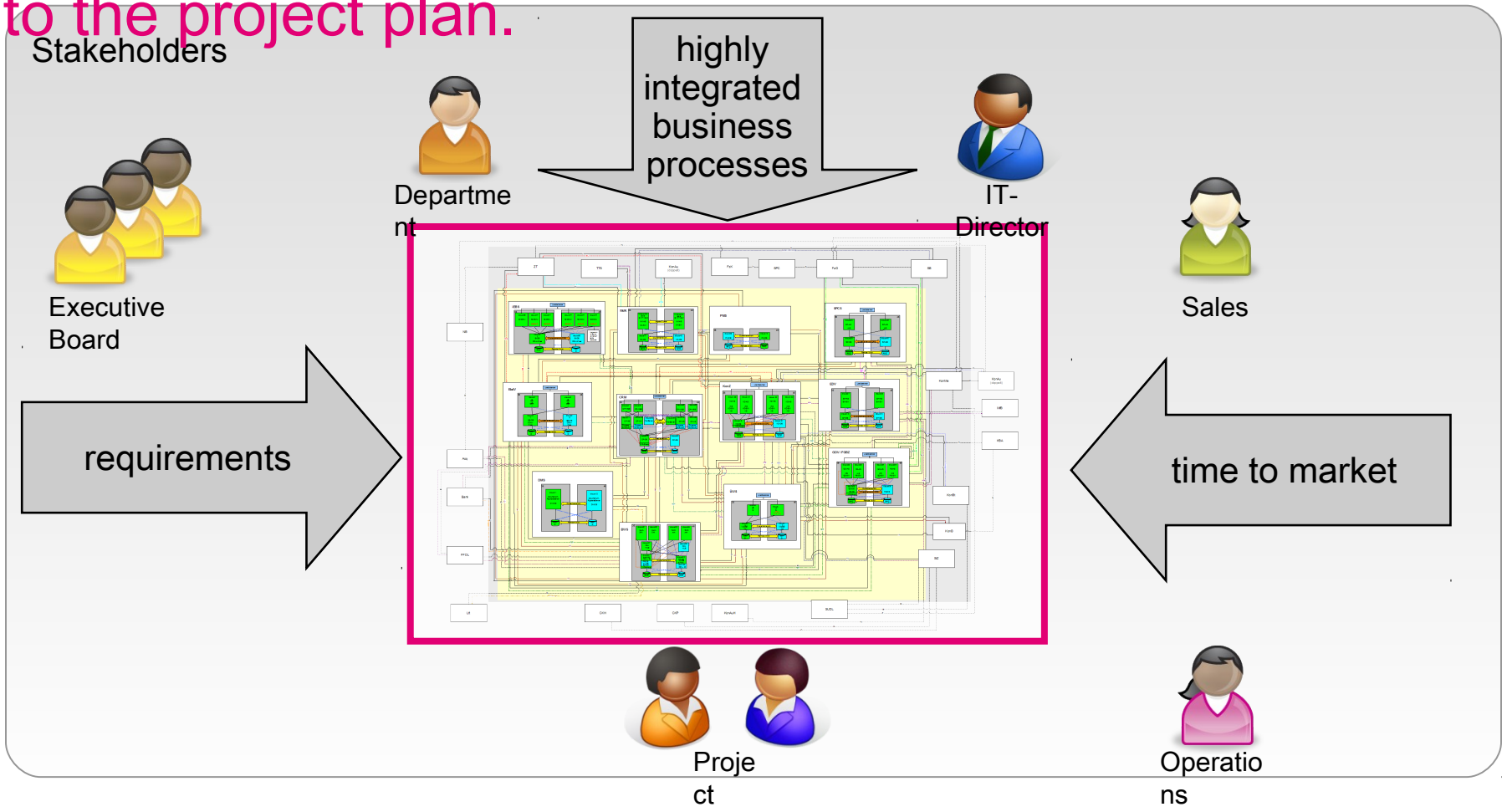
Factory Approach for Testing Large Scale Projects

