

CONTROL FACTORY | BEHIND THE SCENES |

Software Quality principles applied to
Security Controls



CONTROL FACTORY |BEHIND THE SCENES|

BUSINESS ENVIRONMENT

ENERGY GIANT / BUSINESS LINE / BUSINESS UNIT

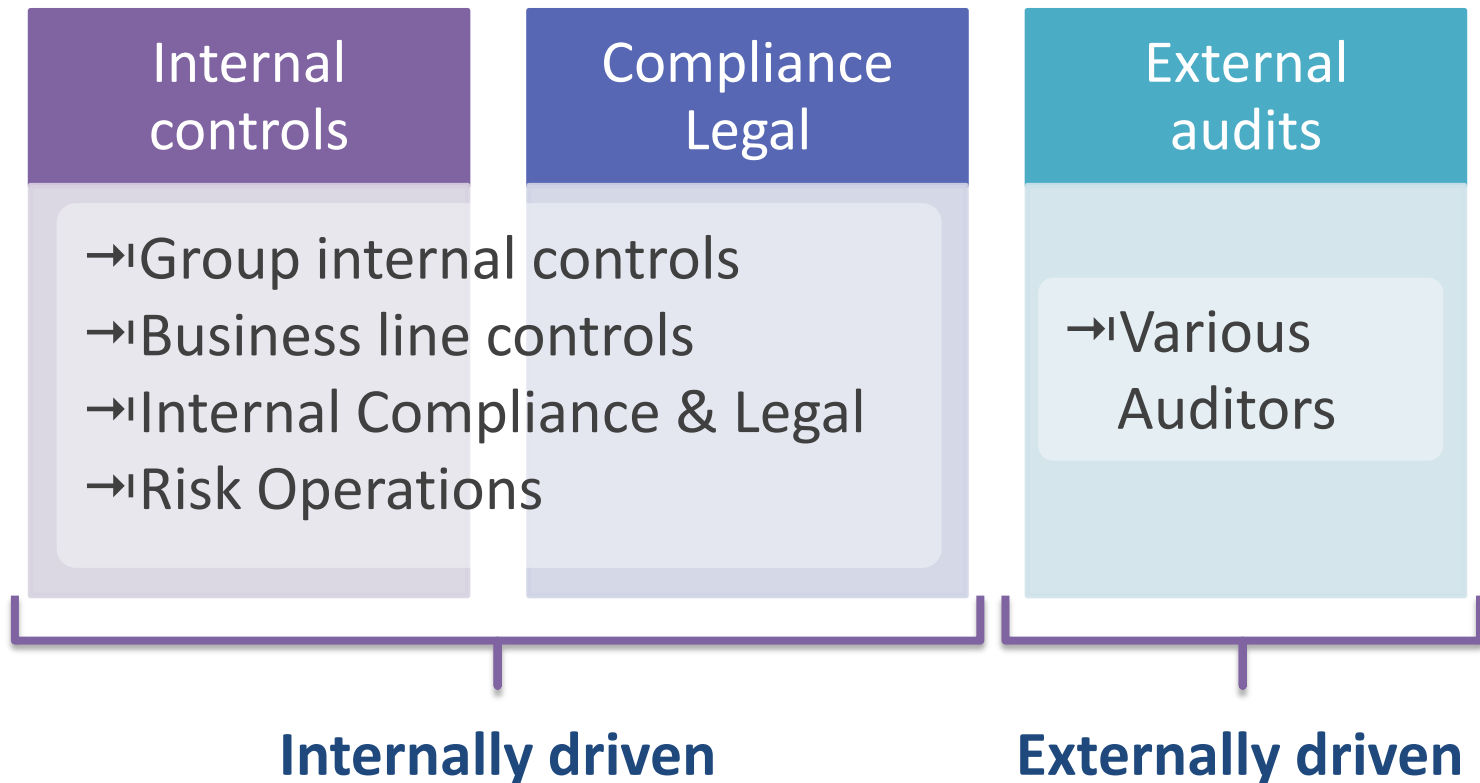
Client Business Environment

Management & Trading of Energy

→ Integrated and dynamic management of portfolio – purchasing contracts, assets and sales contracts

