

”

**Excellence in Project Management –
we are different! Are we different?‘**

“

Dr. Roland Dumont du Voitel
Berlin- May 24th, 2016



Excellence in Project Management – We are different. Are we different?

Agenda Keynote

#		Topic
1	•	Introduction
2	•	Systems Thinking
3	•	Leadership
4	•	Critical Chain Project Management
5	•	Management of Change
6	•	Conclusion

We are different!

Introduction

- Inherent characteristics, e.g.
 - Capital intensive
 - Highly regulated
 - High complexity of technology
 - High complexity of project management
 - Nuclear safety (high risk and high quality requirements)

➡ Enough to be different?

- Typical reasons quoted for cost and schedule overruns.
 - regulatory-driven changes and delays
 - licensing challenges
 - rising commodity prices

Too different, to learn from others?

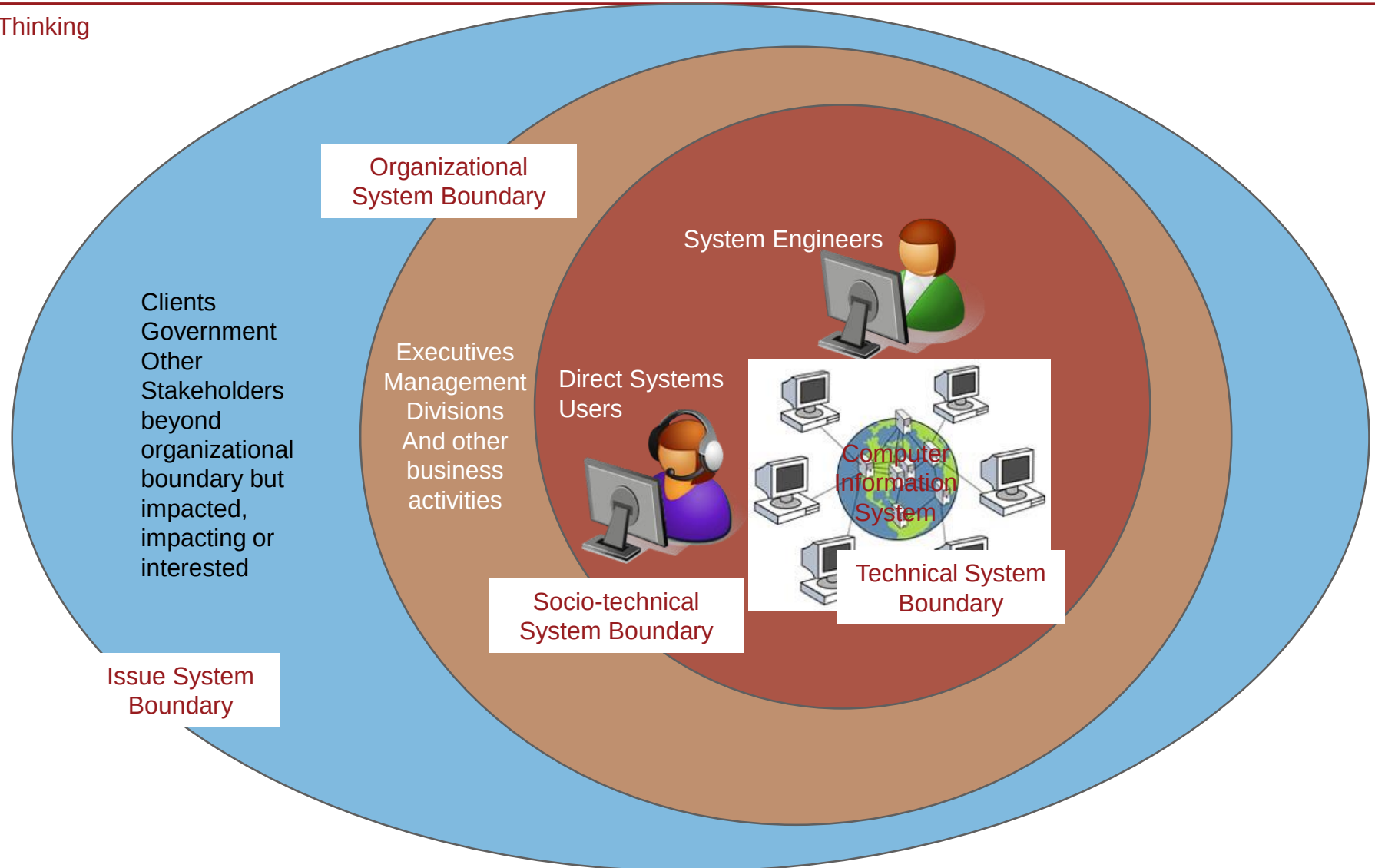
Introduction

- Root causes of poor project executions, cost and schedule overruns most often are rather more structural and more controllable.
- Lessons can be learned from successes in large and complex projects outside the energy industry
- Four topics:
 - **Systems Thinking**
 - **Leadership**
 - **Critical Chain Project Management**
 - **Management of Change**