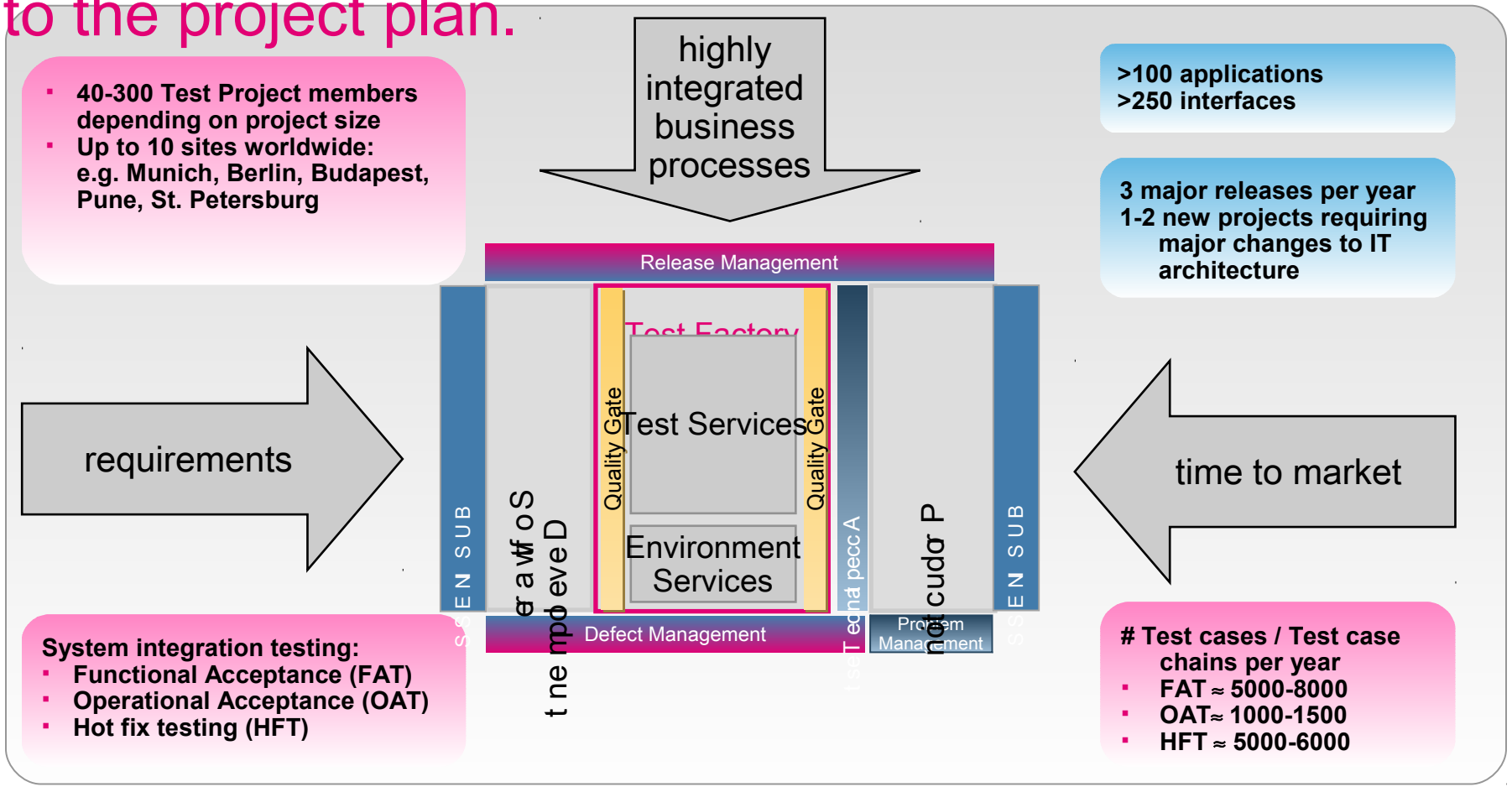
Anne Hager, T-Systems Germany

T-Systems

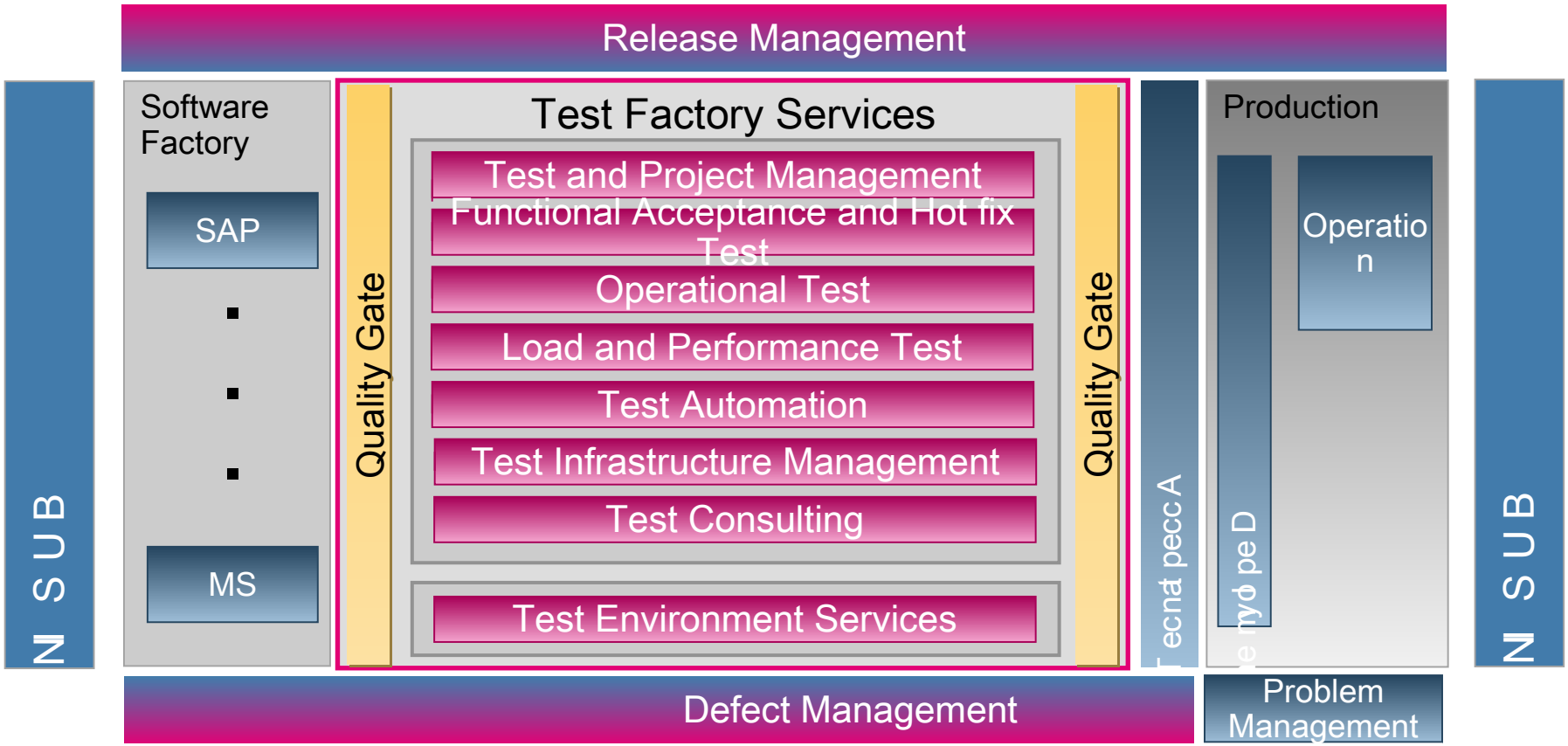
Large scale IT projects are characterized by heterogeneous IT systems and high number of stakeholders involved, requiring