

Integrating Plant Security Practices with Business Continuity Management Strategies

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Agenda:

1. Introduction

- ◆ Plant Security

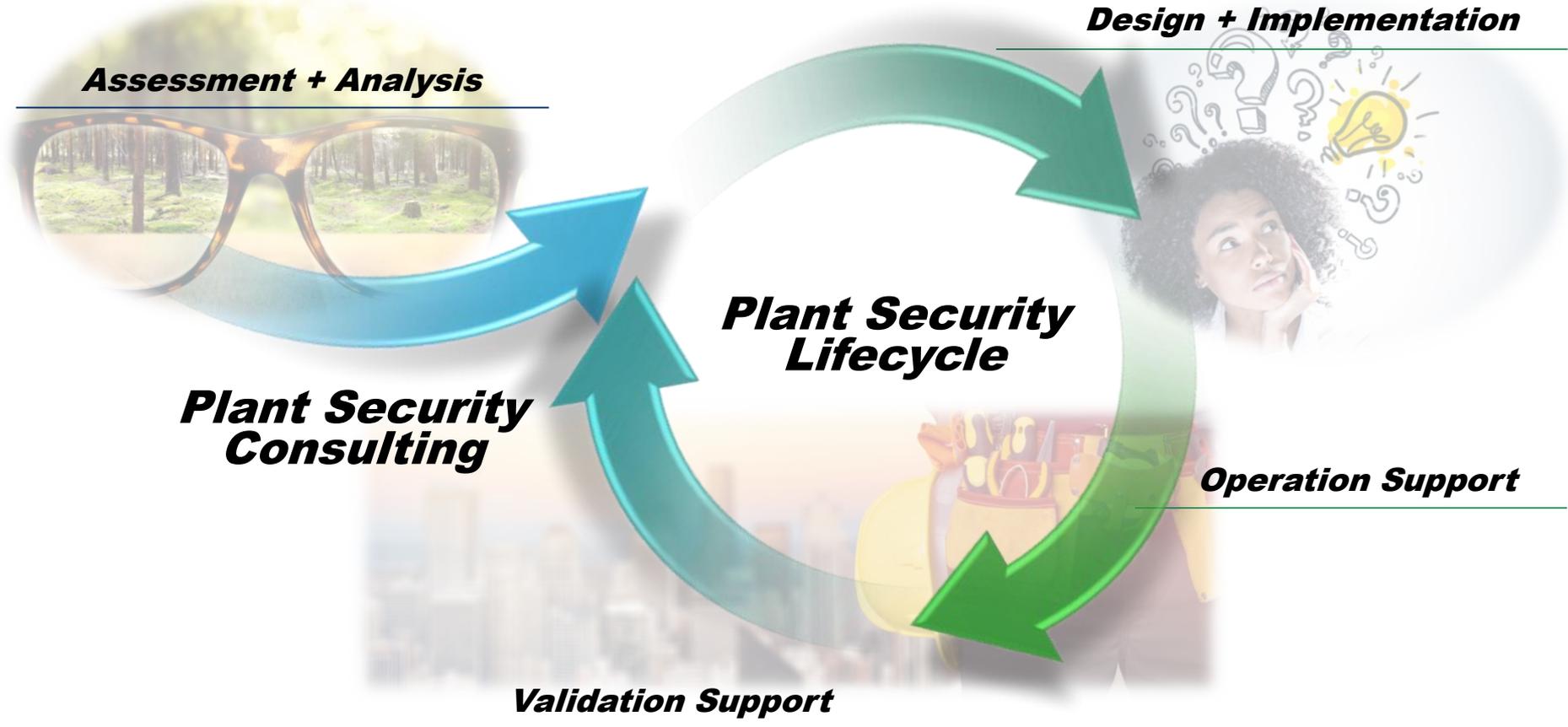
- ◆ Business Impact Analyses (BIA)

2. The correlation between Plant Security & BIA

3. The essential components for BIA

- Protecting of all components and processes that are necessary to operate an automated production plant reliably & safely. This can for instance be
 - ◆ Control & Safety Instrumented Systems
 - ◆ Network components like Firewalls or Switches.
 - ◆ Processes linked to planning, implementation, training, operation and maintenance are equally vital.

