



# QA Navigation Board

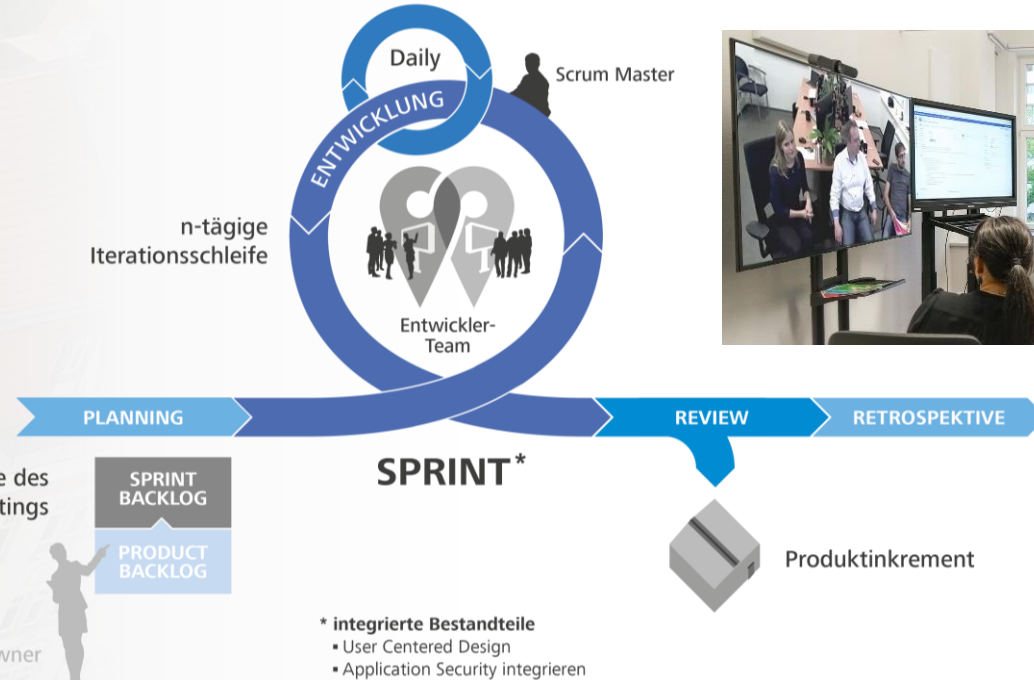
Venture into uncharted waters of quality assurance.

**ZEISS Digital Innovation**

### Portfolio

- Moderne Webanwendungen
- Innovative Cloud-Lösungen
- Softwareevolution
- Individuelle Testservices

### Agile Arbeitsweise



7

#### Standorte

Dresden, München, Berlin,  
Leipzig, Görlitz, Budapest,  
Miskolc

420

#### feste Mitarbeiter

in Deutschland und Ungarn

30+

Jahre Erfahrung in Individualsoftwareentwicklung, ISO 9001 & ISO 27001 zertifiziert

50+

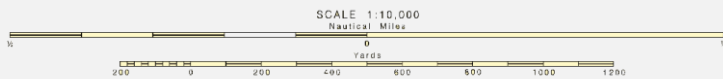
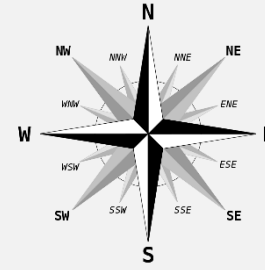
Mio. Euro Gesamtleistung  
im Geschäftsjahr 2020/21

3x

Leader (Agile)  
Software Development  
Internationales Analysten-  
Benchmark 2021, 2018, 2017

# QA Navigation Board

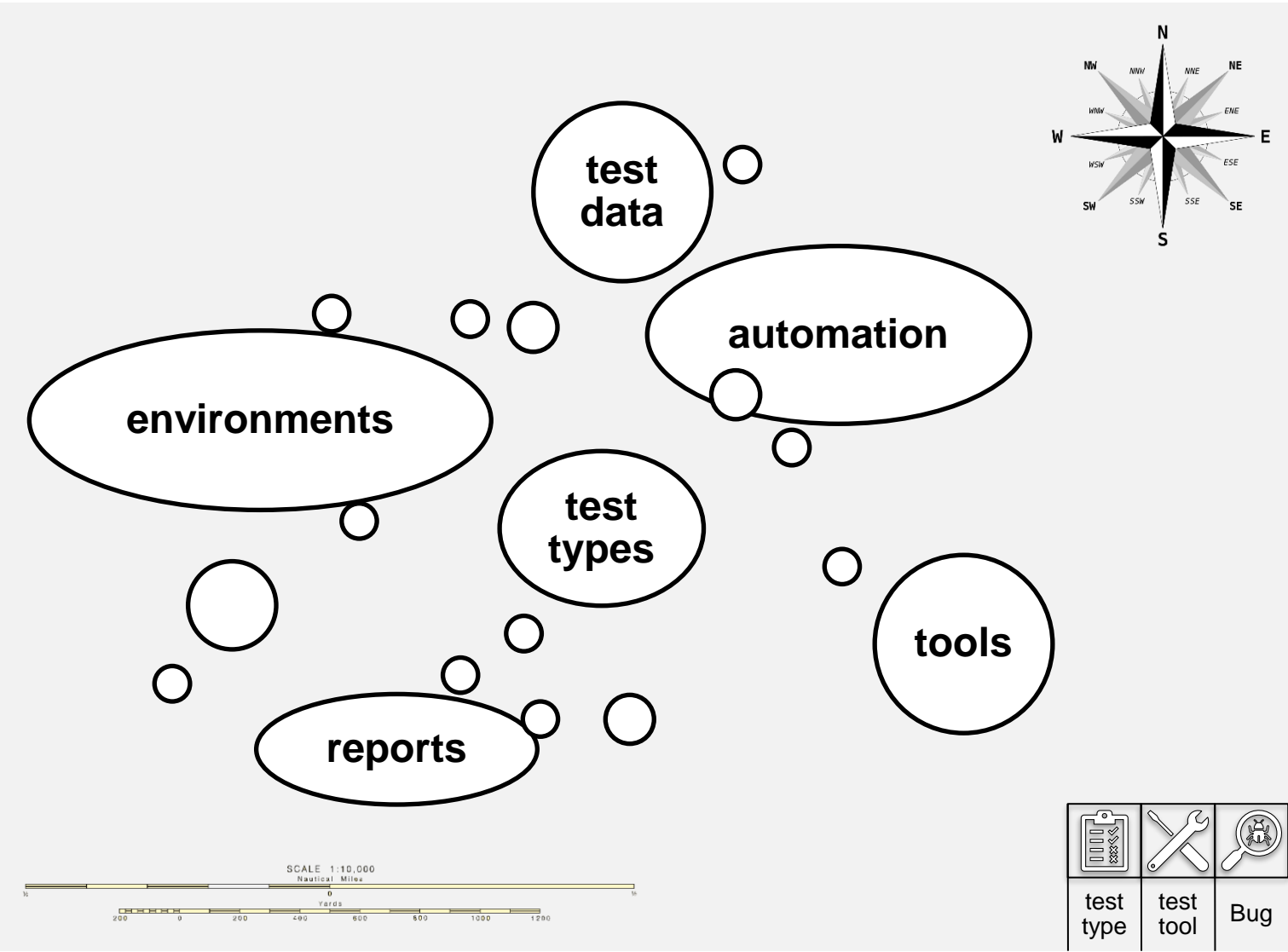
Venture into uncharted waters



test type	test tool	Bug

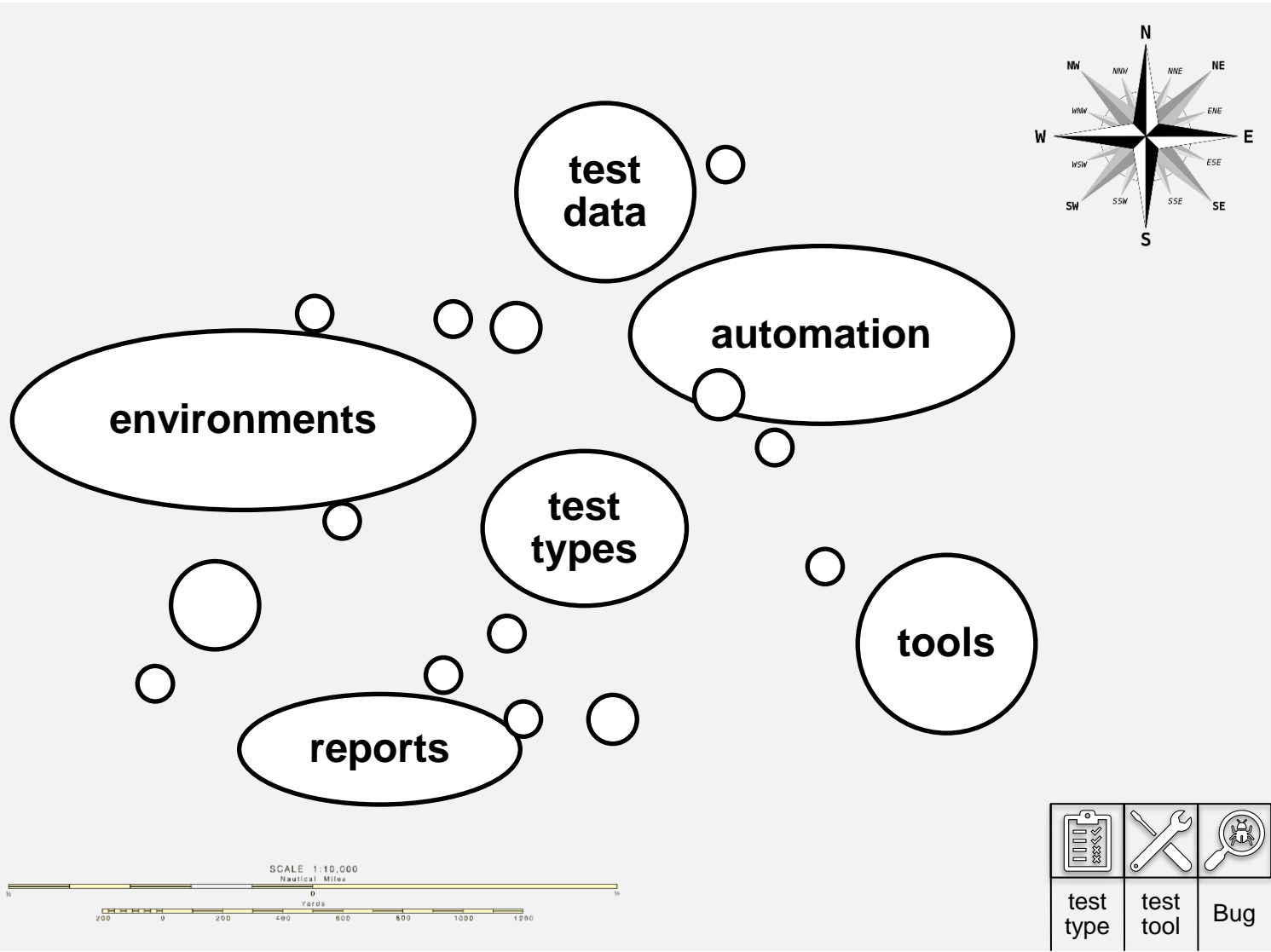
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Venture into uncharted waters