Systems Thinking

System's Boundary

Systems Thinking



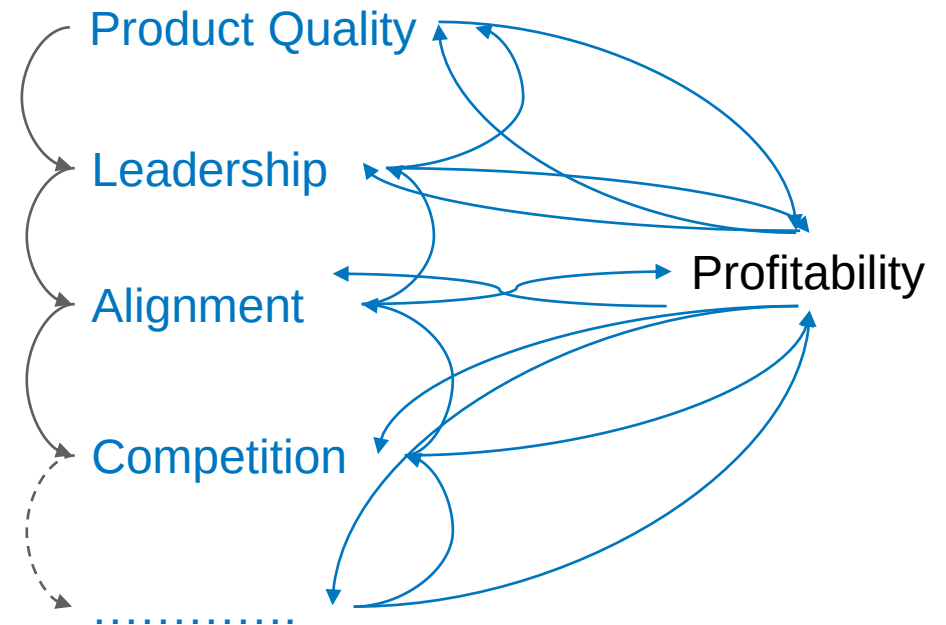
Linear versus Loop Thinking

Systems Thinking

Straight Line Thinking

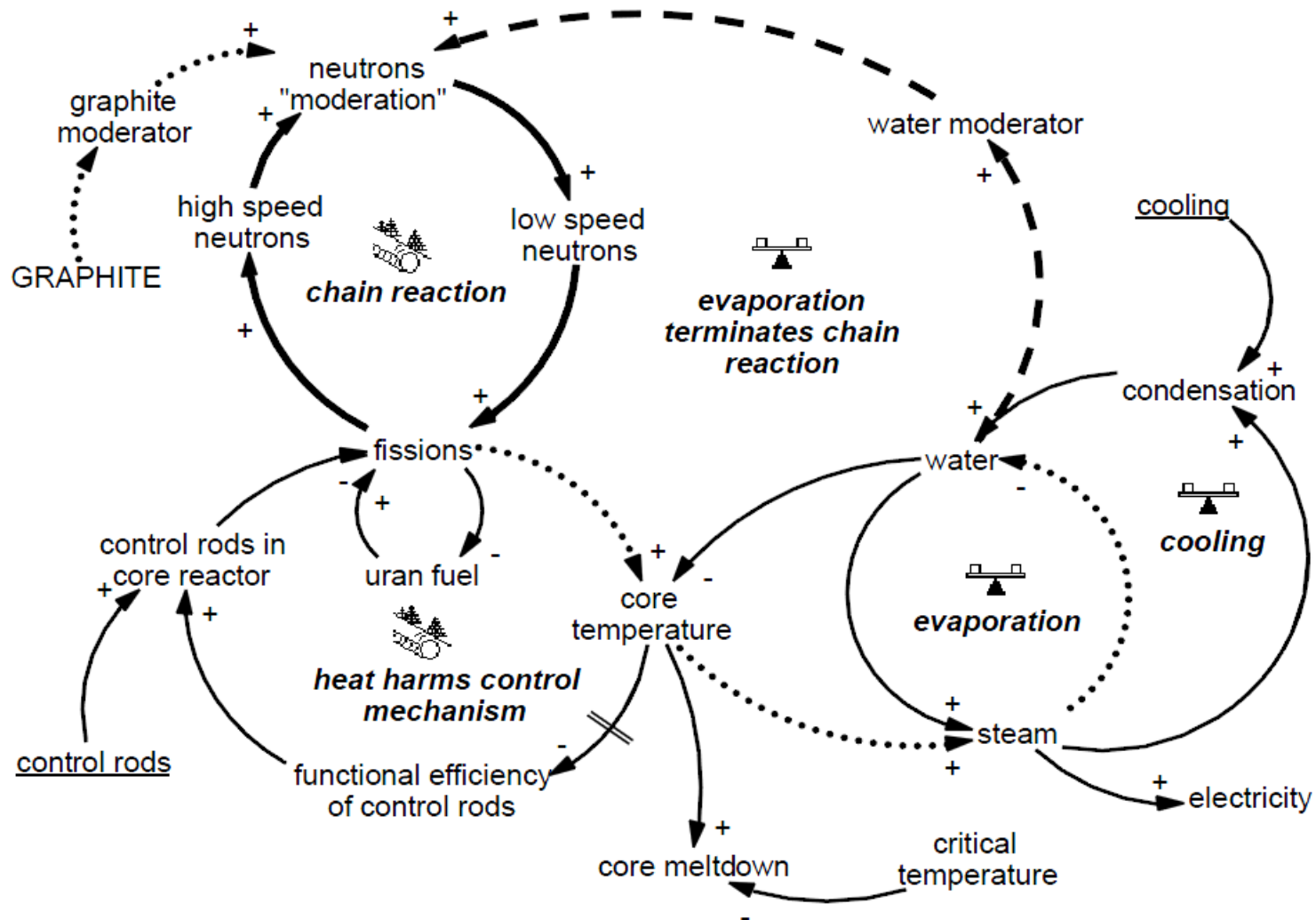


Closed Loop Thinking



Causal Loop Diagram*

Systems Thinking



Leadership

IATA's cross-cultural leadership program

