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Swiss IT Disasters and What They Teach Us

Swiss Cyberstorm Conference
Kursaal Berne, 25th October 2022

Background

65 years old / living near Zurich / married / 3 adult children

40+ years experience as business analyst and project manager for large Swiss Financial Institutes

Retired but still active as an author:

- Guest comments related to project management for "Neue Zürcher Zeitung" and "Finanz und Wirtschaft"
- Recently published a book about failed INSIEME-project in Swiss Federal Tax Administration:

Reappraise projects from point of failure → Search for root causes → Combine with own experiences → Propose improvement opportunities

Introduction

- Is it possible to transfer the INSIEME-findings to IT-security projects?
- Goals of my presentation
- Important disclaimer

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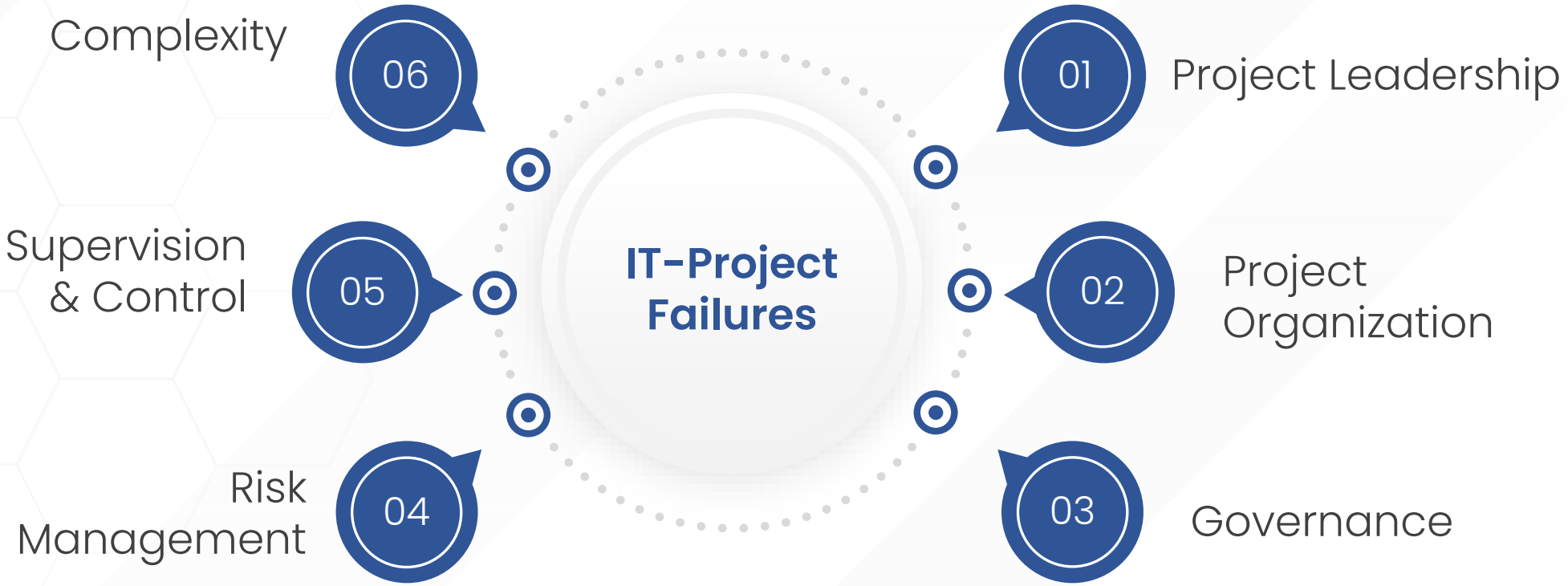
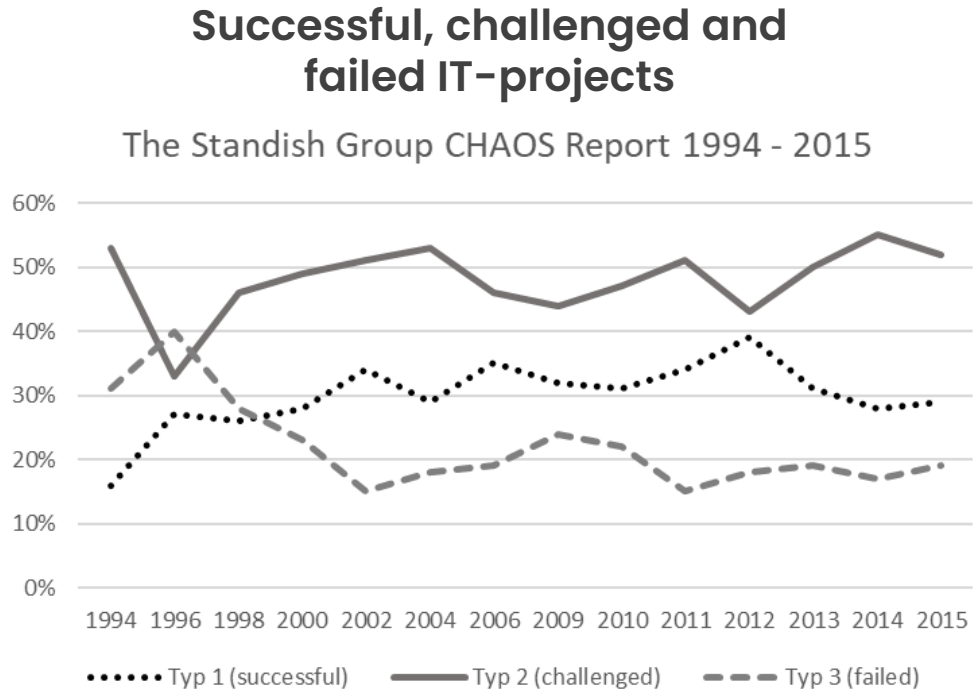