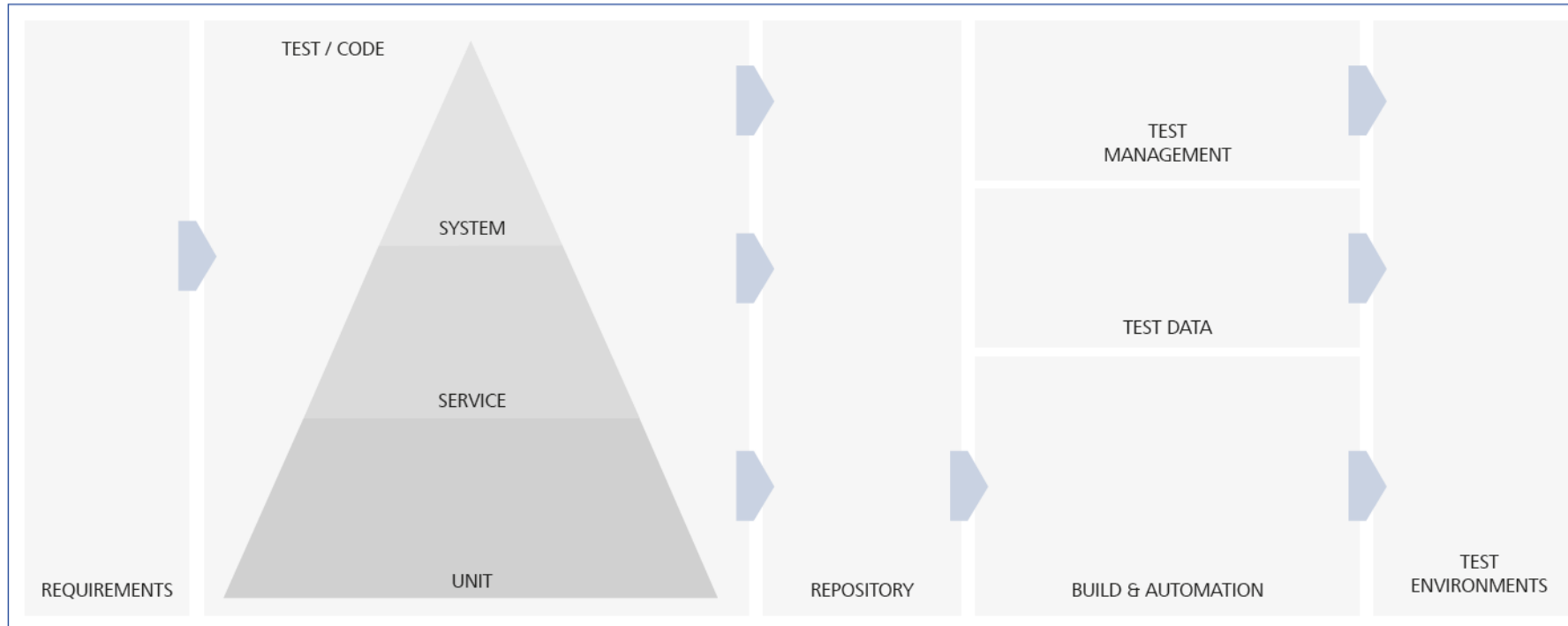
# QA Navigation Board

Venture into uncharted waters



# QA Navigation Board

## Test plan for the team



### DESCRIPTION QA MAP

The teams can use the following questions to fill the QA Map and therefore to plan and document all necessary steps required for an optimal testability of their projects.

#### REQUIREMENTS

- What are the requirements?
- Do the requirements support the preparation of the test case?
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#### TEST / CODE

- Where do we place the tests?
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#### REPOSITORY

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#### TEST MANAGEMENT

- How do we plan our tests?
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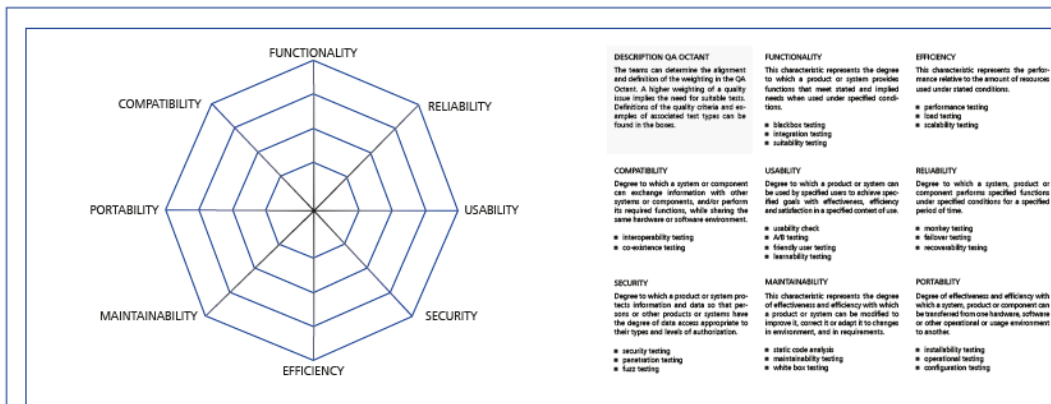
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#### BUILD & AUTOMATION

- How much test automation is required?
- Do we need additional tools?
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#### TEST ENVIRONMENTS

- Do we have an adequate environment for every test?
- Will we get in each other's way?



### Learn more about the QA Navigation Board:

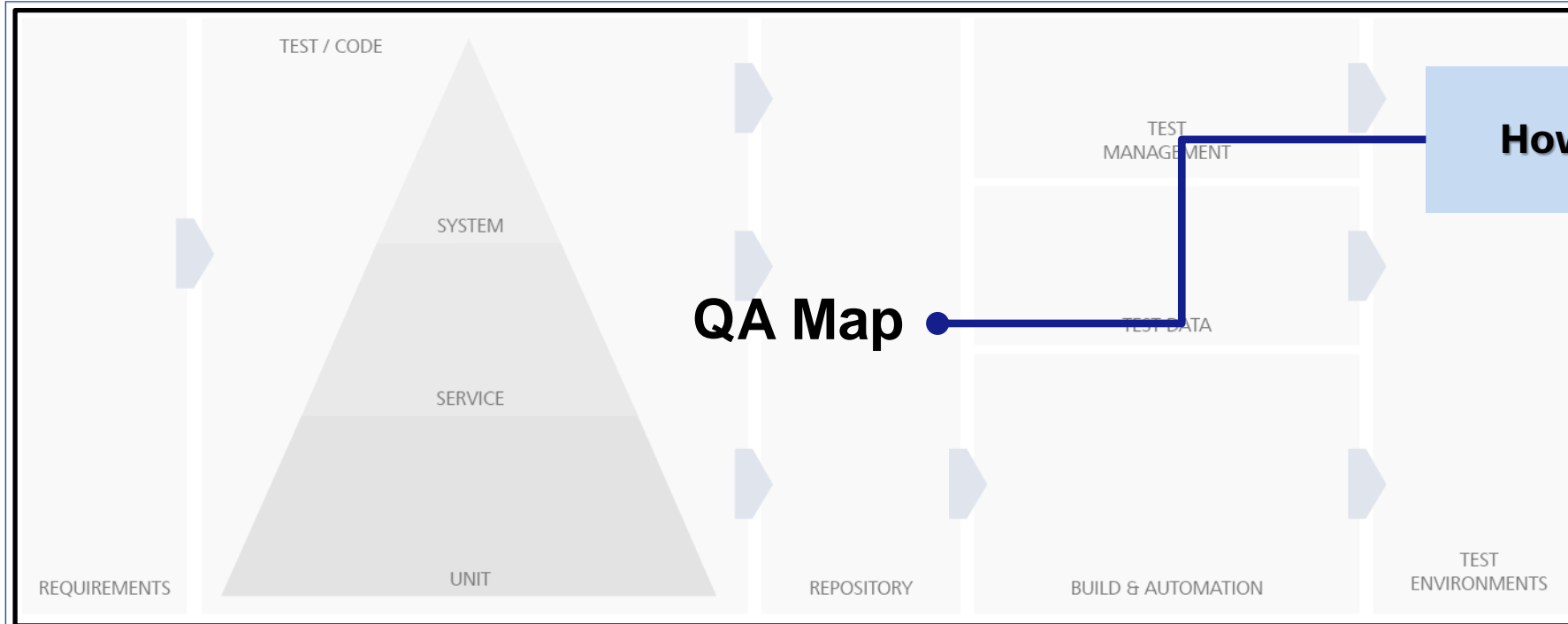


#### CONTACT

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**How and Where?**

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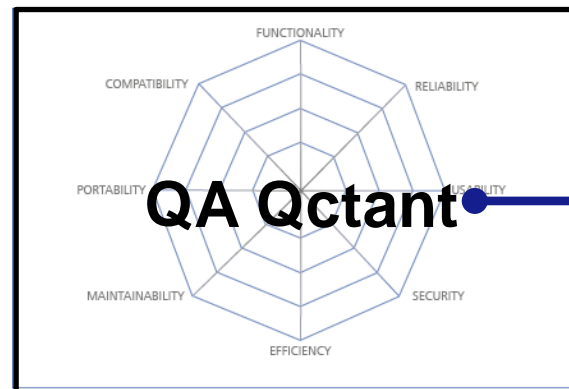
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#### DESCRIPTION QA OCTANT

The teams can determine the alignment and definition of the weighting in the QA Octant. A higher weighting of a quality issue implies the need for suitable tests. Definitions of the quality criteria and examples of associated test types can be found in the boxes.

#### COMPATIBILITY

Degree to which a system or component can exchange information with other systems, components, and/or perform its required functions, while sharing the same or software environment.

- interoperability testing
- co-existence testing

#### SECURITY

Degree to which a product or system protects information and data so that persons or other products or systems have the degree of data access appropriate to their types and levels of authorization.

- security testing
- penetration testing
- fuzz testing

#### FUNCTIONALITY

This characteristic represents the degree to which a given set of functions that meets when users.

- behavior test
- integration
- usability test

#### USABILITY

Degree to which a system or component can be used by specified groups and satisfaction.

- usability test
- A/B testing
- usability testing

#### MAINTAINABILITY

This characteristic represents the degree of effectiveness and efficiency with which a product or system can be modified to improve it, correct it or adapt it to changes in environment, and in requirements.

- static code analysis
- maintainability testing
- white box testing

#### EFFICIENCY

This characteristic represents the performance relative to the resource of system.

- recovery testing

#### PORTABILITY

Degree of effectiveness and efficiency with which a system, product or component can be transferred from one hardware, software or other operational or usage environment to another.

- installability testing
- operational testing
- configuration testing

Learn more about the QA Navigation Board:

**What do we have to test?**

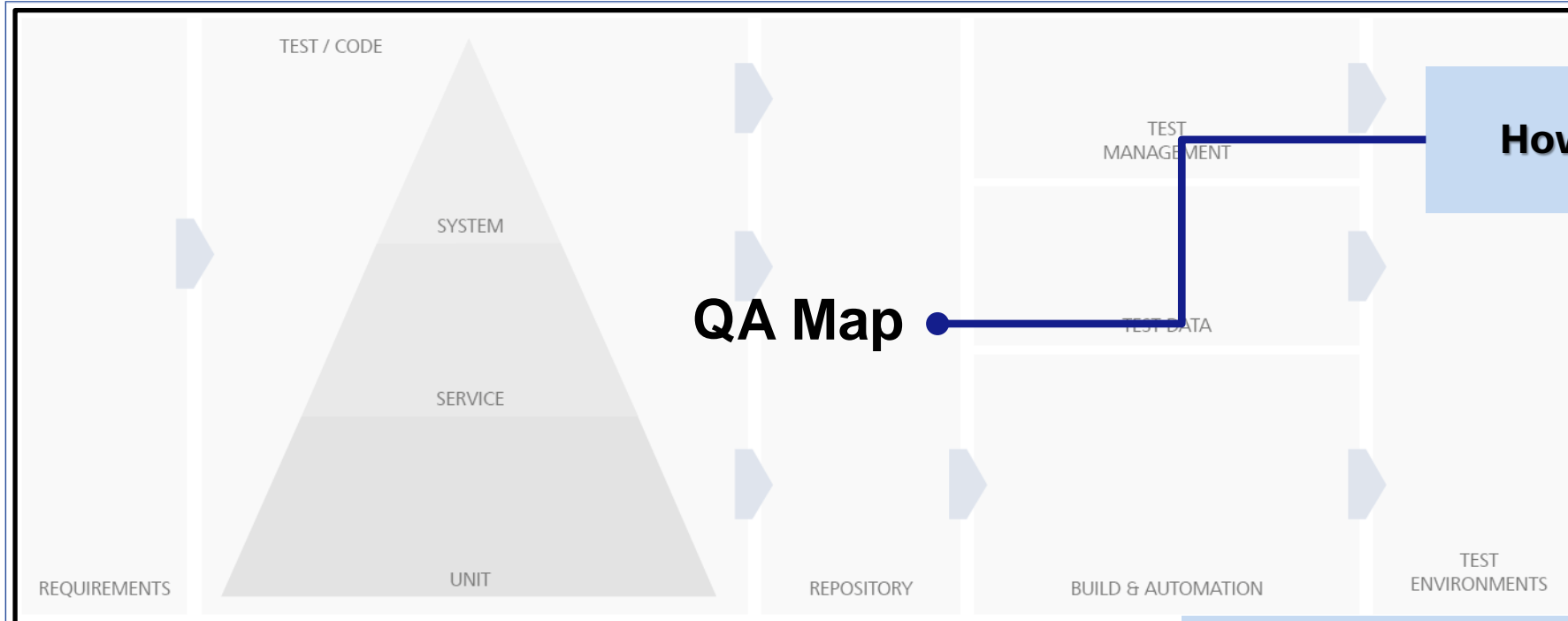
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# QA Navigation Board

## Test plan for the team



**How and Where?**

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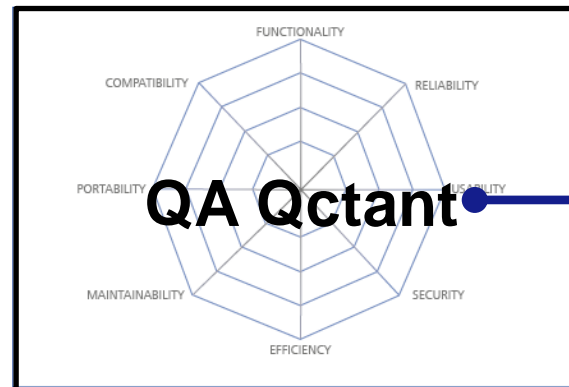
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- interoperability testing
- co-existence testing

#### SECURITY

Degree to which a product or system protects information and data so that persons or other products or systems have the degree of data access appropriate to their types and levels of authorization.