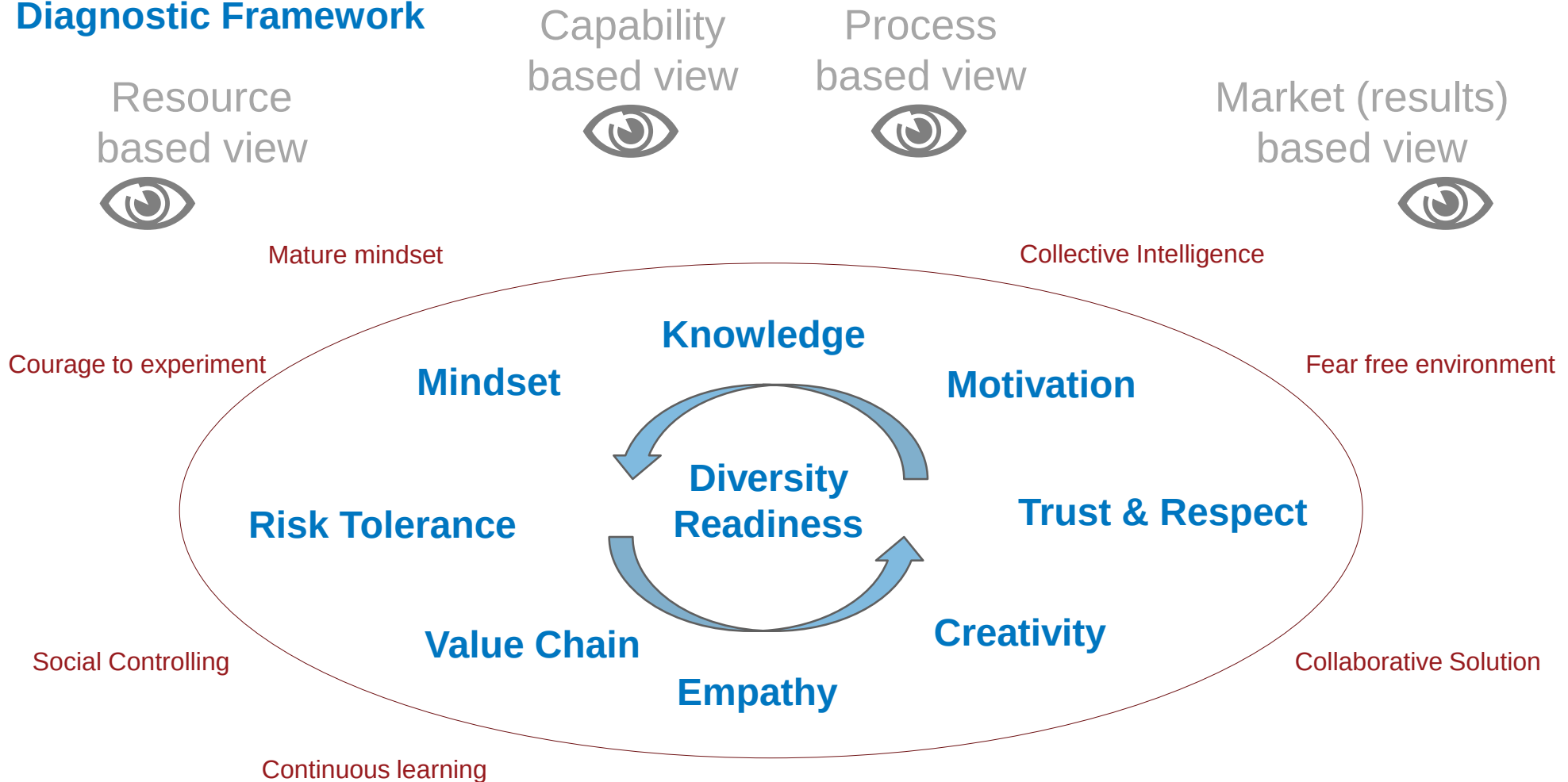
Leadership

- Identify two cultures (“home” and “target” cultures).
- Identify leaders and leadership talent from each culture.
- Identify appropriate pairs of co-leaders.
- Identify real projects.
- Identify a realistic time frame.
- Share practices.
- Adapt for the next cross-cultural challenge.