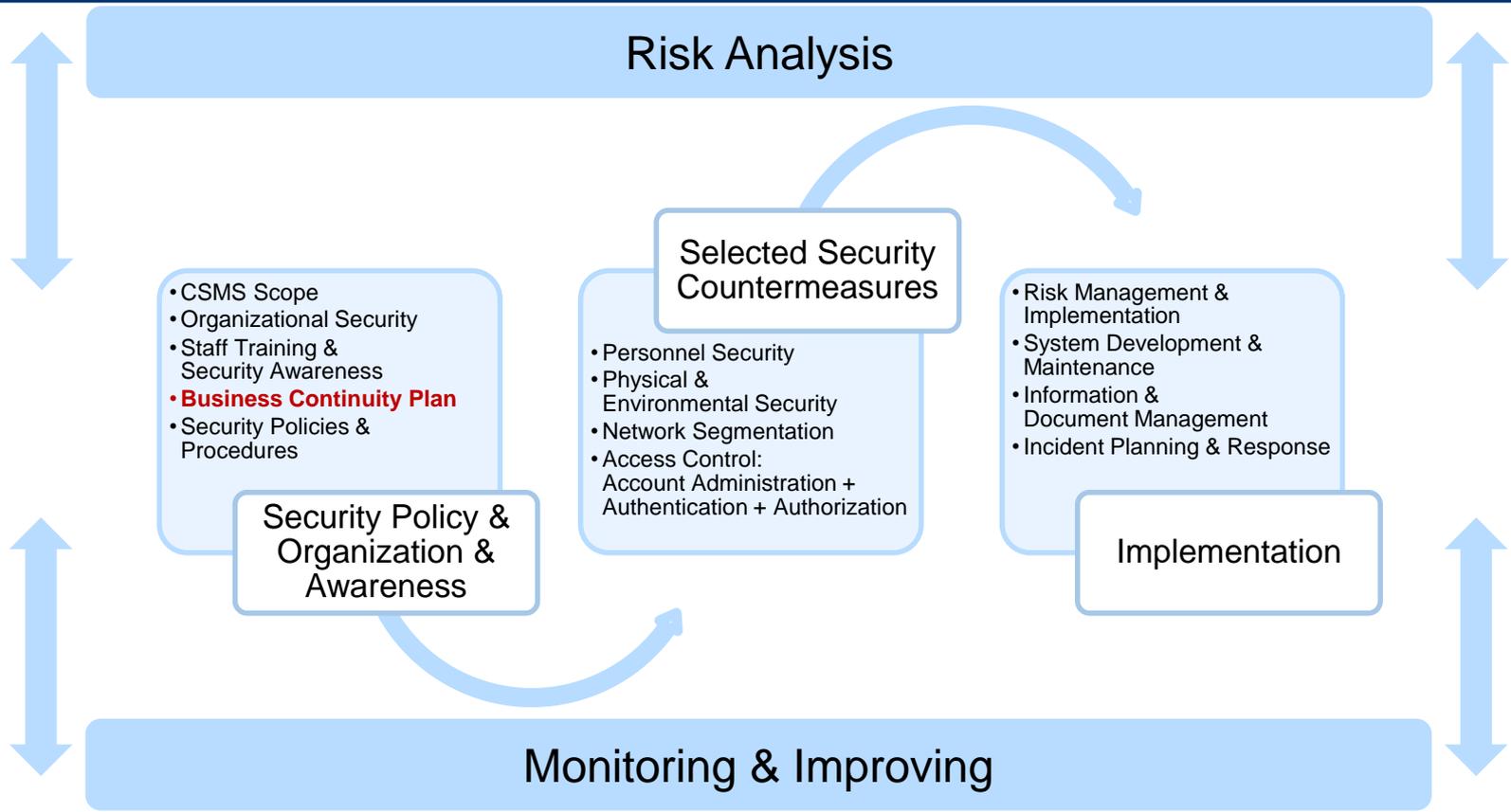
Plant Security – Ongoing process



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Cyber Security Management System (CSMS) – Flow



■ Action steps ...

- ◆ Technology

- ◆ Process

- ◆ People

■ ... to continue the core businesses immediately after the onset of the crisis!

