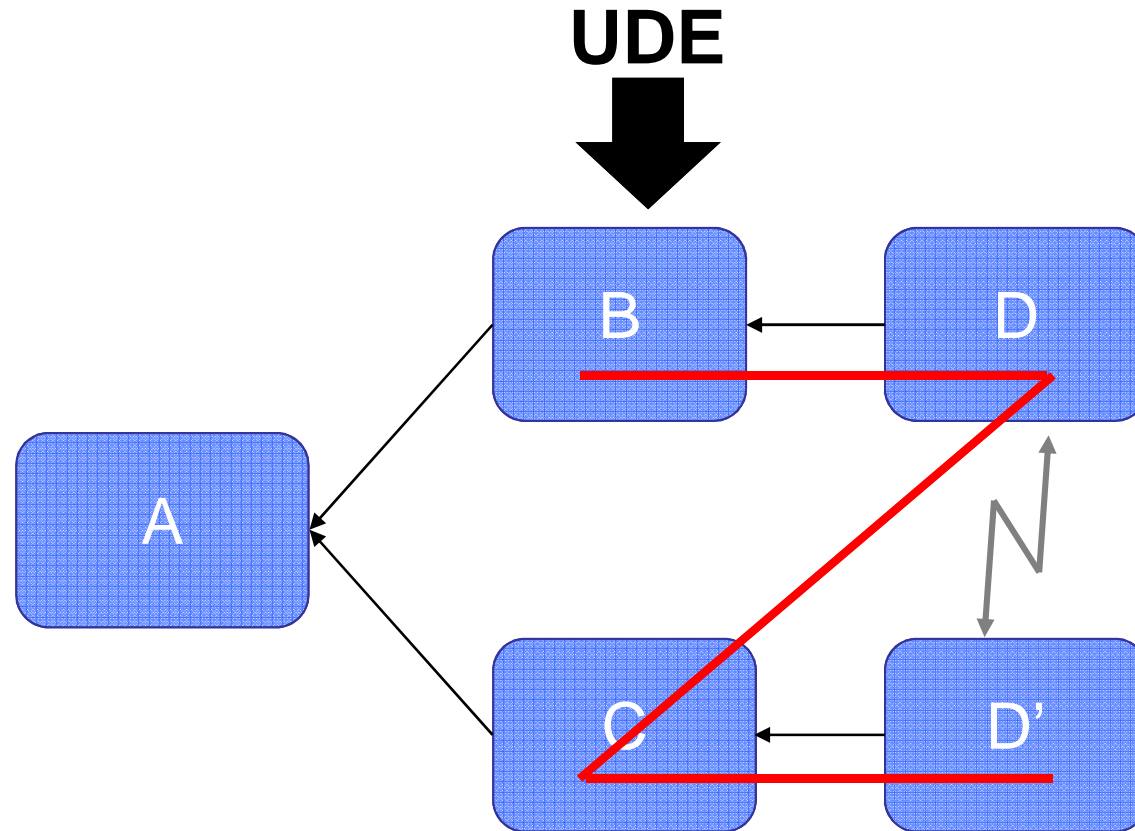


6





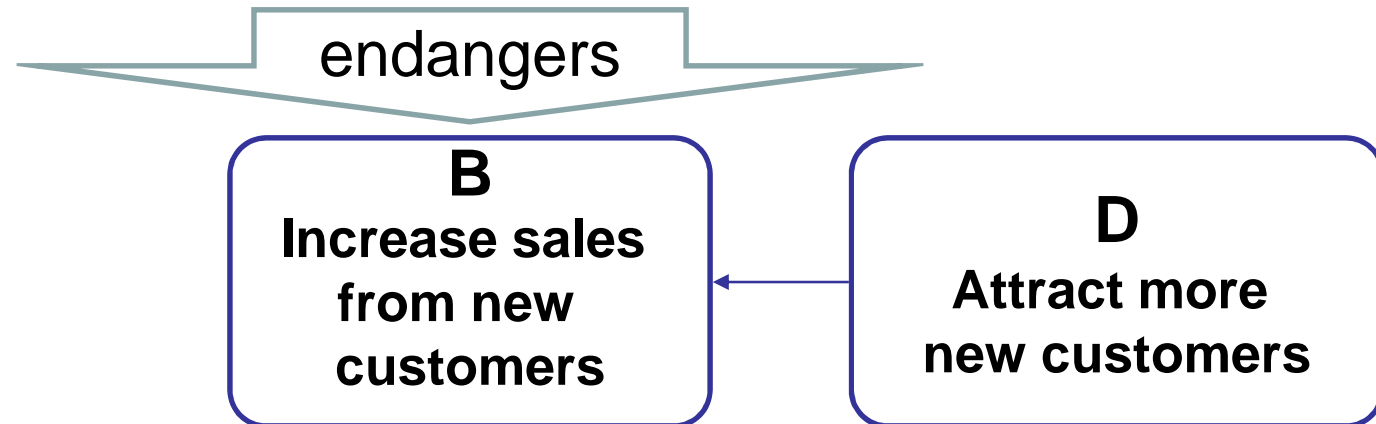
Building an UDE Cloud





Such **UDE Clouds** do not really help

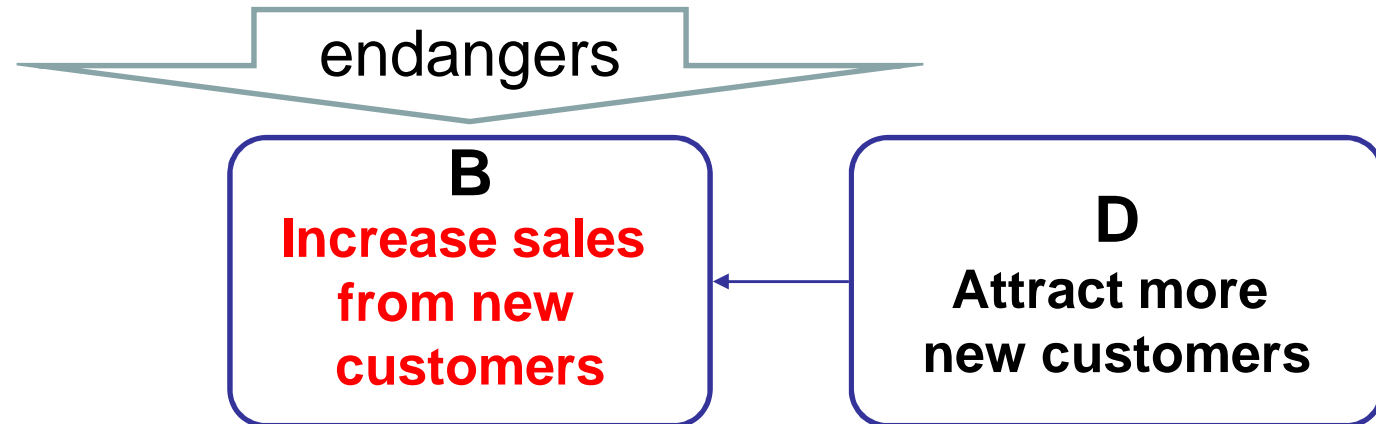