Managing Diversity

Leadership

Diagnostic Framework



Management versus Leadership

Leadership

- **MANAGEMENT**

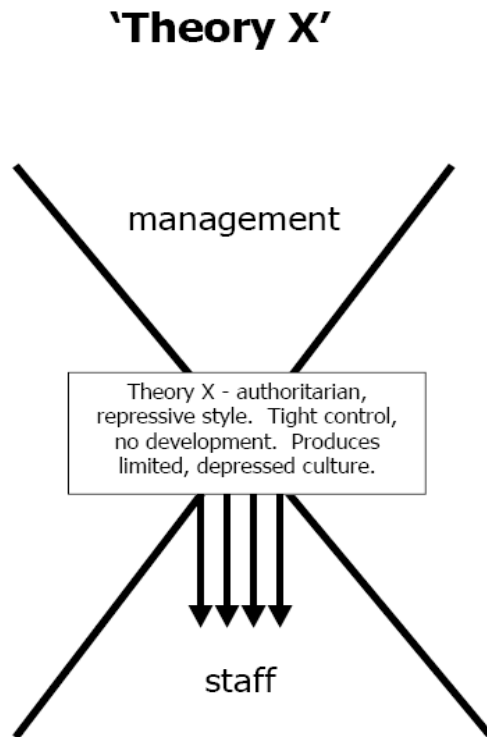
- Works within the existing paradigm
- Uses the present business model
- Manages the people for productivity, efficiency and effectiveness
- Executes existing directions as efficiently as possible.

- **LEADERSHIP**

- Changes the paradigm
- Develops the next business model
- Manages the system for productivity, efficiency and effectiveness
- Steps outside the system to challenge and improve it
- Promotes new directions
- Inspires and empowers people
- Develops strong interpersonal relationships

Mc Gregors Theory X and Y

Leadership



Theory X: People need to be watched every minute, they are incapable and avoid responsibility and work

Theory Y: People are willing to work without supervision and want to achieve

The Soft Factors are the Hardest

Leadership

- Flexibility, collaboration, crossing boundaries, and collective leadership
- Balance between
 - developing leaders through individual competencies and
 - fostering the collective capabilities of teams, groups, networks, and organizational leadership.
- Different leadership cultures serve different purposes.
- Painful gaps between
 - individual leadership skill set and
 - the organization's collective leadership capability

