



INVESTMENTS IN EDUCATION DEVELOPMENT

# TOC = Theory of Constraints

Critical Chain

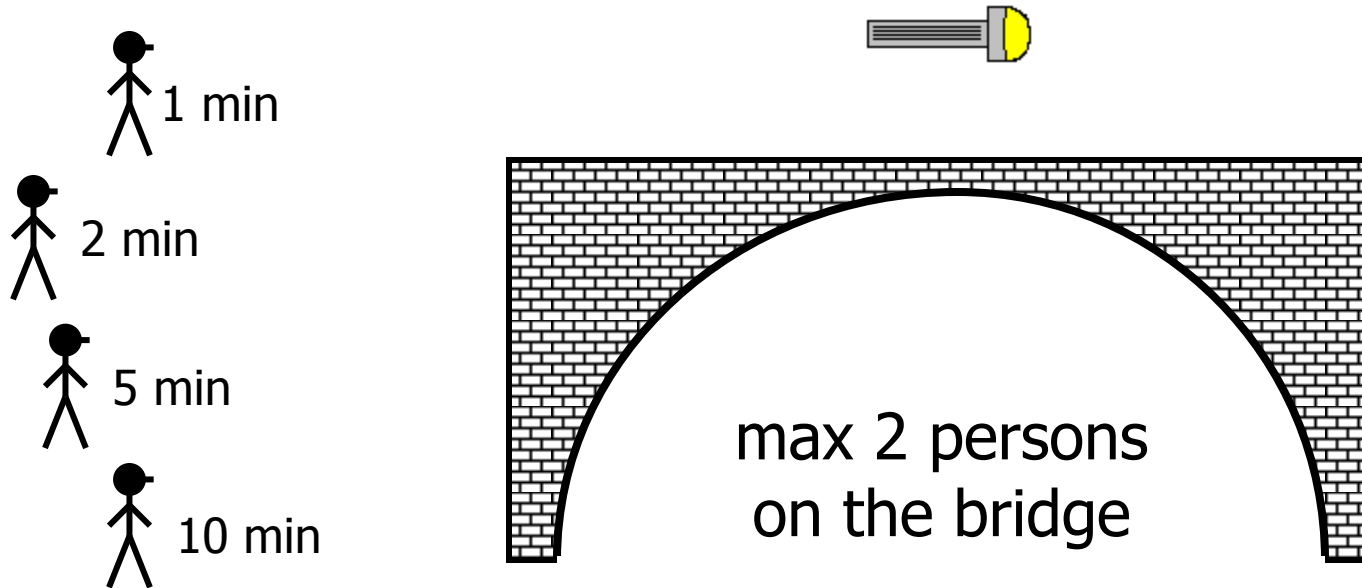
Projects with Floating Objectives

Double-level management of Programs  
and Portfolios

# Individual work

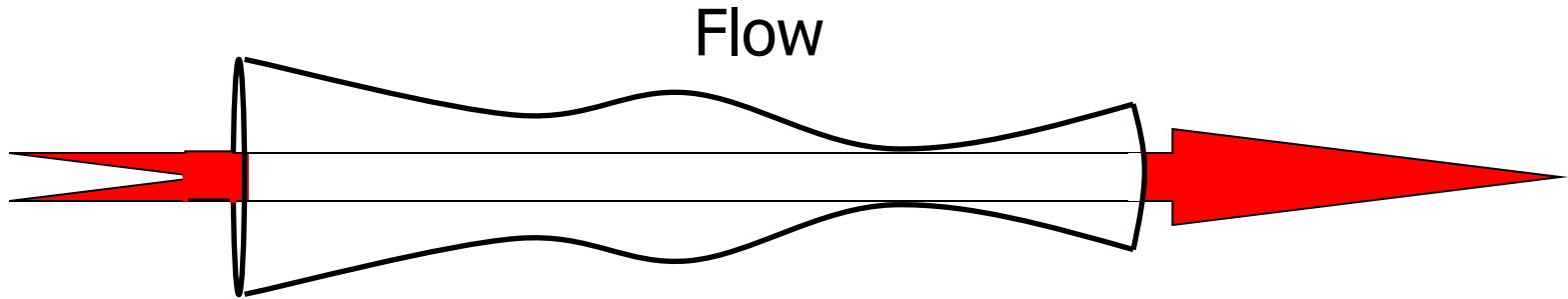
- Who will be the first?
- And with the right answer?

# The Quickest Pass Over an Old Bridge



In what order the wayfarers have to go to reach next bank in the shortest time interval? End: All of them are on the next bank.

# Theory of Constraint



Flow is a criterion according to which the one place within the possible solution space is chosen, which is "most retarding".

Effective investments – quick benefit.