dynamic adjustments to the project plan.



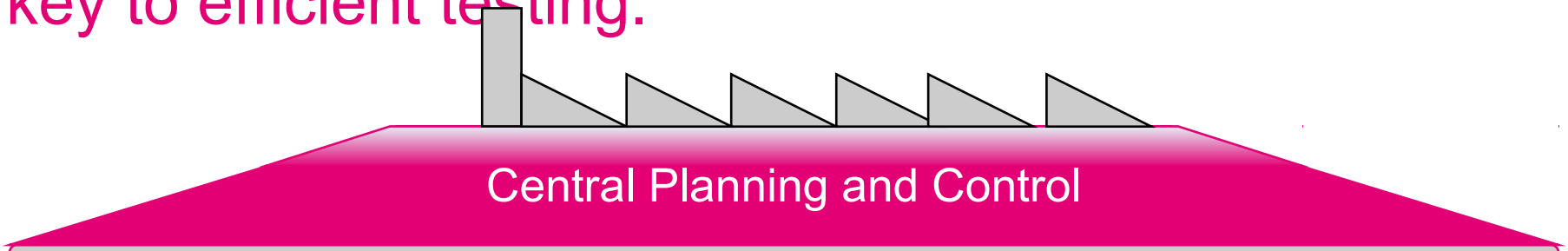
Large scale IT projects are characterized by heterogeneous IT systems and high number of stakeholders involved, requiring dynamic adjustments to the project plan.