- security testing
- penetration testing
- fuzz testing

#### FUNCTIONAL

This character to which a quality functions that needs when users.

- interface test
- integration test
- usability test

#### USABILITY

Degree to which a system or component can be used by specified groups and satisfactorily.

- usability check
- A/B testing
- identify user
- learnability

#### MAINTAINAB

This character of effectiveness a product or improve it, can in environments, also in requirements.

- static code analysis
- maintainability testing
- white box testing

**What do we have to test?**

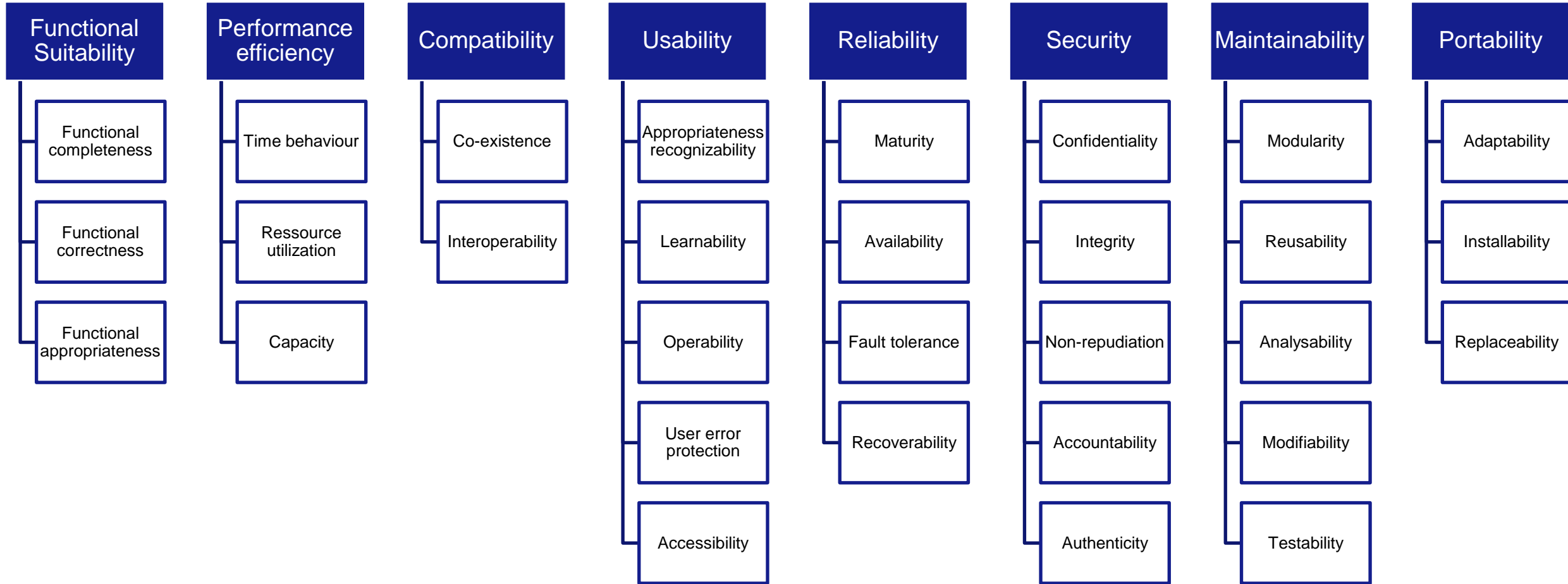
- installability testing
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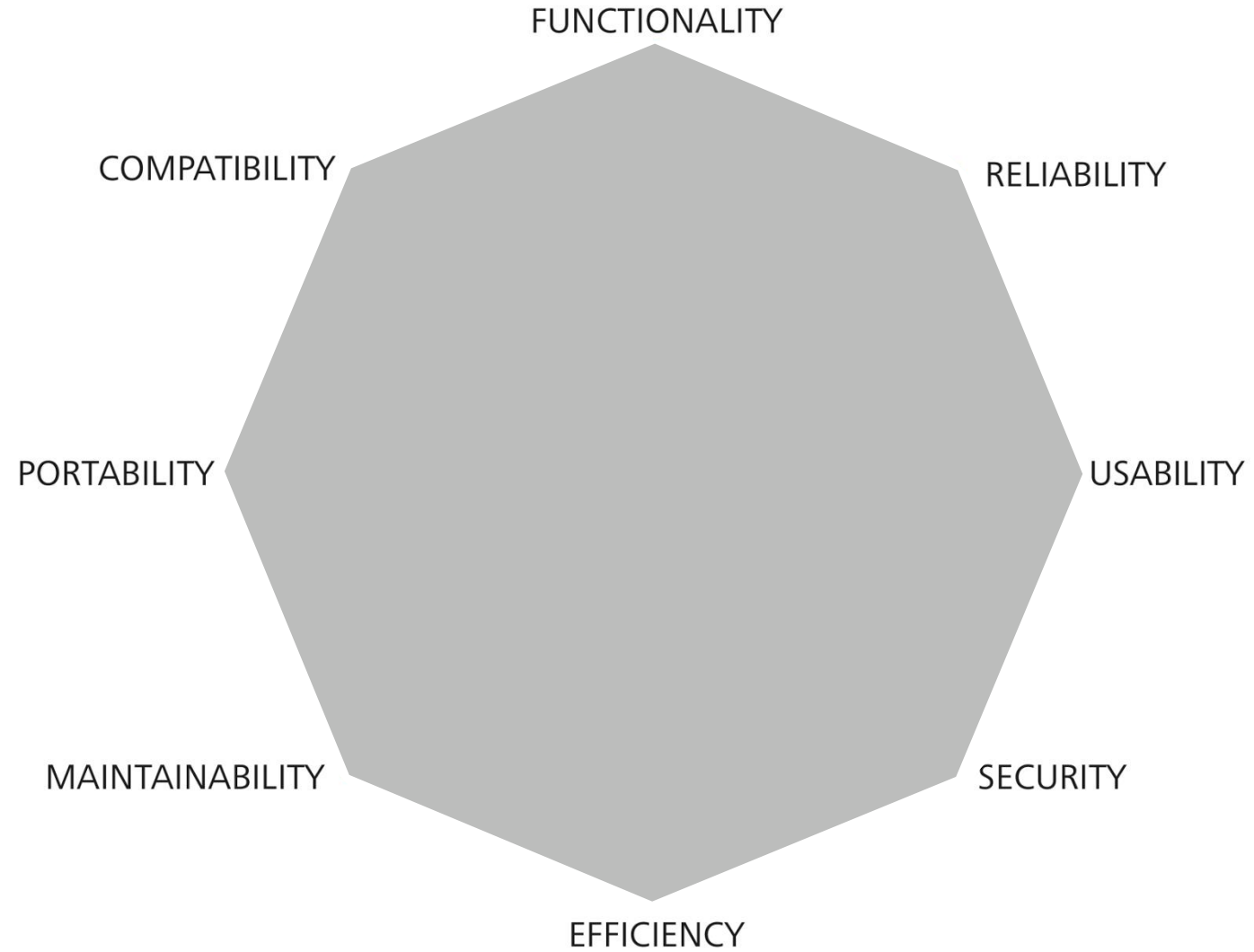
# QA Navigation Board

## ISO 25010



# QA Navigation Board

QA Octant



# QA Navigation Board

## QA Octant



FUNCTIONALITY

COMPATIBILITY

RELIABILITY

USABILITY

SECURITY

EFFICIENCY

PORTABILITY

MAINTAINABILITY

### Portability

Degree of effectiveness and efficiency with which a system, product or component can be transferred from one hardware, software or other operational or usage environment to another.

### Maintainability

This characteristic represents the degree of effectiveness and efficiency with which a product or system can be modified to improve it, correct it or adapt it to changes in environment, and in requirements.

# QA Navigation Board

## QA Octant



### Functionality

This characteristic represents the degree to which a product or system provides functions that meet stated and implied needs when used under specified conditions.

### Efficiency

This characteristic represents the performance relative to the amount of resources used under stated conditions.

### Compatibility

Degree to which a system or component can exchange information with other systems or components, and/or perform its required functions, while sharing the same hardware or software environment.

### Usability

Degree to which a product or system can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use.

### Reliability

Degree to which a system, product or component performs specified functions under specified conditions for a specified period of time.

### Security

Degree to which a product or system protects information and data so that persons or other products or systems have the degree of data access appropriate to their types and levels of authorization.

### Maintainability

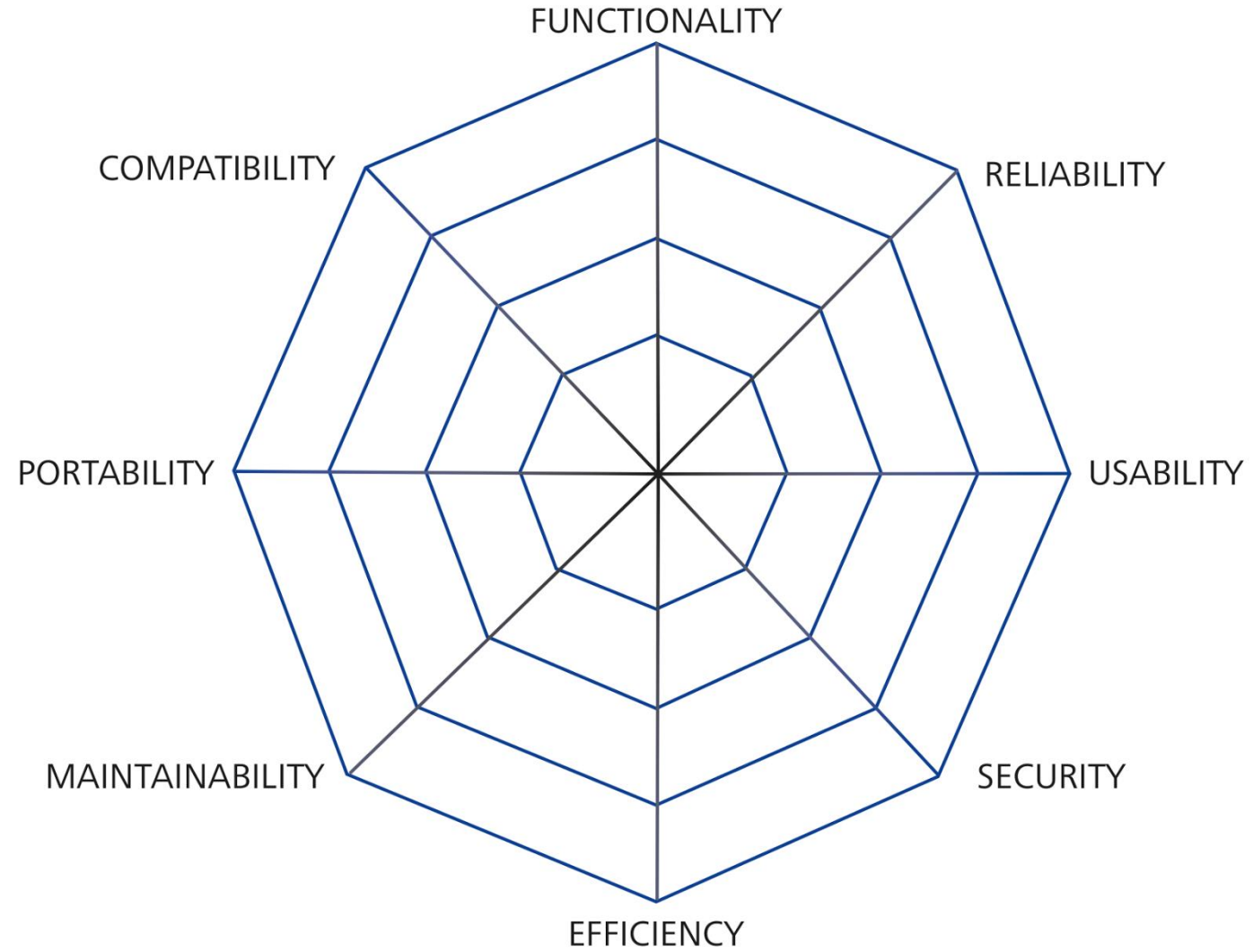
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# QA Navigation Board