UDE: In the last year the sales from new customers were very low





Such **UDE Clouds** do not really help

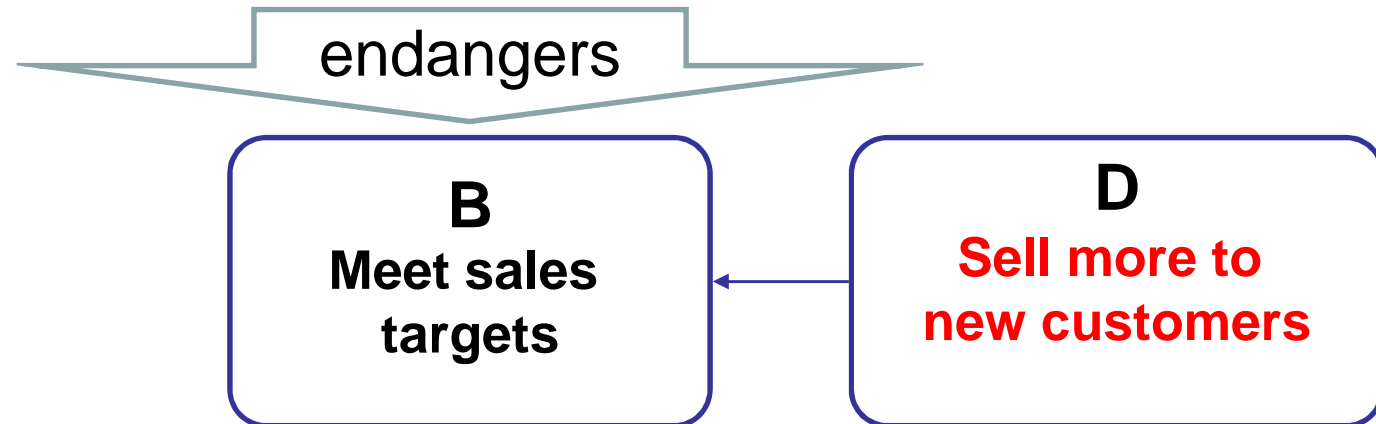
UDE: In the last year the **sales from new customers were very low**