REGULATORY/CONTROLS CONSTRAINTS

Highly monitored and regularly audited activities



CONTROL FACTORY |BEHIND THE SCENES|

CONTROLS FRAMING

FRAMING CONTROLS BASED ON REQUIREMENTS

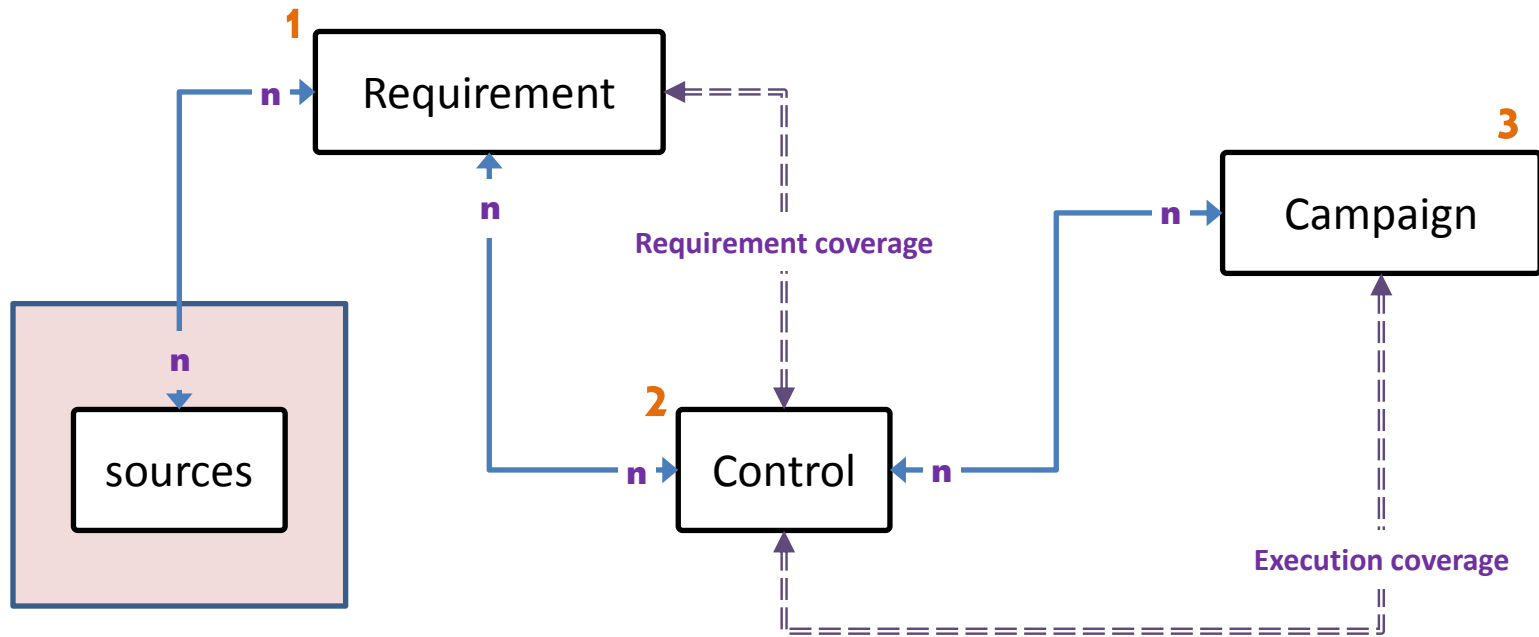
Security Controls governance

- Discipline/Part of Corporate Governance focused on information technology (IT) oriented security controls aligned with business constraints

Security Control book

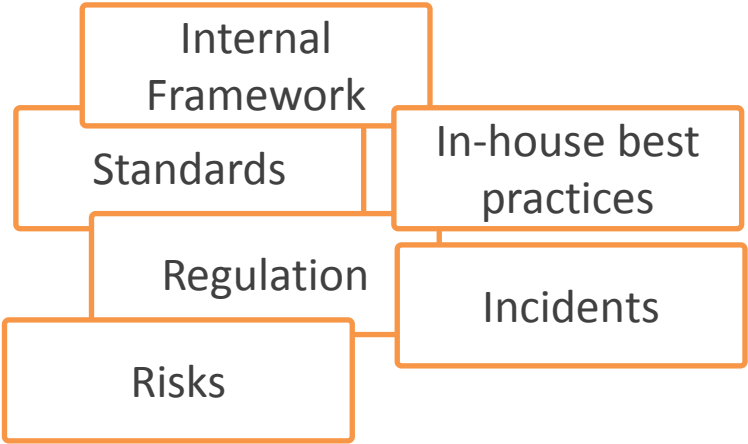
- A centralization of security controls carried out on the organization
- An important element of a framework ensuring that the organization's policies/requirements are formalized, monitored and implemented as controls over time
- A tool-based methodology implementing the security control strategy