Agile Leadership

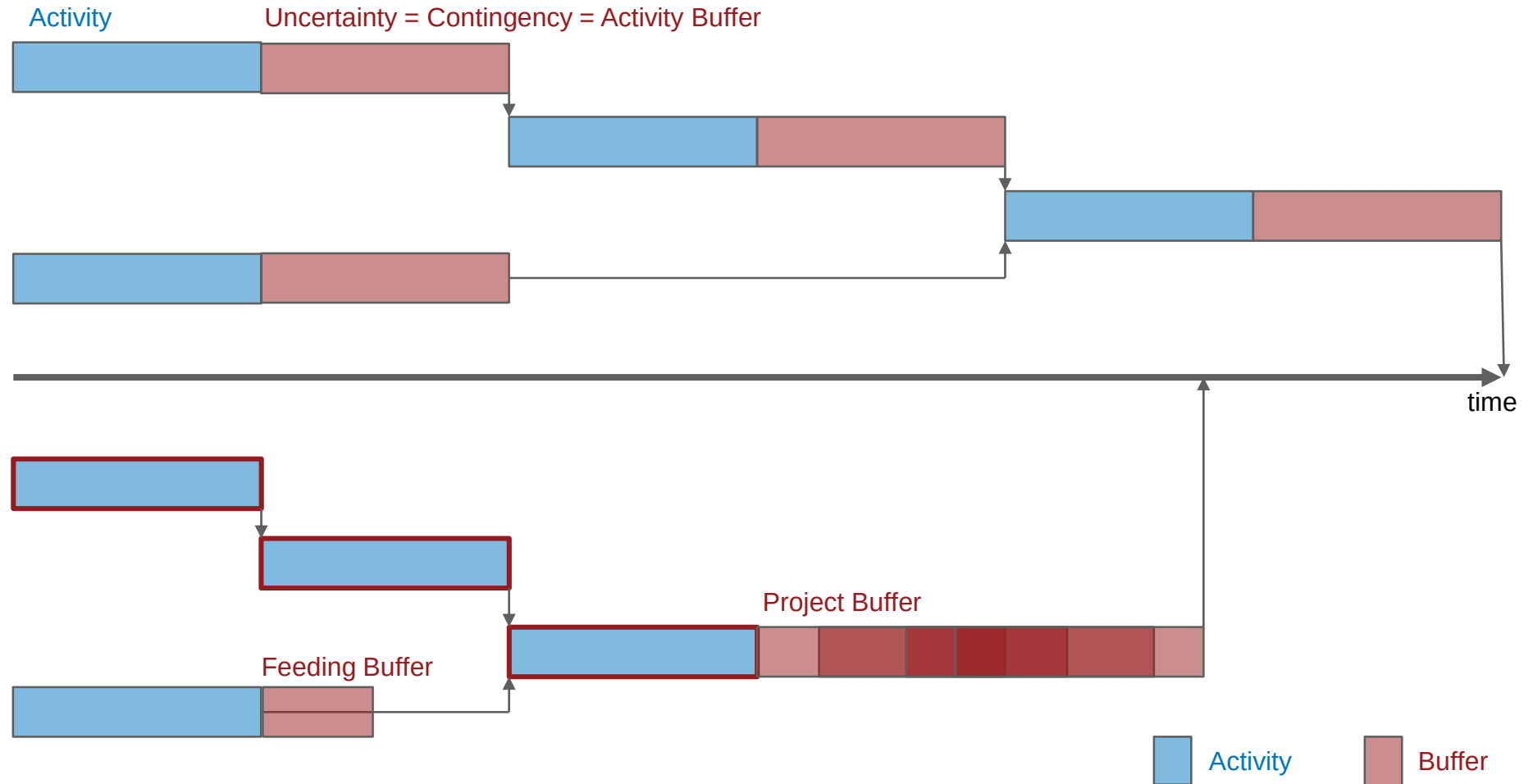
Leadership

- Away from Taylorism, which alienates workers by treating them as mindless and easily replaceable factors of production, towards process and network thinking
- Away from the individual and lonely heroes and specialists towards collaboration and interdisciplinary teams
- Away from traditional business models toward new business models of co-creation, co-production, et.al. or even disruptive business models
- Away from homogenous teams, i.e. “same breed”, towards diversity and heterogeneous teams and managing those to initiate innovative problem solutions
- Away from isolated islands of knowledge towards collective knowledge
- Away from hierarchical micromanagement towards self actualization, self organization and empowerment.
- Away from fixed and rigid working times toward more geographical and time flexible new models.

Critical Chain Project Management

Critical Chain Project Management (CCPM)

Critical Chain Project Management



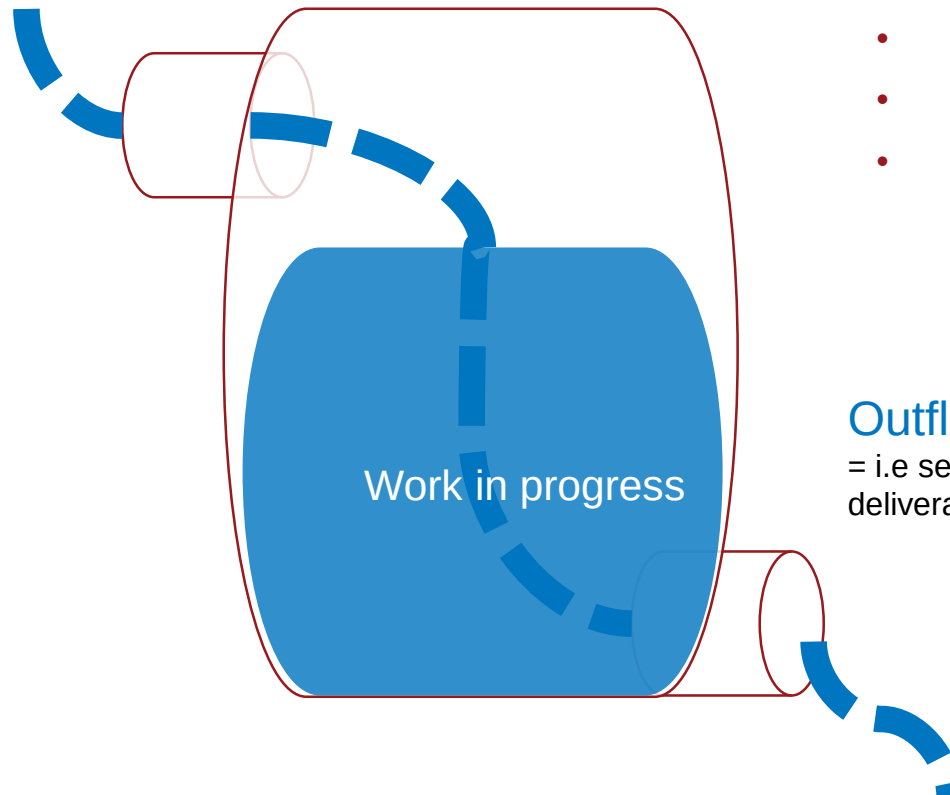
Little's law

Critical Chain Project Management

- “Little’s Law” is a fundamental of queue theory and defines the relationship between Work in Progress (WIP), Throughput and Lead Time

