

# Czech-German Cross-Border Situational Awareness for Critical Infrastructures (PKI)

Activities of CZ team, 05/2020 – 12/2020

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- 1) Administration
- 2) Own research in the area
- 3) Next steps

## 1. COVID-induced changes approved by the Ministry of Education

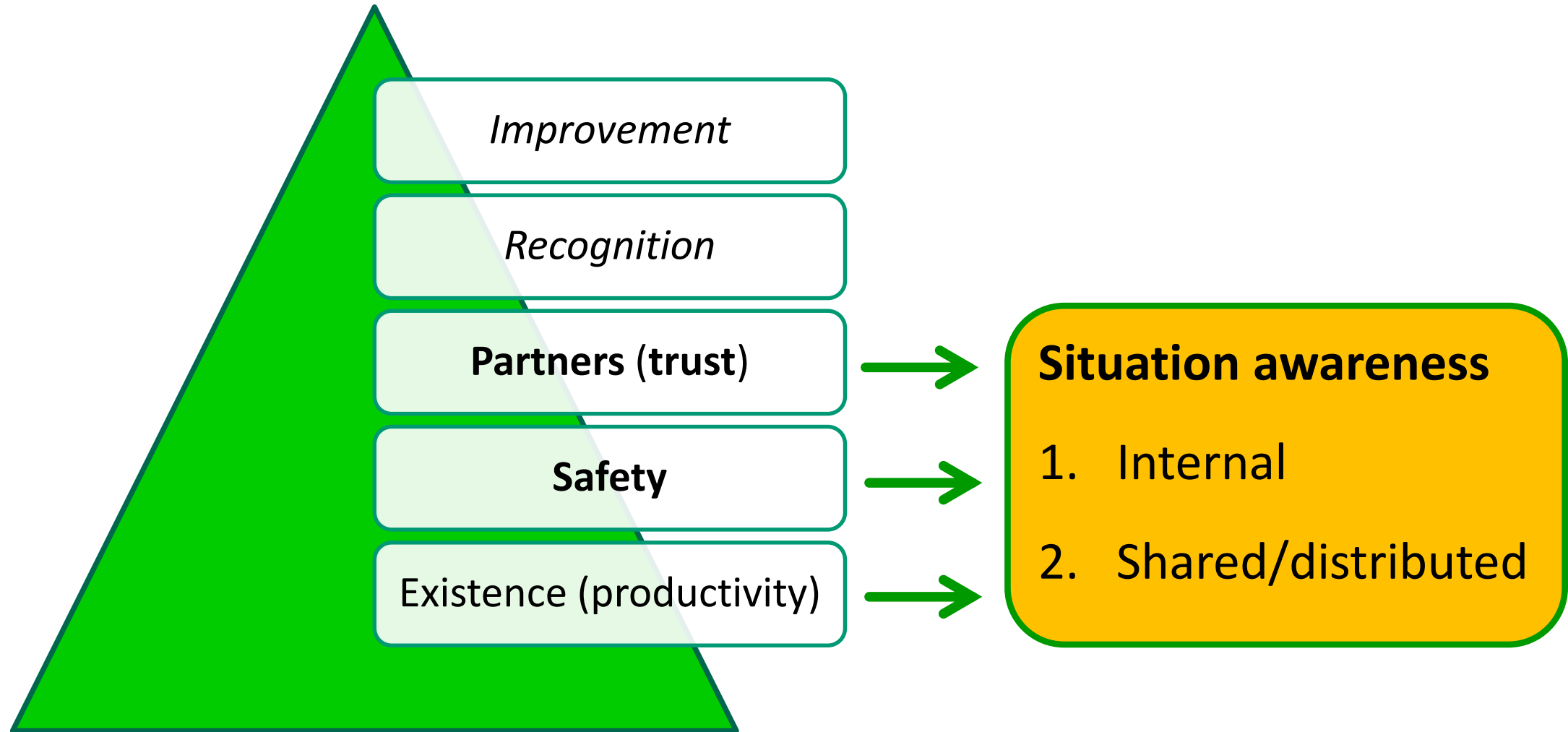
- Goals and timetable remain
- Reduced budget for 2020
- Personal changes
  - Programmer temporarily quit
  - Data analyst joined
  - Altogether 4 members
- Formal changes
  - From stakeholders network conditionally to data analysis and reviews
  - From personal workshop conditionally to some other form