SECURITY CONTROLS | SOFTWARE QUALY PRINCIPLES

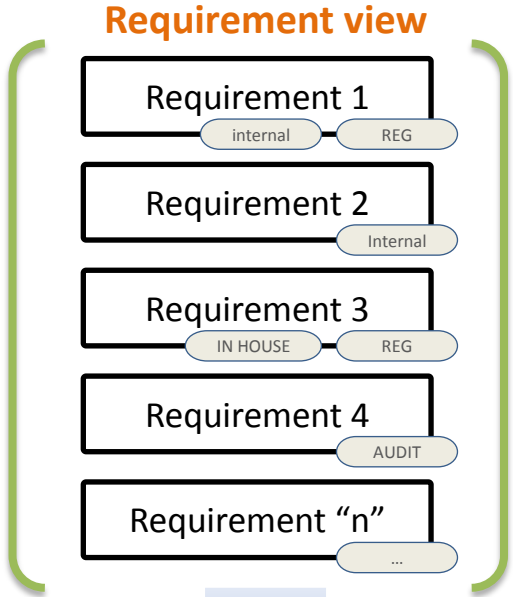


- ↔ relationship | cardinality
- ⇔ Report/Gap analysis needs

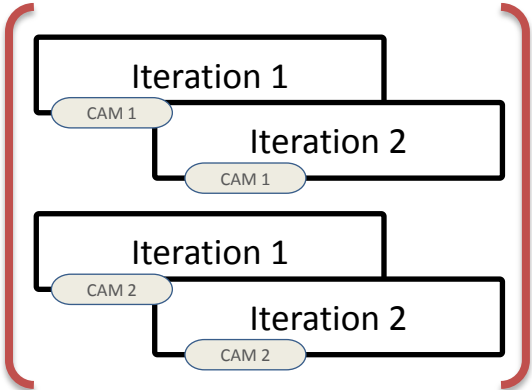
CONTROL ECOSYSTEM



Sources of requirements

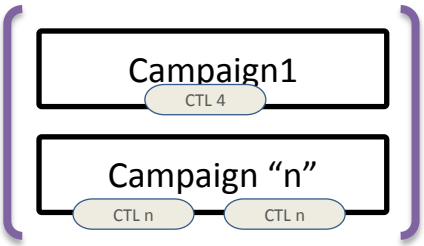


Sources of control