Such **UDE Clouds** do not really help

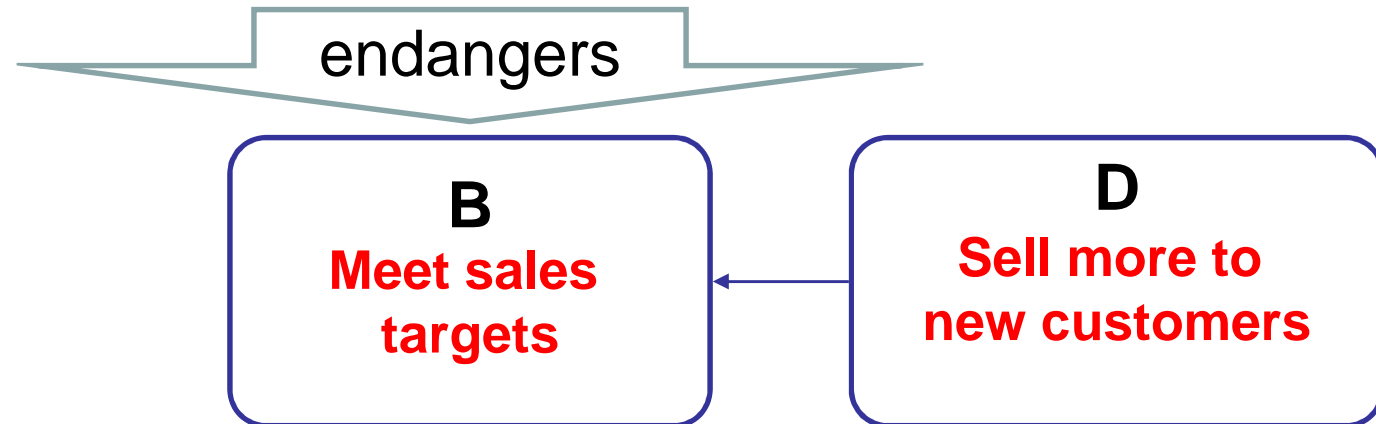
UDE: In the last year the **sales from new customers were very low**





Such **UDE Clouds** do not really help

UDE: In the last year the **sales from new customers were very low**

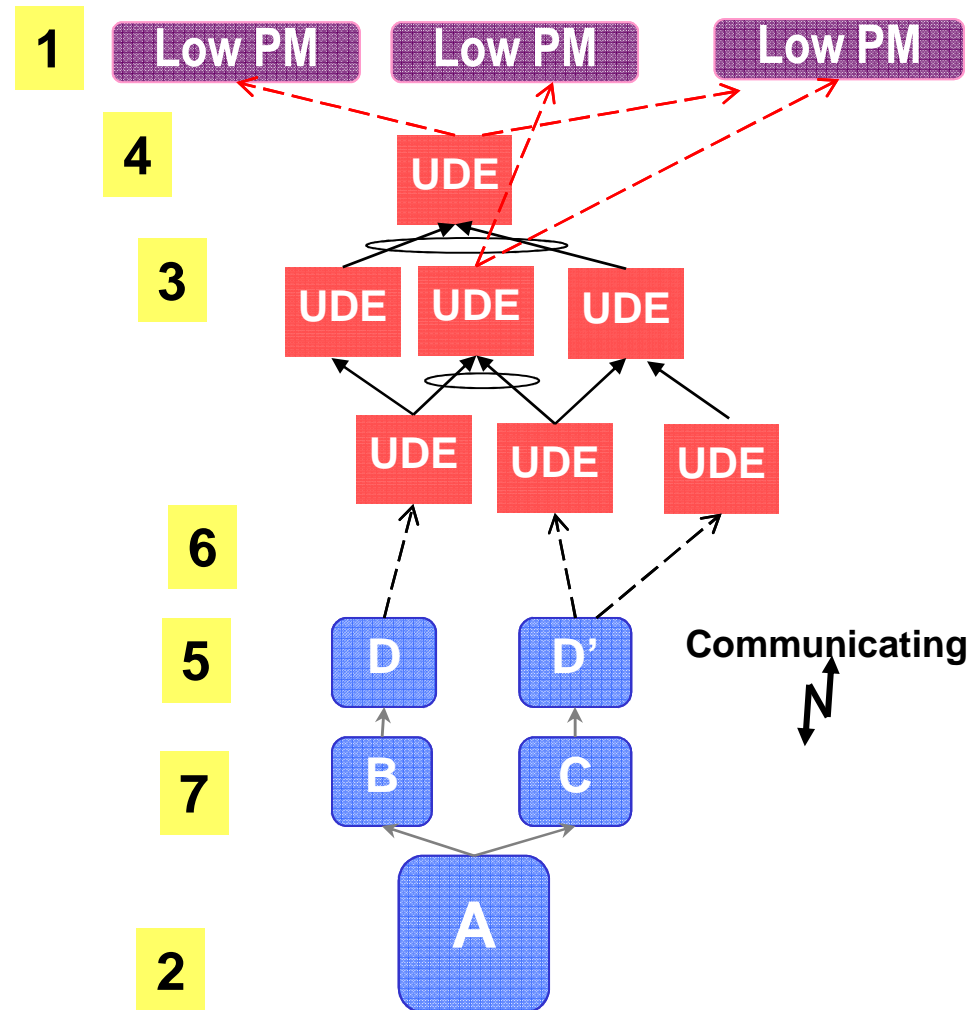
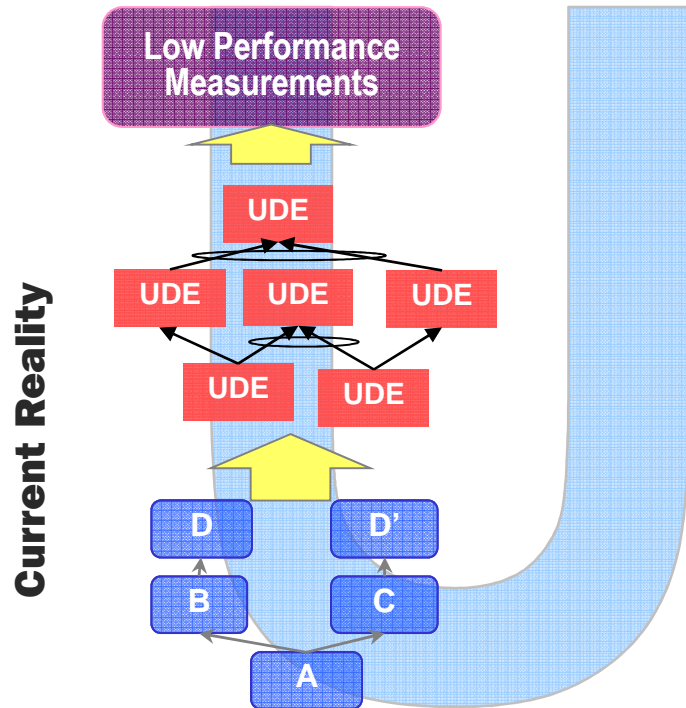