The INSIEME Project

Goal	Sunk Cost	Duration	Stopped Sep 2012
Platform Harmonization	approx. 116m CHF	12 Years	Criminal & parliamentary Investigation

Most INSIEME-problems well known from IT-projects in large Swiss Banks

The CHAOS[1] Report[2]



Conclusions

- → CHAOS Report (1994-2015) shows that approx. 70% of IT-Projects are "challenged"[3] or have failed
- → CHAOS Report 2020 shows similar figures[4]

[1] Comprehensive Human Appraisal for Originating Software
[2] Source: The Standish Group (https://www.standishgroup.com/)
[3] Project completed, but with cost and/or time overruns or the full planned functional scope was not achieved: Wikipedia: CHAOS-Studie
[4] Source: Henny Portman's Blog: Review Standish Group - CHAOS 2020: Beyond Infinity (Summary)

Project Management & Leadership

It's about Attitude, Behavior and Skills

Projects stand or fall with project leaders

Never seen a project fail because of technical issues

"Leadership under the magnifying glass"

Good project managers will succeed even in unsuitable environments

It's About Attitude, Behavior and Skills

Expectations & Requirements


Subject Matter Expertise


Own Personality


Attitude


Behavior


Project Management skills [1]


Self Organization

Improvement Opportunities

→ Careful selection of Project Managers

→ Decision after probation period

→ Systematic training & education

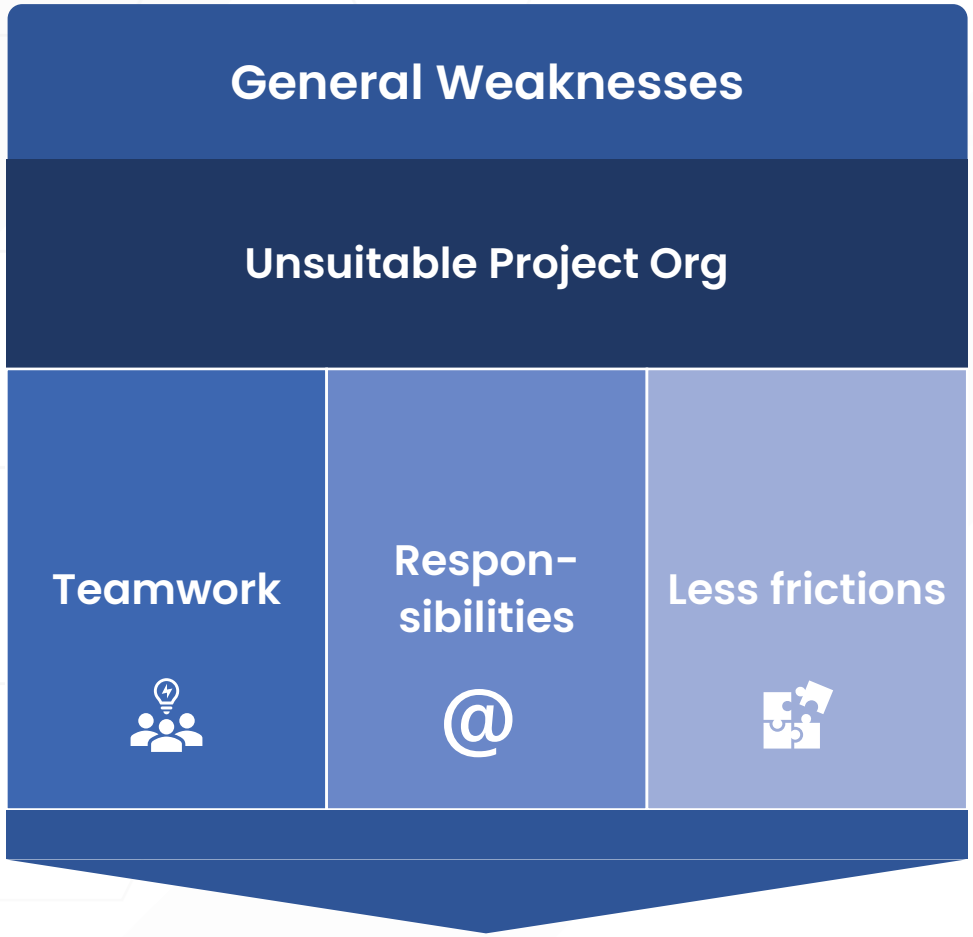
→ Careful guidance

[1] Required skills: Planning, Coordination, Change Management, Methodology knowledge, 360°-Leadership

Project Organization

Common Thread Through
Failed Projects

(IT-) Project Organization



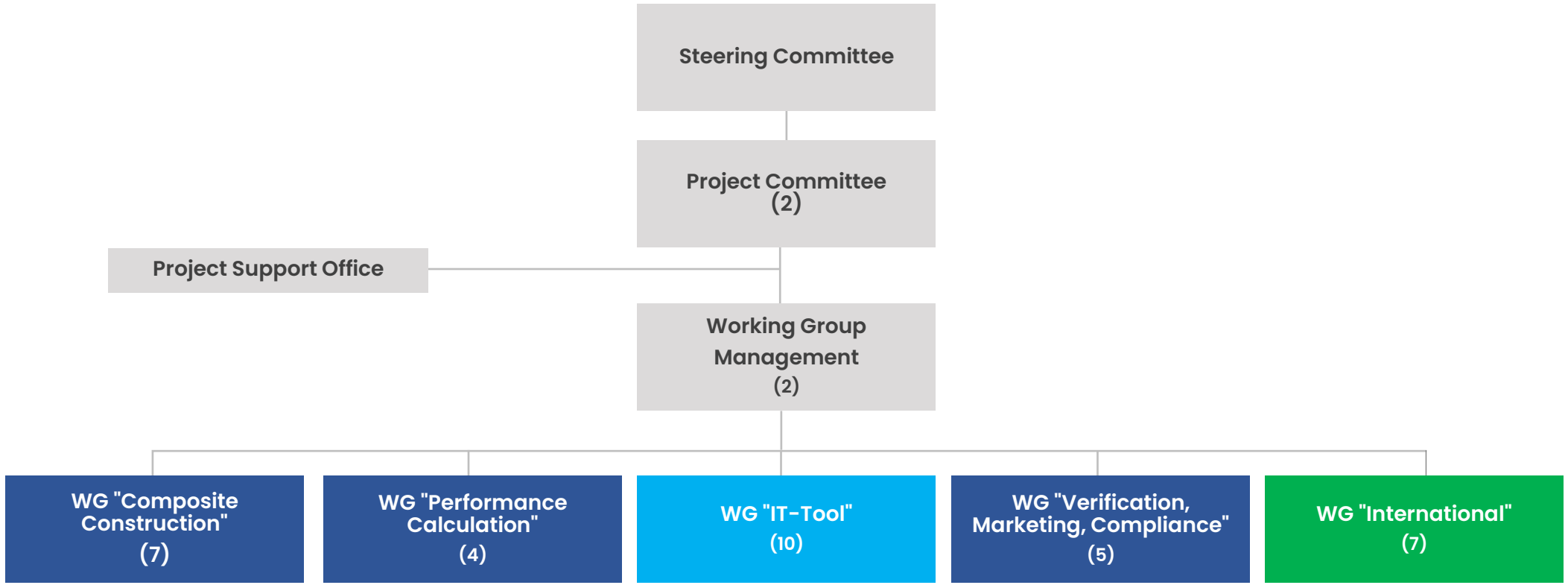
One of most underestimated problems in IT-projects