Inflow

= i.e. work,
activities,
materials



- A WIP above 100% initiates:

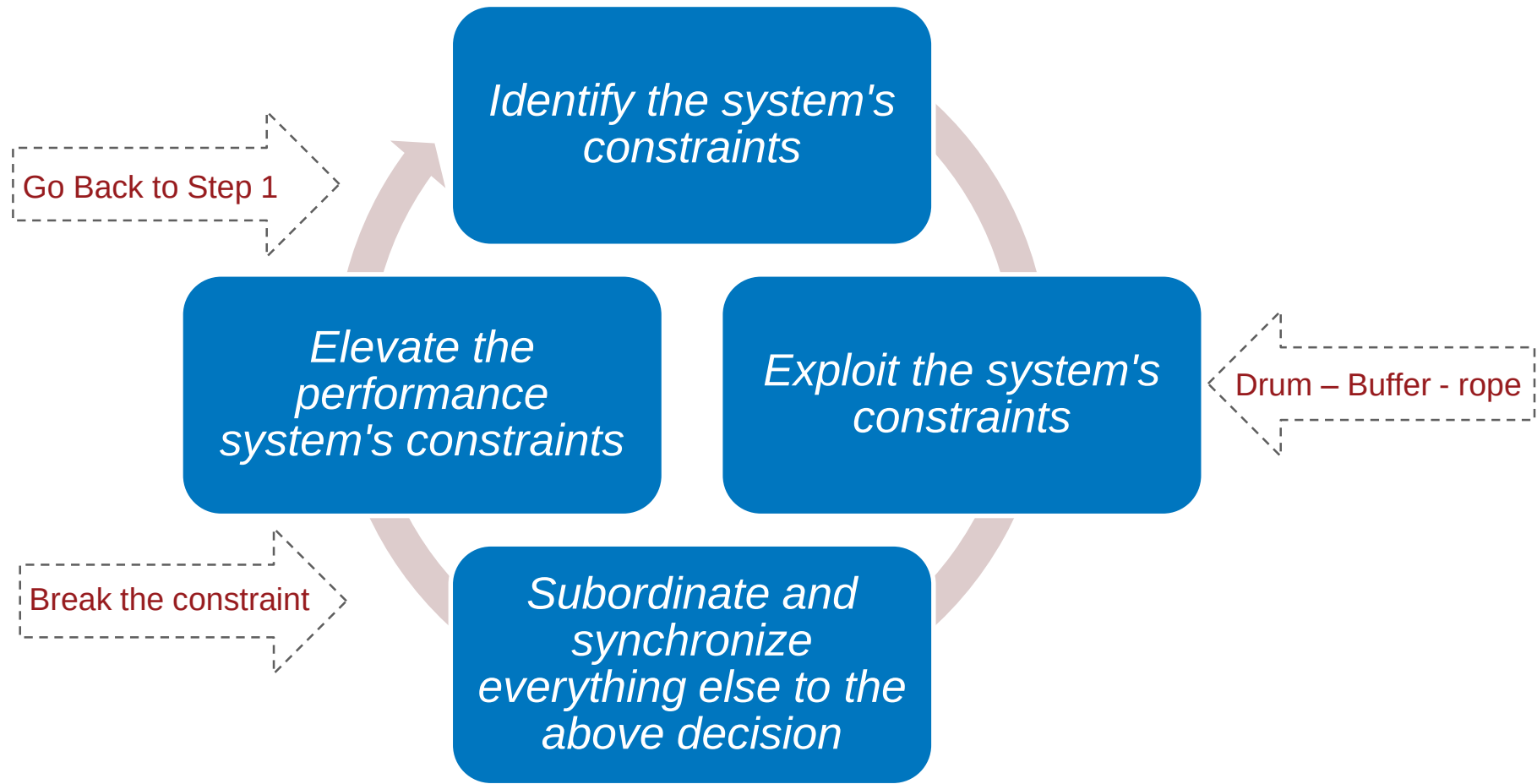
- Negative multitasking
- Student syndrom
- Parkinson law