The T-Systems Test Factory Services provide independent quality assurance supported by quality gates.



In large scale projects the test factory approach is the key to efficient testing.



Central Planning and Control

Industrialized production managed by central planning and control unit, which is single entry point for orders and reports

Services and Organization

Scalable Organisation delivering standardized test services and environment services

Standardized integrated tools across the complete value chain

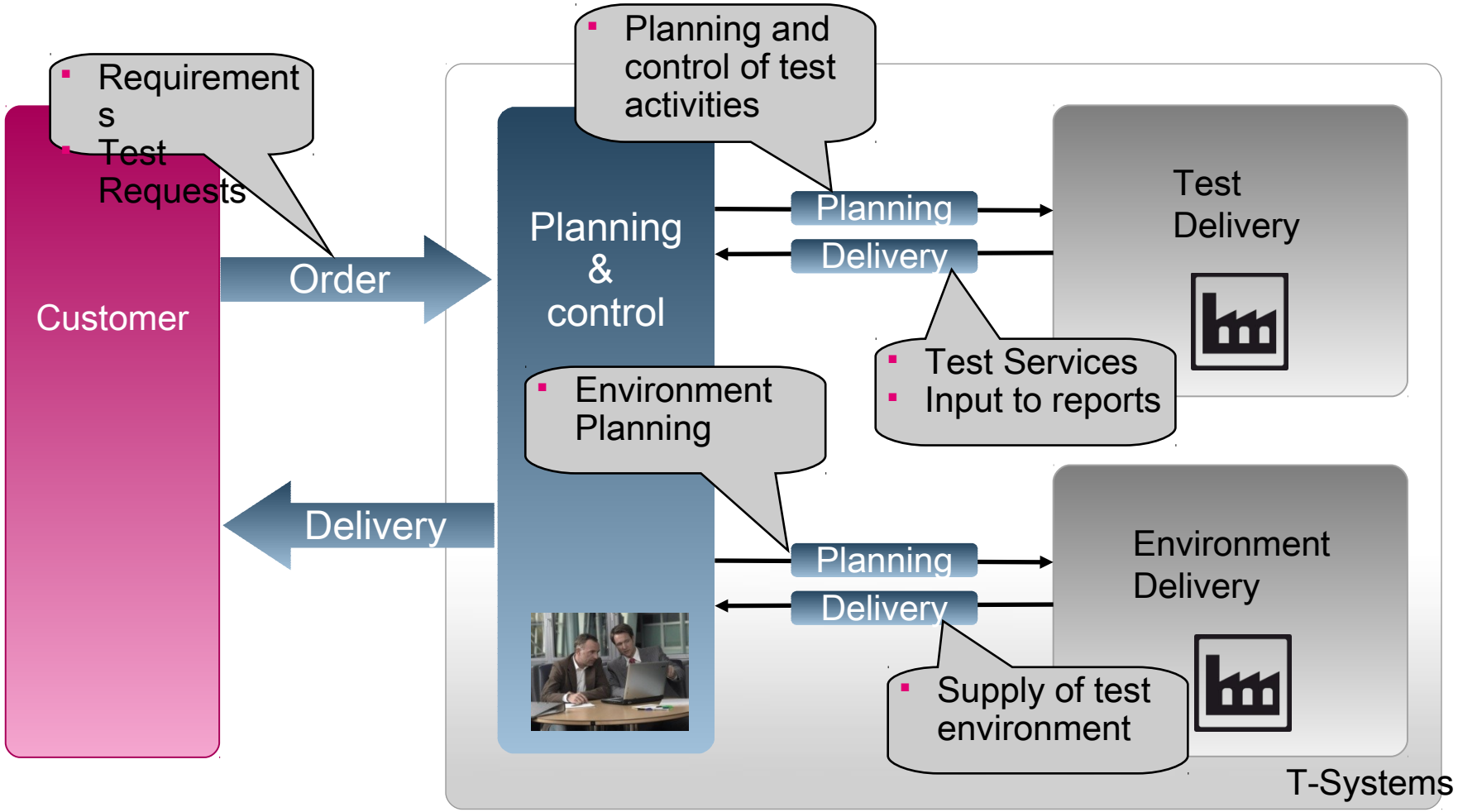
Transparent reporting based on reliable data from tools and KPIs

KPIs

KPIs monitor quality of results and process to help identify cost drivers

T · · Systems

Standardized delivery is managed by a strong planning unit acting at the customer interface.



Planning and Control is the entry point for all customer requests and responsible for the overall planning of the project.