Improvement Opportunities

- → Clear / undisputable definition of roles & responsibilities
- → Quality criteria for organizational structures
- → Appropriate hierarchy level

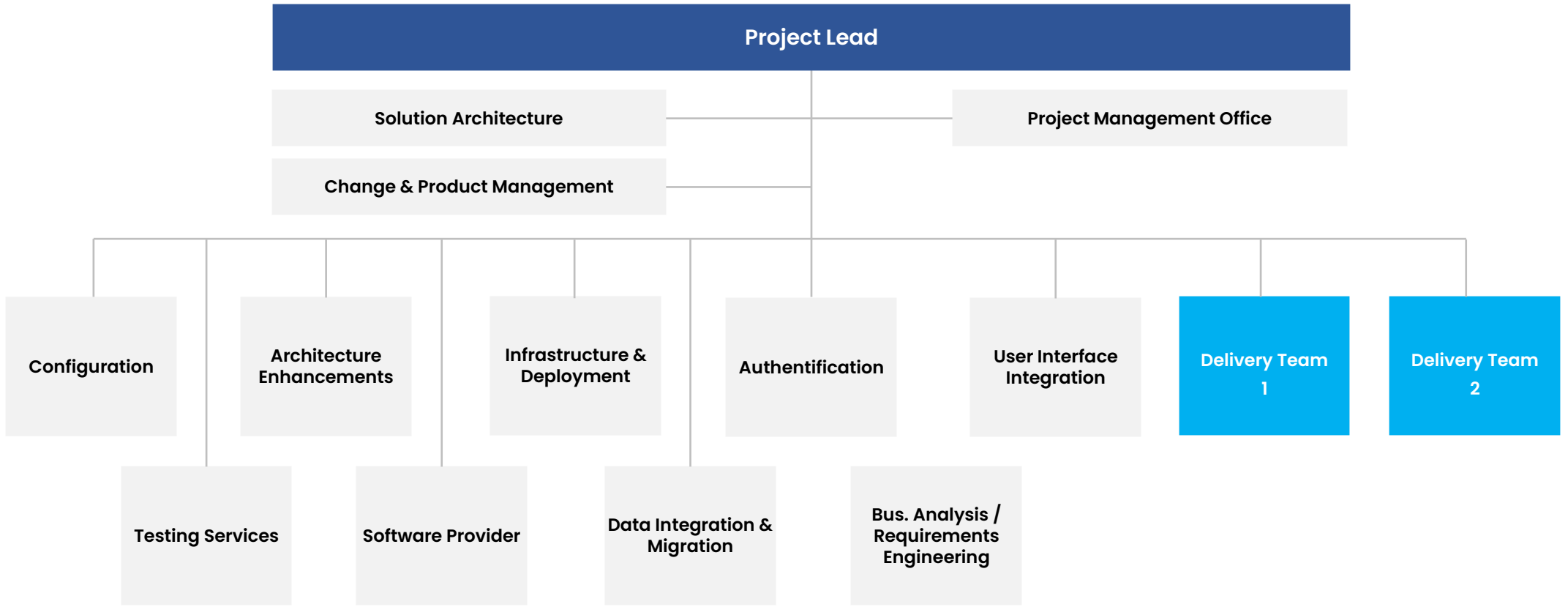
Two Negative Examples

1) Different Structuring Criteria on Same Organizational Level



Two Negative Examples