Communicating the Gap - WHAT and WHY

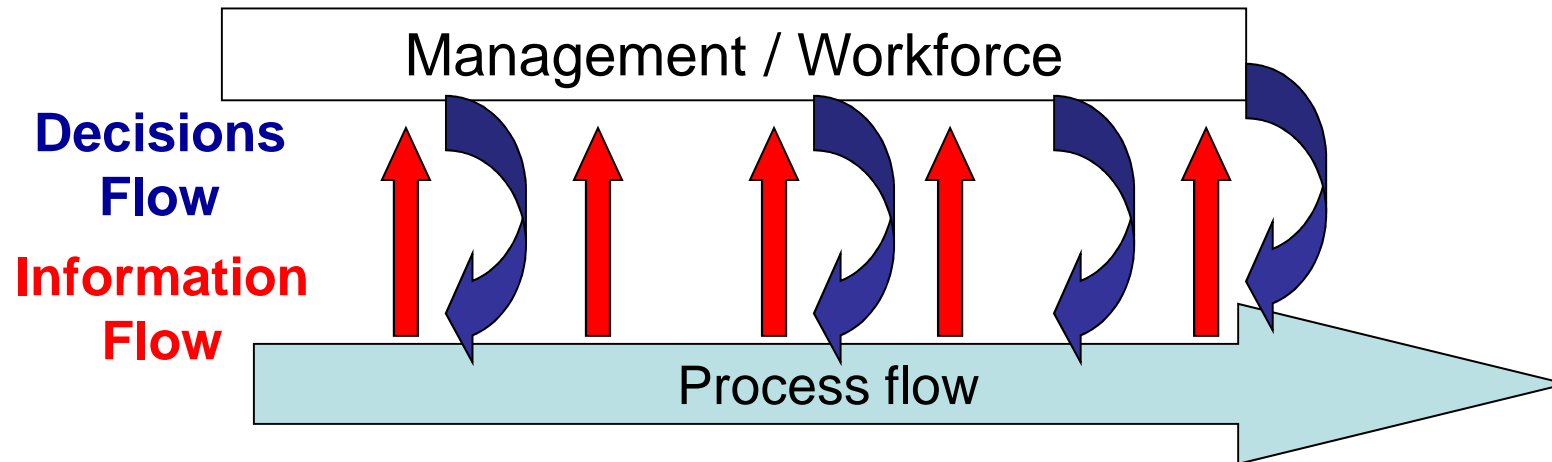
Communicating the Gap

Understanding the Gap





2 – Process of building a Deployment Chart and marking procedures that sustain UDEs