QA Octant

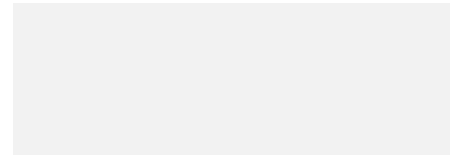


# QA Navigation Board

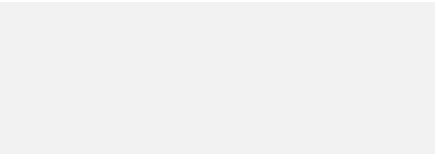
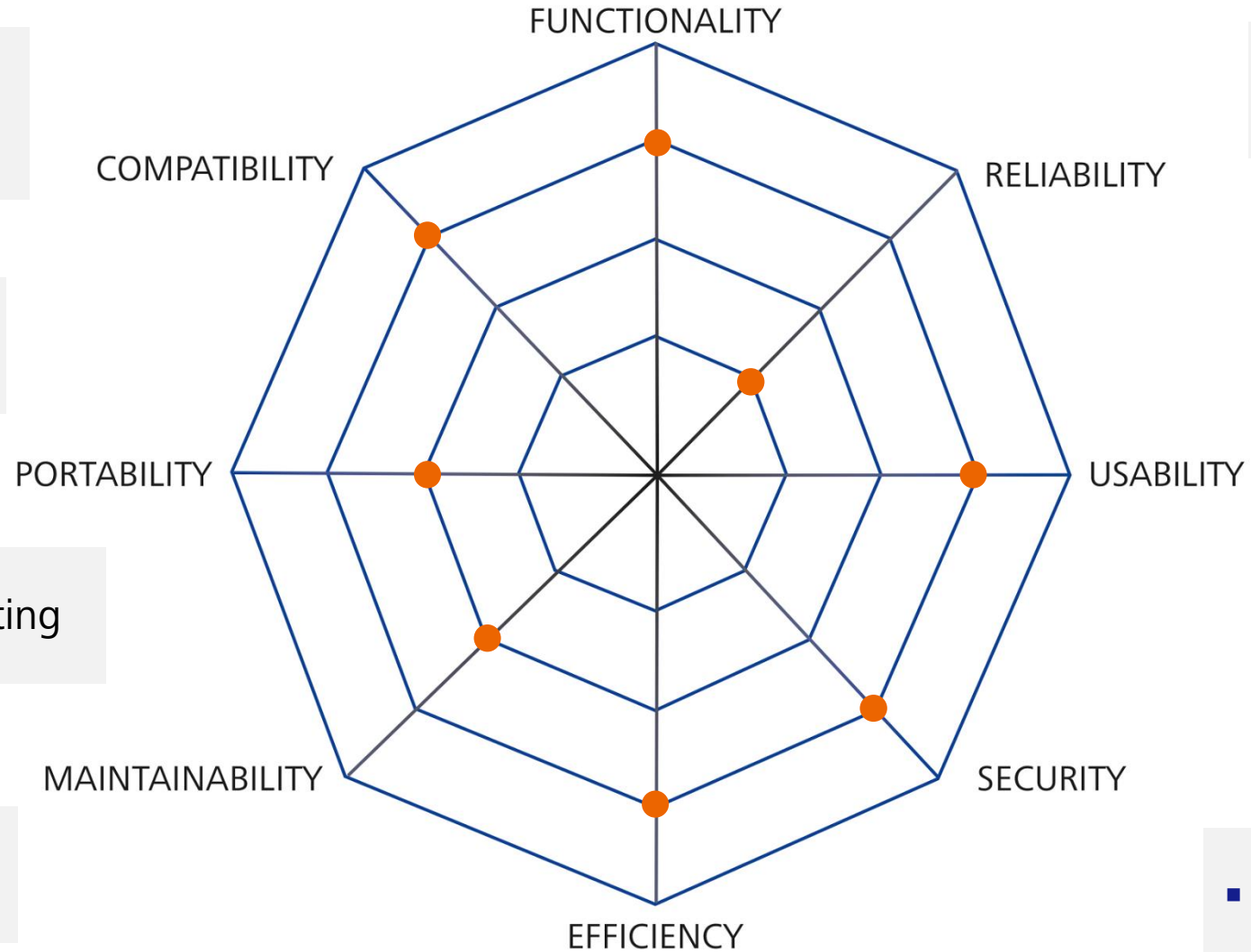
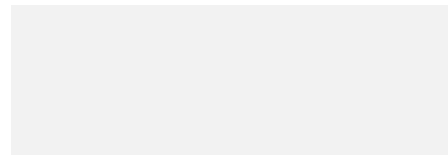
## QA Octant



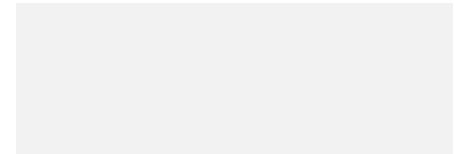
- Black Box Testing
- Explorative Testing



- Cross Browser Testing



- Friendly user testing




- Pen Testing

- Load Testing

# QA Navigation Board

## QA Octant Workshop



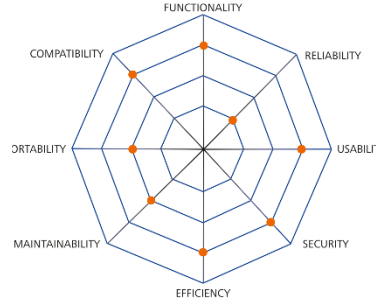
PO




Stakeholder




Quality Criteria



Octant



1 h



Collaboration



Poster



Powerpoint



# QA Navigation Board

## Alternative



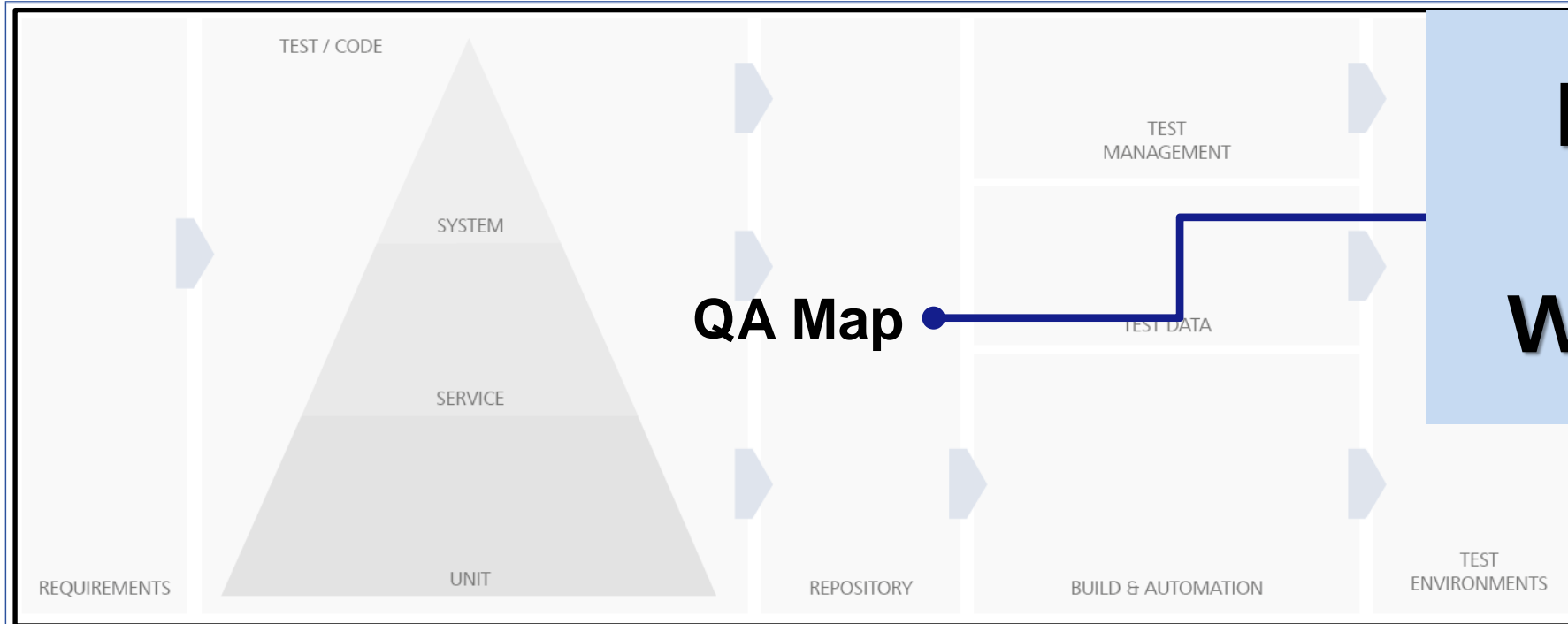
## Riskstorming

... is a collaborative, strategic board game that focuses on identifying how to test risks that impact the imperative quality aspects of your product.

<https://www.ministryoftesting.com/testsphere/riskstorming>

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## Test plan for the team



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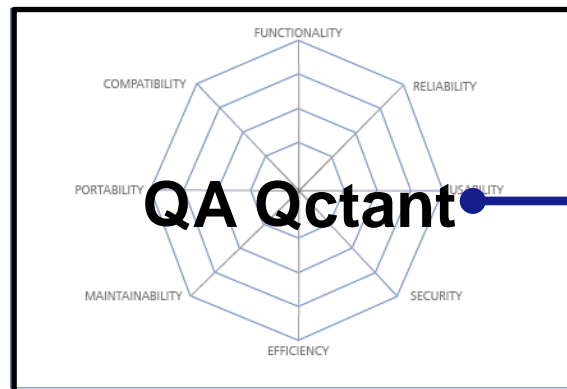
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**FUNCTIONALITY**  
Degree to which a system or component can exchange information with other systems, components, and/or perform its required functions, while sharing the data or software environment.

- interoperability testing
- co-existence testing

**SECURITY**  
Degree to which a product or system protects information and data so that persons or other products or systems have the degree of data access appropriate to their types and levels of authorization.

- security testing
- penetration testing
- fuzz testing

**RELIABILITY**  
This characteristic represents the degree to which a product or system performs its required functions that meet when used.

**COMPATIBILITY**  
Degree to which a system or component can exchange information with other systems, components, and/or perform its required functions, while sharing the data or software environment.

- usability (uX)
- A/B testing
- usability user testing
- learnability testing

**MAINTAINABILITY**  
This characteristic represents the degree of effectiveness and efficiency with which a product or system can be modified to improve it, correct it or adapt it to changes in environment, and in requirements.

- static code analysis
- maintainability testing
- white box testing

**EFFICIENCY**  
This characteristic represents the performance ratio to the resource of resources.

**USABILITY**  
Degree to which a system or component can be used by specified groups of users and satisfactorily.

- recoverability testing

**PORTABILITY**  
Degree of effectiveness and efficiency with which a system, product or component can be transferred from one hardware, software or other operational or usage environment to another.