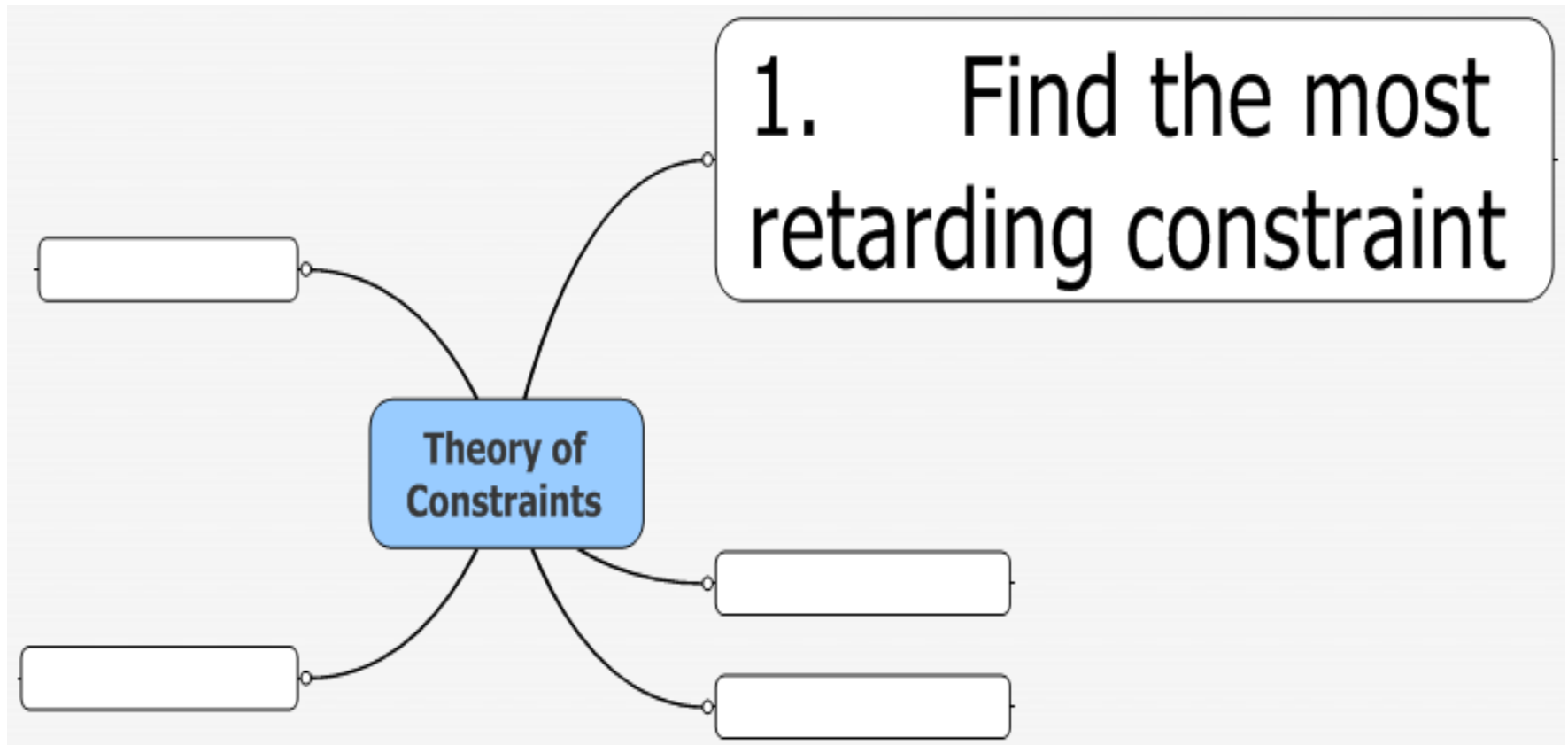
# Theory of Constraints (TOC)

What is the first step ?



Theory of  
Constraints

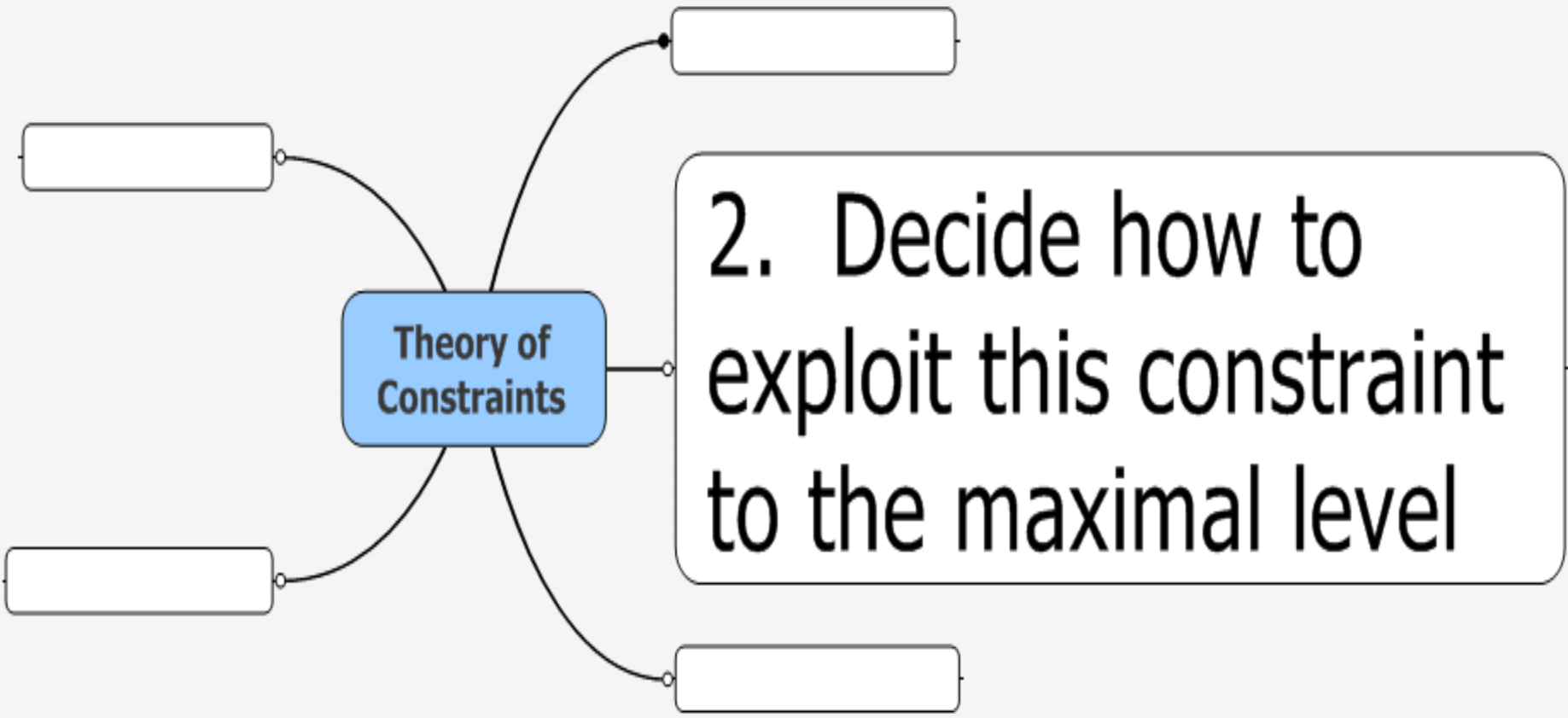
# Theory of Constraints (TOC)



# Theory of Constraints (TOC)

What is the  
second step ?