- In the Deployment chart we look at the process flow as the interaction between different “players”
- Information flow – system of reports and signals (‘for purpose’) For that there should be relevant data in the process flow
- Decision flow – the paradigm for the decision



From Hans Steenpoorte's presentation Applying TOC to Services
9 Feb 2013

6 solution elements (injections)

(Relatively) senior multi-disciplinary group of people **physically (!) put together**

DECISION about the flow for now and for the future if applicable

Injection	Benefit
Dramatically reduce WIP	Dramatically decrease LT
(Re-)define/design the process	Less LT for customer and less TT for the professionals
Uniform task priorities (BM)	High DDP
Work in teams	Less peaks & troughs (aggregation)
Management reports & process	Transparency and grip of operational performance
Identify sources & causes of delay	Continuous improvement

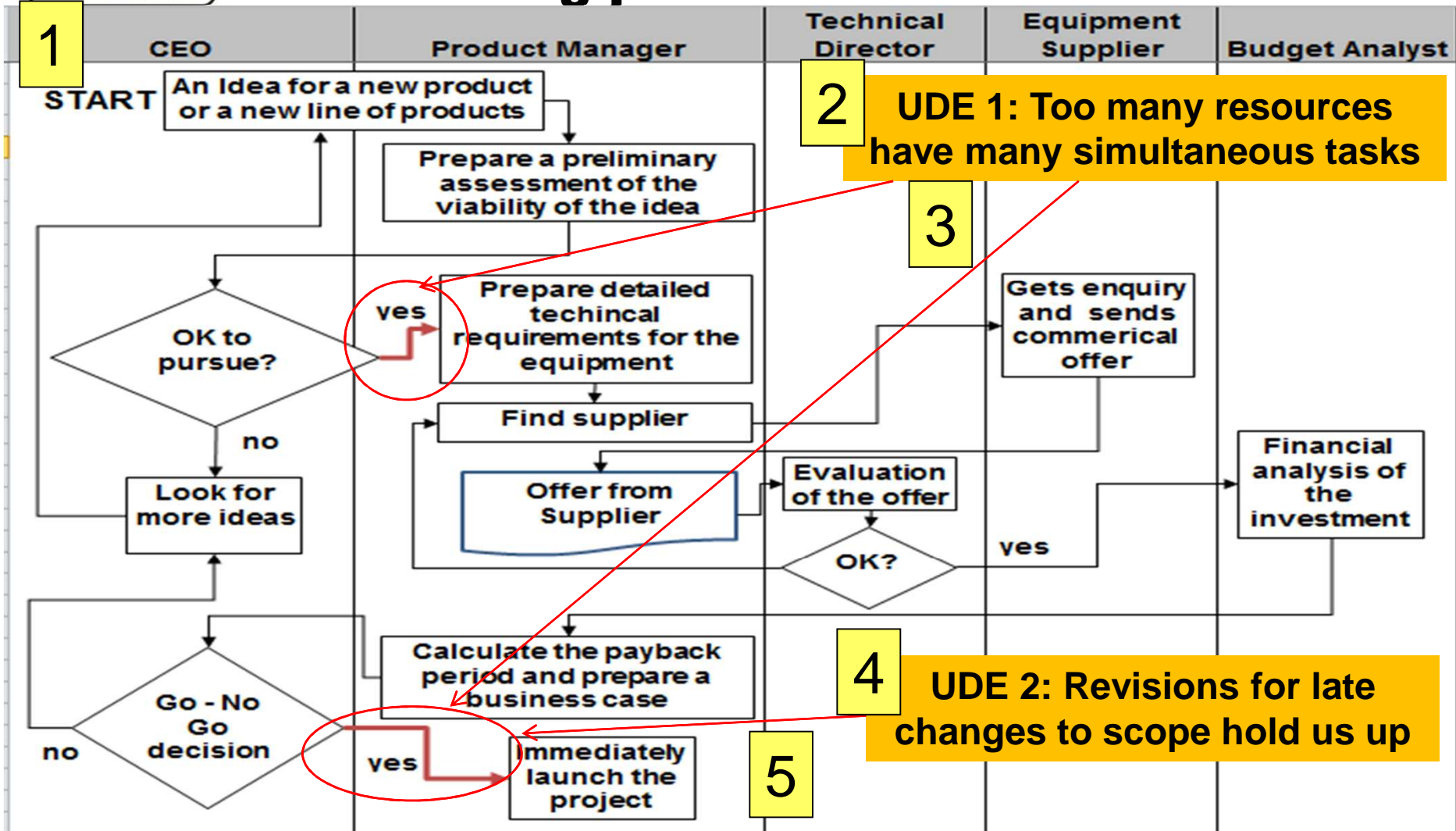


Specialist	opnam es in de period	ot aantal opnam es in	Cumul atief	Begro ot cumula tes 2012	ot opnam es
ANA	4	78	32		
CAR	106	2,378	3,919		
CHI	172	3,132	4,482		
DER	1	17	20		
GAS	38	826	368		
GER	0	0	0		