2) Imbalance: "Mission Critical" Units vs. Support Units

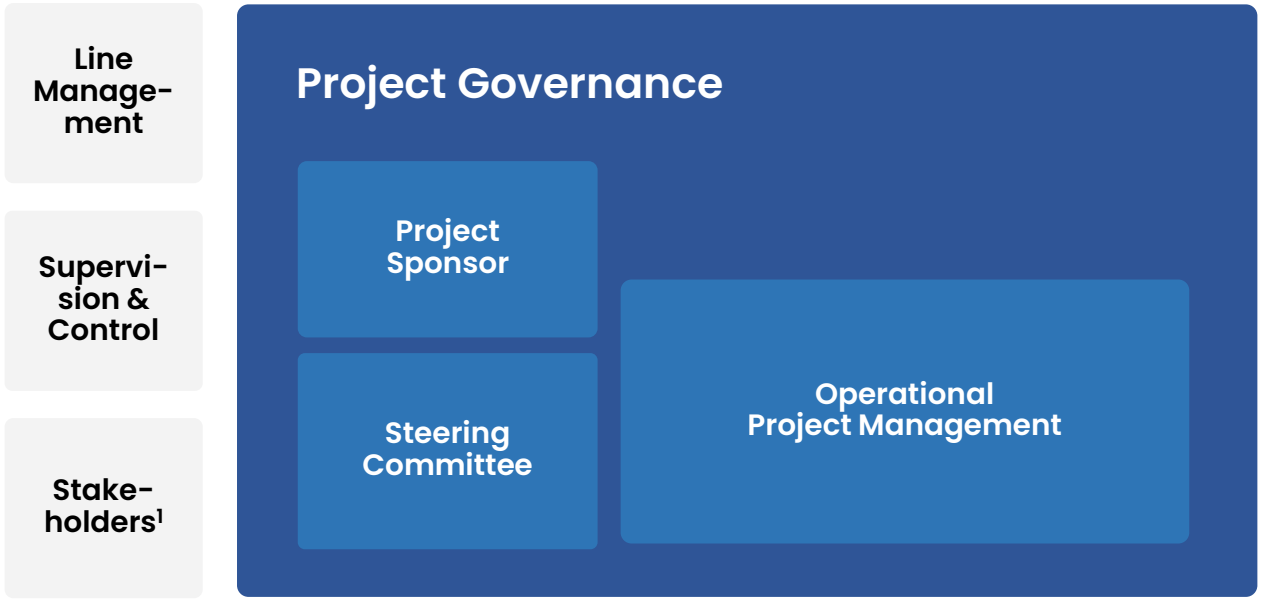


Governance & Responsibility

No Participation
Without Responsibility

Project Governance

Project Environment



Tasks & Responsibilities

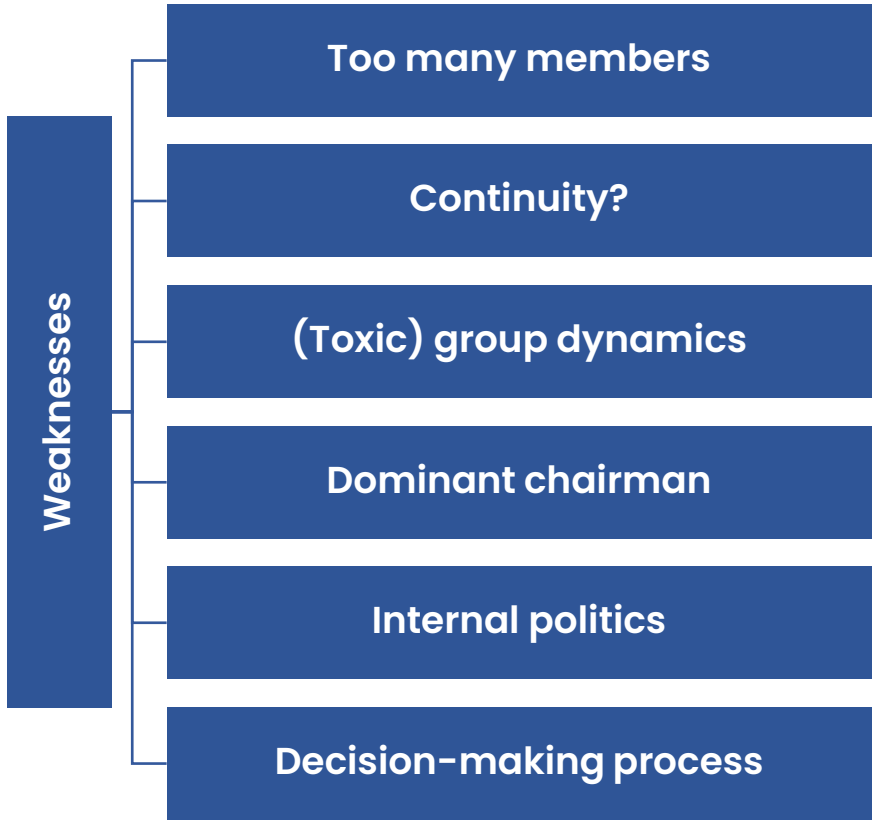
Project Sponsor
- → Ultimate responsible
- → Steering Committee Chairman