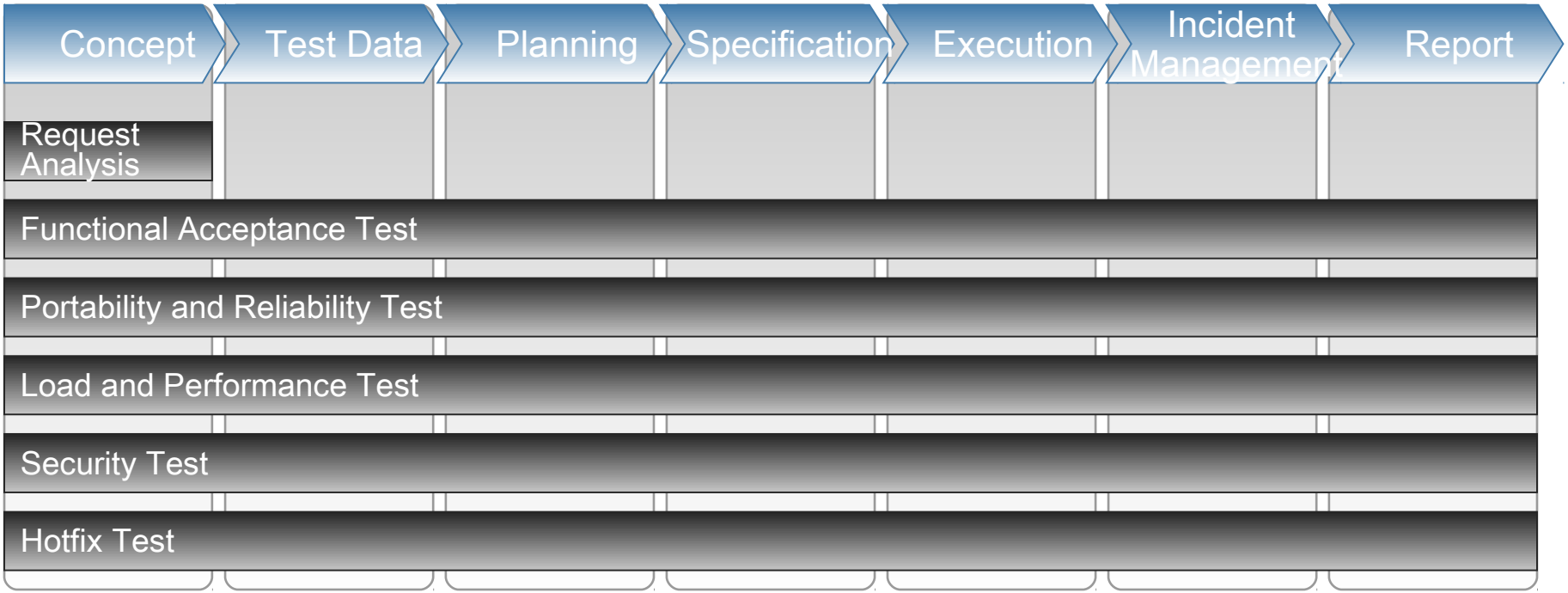
- Handle incoming test requests
- Check feasibility
- Rough effort estimation and dependency analysis
- Scope monitoring

- Entry point for deliverables from development
- Formal quality check of release contents
- Coordination of installation
- Preparation of integration of new applications

- Project integration management of all test activities
- Long term and mid term planning
- Effort estimation of test requests