- installability testing
- operational testing
- configuration testing

Learn more about the QA Navigation Board:

# What do we have to test?

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# QA Navigation Board

## Workshop



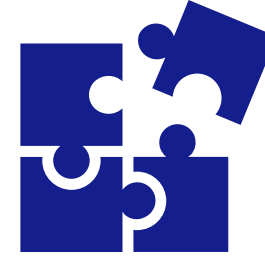
Team



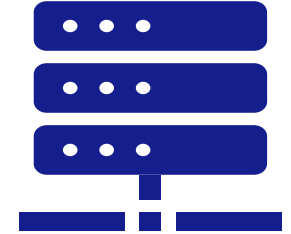
ScrumMaster



PO



Stakeholder



Ops



1,5 h



Collaboration



Poster



Powerpoint

# QA Navigation Board

QA Octant



## Functionality

- Manual and automated black box testing
- Explorative testing

## Usability

- Friendly user testing

## Security

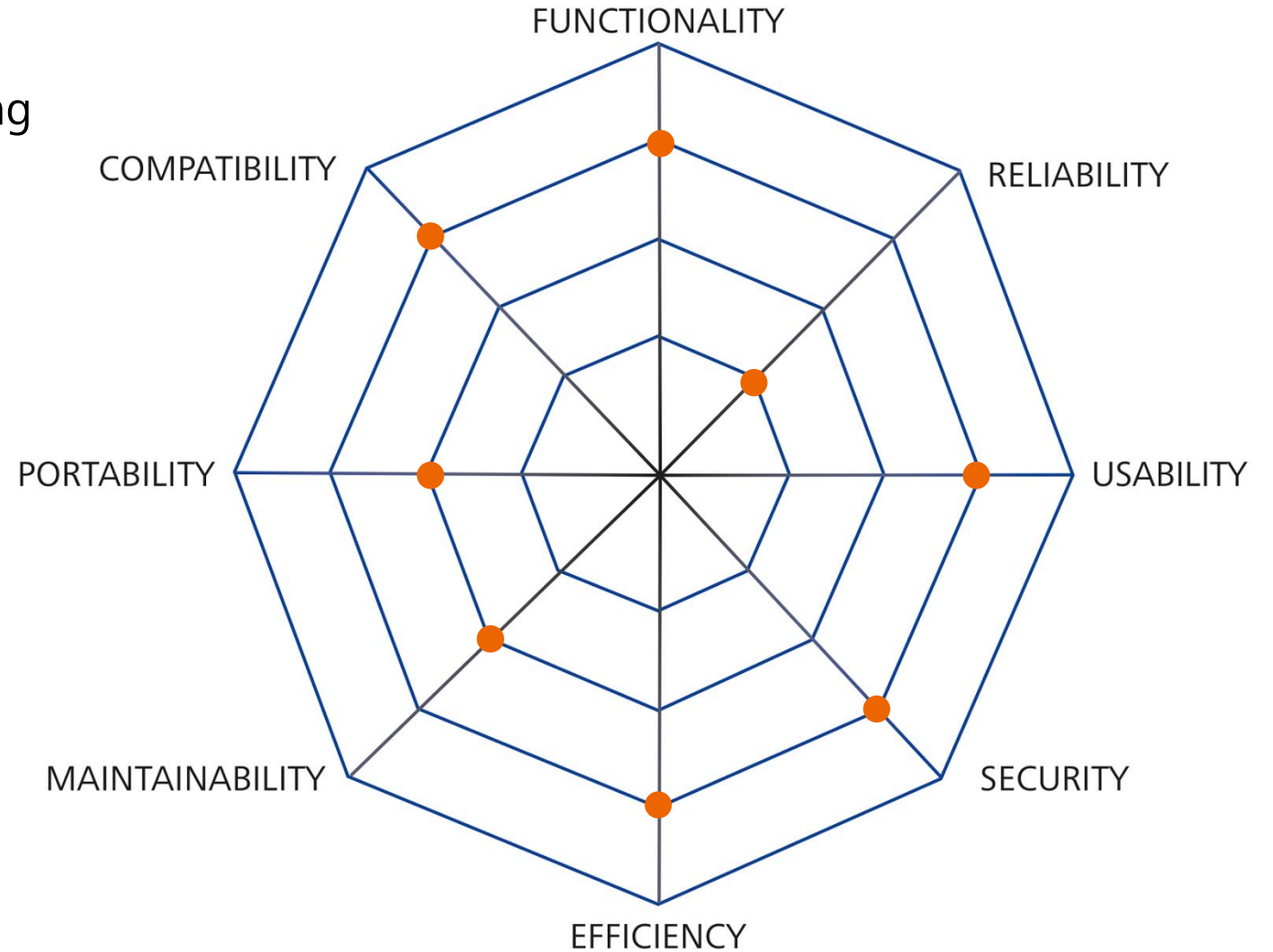
- Pen testing

## Efficiency

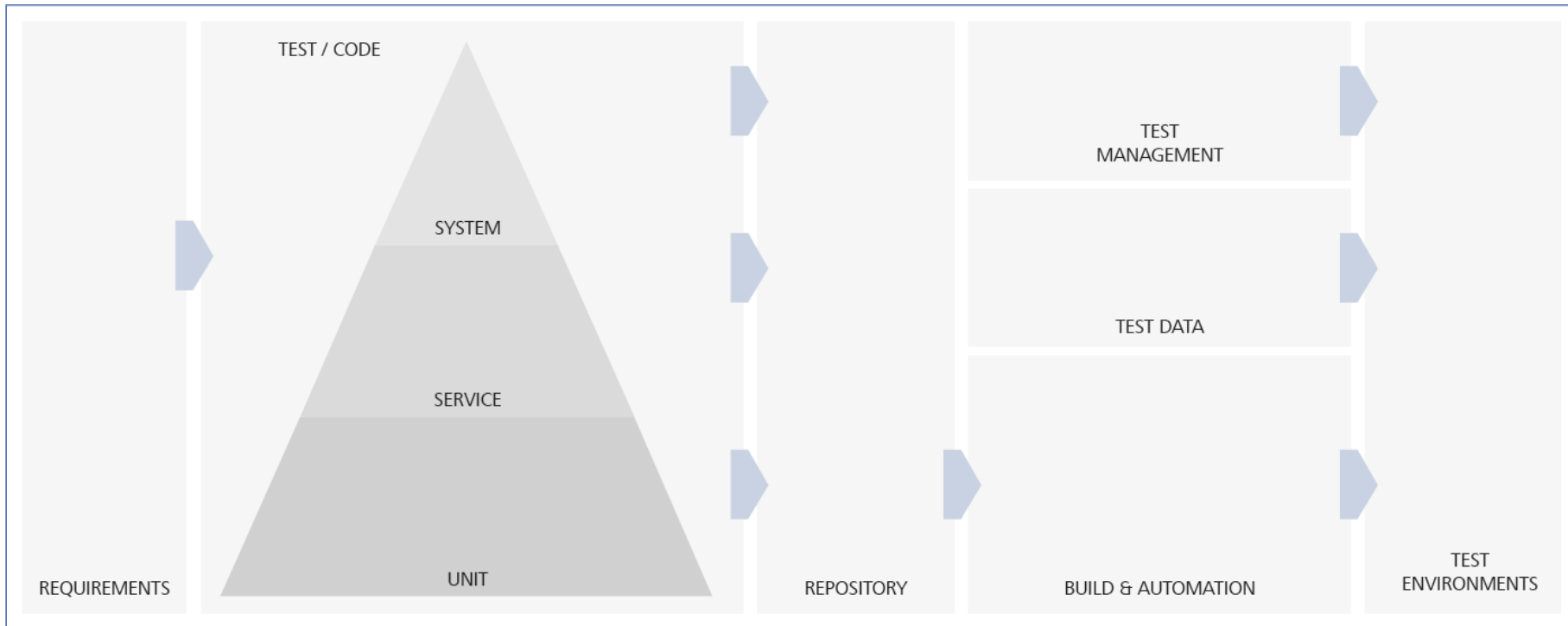
- Load testing

## Portability

- Browser testing



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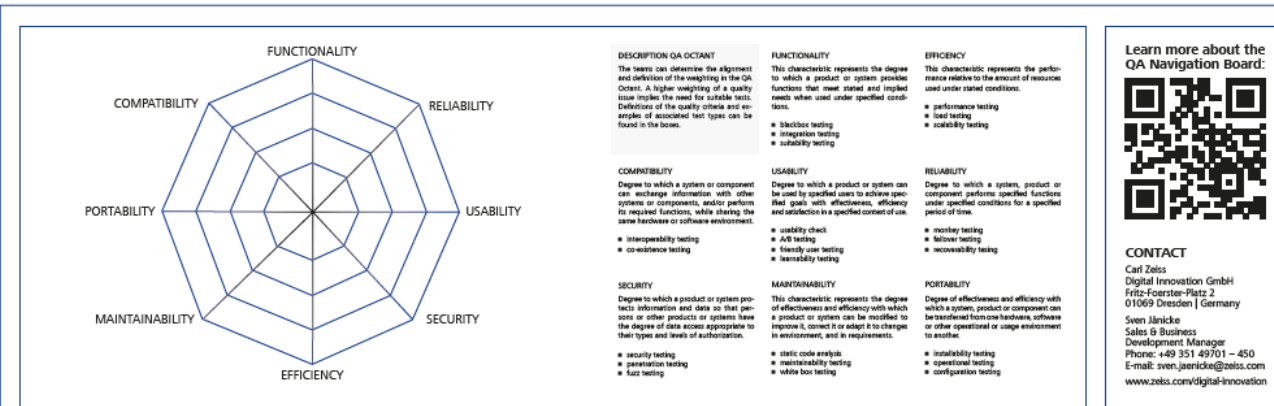
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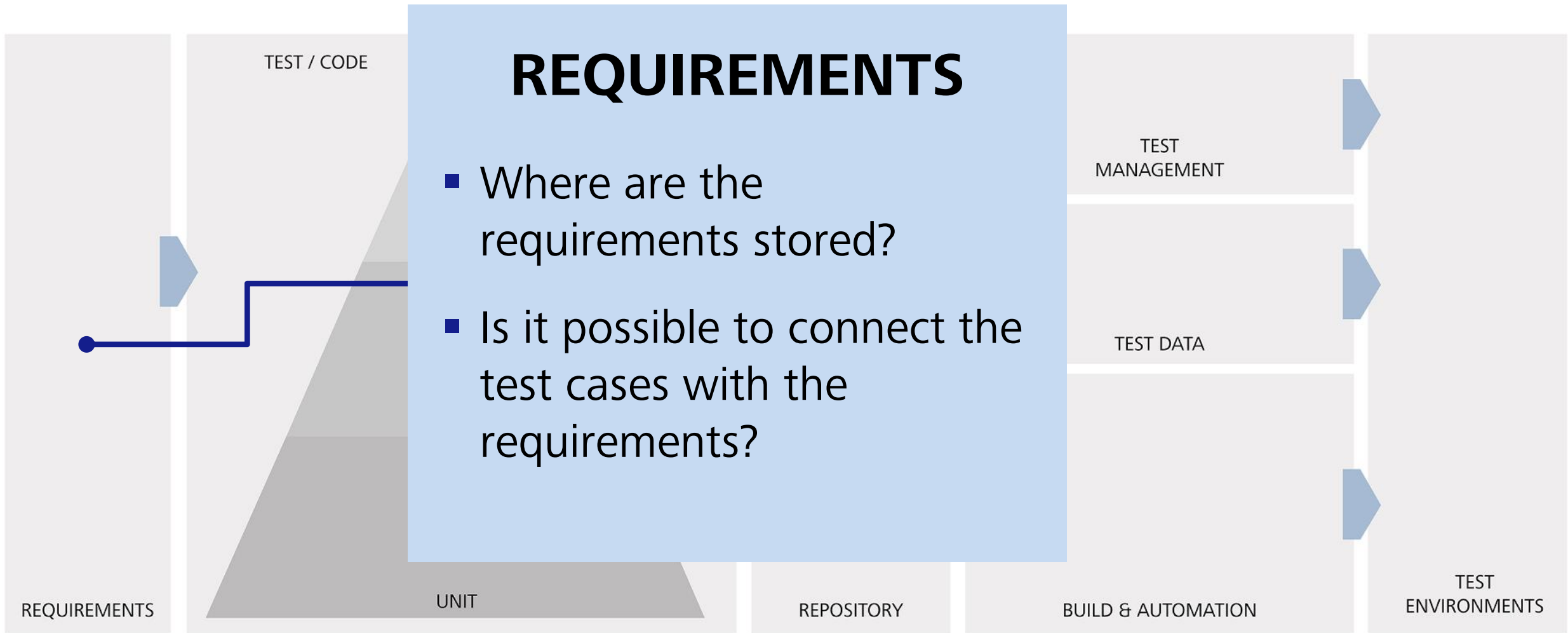