Steering Committee (STC)
- → Strategic decisions
- → Supervise project manager
- → Stakeholder interests
- → Risk management

[1] e.g. Legal / Compliance / Risk, Procurement etc.

Project Governance

General Weaknesses



Improvement Opportunities

- → Max. 7 (+/-1)
- → Individual role descriptions
- → Individual responsibilities
- → If appropriate: direct report to top management (committee)
- → Advocatus Diaboli

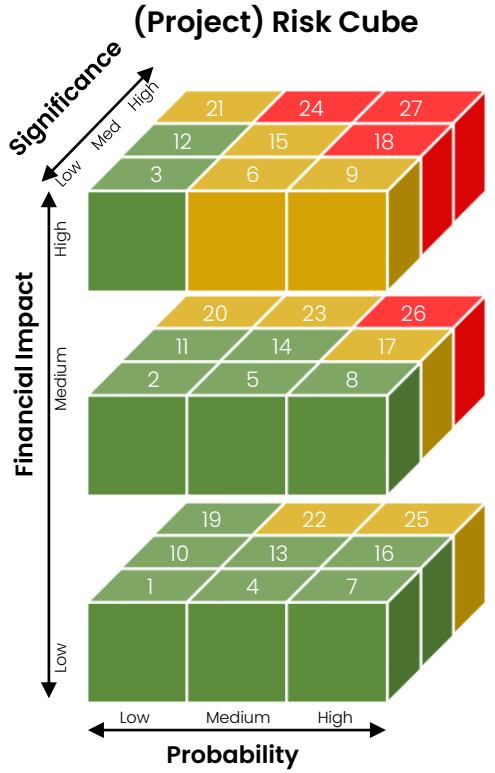
Downside Risk Assessment

General Weaknesses

→ Two-dimensional risk approach

→ Project *Significance?*

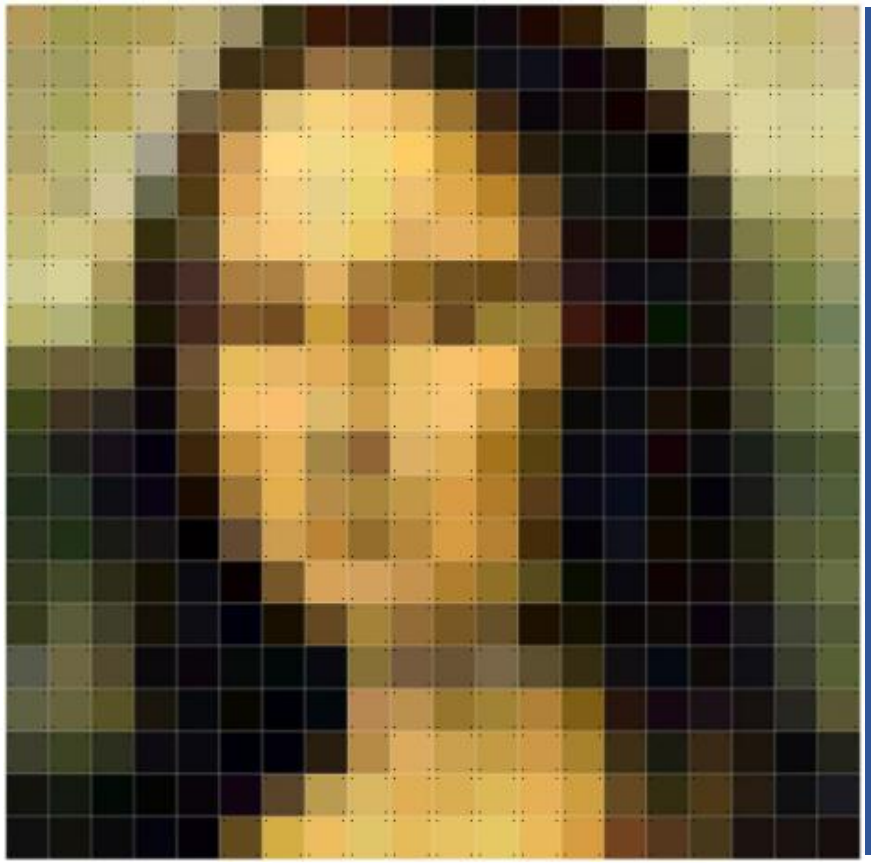
Improvement Opportunities



Supervision & Control

Less Is More!

Supervision & Control



→

You don't need all the details to recognize a picture

→

Same for reviews of projects at risk

Supervision & Control

General Weaknesses

Inflationary number of audits and reviews

Status ORANGE

Recommendations?

Improvement Opportunities

- → Less is more!
- → Checklists for standard situations
- → Two instead of three status colors
- → Early warning system
- → Instructions & deadlines
- → Escalation plan