## 2. Mandatory intermediate review

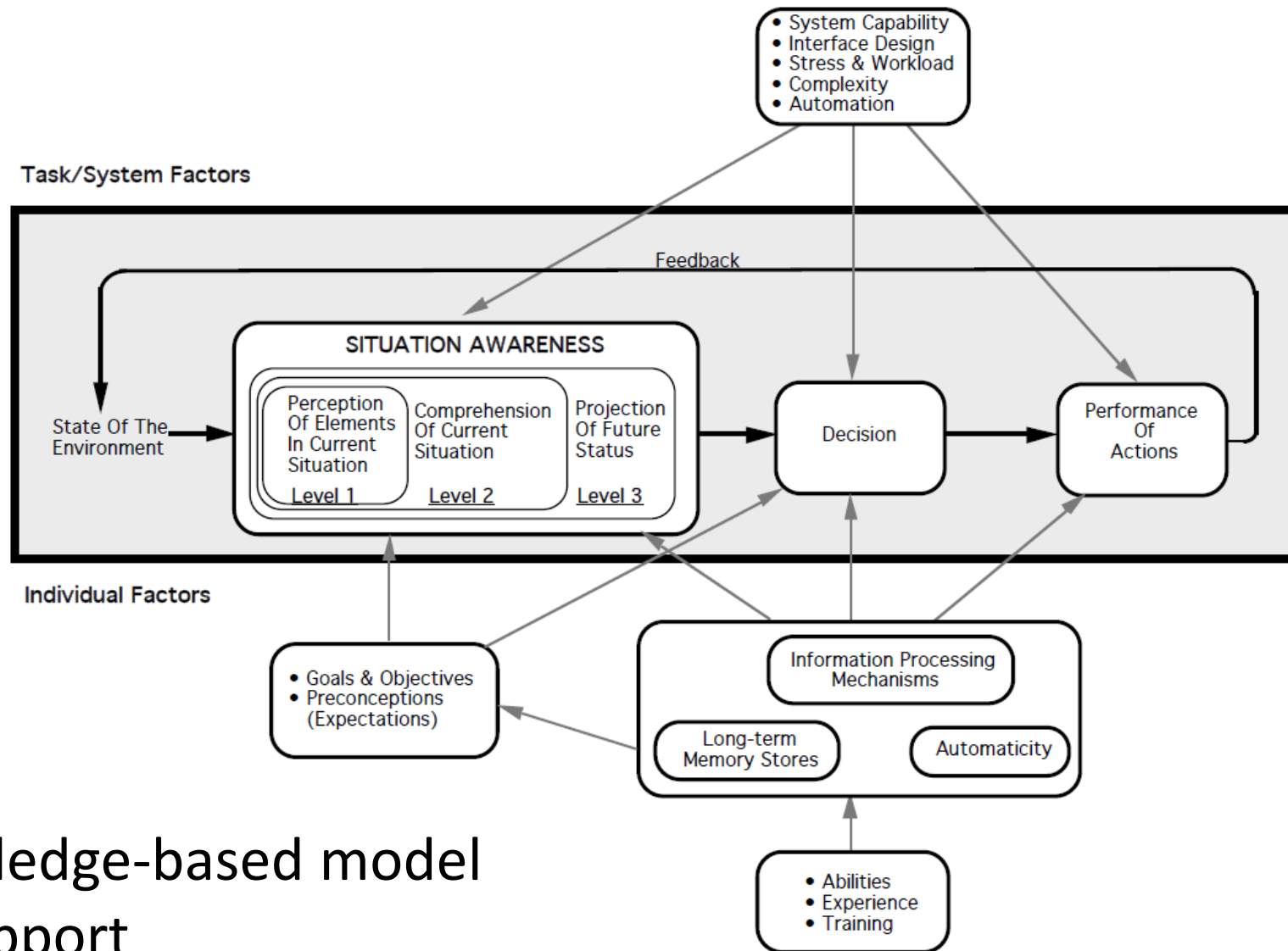
- Committee 5 + 2, accepted
- Deadline: 31.1.2021