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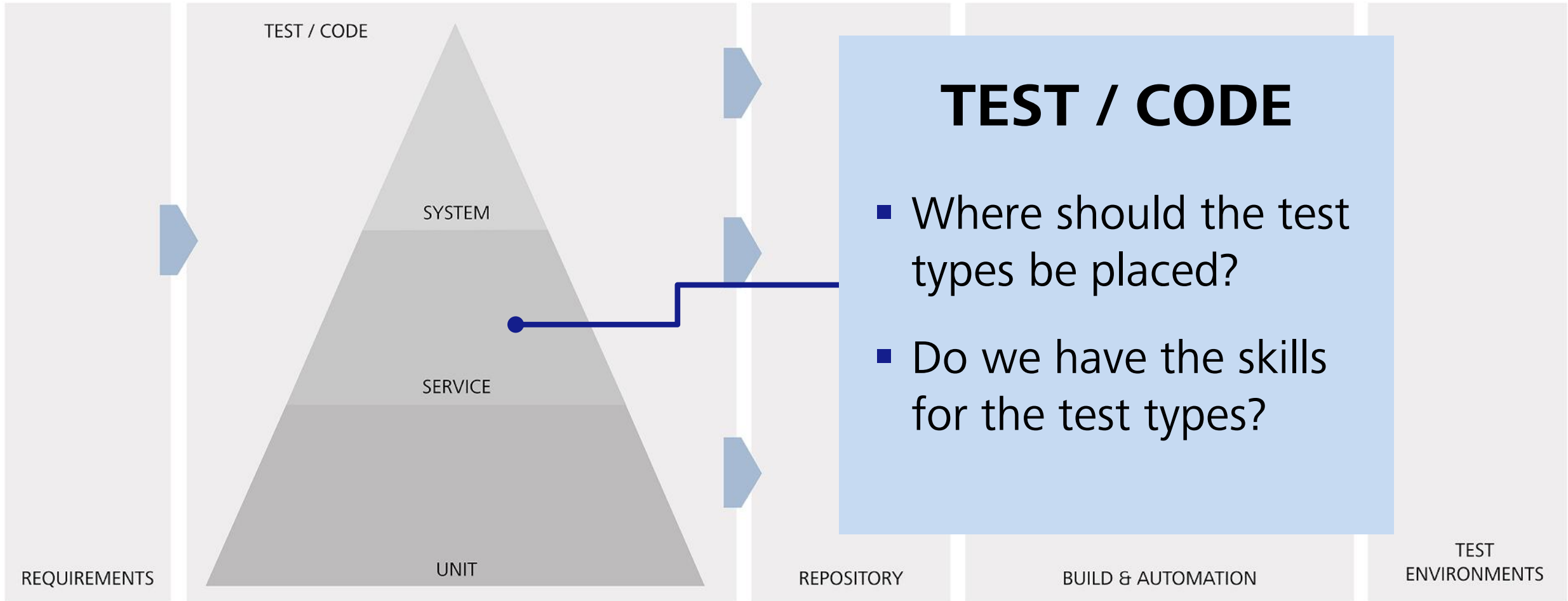


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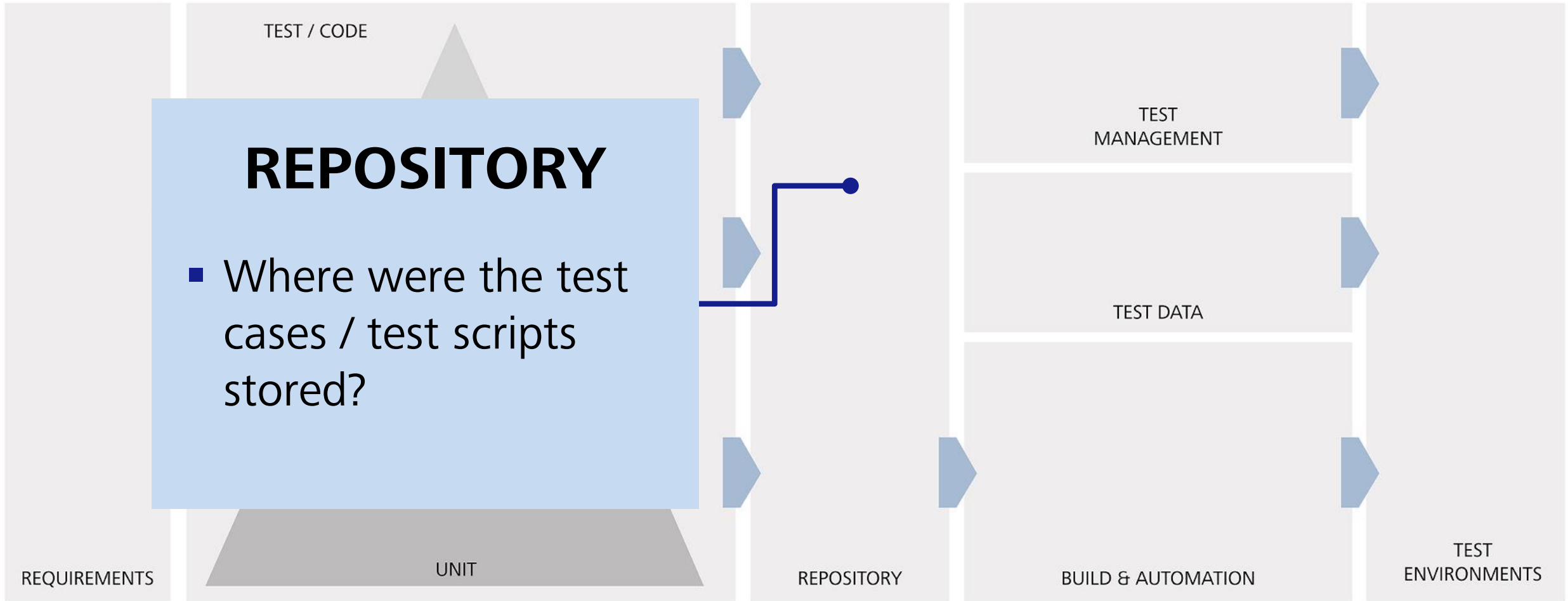
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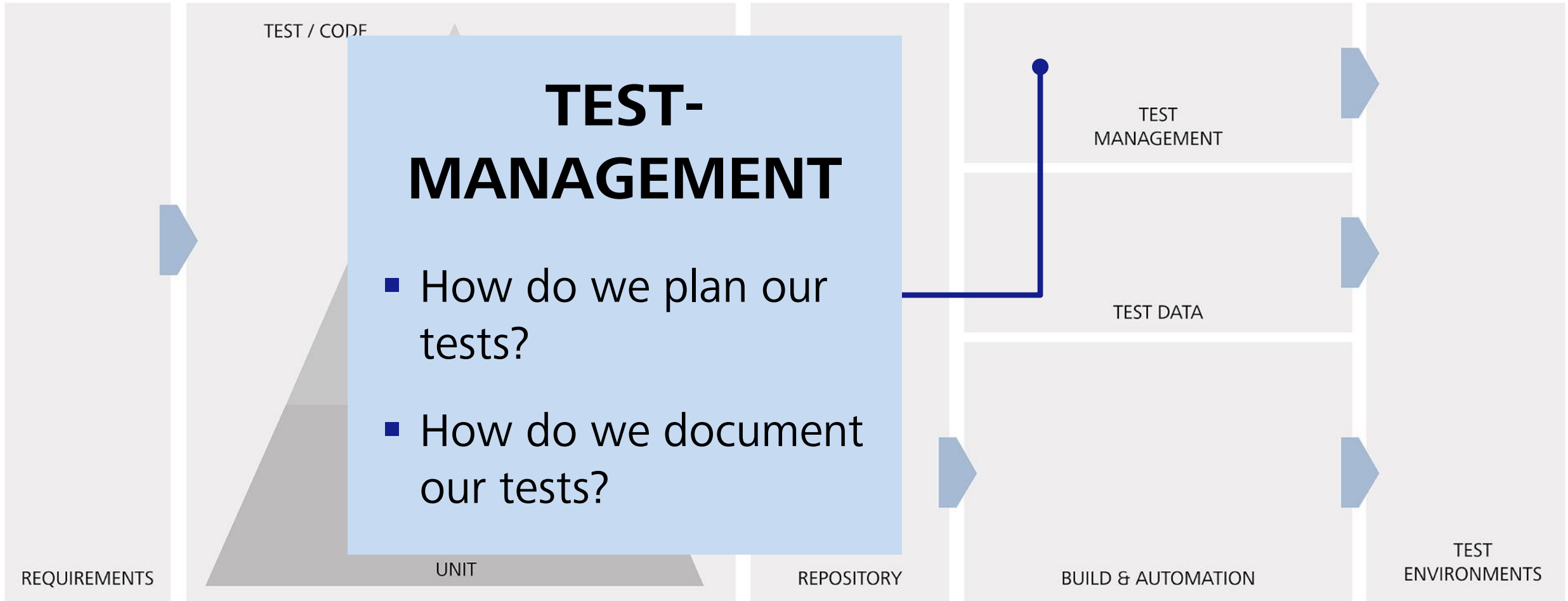