Outflow

= i.e semi finished,
deliverables,

Critical Chain: „Theory of Constraints“* (TOC)*

Critical Chain Project Management



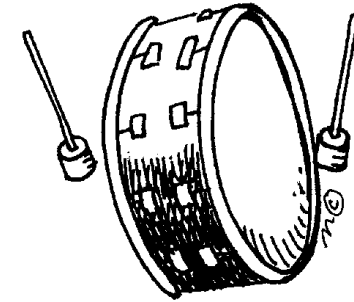
*Goldratt

Critical Chain Project Management

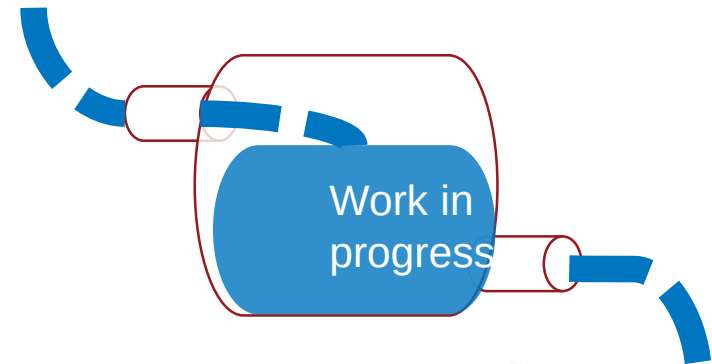
Critical Chain Project Management

- **Drum Buffer Rope**

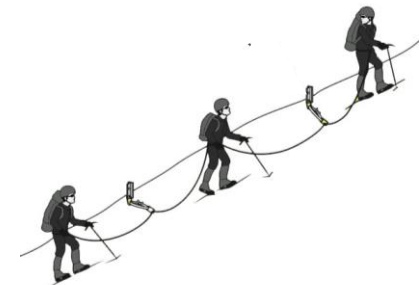
- **Drum:** The speed at which the constraint runs sets the “beat” for the process and determines total throughput.



- **Buffer:** the level of inventory needed to maintain consistent production



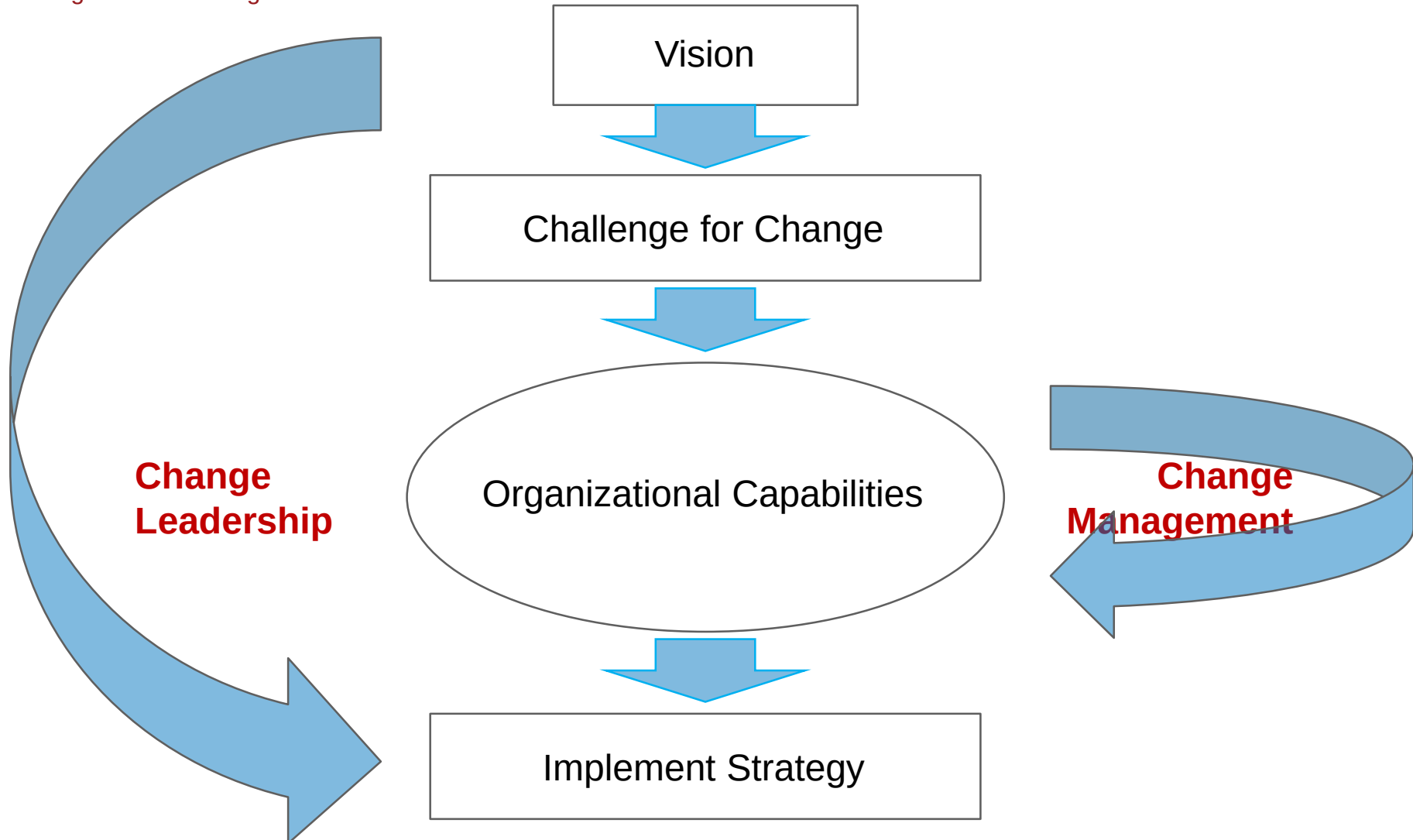
- **Rope:** signal generated by the constraint indicating that some amount of inventory has been consumed (Kanban)