T · · Systems

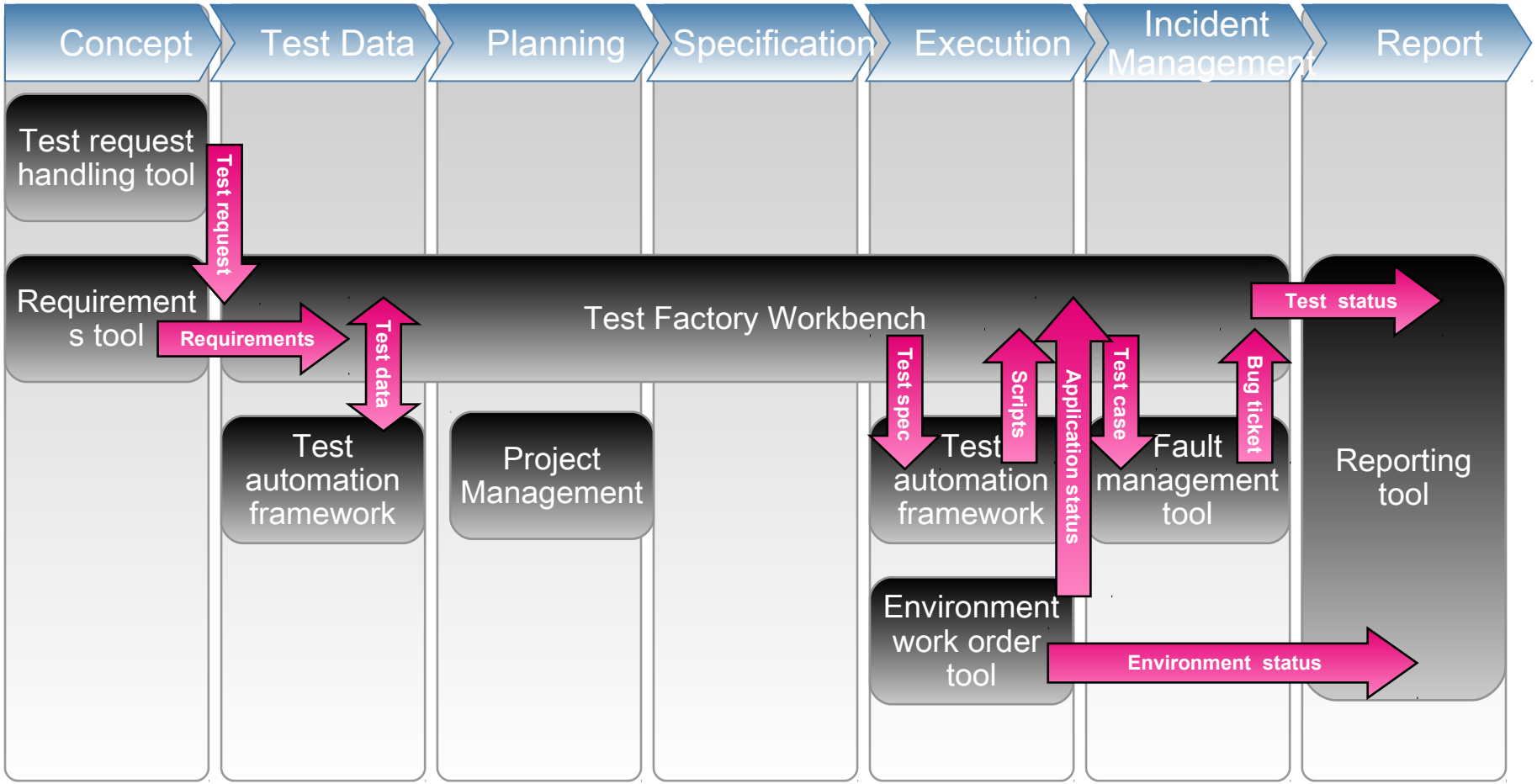
Standardized Services are structured along Value Chain to enable industrialized production.