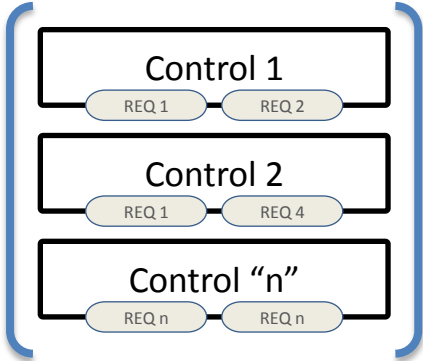
Execution view

Sources of iterations



Campaign view

Sources of campaign



Control view

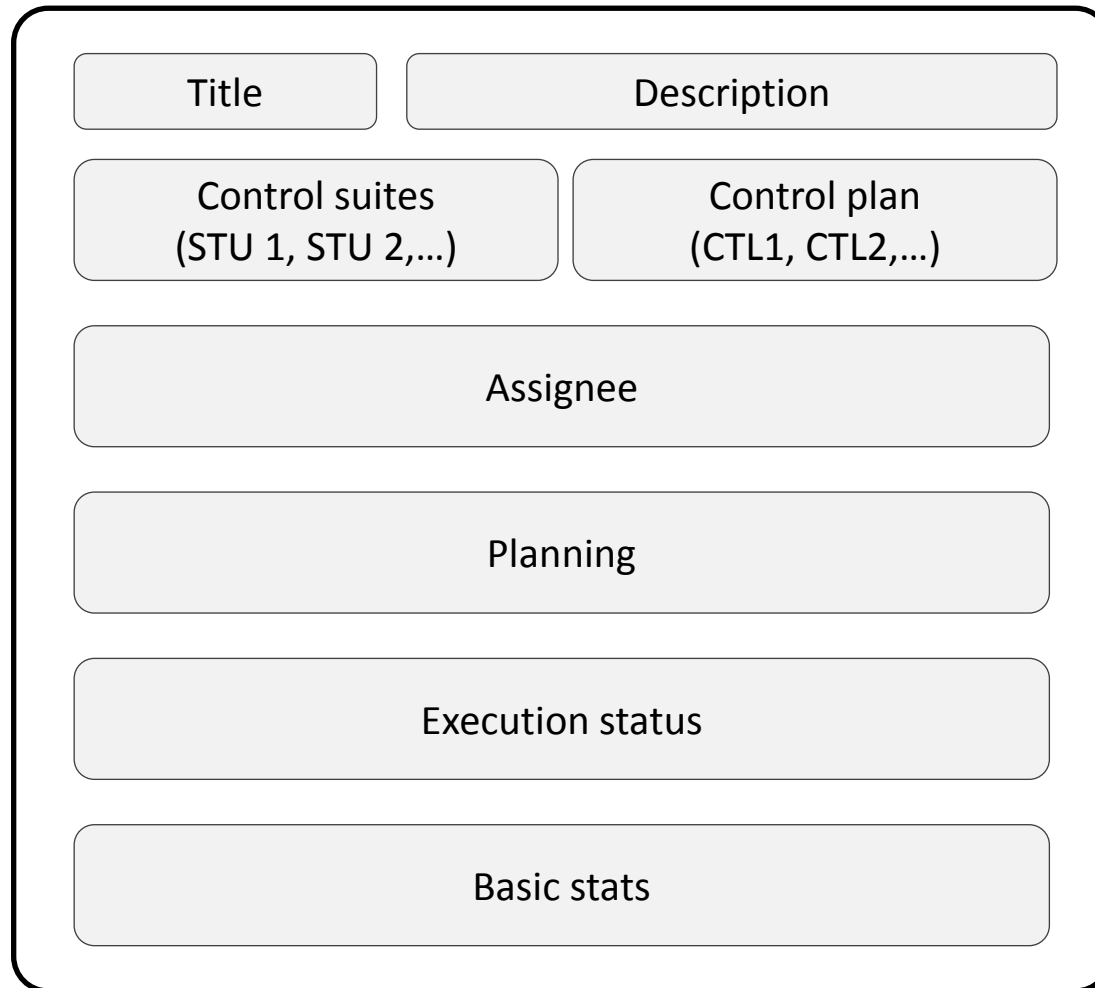
Requirement template

Title	
Description	
Criticality	Category (Security, Business...)
Covered risk	
Owner	
Group/source (tag or ordering)	