# Theory of Constraints (TOC)

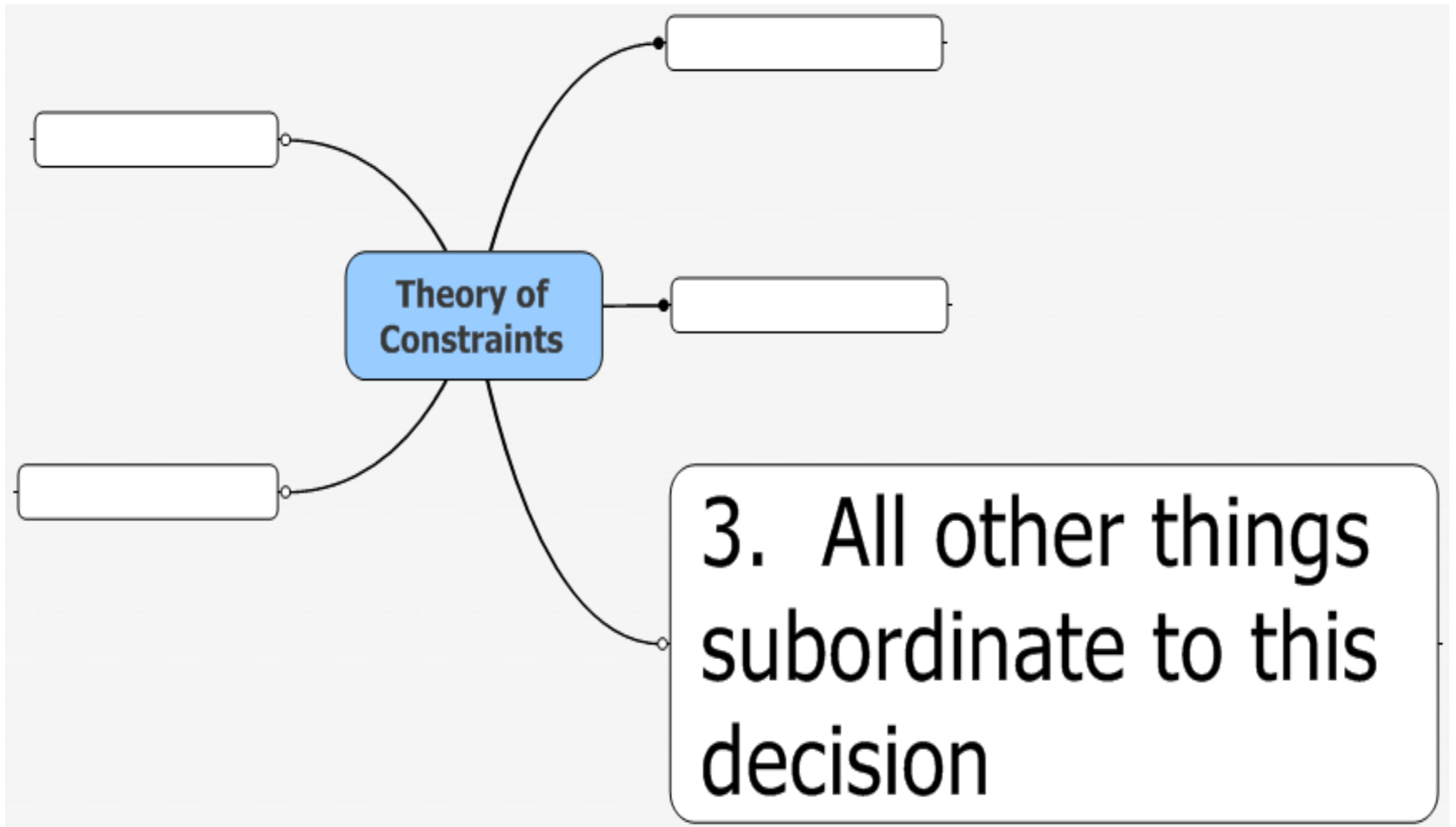




# Theory of Constraints (TOC)

What is the  
third step ?