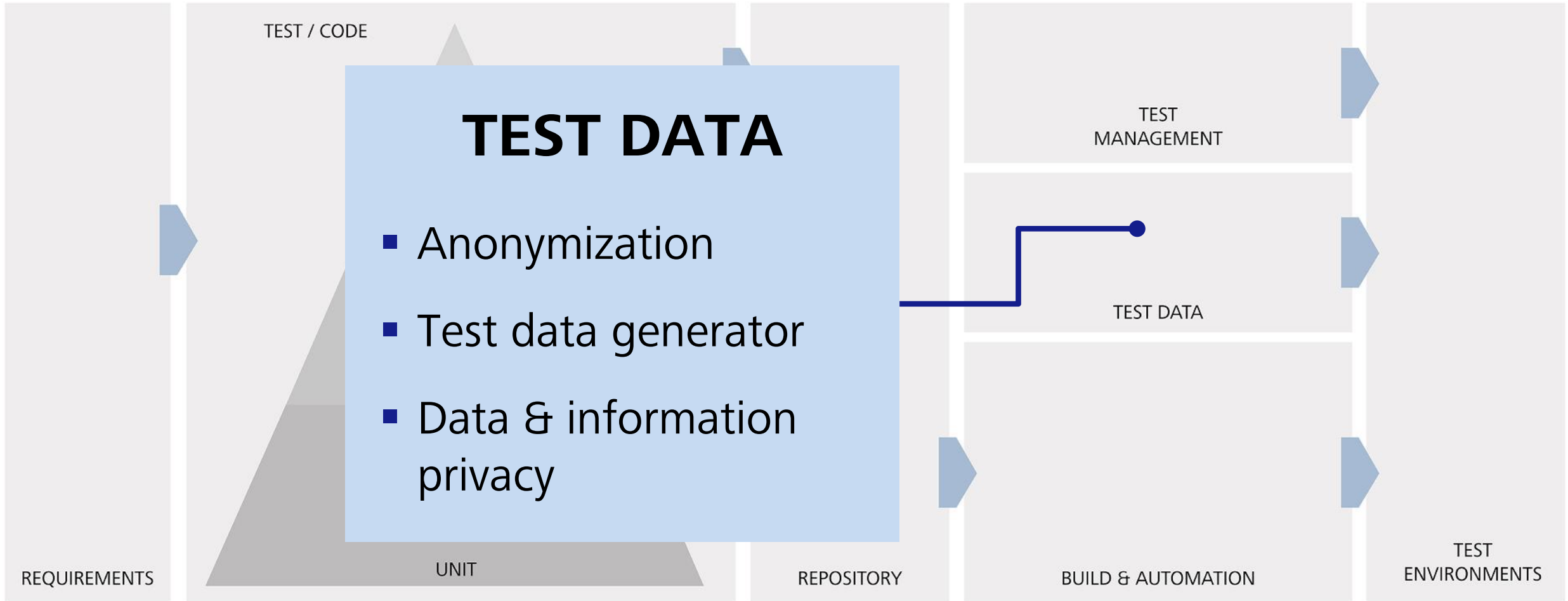




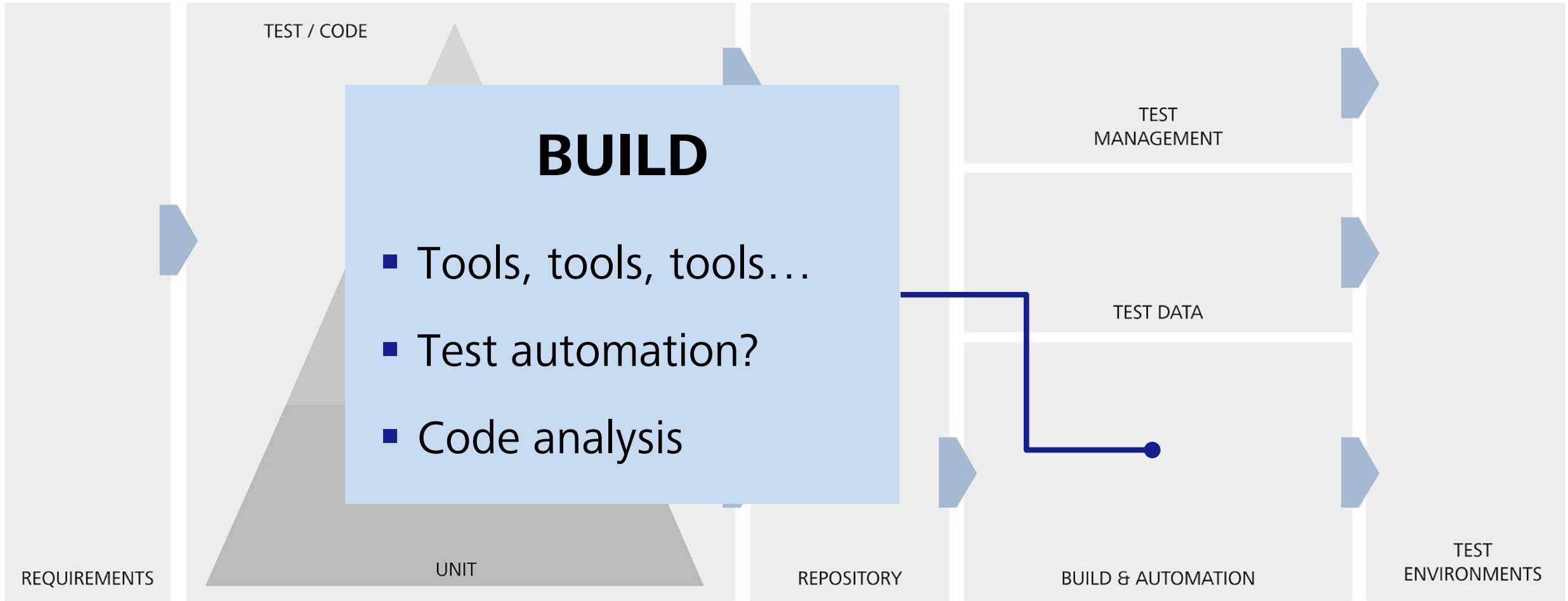


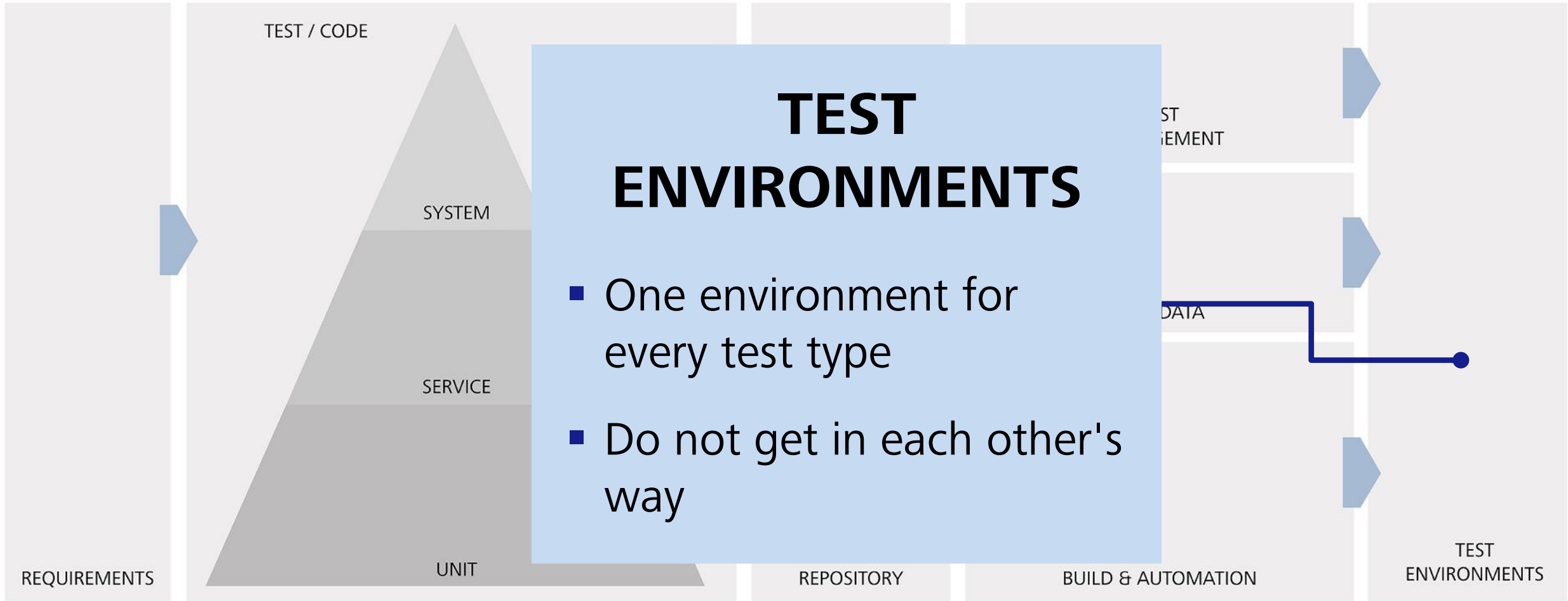






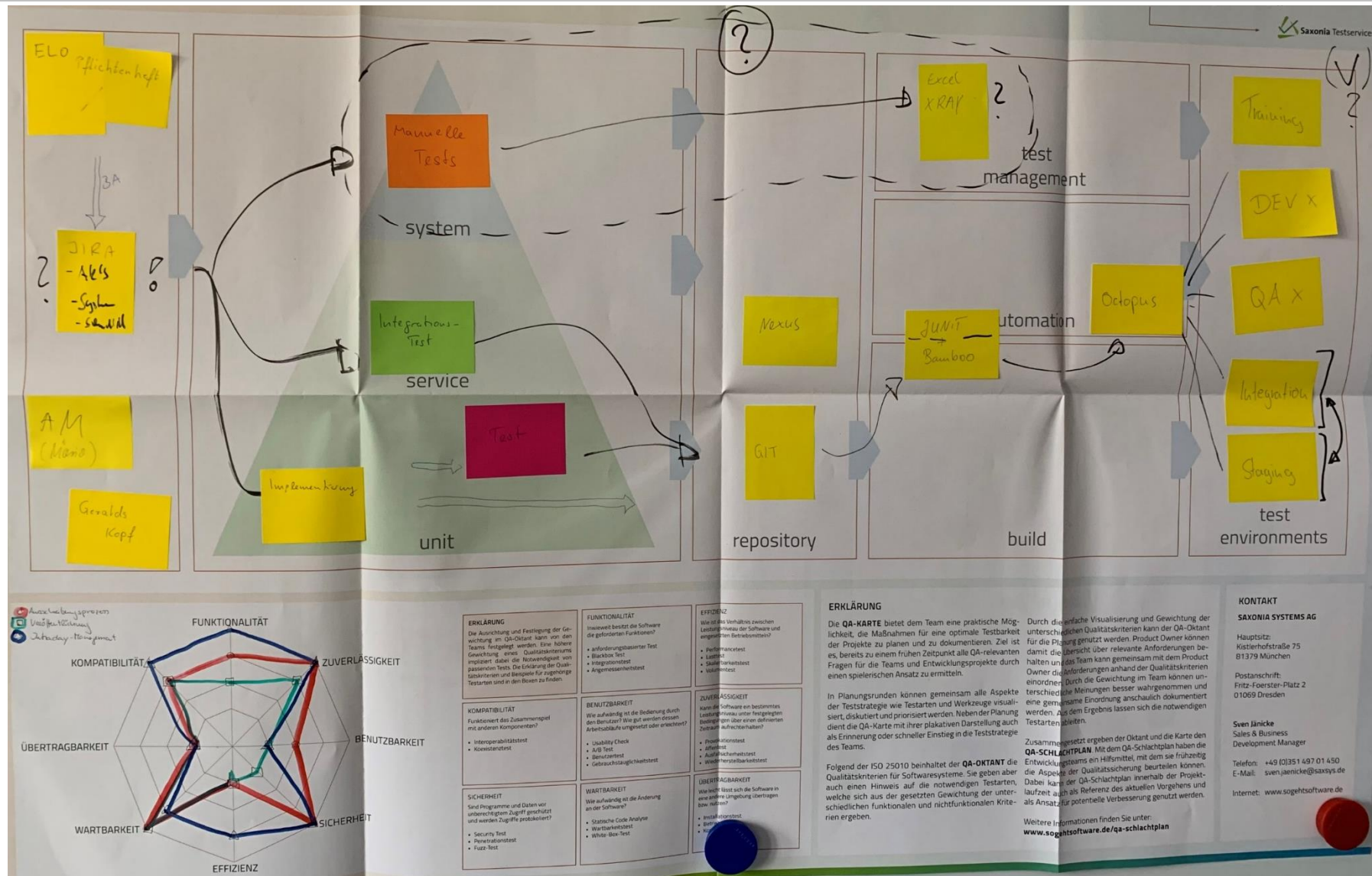
# QA Navigation Board





# QA Navigation Board

## Examples





# QA Navigation Board

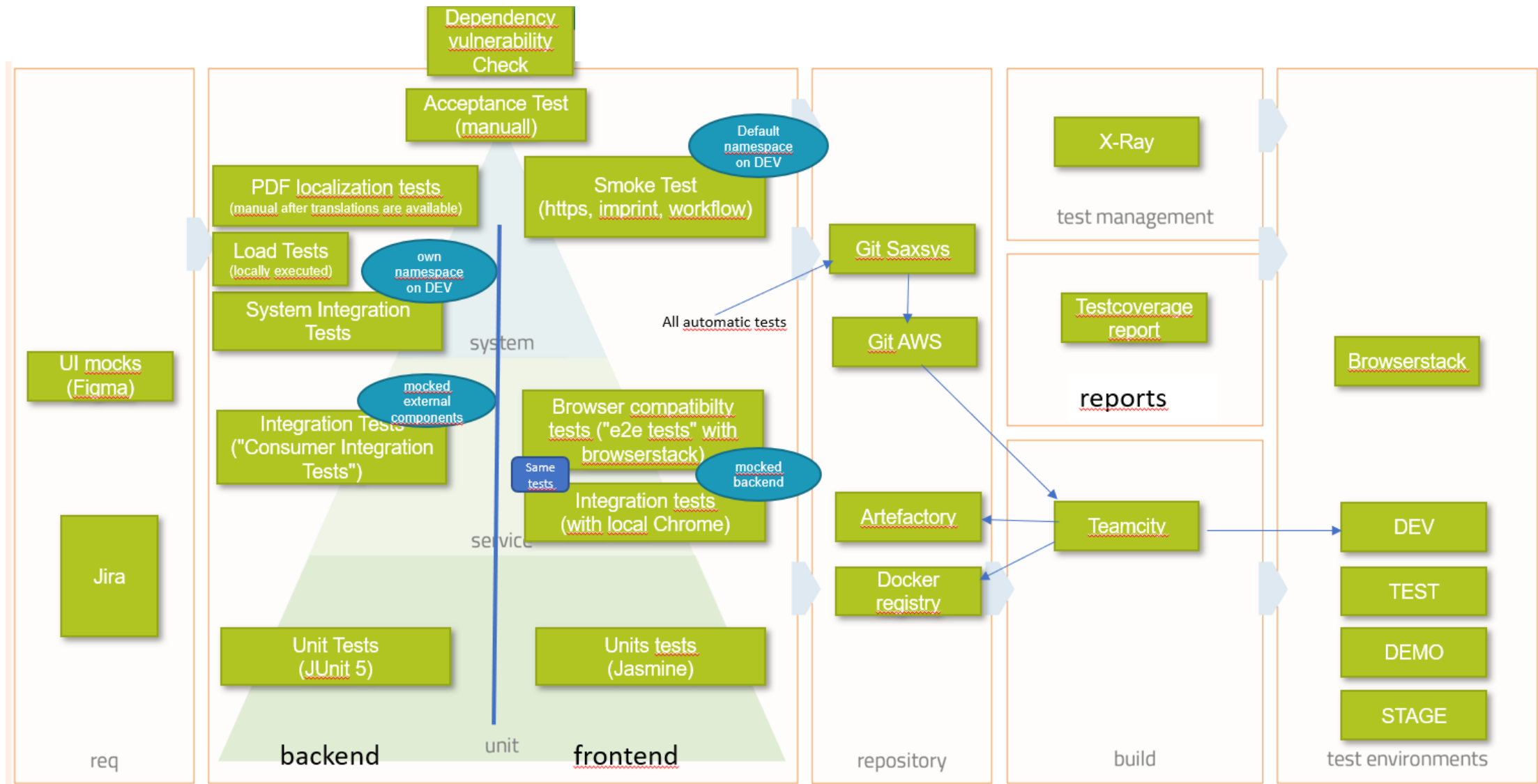
## Examples





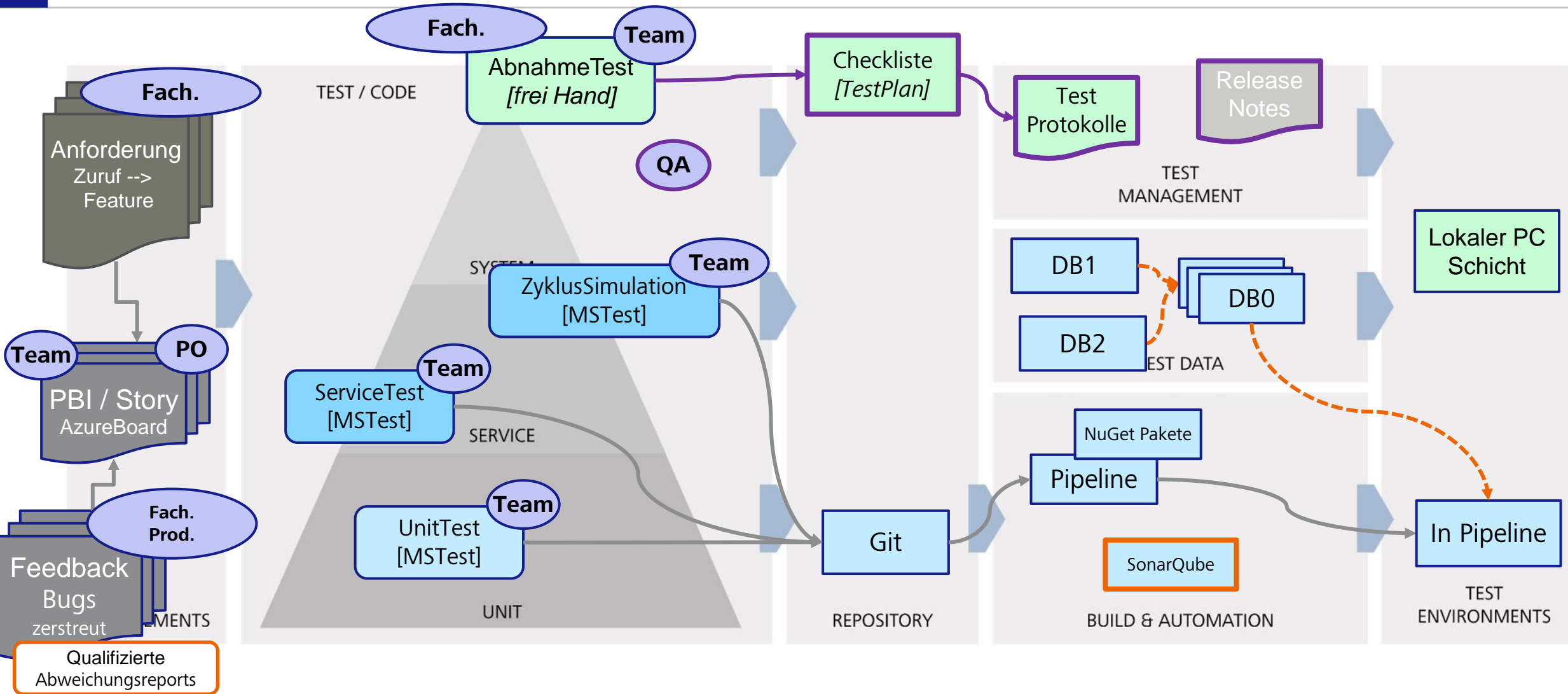
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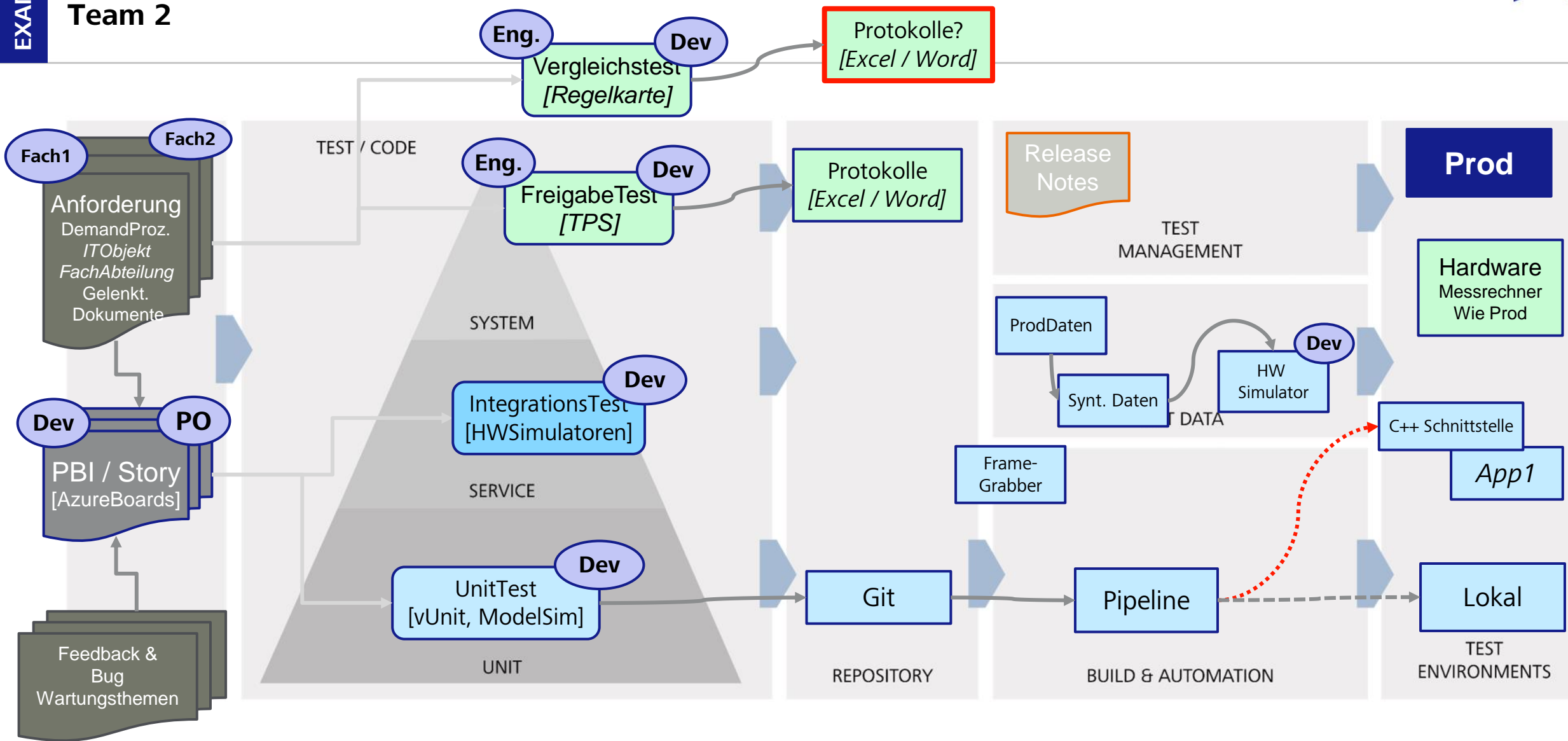
# QA MAP

## Team 1



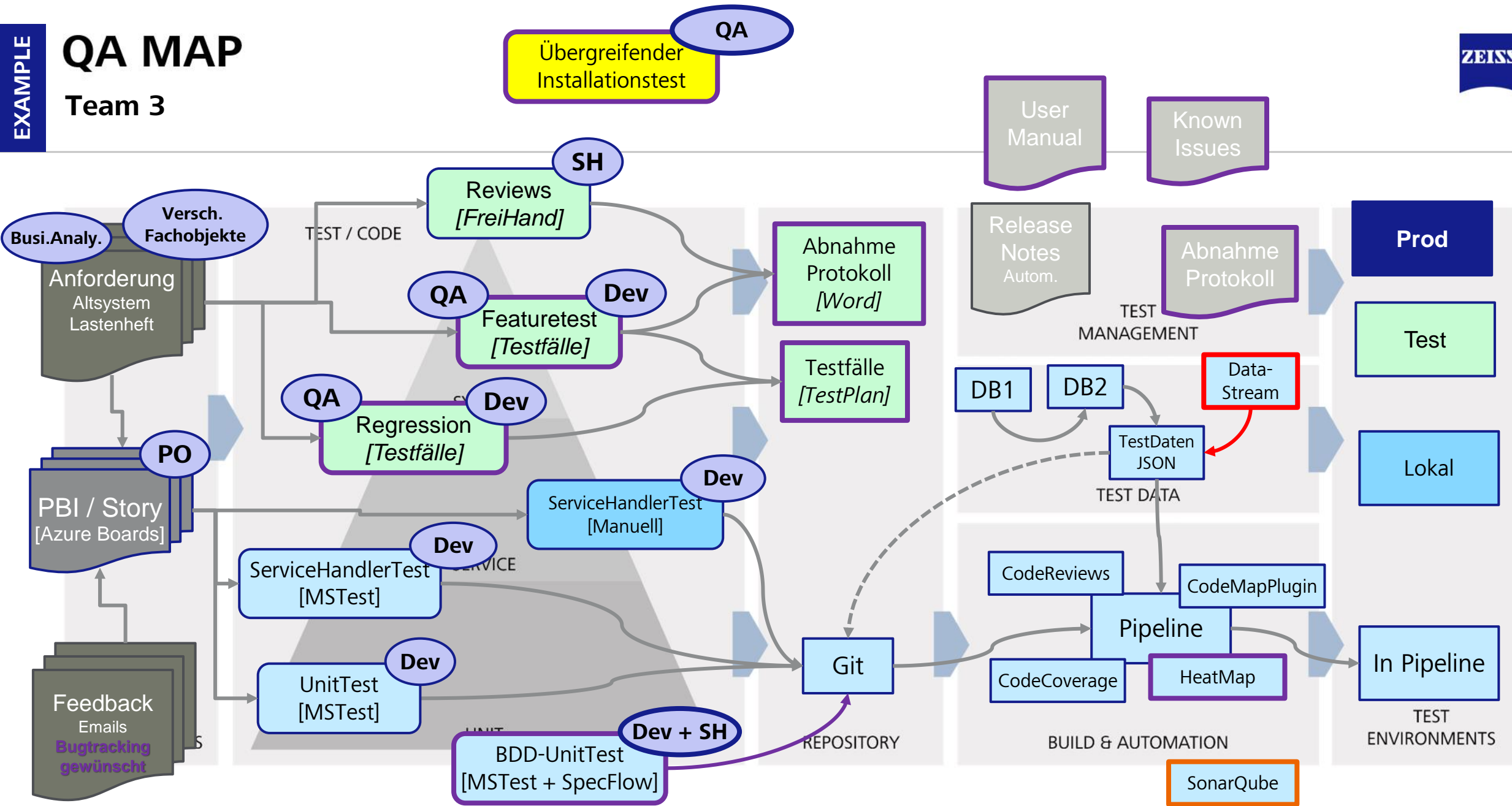
# QA MAP

Team 2



# QA MAP

## Team 3



# QA Navigation Board

## Examples



# QA NAVIGATION BOARD

AE 1

**REQUIREMENTS**

- SECURITY
- USABILITY
- PORTABILITY
- RELIABILITY
- COMMITMENT
- EFFICIENCY
- MAINTAINABILITY

Azure DevOps

**SYSTEM**

EST / CODE

SW Test

TEST?

TEST MANAGEMENT

TEST DATA / config

REPOSITORY

Build & Automation

TEST ENVIRONMENTS

SW Test | Labtechnik

eigen TEST-VMs (manuel)

Paraver-VMs (autom)

PROTO

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**TEST ENVIRONMENTS**

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**DESCRIPTION QA OCTANT**

The octant represents the alignment and definition of the weights on the QA Octant. A higher weight of a quality dimension indicates a higher priority of the quality criteria and the degree of automated test types can be used in the tests.

**FUNCTIONALITY**

The characteristic represents the degree to which a product or system provides functions that meet stated and implied needs when used under specified conditions.

- Selection testing
- Integration testing
- Usability testing

**RELIABILITY**

Degree to which a system, product or component performs specified functions under specified conditions for a specified period of time.