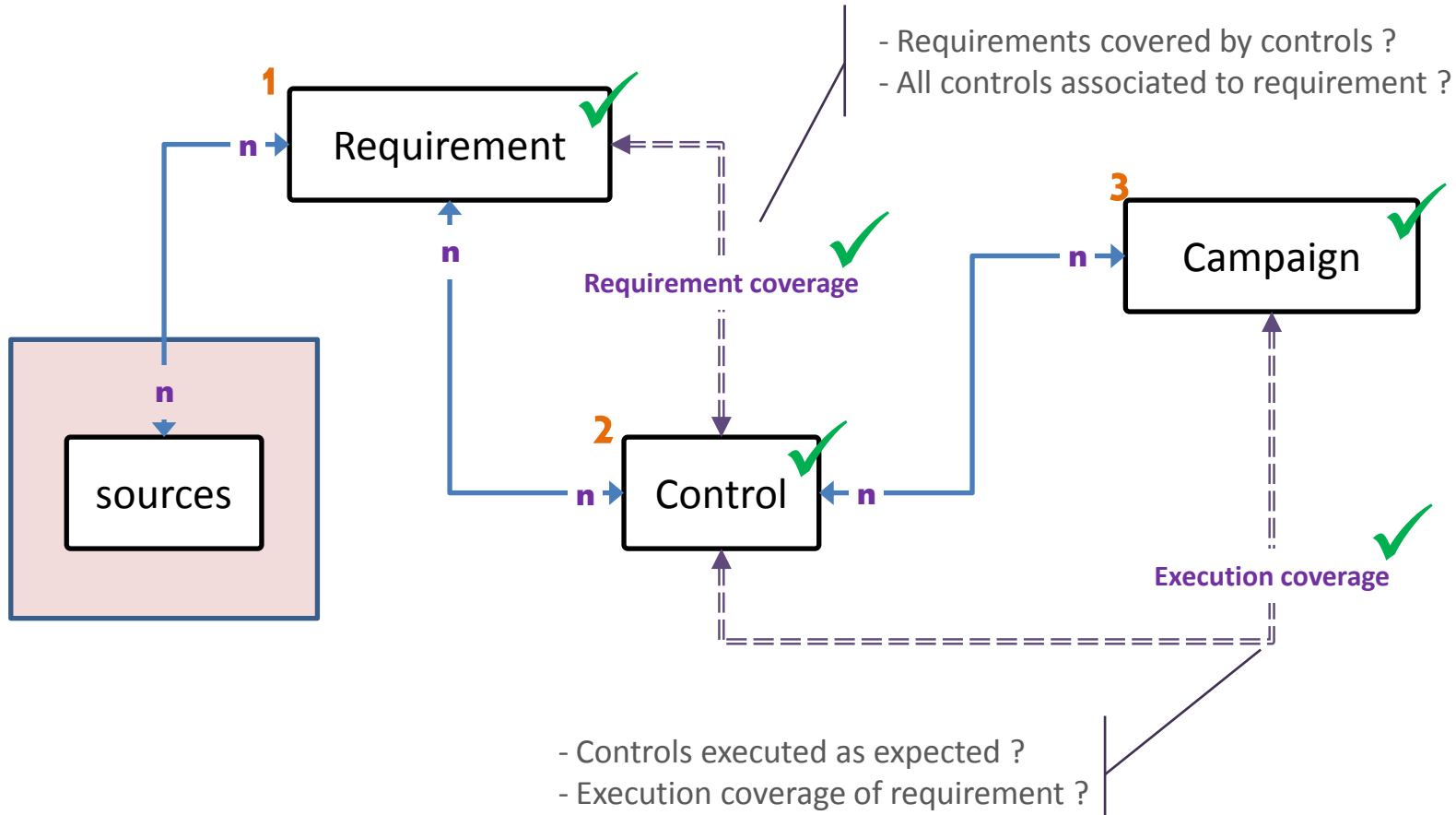
Control template

Title	Description
Nature (administrative, technical, physical)	
Function (preventive, detective, corrective, recovery)	
Type (Security)	
Frequency	
Level (1 to 3)	
RACI matrix	

Campaign template



SECURITY CONTROLS | SOFTWARE QUALITY PRINCIPLES



- ↔ relationship | cardinality
- ⇔ Report/Gap analysis needs



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IAM SECURITY OPERATIONS



Control Factory (CF)

refers to :

- ① a structured collection of assets
- ② that aids in producing controls
- ③ according to specific requirements
- ④ through an assembly process

The Control factory applies manufacturing techniques and principles ...

> **Formalization**

Right process ⇔ right result

> **Automation**

Reduce manual intervention

> **Services Oriented**

Activities divided in services

> **Industrialization**

Reusable components

CONTROL FACTORY | OBJECTIVES

... to mimic the benefits of traditional manufacturing

>Consistency



build multiple instances of a control product line & set of controls sharing similar “features and architecture”

>Quality




integrates reusable controls reducing the likelihood of control design flaws


>Productivity





Controls activities can be streamlined and automated


CONTROL FACTORY | ACTIVITIES/SERVICES

	Conception	Design and logic according to requirements
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	Suppliers relationship	Sourcing of data, qualification, remediation
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	Production	Producing resources for controls reports, dashboards
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	Delivery	Making resources for controls available
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	Supervision	Governing controls campaign and remediation
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	Internal	QA, maintenance, improvements
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Customers