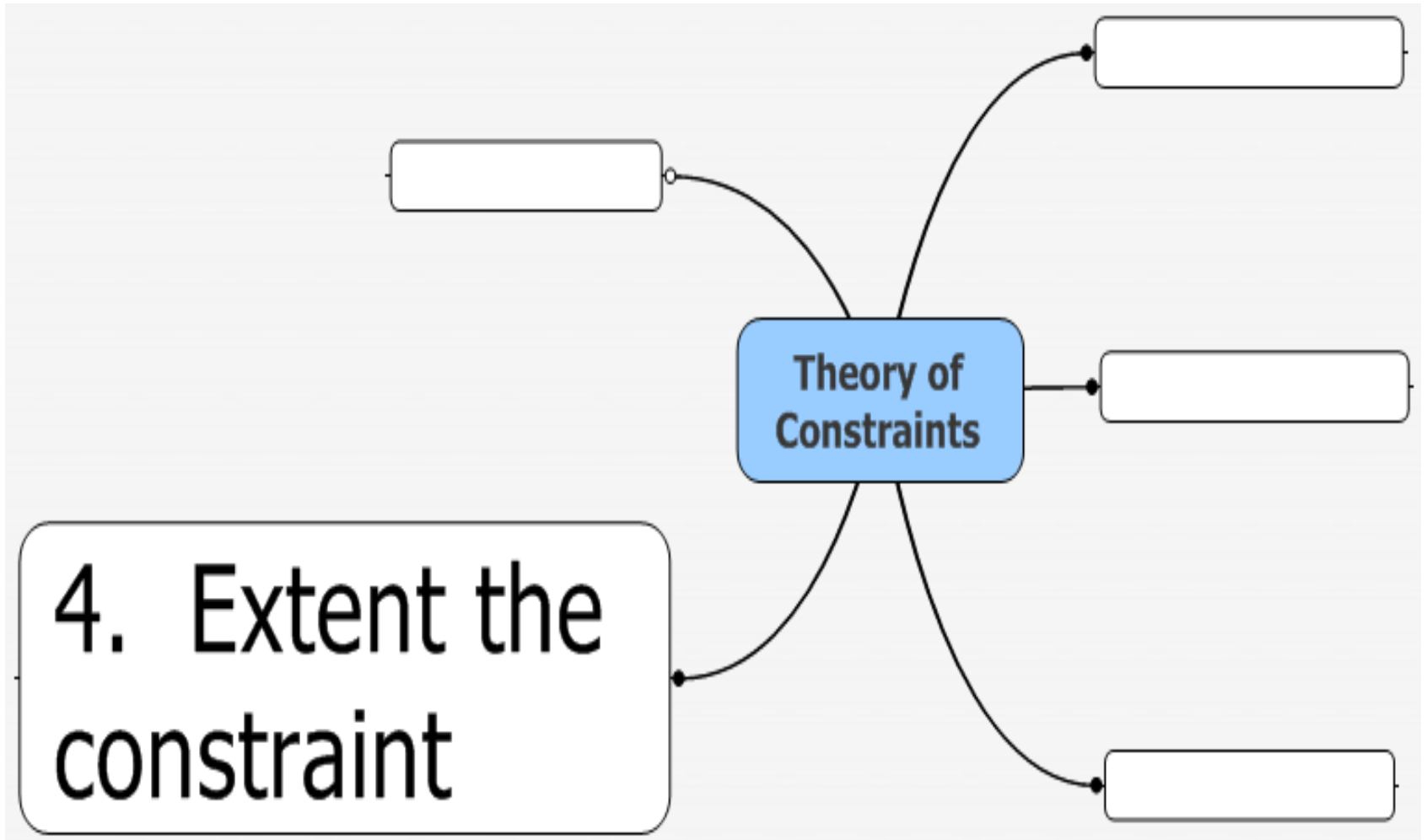
# Theory of Constraints (TOC)



# Theory of Constraints (TOC)

What is the  
fourth step ?

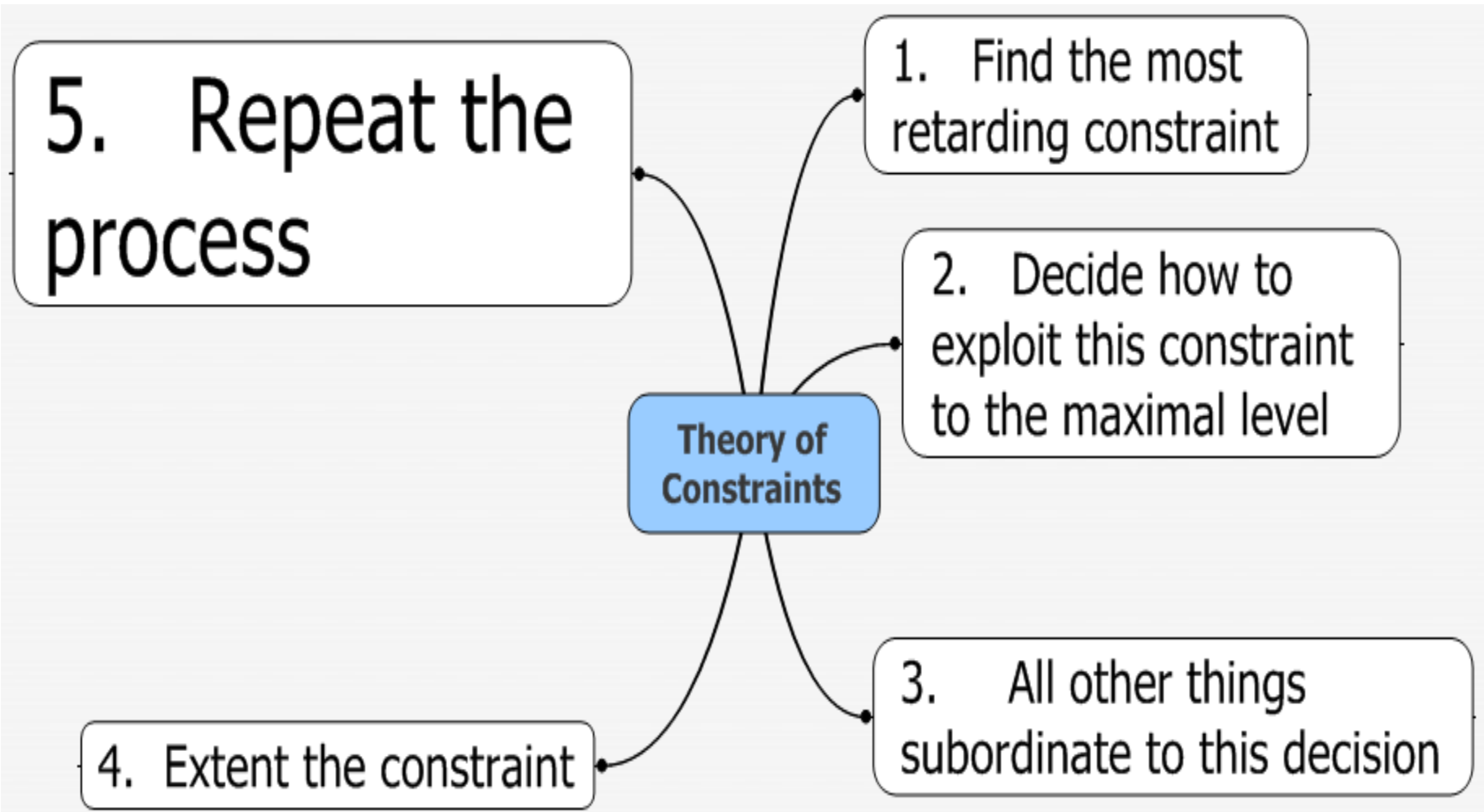
# Theory of Constraints (TOC)