Business Impact Analyses – Systematic process

- Identification and evaluation of business process default risks.
 - ◆ Provides information on possible influences and costs of a disaster.
 - ◆ Starting point for recovery priorities and meaningful recovery scenarios and strategies.

Recovery Point Objective (RPO)

- Recovery time after an IT/OT system or network infrastructure failure.
 - ◆ Time period in which data may be lost. Depends on the sources from which the transaction data can be obtained.
 - ◆ Continuous Data Protection (CDP) as an alternative to data updating.

Recovery Time Objective (RTO)

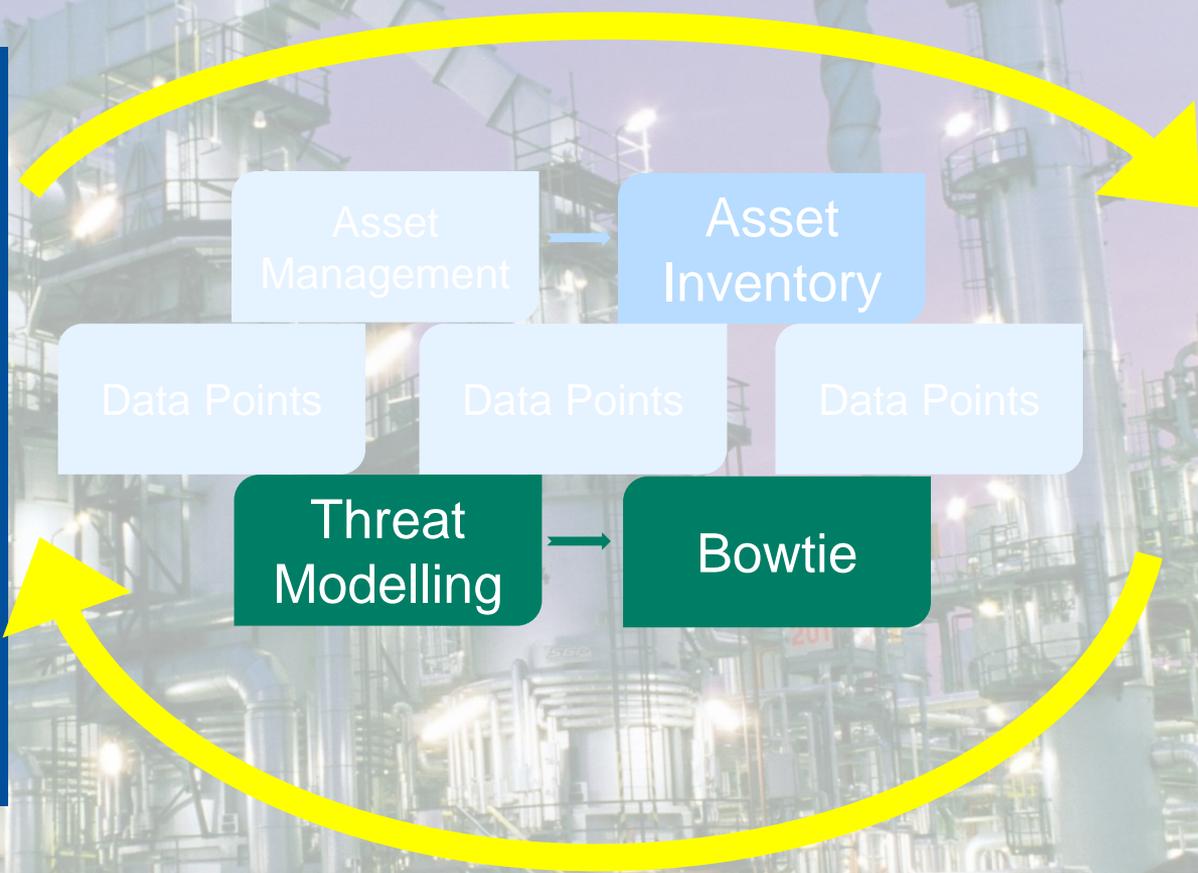
- Time span of the permissible (bearable) downtime.
 - ◆ The determination of the RTO is based on the expected loss of revenue per time unit on the one hand and the costs of the required availability technology on the other.
 - ◆ The RTO is measured in seconds, minutes, hours or days and is important when considering how much time is available for "recovering" after a disaster.