CONTROL FACTORY | PRODUCTION SERVICES



Control Production



Production is divided in 6 distinct stages :

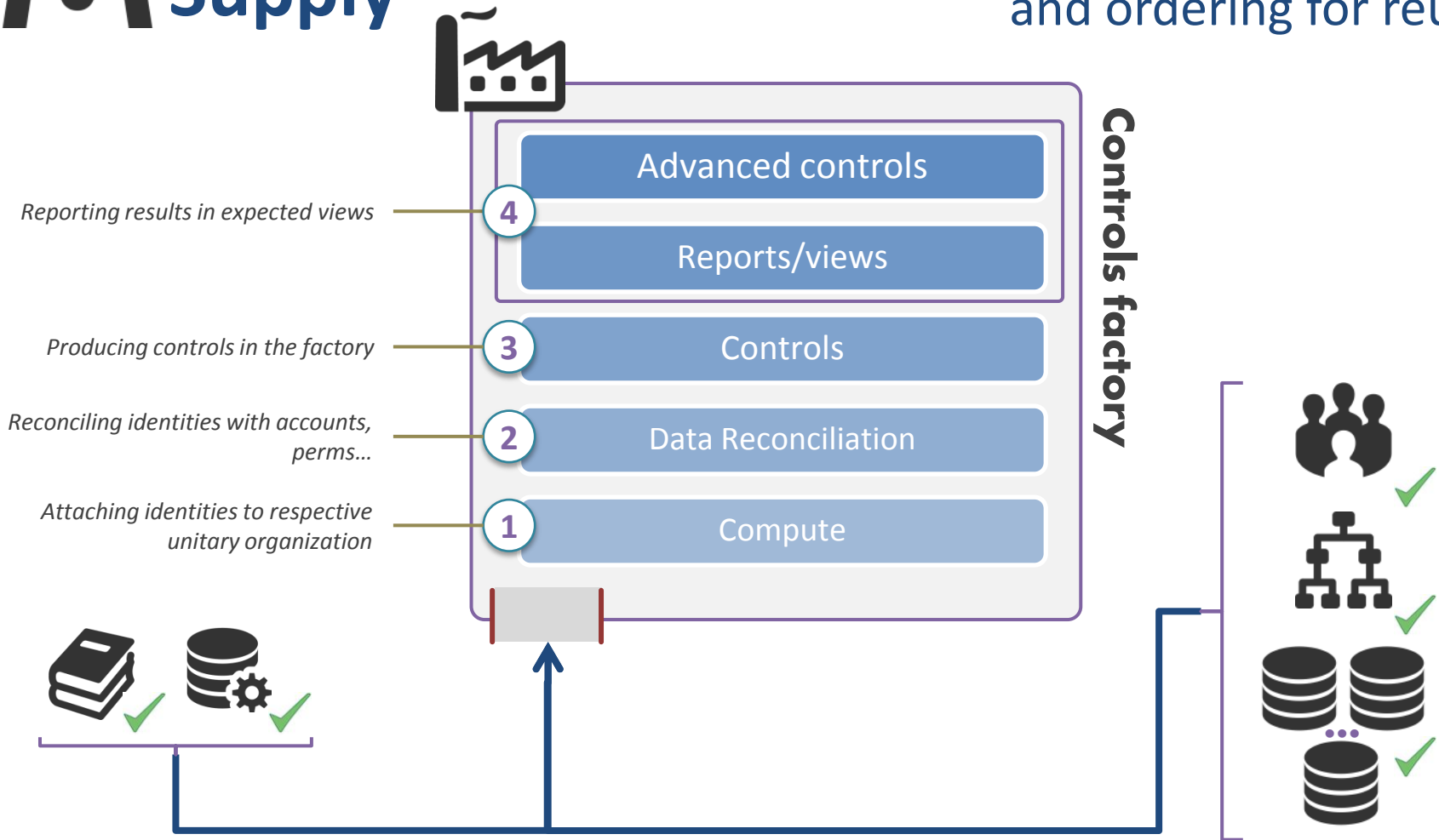
	Supply		Raw data from multiple collect sources
	Compute	} +	Loading, ordering & storing data
	Reconcile		Identities vs. accounts
	Control		Production of control resources
	SoD		Advanced controls
	Report		Presenting results as expected