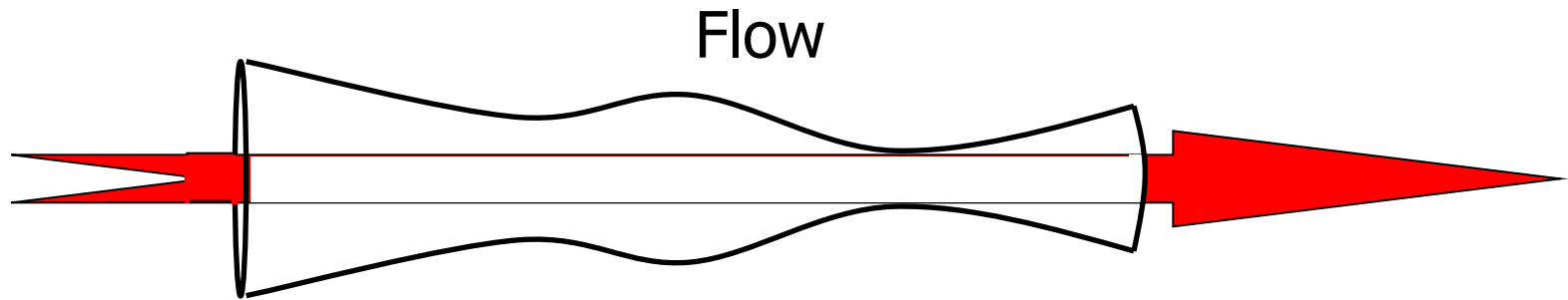
# Theory of Constraints (TOC)

What is the  
fifth step ?

# Theory of Constraints (TOC)



# TOC – think of it over this picture



Flow is a criterion according to which the one place within the possible solution space is chosen, which is “most retarding”.

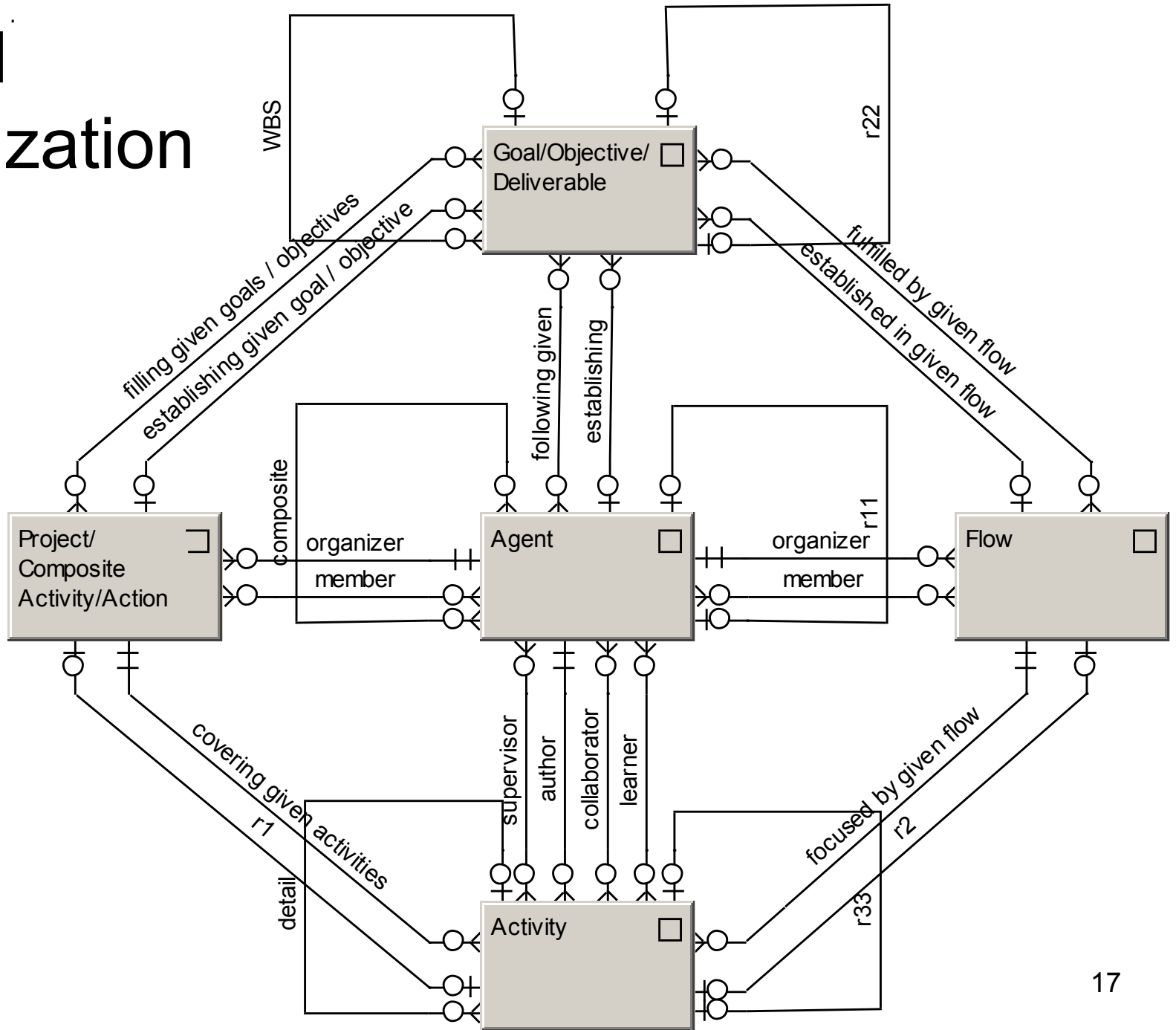
Effective investments – quick benefit.

What is the most retarding  
“place” within PPPM?