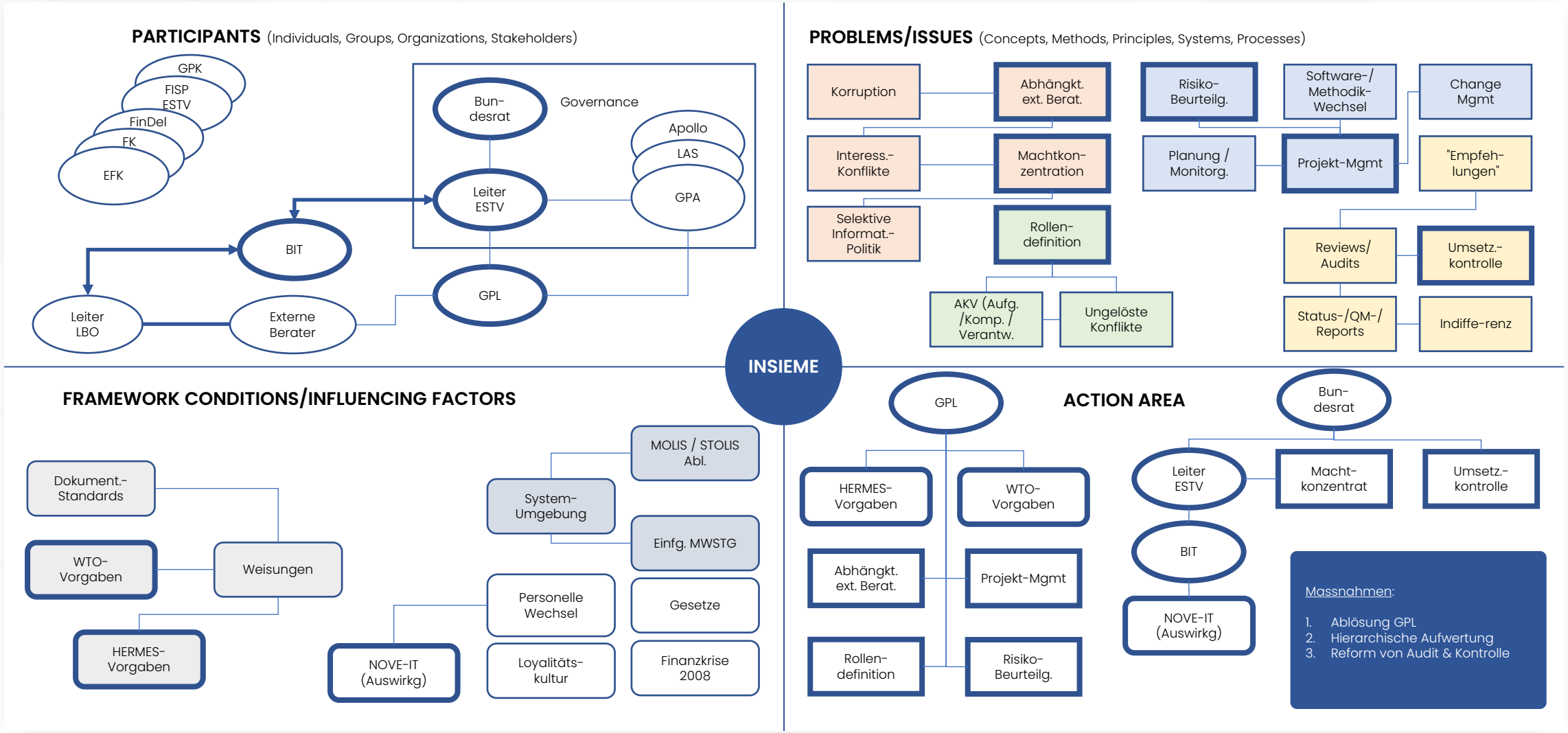
System Complexity

The Leverage Effect

Can Complexity be Mastered?

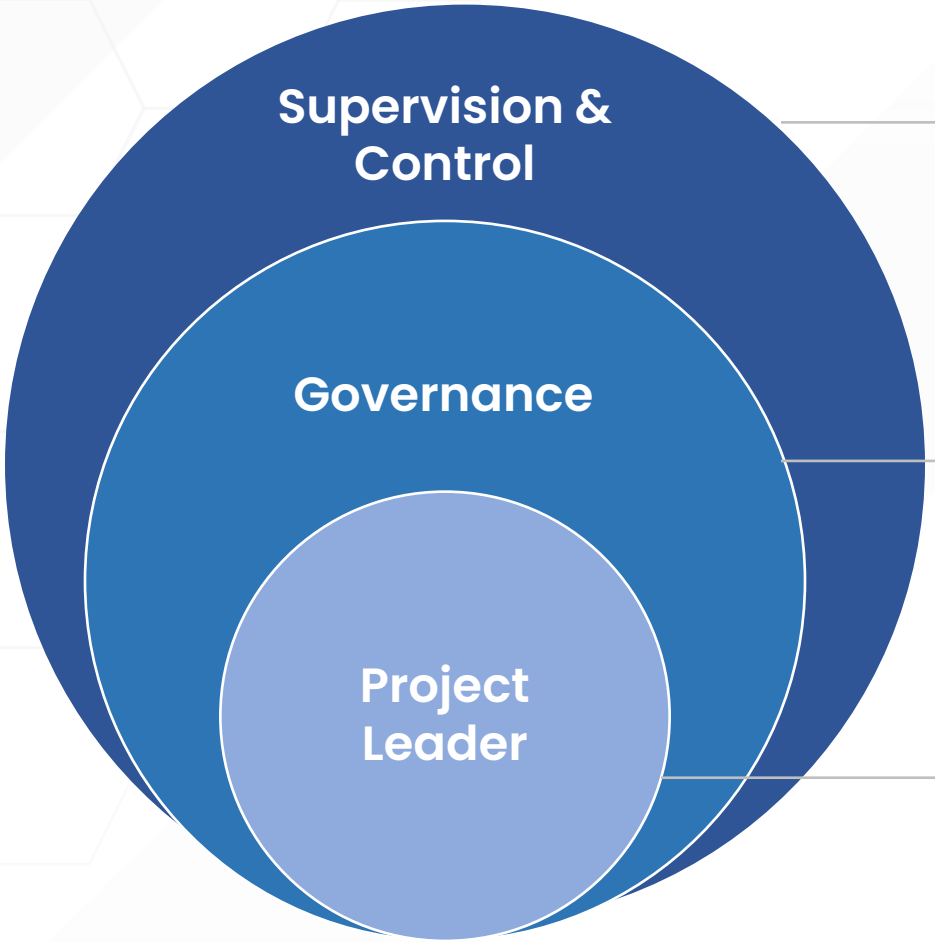
- Complicated vs complex systems
- IT projects are complex systems
- Security projects: small details with disproportionate impact
- Pareto Systems Analysis (PSA):

Pareto Systems Analysis (PSA)



Summary & Takeaways

Summary & Take Aways



→ Instructions!
→ Escalation Plan

→ Max. 7 members (+/-1)
→ 3D-Risk Management

→ Selection is key!
→ Project Organization