- First paper published and presented, second under preparation
  - Enterprise architecture
  - Networking governance
- Research report no. 1 is ready for reviewers
  - Results of analytic phase with some design artefacts
- Requirements for sample programming tasks defined and tools identified

# Approach: Maslow hierarchy applied on companies

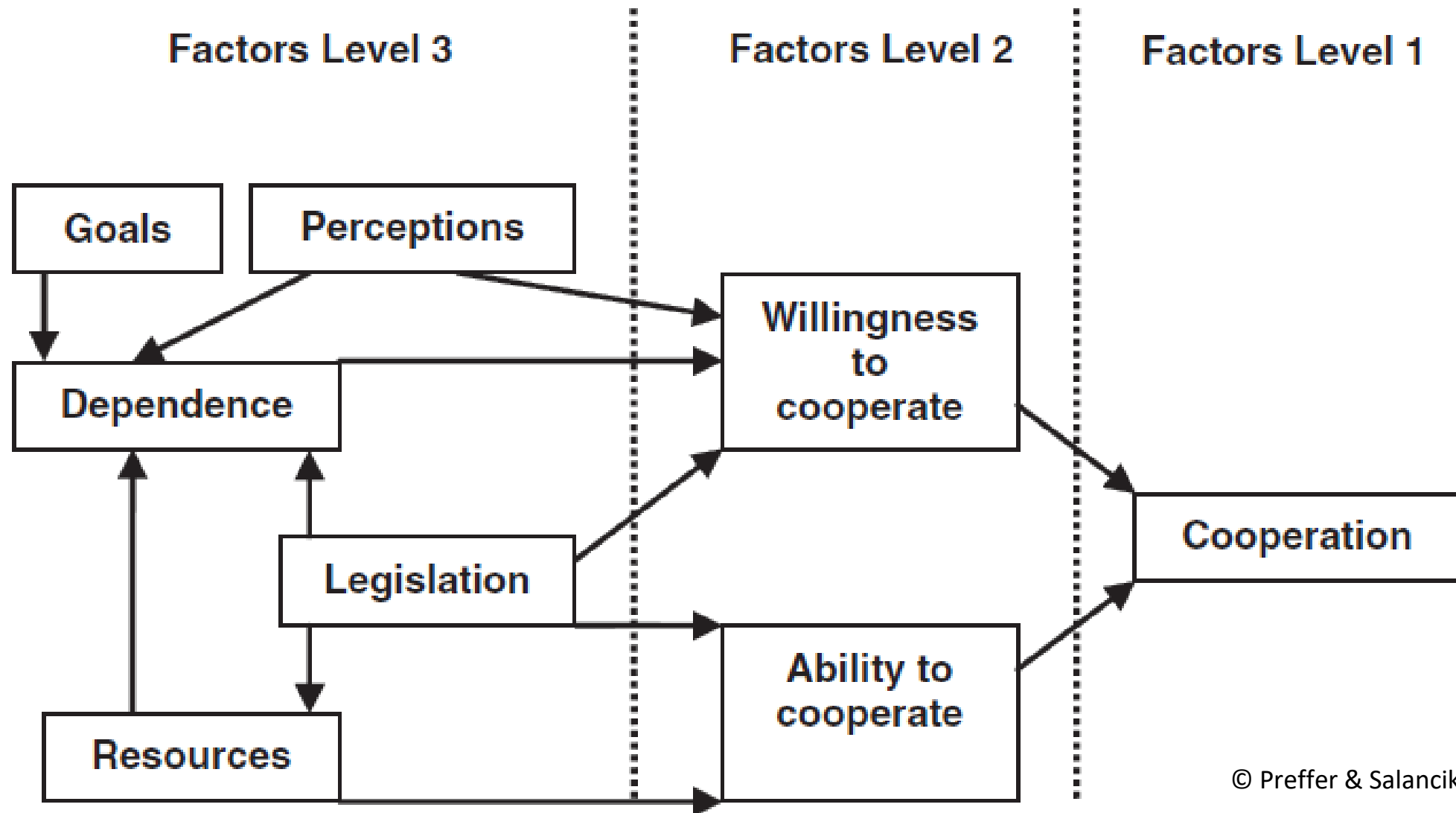


# © Endsley model of SA



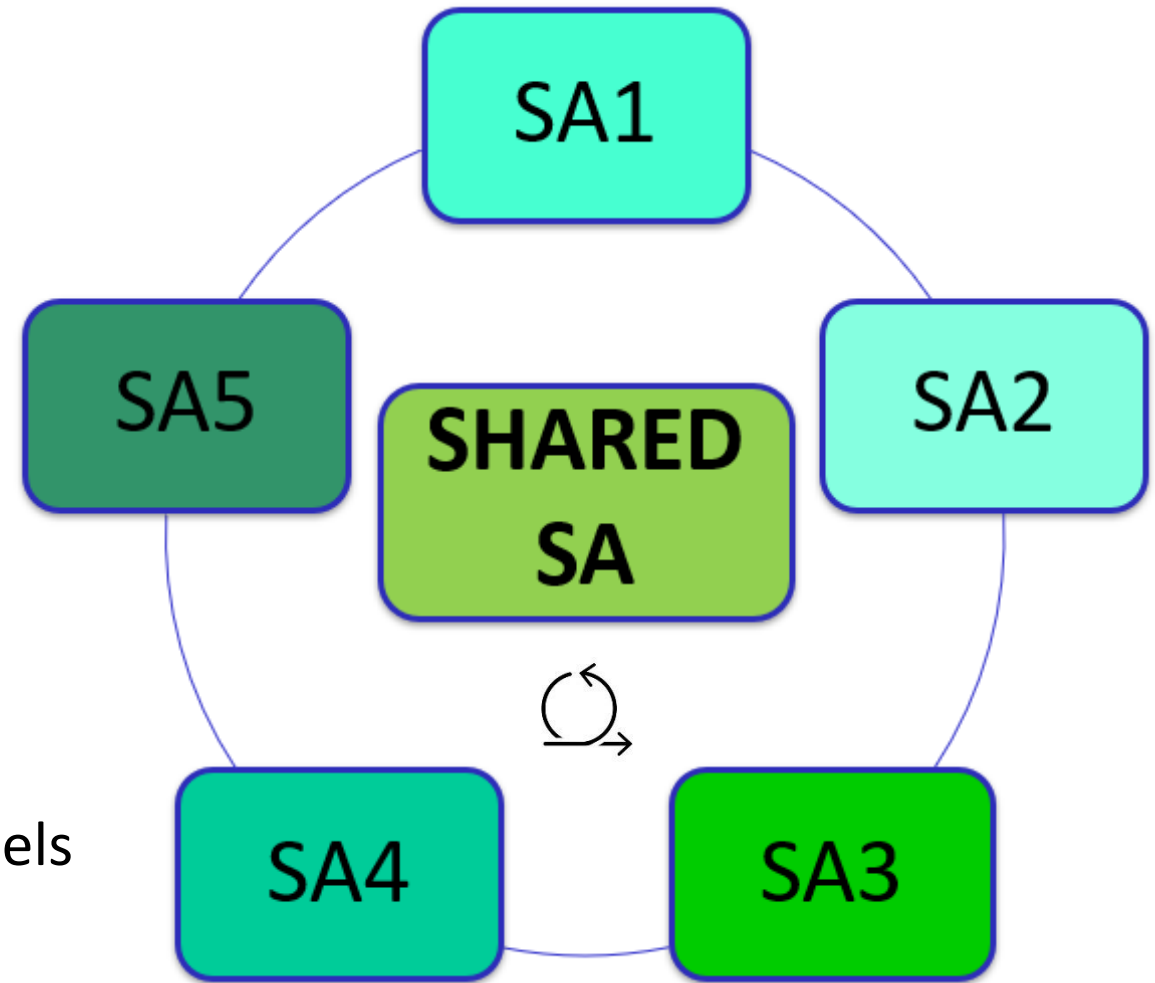
Dynamic knowledge-based model  
for decision support