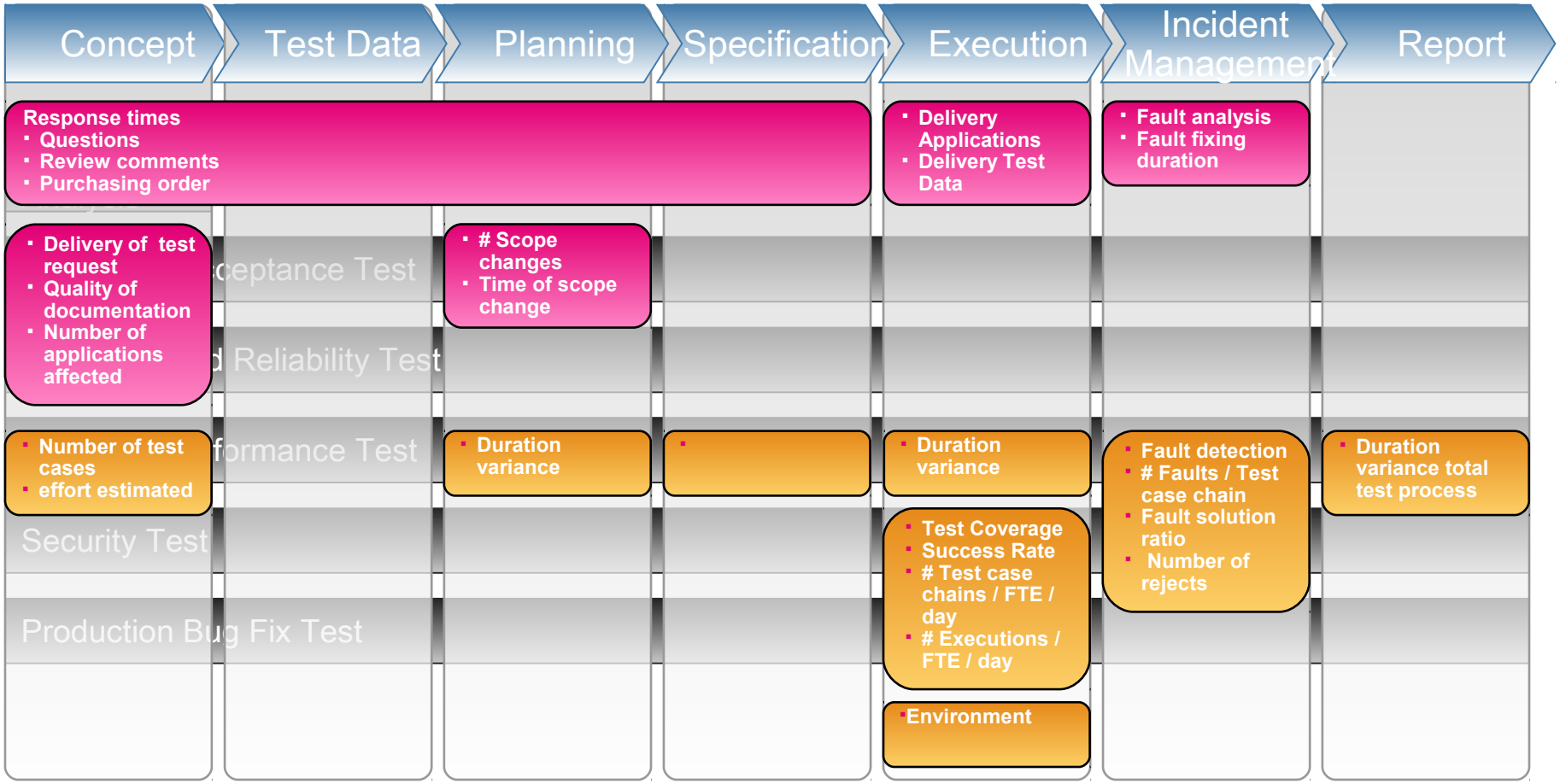
- All services are structured identically
- Common use of tools and processes for each value added step
- Enables easy ramp up and down
- Supporting services e.g. automation are bundled to use size effects

T · · Systems

The test tool set shares common data to support standardized services throughout the complete test process.



Delivery of Standardized Services along Value Chain is monitored by KPIs.



T · · Systems

Transparency is given by bundling metrics into six KPIs.

		Value	Planne
Earned Value Analysis	EVA	20,00%	
Test-Performance	TP	42,31%	
Order Stability	OS	0,00%	
Conditions For Test	CFT	29,41%	
Test Efficiency	TE	55,77%	
Human Resources	HR	100,00%	
KPI Total	KT	34,69%	

scope, time, cost

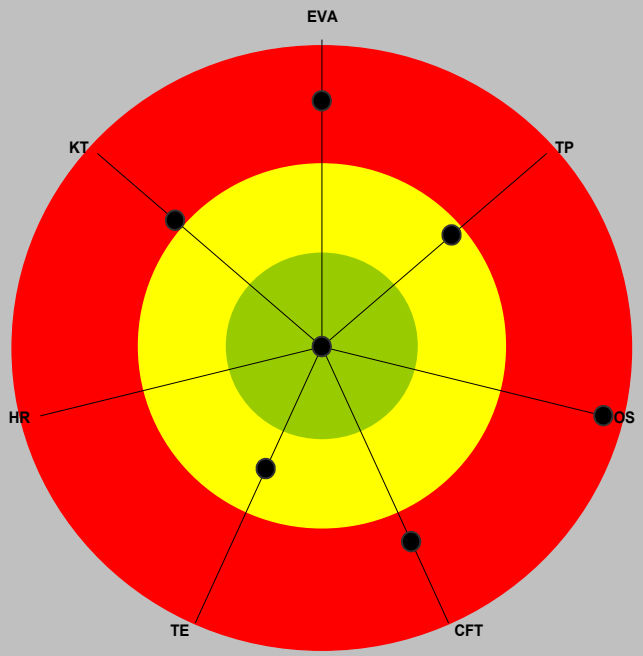
test coverage, pass rate, re test rate

number and volume of changes

faults, environment, data

onal if green)