- Monkey testing
- Load testing
- Recovery testing

**USABILITY**

Degree to which a product or system can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use.

- Usability check
- Task testing
- Usability user testing
- Usability testing

**SECURITY**

Degree to which a product or system prevents information and data as that interests or other products or systems from the degree of data access appropriate to their types and levels of authorization.

- Security testing
- Penetration testing
- Exploit testing

**EFFICIENCY**

The characteristic represents the degree of effectiveness and efficiency with which a product or system can be modified to meet changes in an environment, and in requirements.

- Static code analysis
- Maintainability testing
- White box testing

**PORTABILITY**

Degree of effectiveness and efficiency with which a system, product or component can be transferred from one hardware, software or other operational or usage environment to another.

- Installability testing
- Operational testing
- Configuration testing

**Learn more about the QA Navigation Board.**

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# QA Navigation Board

## Examples



**Visual aid for planning  
and anamnesis**

**Reference of the  
current procedure**

**Approach to potential  
improvement**

Retrospektiven

**Can be supplemented  
and combined with  
other tools**

OnePageTestPlan, Risk Storming, Wiki etc.

# QA Navigation Board

Blog



<https://blogs.zeiss.com/digital-innovation/en/topic/qa-navigation-board/>





# QA Navigation Board

Feedback



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Seeing beyond