Plant Security & BIA – Significant issues

- Which systems & processes are essential for the survival of the company?
- How quickly do critical systems & processes have to be up and running again before significant damage or unacceptable losses occur?
- Where are the dependencies between systems & processes?
- In which order and how fast do the systems & processes have to be restored after a disaster?

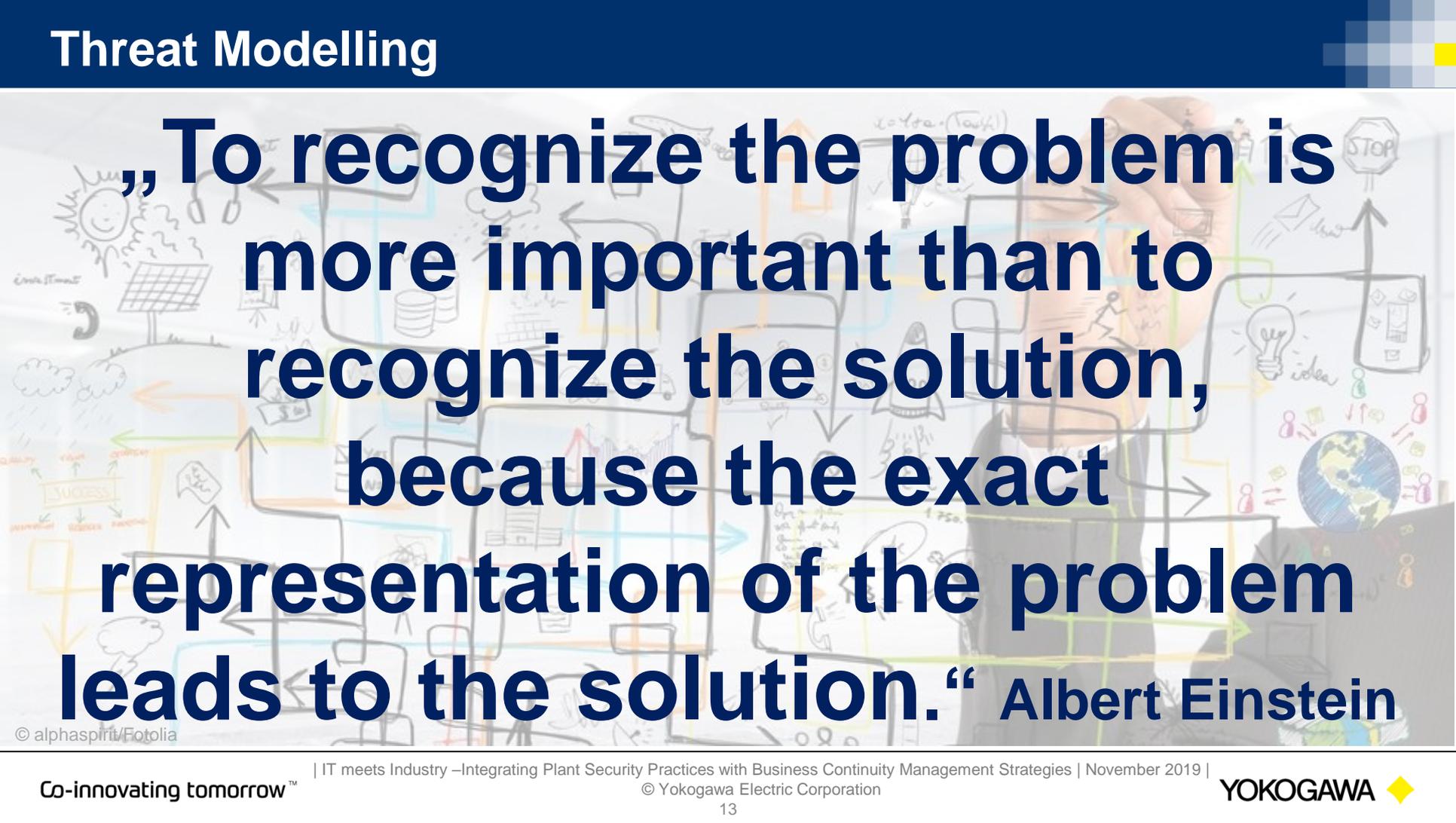
Ingredients for BIA

Business
Impact
Analyses



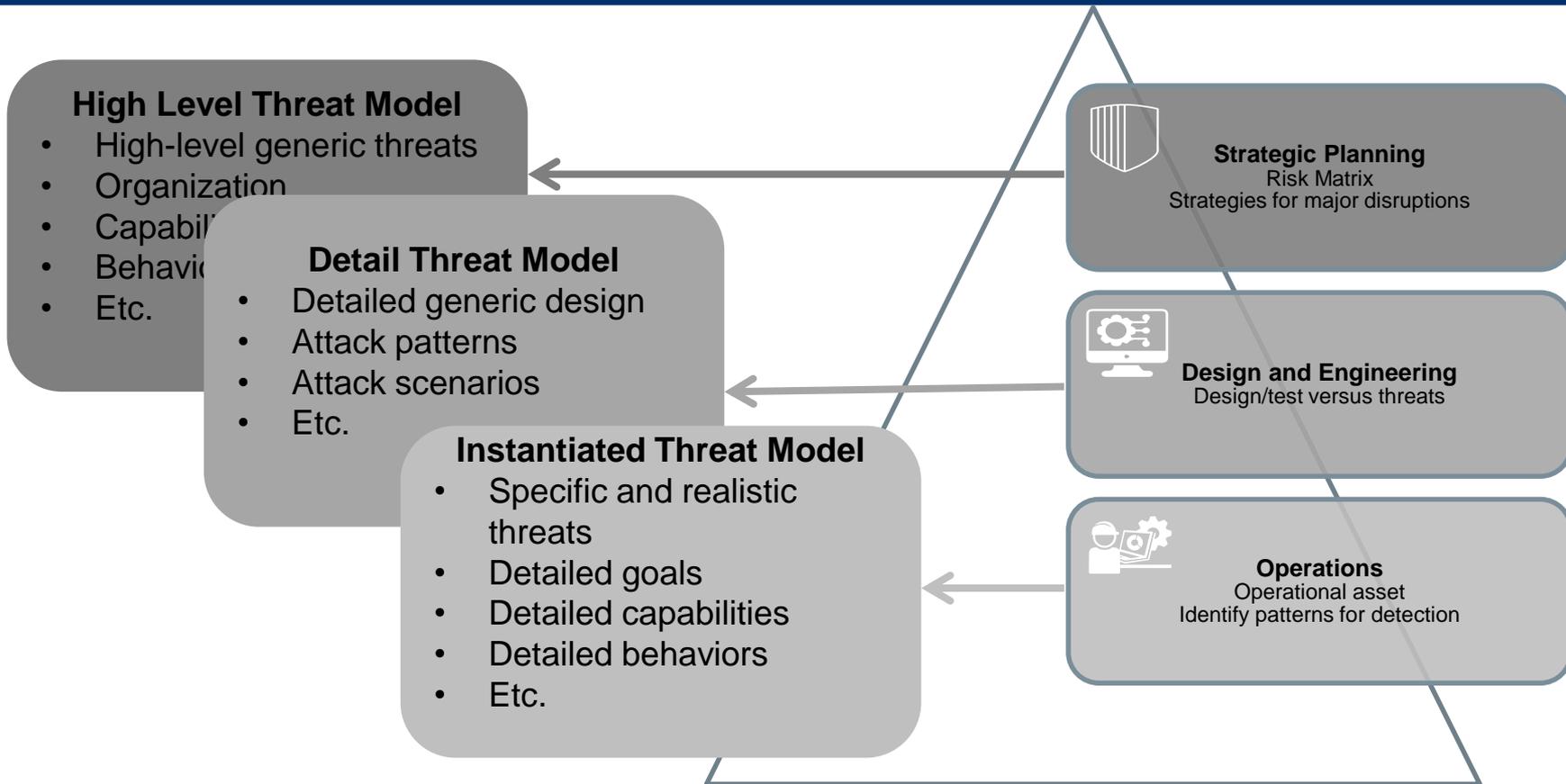


**Just WHAT I know,
I can
PROTECT EFFECTIVELY!**

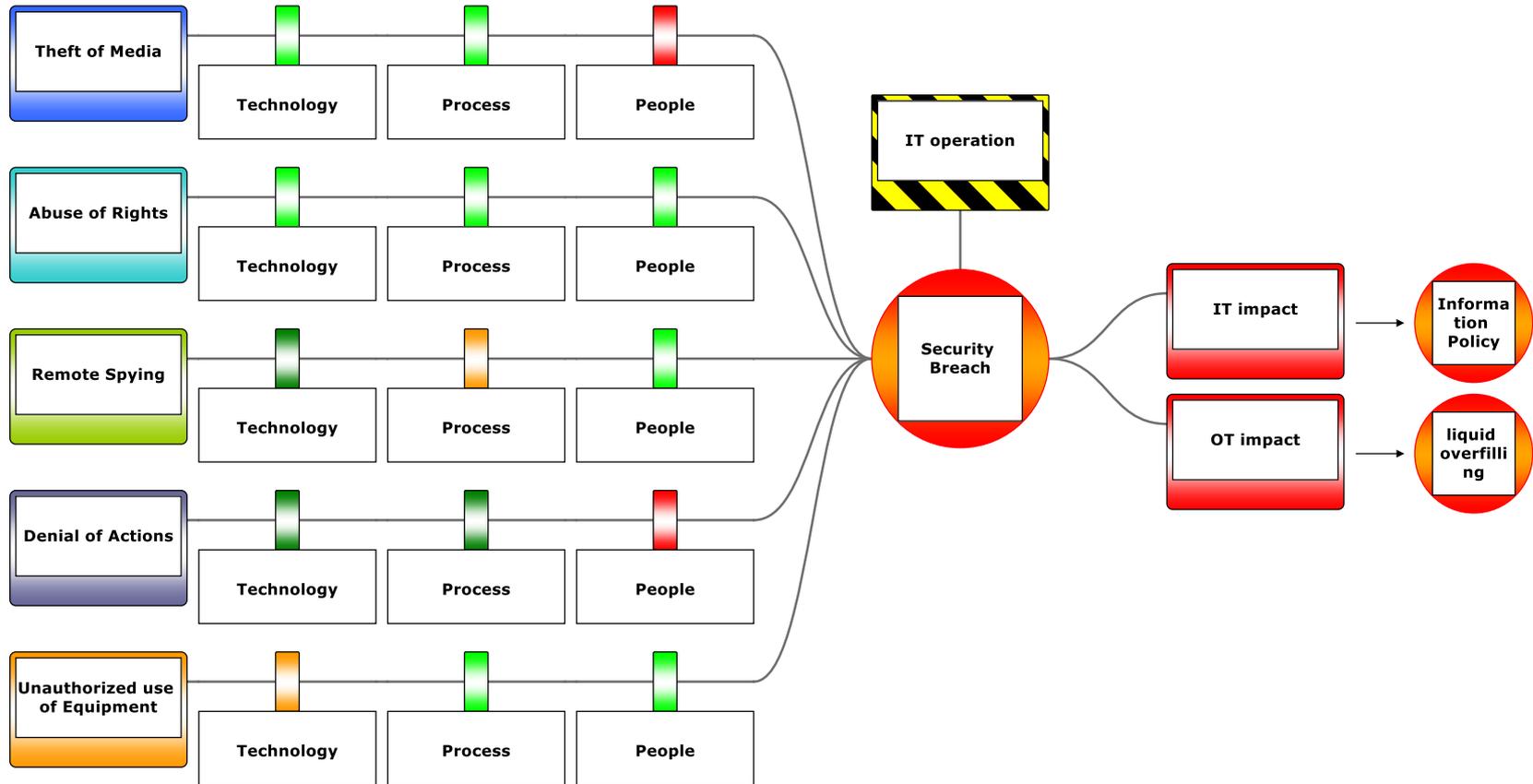


„To recognize the problem is more important than to recognize the solution, because the exact representation of the problem leads to the solution.“ Albert Einstein

Threat Modelling



Bowtie – Effective visualization





**Do not underestimate that your
”biggest challenge with
integrating [will be]
changing the mindset of
the necessary team!”**



Co-innovating tomorrow™

**See the big picture in terms of risk management
while also navigating the day-to-day decisions.**

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