fault detection, ticket rejection rate

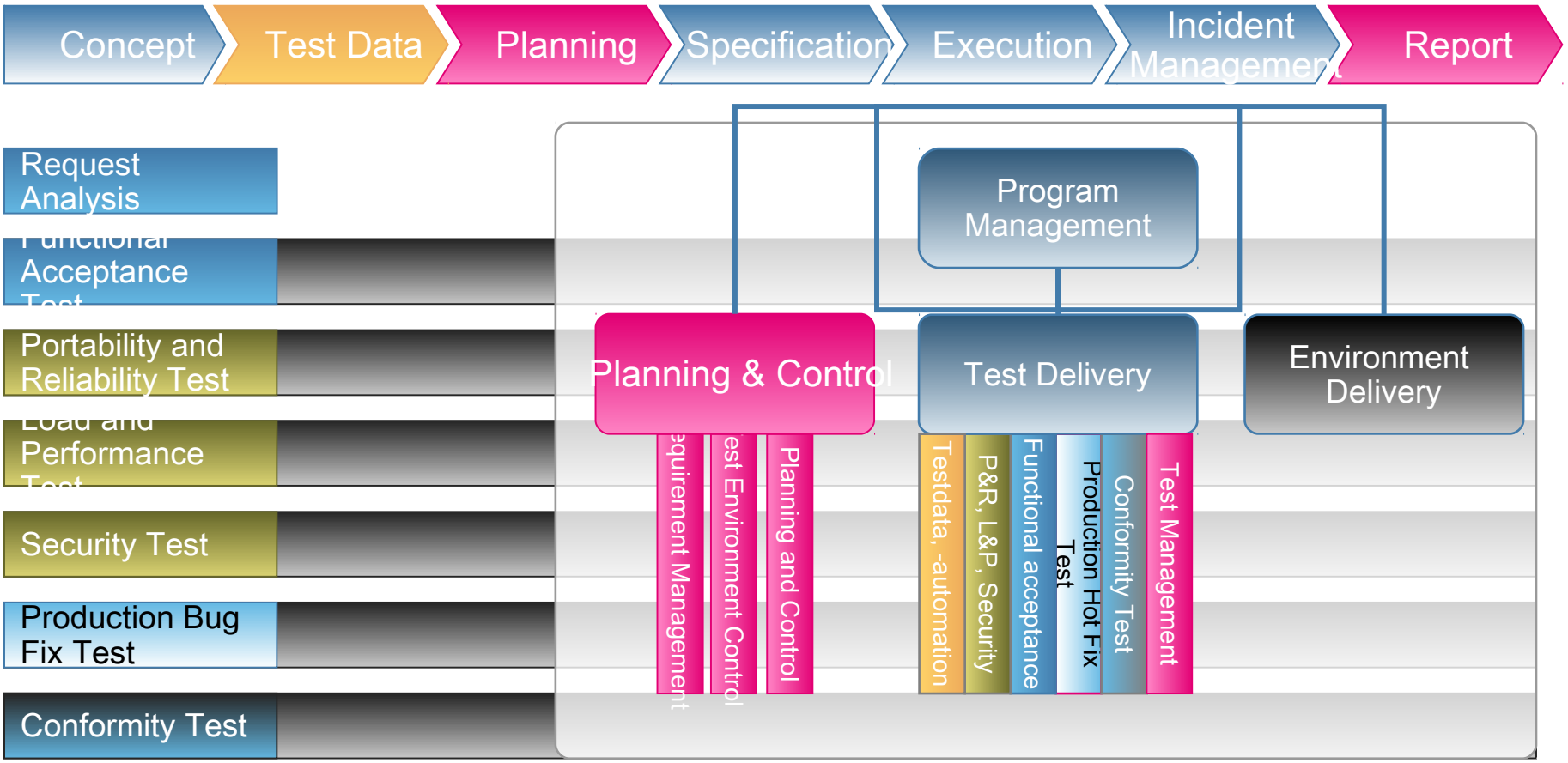


KPI‘s are normalized:
- 0% lowest value
- 100% optimum value

KPIs give quick information on overall situation.
Analysis of underlying KPIs in detail gives information on optimization potential

T · · Systems

Bundling of value added steps into one team increases efficiency through size effects .



T-Systems