Brainstorming  
Discussion



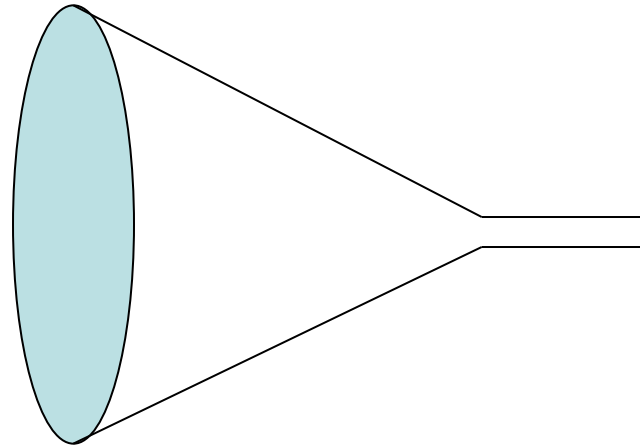
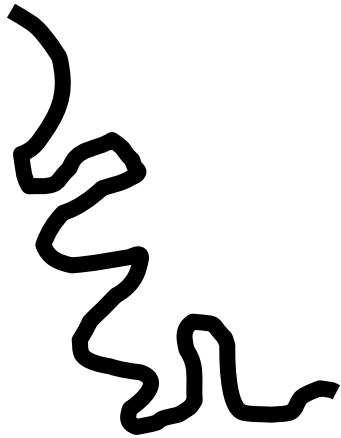
# PPPM organization



# Principles of TOC based PPPM

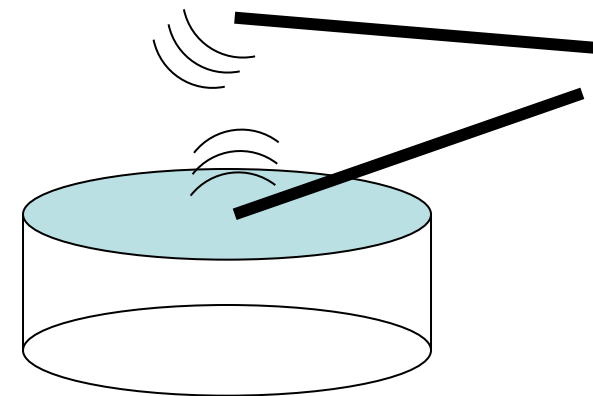
- The agent focuses on the very one task, he/she/it is running.
- The agent reports accomplishing of the task and hands over “the baton”.
- Actions start not before the constraint permits it.
- “Rope and Drum” principle. Work rhythm.

# Rope and Drum Principle (explanation on funnel and cord)



**PULL !!!**

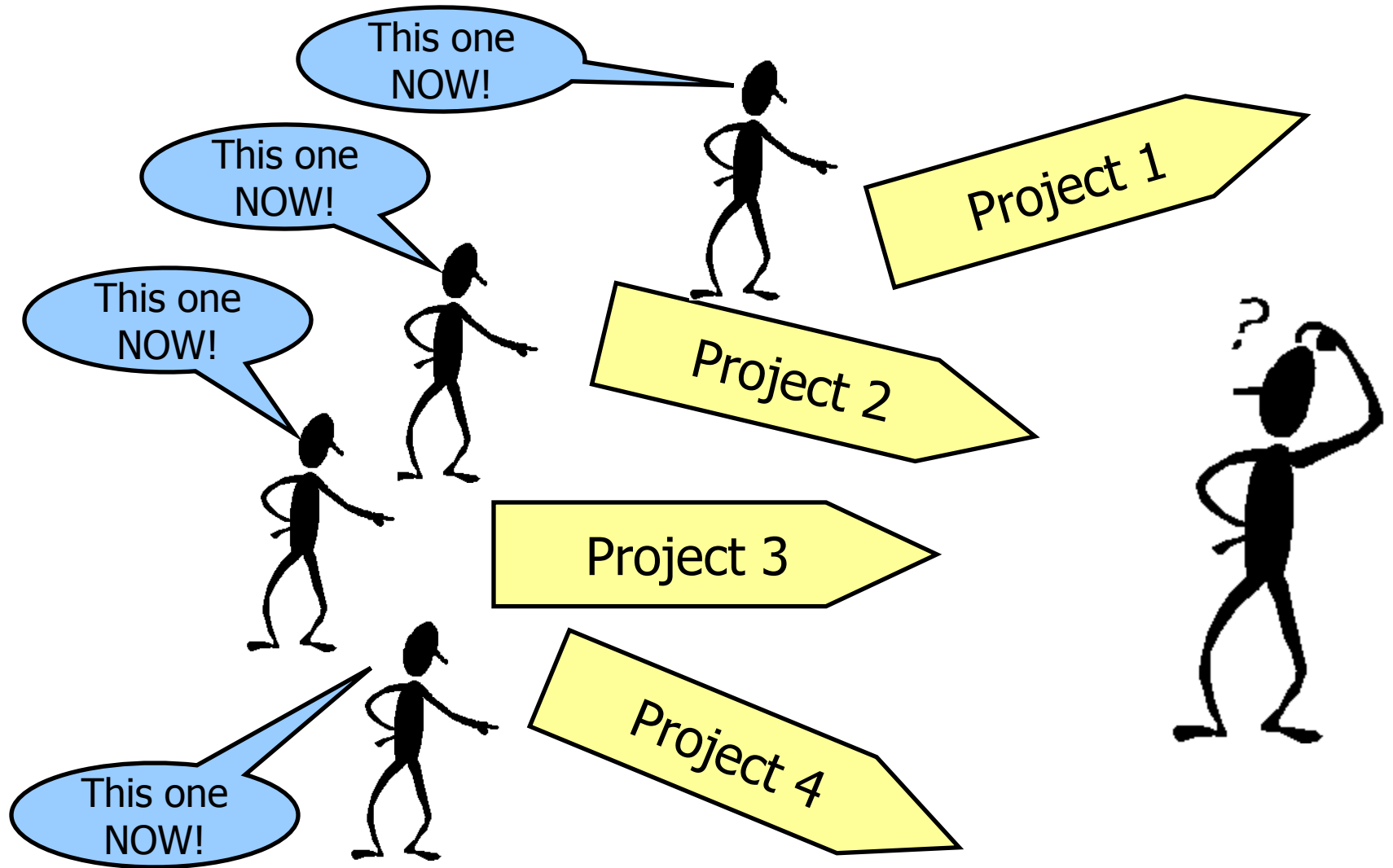
**PUSH**



# Rope and Drum Principle

- **The work must not be pushed through a team of agents !**
- **The work must be pulled through a team of agents !**
- **The work must be done in a regular rhythm !**

# Multitasking and priorities



What to do with a situation:  
one project affects the other projects?