2 - Process of building a Deployment Chart and marking procedures that sustain UDEs





The need to communicate justification for the new procedures

Dealing with the questions discussed before:

1. Do we need the new procedure at all? (Layer 1)
 - Deployment Chart with the marked areas in the current processes that sustain UDEs
 - Justification to stop doing the wrong things
2. How do we know that it is through this new procedure the suggest change (the Injection) will give us promised benefits? (Layers 2 & 3)
 - The logical structure of an S&T step
 - Justification to start doing the right thing



S&T Step – generic questions

The entities within an S&T step are the answer to some generic questions.

Necessary Assumption	Why do we need this element of the strategy to be achieved?
Strategy	What has to be achieved?
Parallel Assumptions	Why will the tactic / action / activity achieve this element of the strategy?
Tactic	How do we accomplish this element of the strategy?
Sufficiency Assumption	Why is accomplishing this strategy/tactic at risk without providing another level of details?



Questions adjusted for Organization S&T Tree

Organization S&T Tree is used when there is a need achieve sustainability and robustness in the synchronization of everyone in an organization towards taking only those actions that align locally with the strategic direction, which has been implemented via a transformation.

The generic questions are changed to:

Necessary Assumption

Why does the organization need the contribution from this job/function/role?

Strategy

**What does this job/function have to achieve for the organisation?
What are the key metrics by which to judge achievement / progress for this job/function?**

Parallel Assumption(s)

**Why will the tactics /actions achieve this strategy?
Why are the actions that should not be done, or should be stopped, harmful to the strategy?**

Tactic

**How should this strategy/contribution be accomplished - what actions?
What actions should not be done or should be stopped?**

Sufficiency Assumption

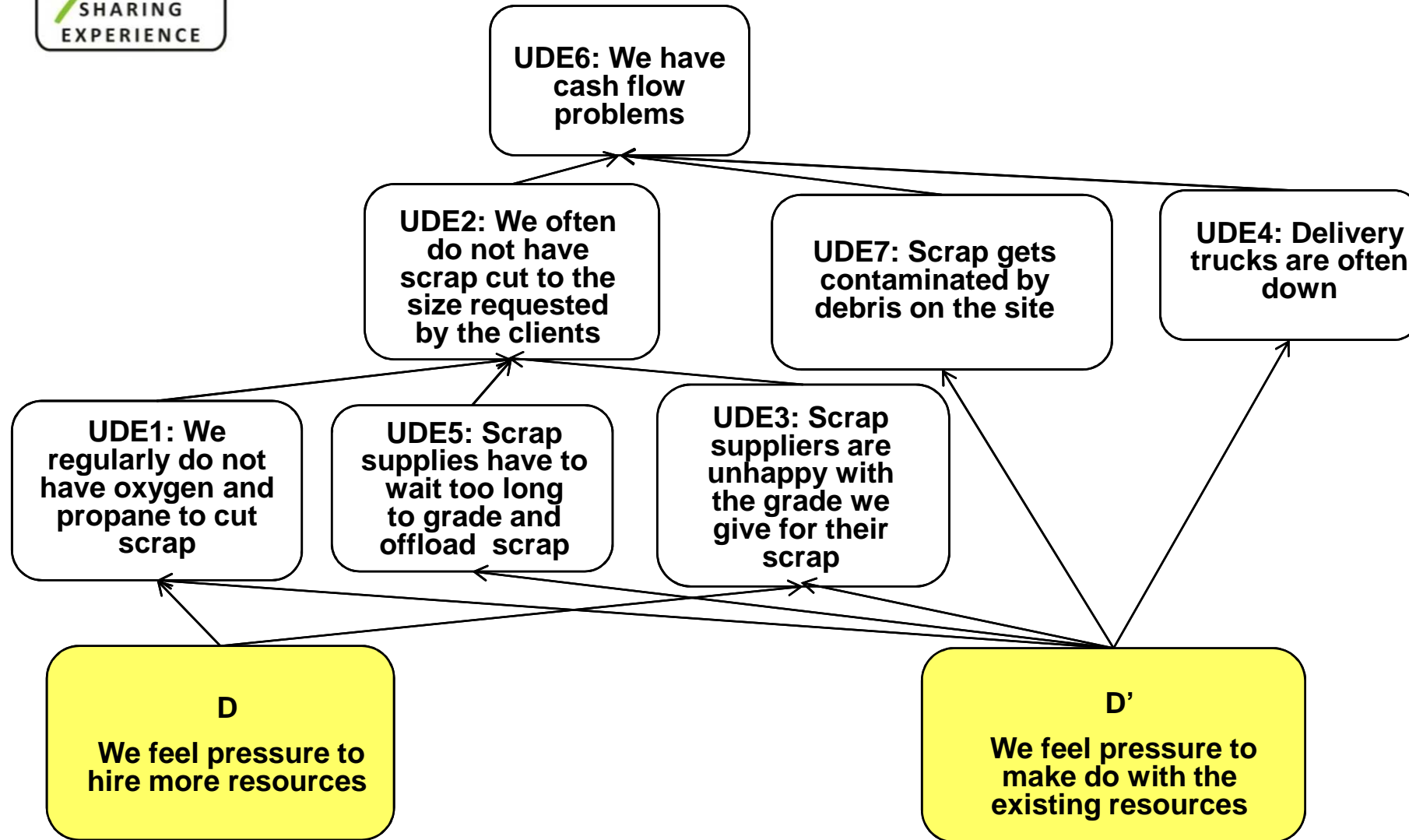
Why is accomplishing this strategy/tactic at risk without providing another level of details for the subordinates of this role?