PRODUCTION SERVICES | SUPPLY



Supply

... loading raw data, reconciliation, mapping and ordering for reuse

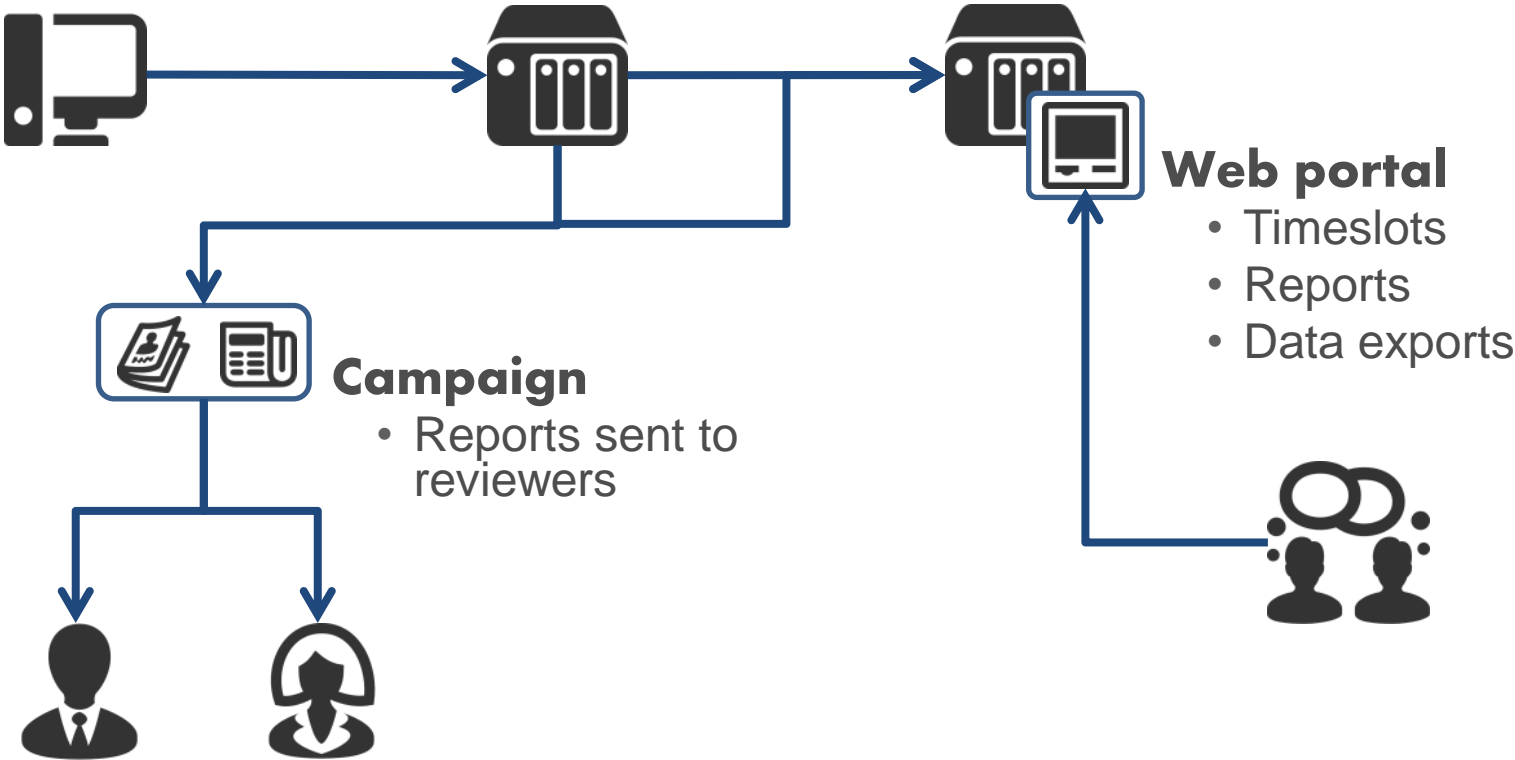


PRODUCTION SERVICES | REPORT

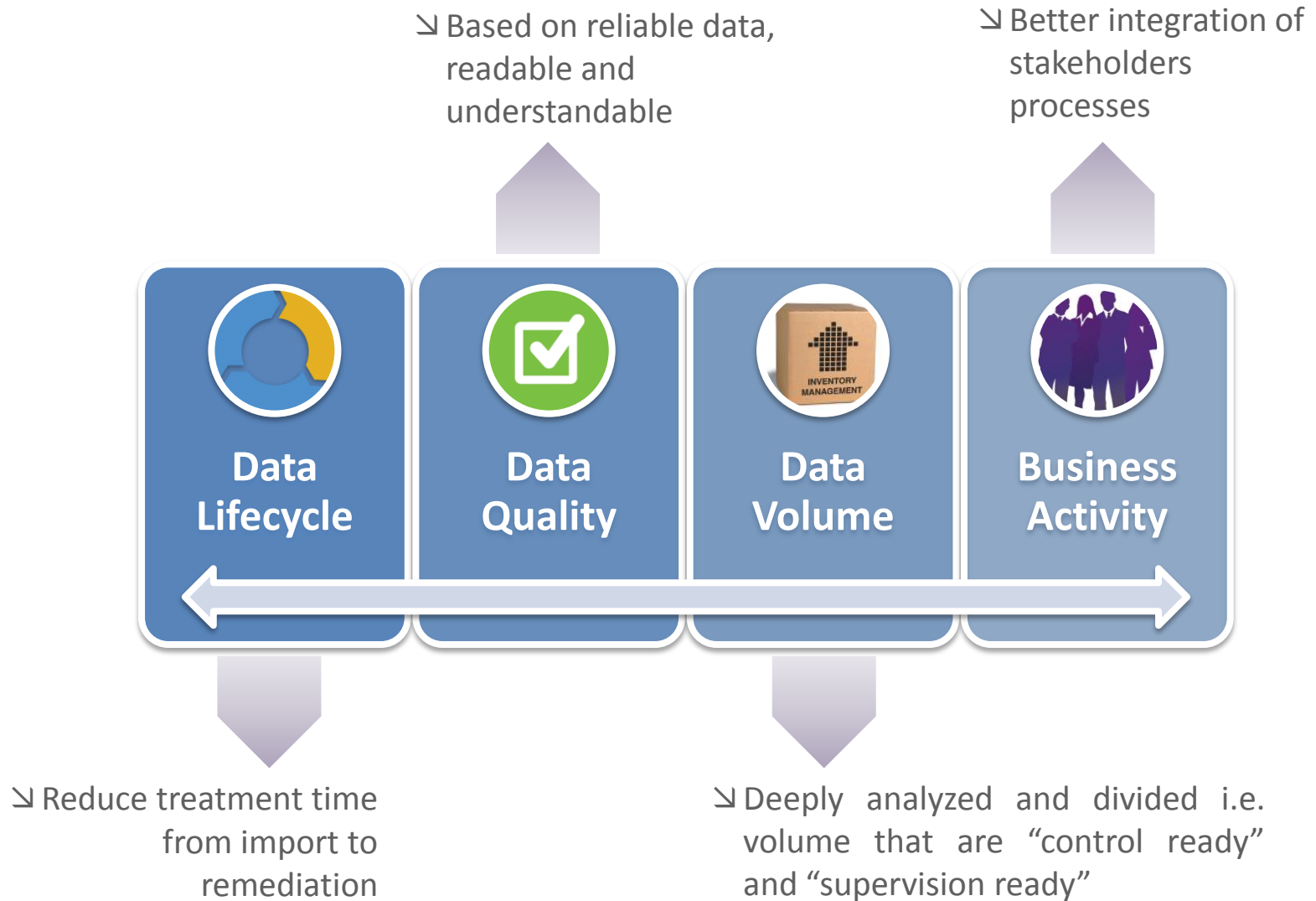


Report

... presenting control data as requested
(format & delivery)



CONTROLS GOVERNANCE | FOCUS ON PITFALLS





Orientations and improvements

> Ergonomics and design

- > Dynamic reports (web interfaces)
- > Point and click review
- > Enriched information

> Automation

- > Tickets directly created and assigned
- > Follow-up using the factory

> Dashboard & Reporting

- > Automated and real-time
- > Web-based dashboard

> Administration

- > Delegation mechanism enhanced
- > Improved planning and review mechanism

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THANK U / QUESTIONS