**What projects in one group mutually shares?  
What are they pass on?**

**RESOURCES**

**PRODUCTS**

**MONEY**

**TIME**

**CO-ORDINATE !**



**Decide on priorities**

# Remember the Discussion:

- What is a constraint in a Program or Portfolio of Projects?
  - What makes the greatest troubles?
  - What constraints to realize the project in shorter time and for less money?

**REDUCE MULTITASKING  
OF CRITICAL RESOURCES!!**

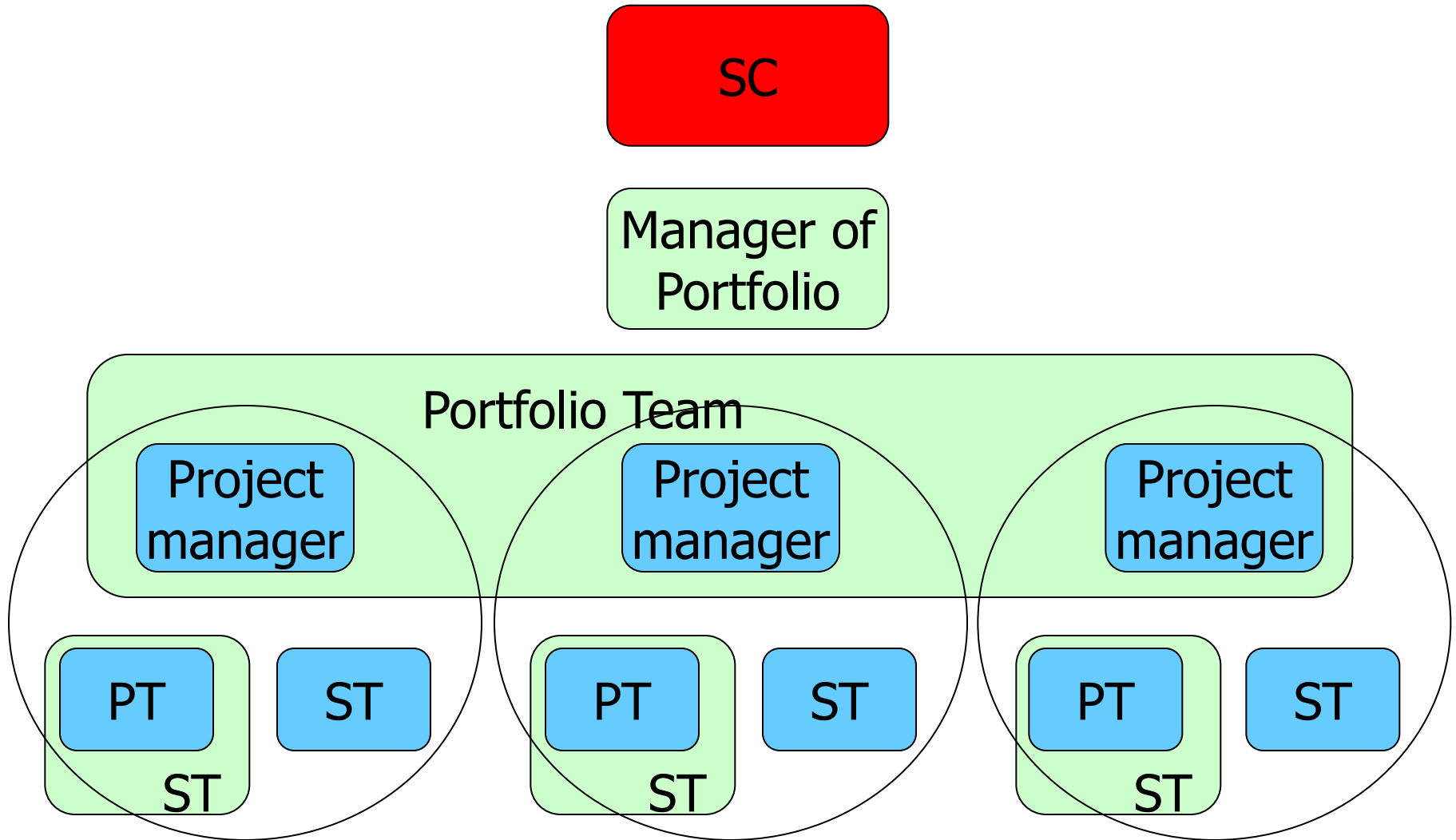
# Discussion

- What other is a constraint in a Program or Portfolio of Projects?
- Do you think “milestones” will help us ?!?
- Do you know what consequences follow from milestones setting ?
- Do you know what is a “critical path” ? (If not, then learn !!)
- Is the critical path enough for planning and realization of projects within a Program or Portfolio ?