# Resource Dependence Institutional Cooperation (RDIC)



© Pfeffer & Salancik

- Individual SAs indicate:
  - Ability = performance + safety
  - Willingness = understanding + trust to cooperate
- Shared SA is derived from individual values based on adopted model of **governance model**
- Network processes must be agile
  - From events and patterns to shared models
  - Based on OODA loop
    - Observe, orient decide, act





# DSA = network interoperability (initial CLDs available)

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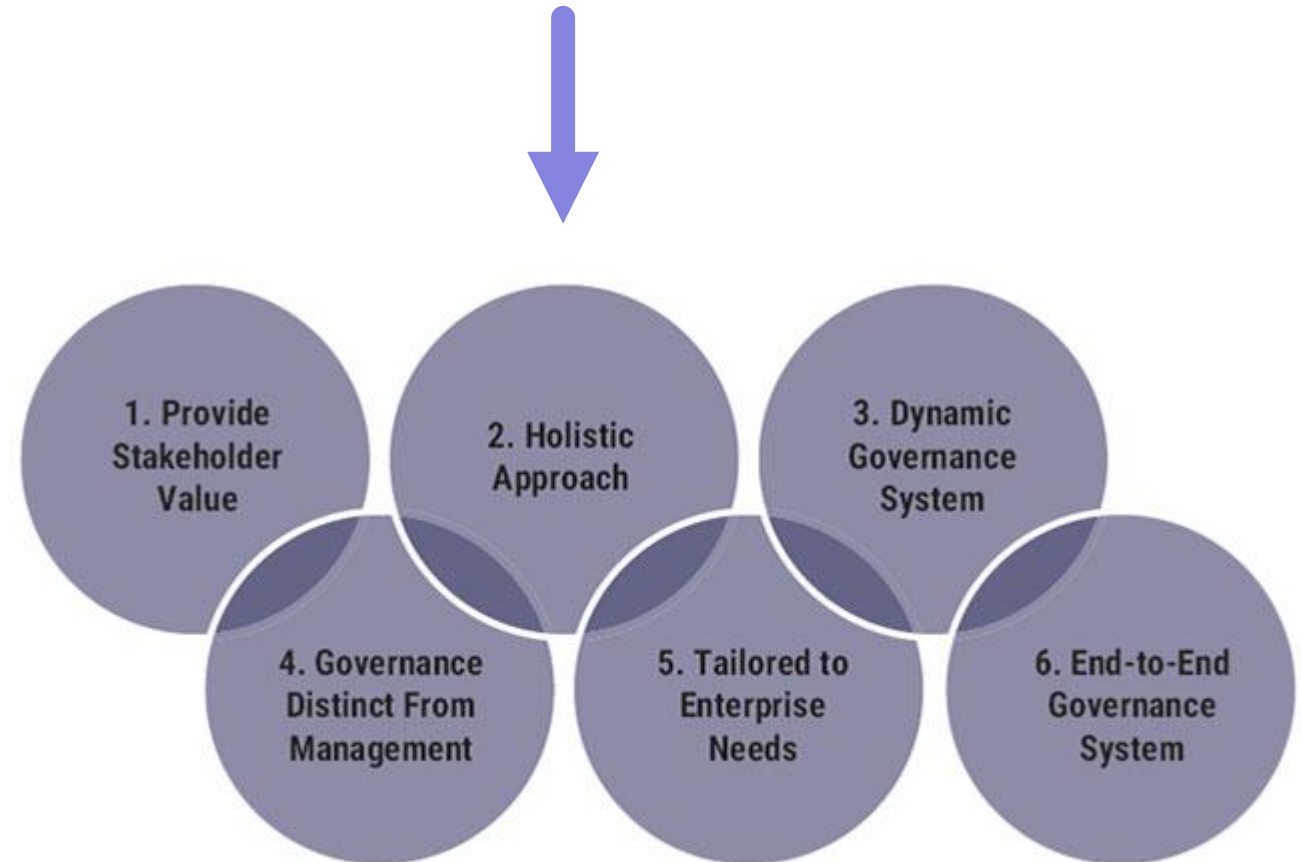
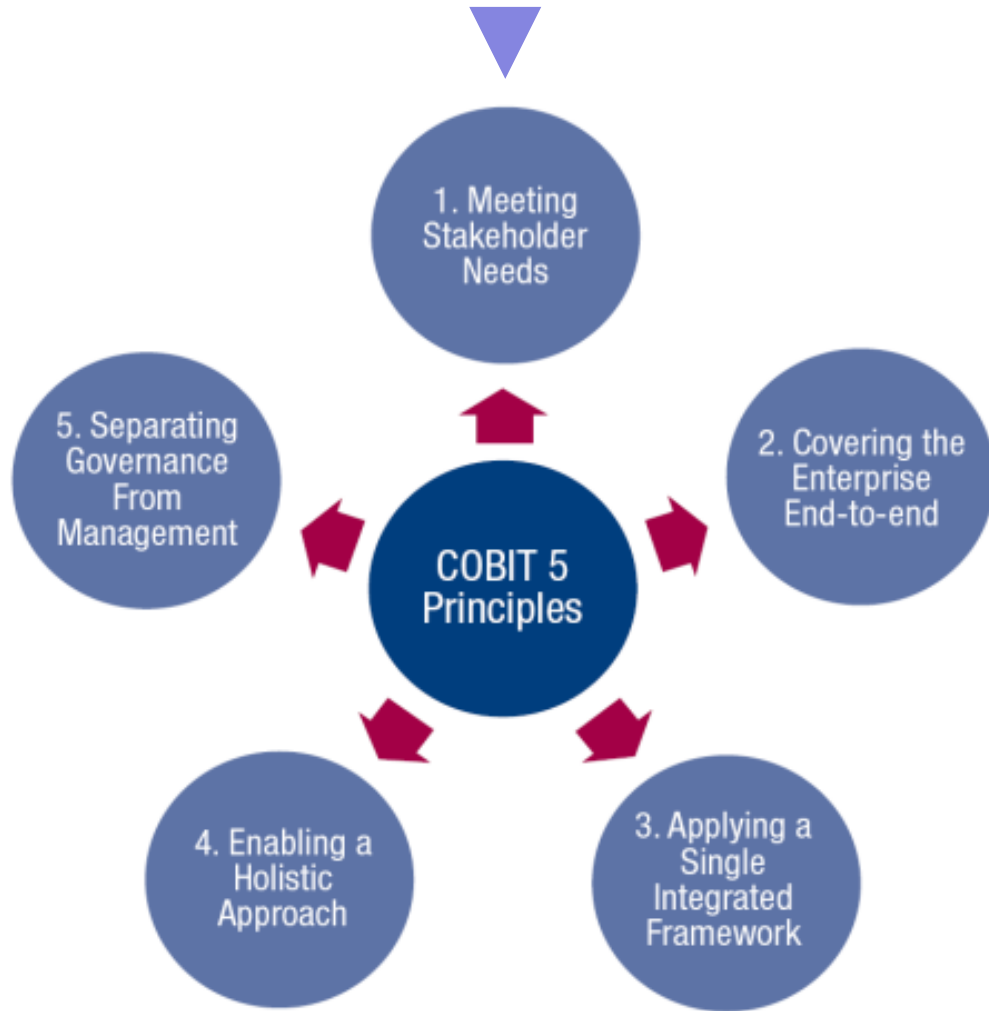
## LTAB:

- Holistic **management** with defined performance indicators
  - Performance, power, leadership
- Regular personal contacts among networking partners
- Allocation of resources for maintenance and development of partnership
- Mutual **trust**, respect and understanding

## Follow-up project?

- Transparent and accountable **governance** both for network and members
- Business alignment across the network
  - Vision, mission, goals, strategy, values
- Processes for review and evaluation of collaboration

# From COBIT 5 (2012) to COBIT 2019

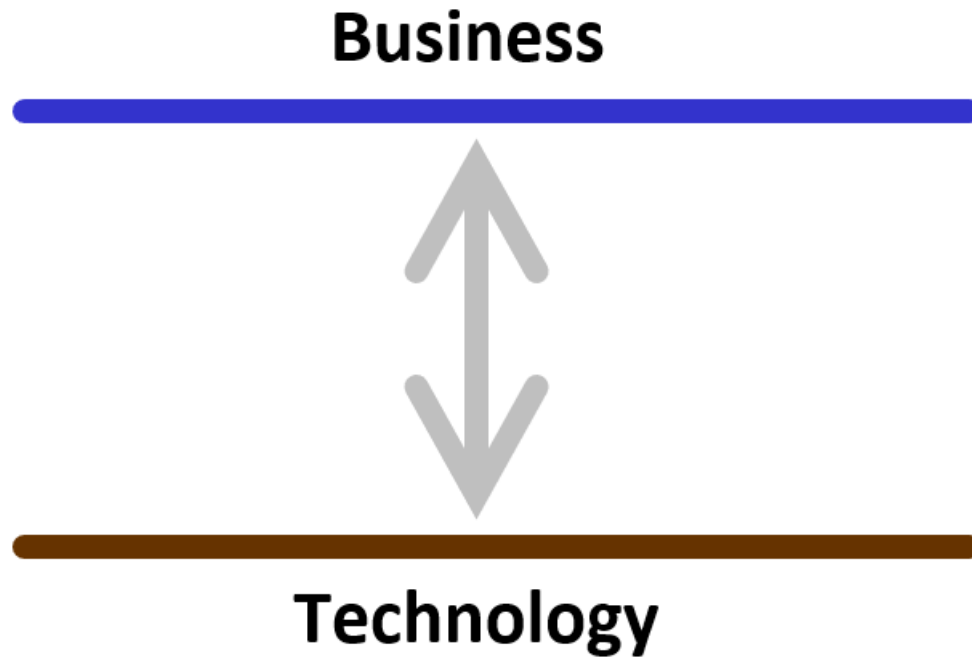


© COBIT, Control Objectives for Information and Related Technologies

**Business**

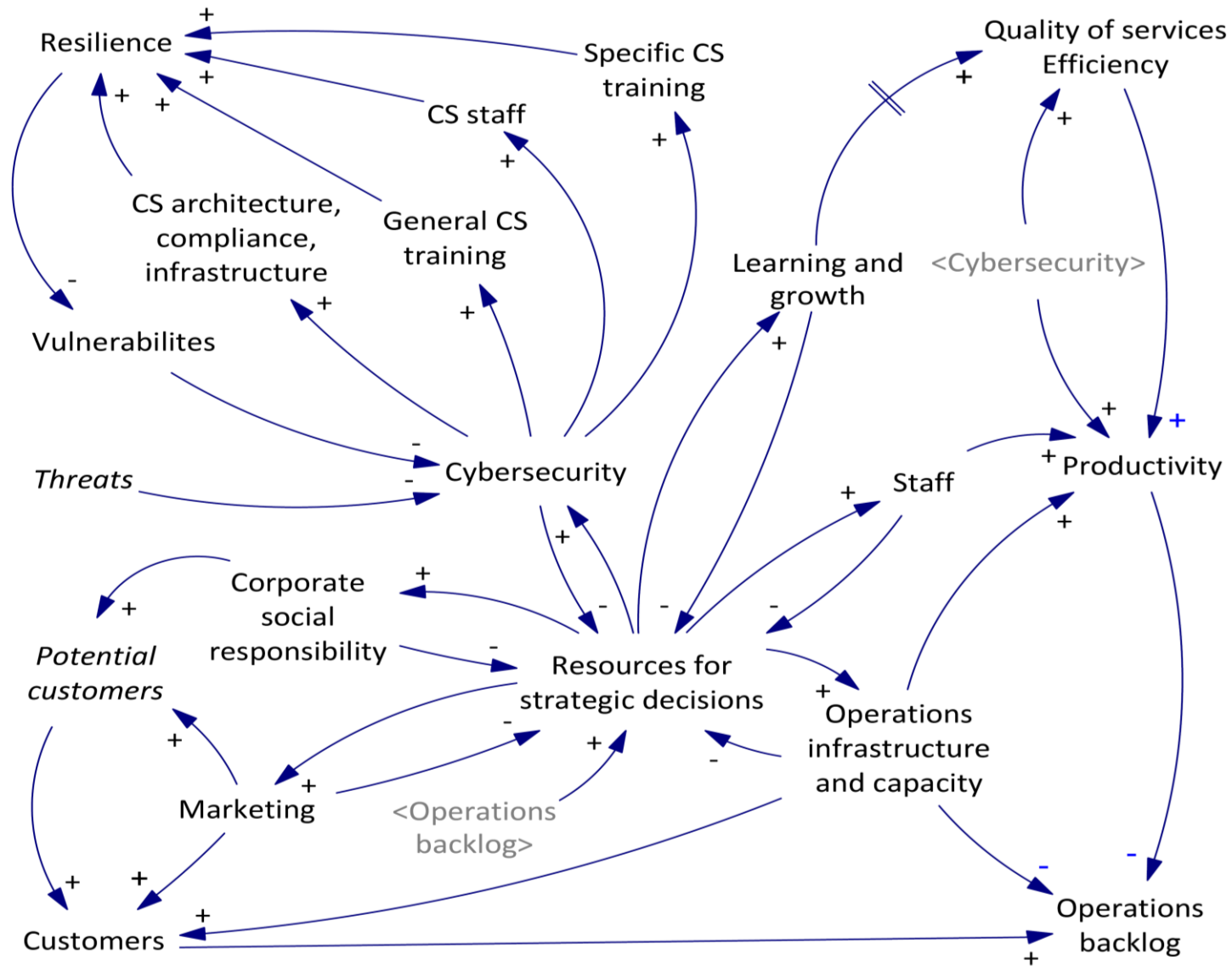


**Technology**



- Value engineering
- Cyber threat intelligence
- Cybersecurity/cyber risk indexes
- Enterprise architectures
- Shared awareness and governance

# SA model including cybersecurity



Synchronize activities, exchange outputs, identify common tasks for 2021:

- Design and communication of the joint methodology
- Dissemination of results, consideration of future steps (project applications)
  - Educational content?
- SW implementation of sample tasks
  - 1) Tool for cybersecurity assessment (BEAN?)
  - 2) Platform for mutual understanding and terminological unification (WebGrid)
  - 3) Environment for evaluation and exchange of shared model models (Forio Epicenter)
  - 4) Own method and tool? for initial SSA assessment