Management of Change

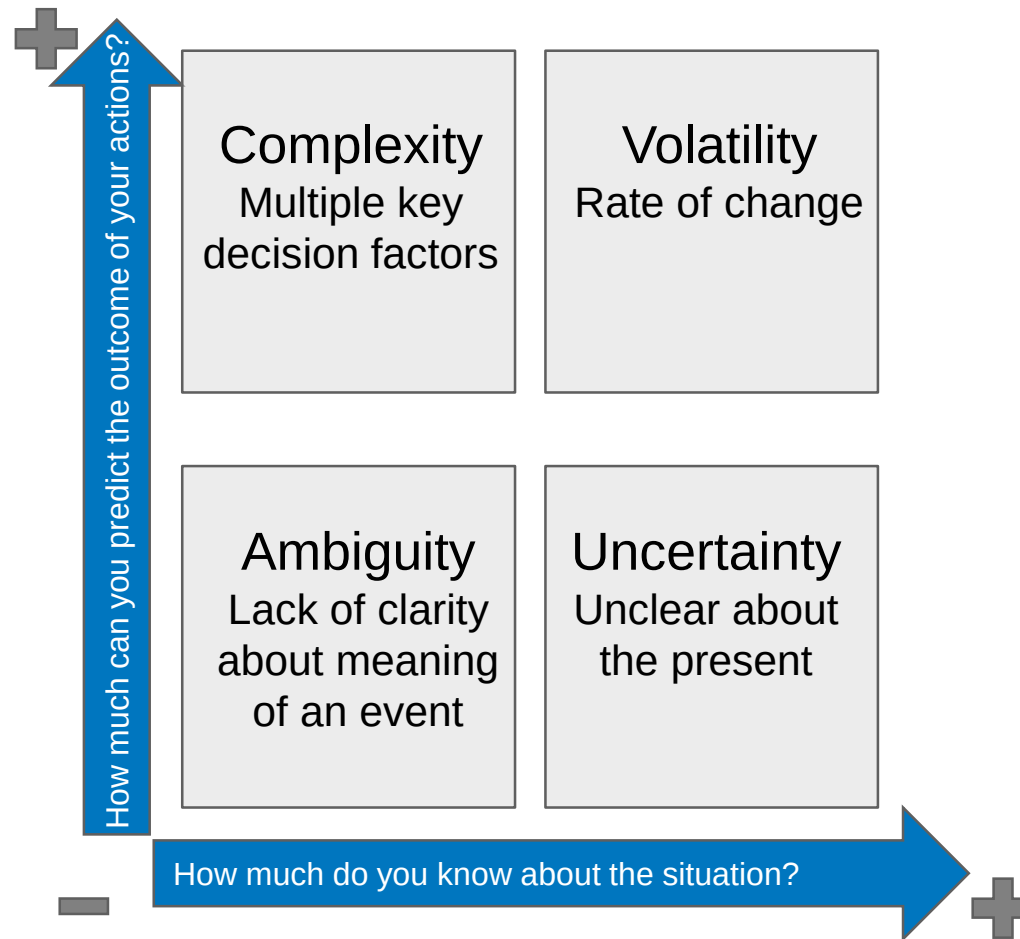
Change Management and Change Leadership in Balance

Management of Change



VUCA

Management of Change



Changes are Far-reaching

Conclusion

- Leitmotif: systemic and agile
- Responses are challenging for conservative industries
- Be prepared.



Thank You

Literature

References

- Goldratt, Eliyahu M. (1997): Critical Chain. Great Barrington, MA: North River Press.
- Lord, P.(2014); The Human Side of Change Management. LinkedIn
- Meadows, Donella H. (2008) Thinking in Systems - A primer (Earthscan)
- Tate, William (2016); Leadership in Organizations: Current Issues and Key Trends (ed. J. Storey). Routledge, 3rd ed.
- Clark, J; Heiligttag, S.; Reichwald, J.; Vahlenkamp, T.; McKinsey (2015), The Agile Utility. Electrical Power & Natural Gas and Risk



Contact

Talk to Us, We Listen

- **Dr. Roland Dumont du Voitel**

amontis consulting ag

M: +49 172 257 46 80

Roland.dumont@amontis.com

- **Center**

amontis consulting ag

Kurfürsten Anlage 34

D-69115 Heidelberg

T: +49 (0)6221 14 16 0

F: +49 (0)6221 182 148

welcome@amontis.com