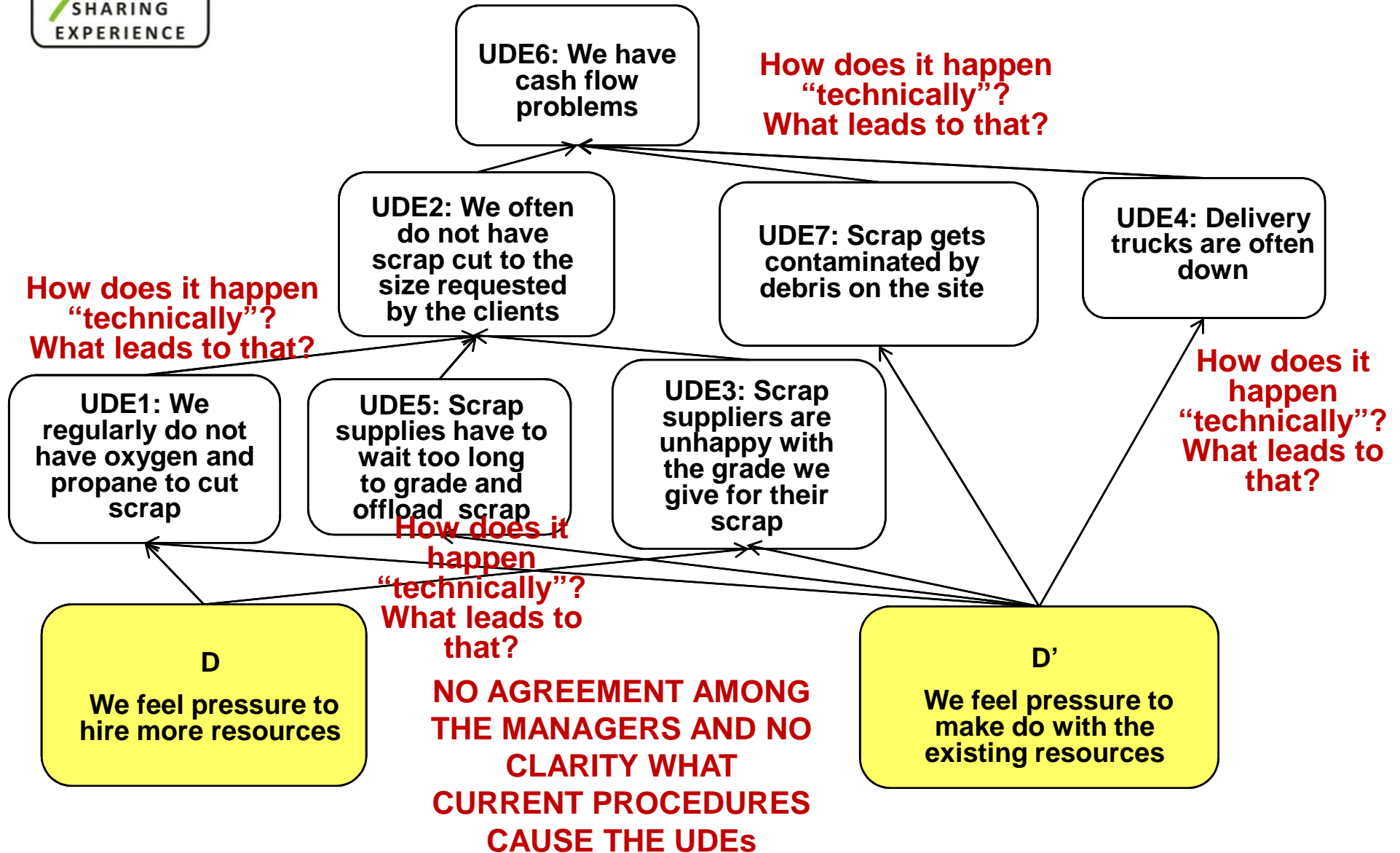


Using S&T Step pattern to justify a new procedure

Suggested changes to the generic questions:

1 Necessary Assumption	Why do we need this element of the strategy to be achieved?	<ul style="list-style-type: none"> •What negative is there in the company's current reality that does not allow us to achieve high [specific measurement set for this system]? •What is the need of the system? <p><i>The opportunity that we see to "sell" this idea.</i></p>
2 Strategy – Deliverable	What has to be achieved?	<p>State the expected deliverable/ outcome of the new procedure (IO on the way to the Injection).</p> <p><i>What NEW we offer as the RESULT of procedure.</i></p>
4 Parallel Assumptions	Why will the tactic / action / activity achieve this element of the strategy?	<p>Show on what knowledge and/or existing expertise in other companies you base your claim that the new procedure will reach the Deliverable in the Strategy.</p> <p><i>Prove that this procedure works.</i></p>
3 Tactic – Procedure	How do we accomplish this element of the strategy?	<p>Describe the new procedure in a concise way.</p> <p><i>What new mechanism we will introduce that the system did not have before.</i></p>
5 Sufficiency Assumption	Why is accomplishing this strategy/tactic at risk without providing another level of details?	<p>Generally known fact that is risky to overlook or underestimate.</p>







Using S&T Step pattern to justify a new procedure/mechanism

Case – The suggested procedure/mechanism: build Deployment Chart

1

Necessary Assumption

- **What negative is there in the company's current reality that does not allow us to achieve high [specific measurement set for this system]?**
- **What is the need of the system?**

The opportunity that we see to "sell" this idea.

Our system currently has problems that do not allow us to get more money (profit).

Introducing improvements to the operational processes means introducing changes. Any change has a potential risk of destabilizing the system. In order to avoid that, we need to have a clear "snapshot" of the flow of processes and to identify in which points in this flow we need to introduce the changes to get maximum result with minimum efforts.



Using S&T Step pattern to justify a new procedure/mechanism

Case – The suggested procedure/mechanism: build Deployment Chart

2

Strategy – Deliverable

State the expected deliverable/ outcome of the new procedure (IO on the way to the Injection).

What NEW we offer as the RESULT of procedure.

The company has a good visualized understanding of the problematic places/areas in its operational processes.



Using S&T Step pattern to justify a new procedure/mechanism

Case – The suggested procedure/mechanism: build Deployment Chart

3

Tactics – Procedure/ Mechanism

Build the Deployment Chart for every function of the company reflecting the tree types of the flow (1) process flow, (2) information flow, (3) decision flow.

Describe the new procedure in a concise way.

What new mechanism we will introduce that the system did not have before.



Using S&T Step pattern to justify a new procedure/mechanism

Case – The suggested procedure/mechanism: build Deployment Chart

The parallel assumptions entity is probably the most important one among the three types of assumptions, as it explains why we claim that the strategy is possible at all.

4

Parallel Assumptions

Show on what knowledge and/or existing expertise in other companies you base your claim that the new procedure will reach the Deliverable in the Strategy.

Prove that this procedure works.

Formalizing in writing the Deployment Chart as opposed to an informal knowledge of how the system works helps to get a structured understanding of dependencies and interactions in the processes.

Companies generally widely use structured visualized way to present their reality and demonstrate dependencies – for example, the organizational structure.

Significance of understanding the system processes “blueprint” for making changes is no less than for a technical drawing when a change in a technical process needs to be introduced.

There is available knowledge, methodology and expert support to build a Deployment Chart.



Presenting as a S&T Step

Deployment Chart

<p>Necessary assumptions</p>	<p>Our system currently has problems that do not allow us to get more money (profit). Introducing improvements to the operational processes means introducing changes. Any change has a potential risk of destabilizing the system. In order to avoid that, we need to have a clear “snapshot” of the flow of processes and to identify in which points in this flow we need to introduce the changes to get maximum result with minimum efforts.</p>
<p>Strategy</p>	<p>The company has a good visualized understanding of the problematic places/areas in its operational processes.</p>
<p>Parallel assumptions</p>	<p>Formalizing in writing the Deployment Chart as opposed to an informal knowledge of how the system works helps to get a structured understanding of dependencies and interactions in the processes. Companies generally widely use structured visualized way to present their reality and demonstrate dependencies – for example, the organizational structure. Significance of understanding the system processes “blueprint” for making changes is no less than for a technical drawing when a change in a technical process needs to be introduced. There is available knowledge, methodology and expert support to build a Deployment Chart.</p>
<p>Tactic</p>	<p>Build the Deployment Chart for every function of the company reflecting the tree types of the flow (1) process flow, (2) information flow, (3) decision flow.</p>