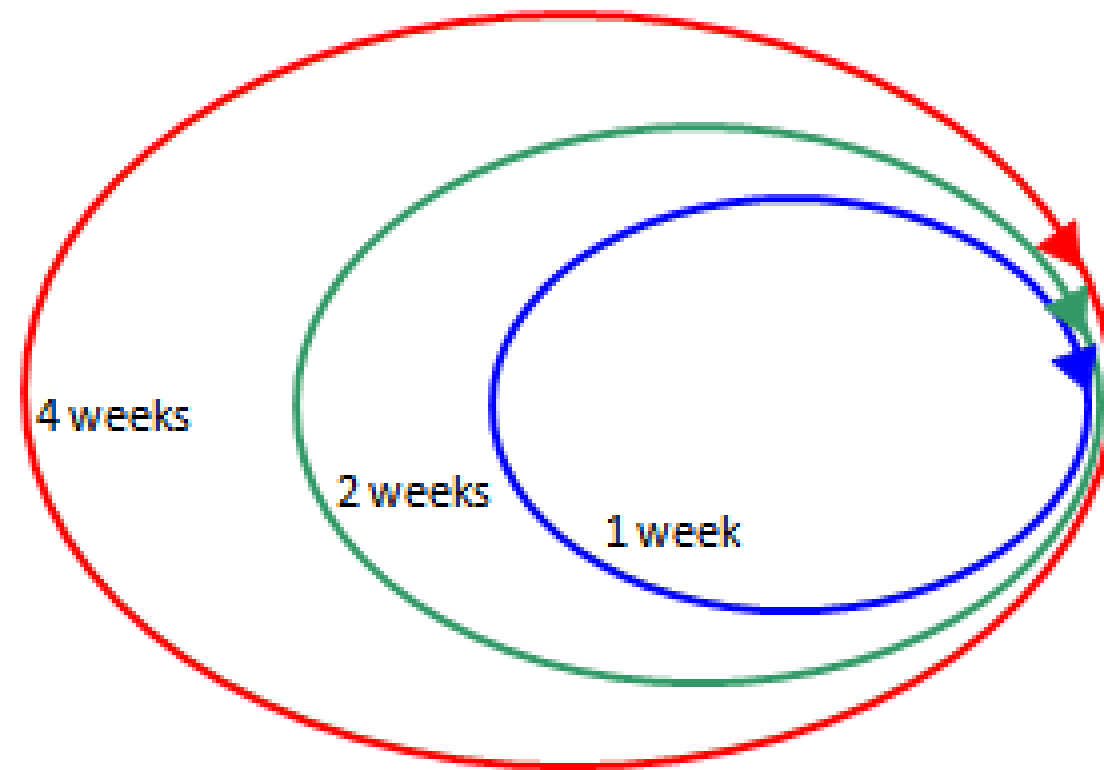


# Double-level management – MILE

(Management In Large Extent)



# Portfolio and Program Management Principle

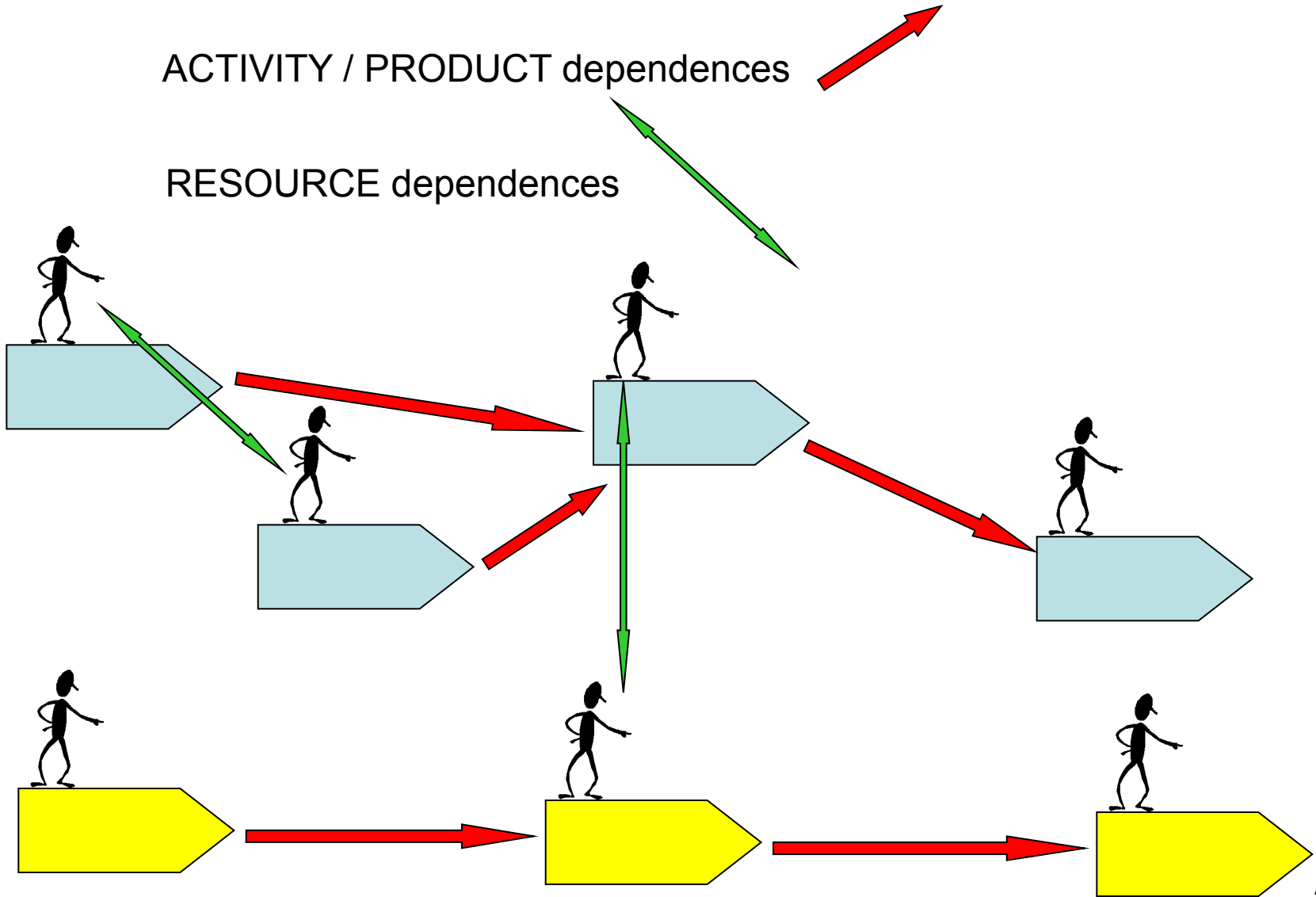


- **Project Mill**
  - single project daily operating agenda
- **Portfolio/Program Mill**
  - influences and impacts among Projects
- **Steering committee Mill**
  - influences and impacts between Portfolio/Program and Business

# Critical Chain

ACTIVITY / PRODUCT dependences

RESOURCE dependences



# Critical Chain

- Critical Chain is such sequence of depended activities from various projects of a program or a portfolio, which constraints to finish a project or a set of projects early, with the same set of resources.



