

Growing to a Next Level Test Organisation

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Start



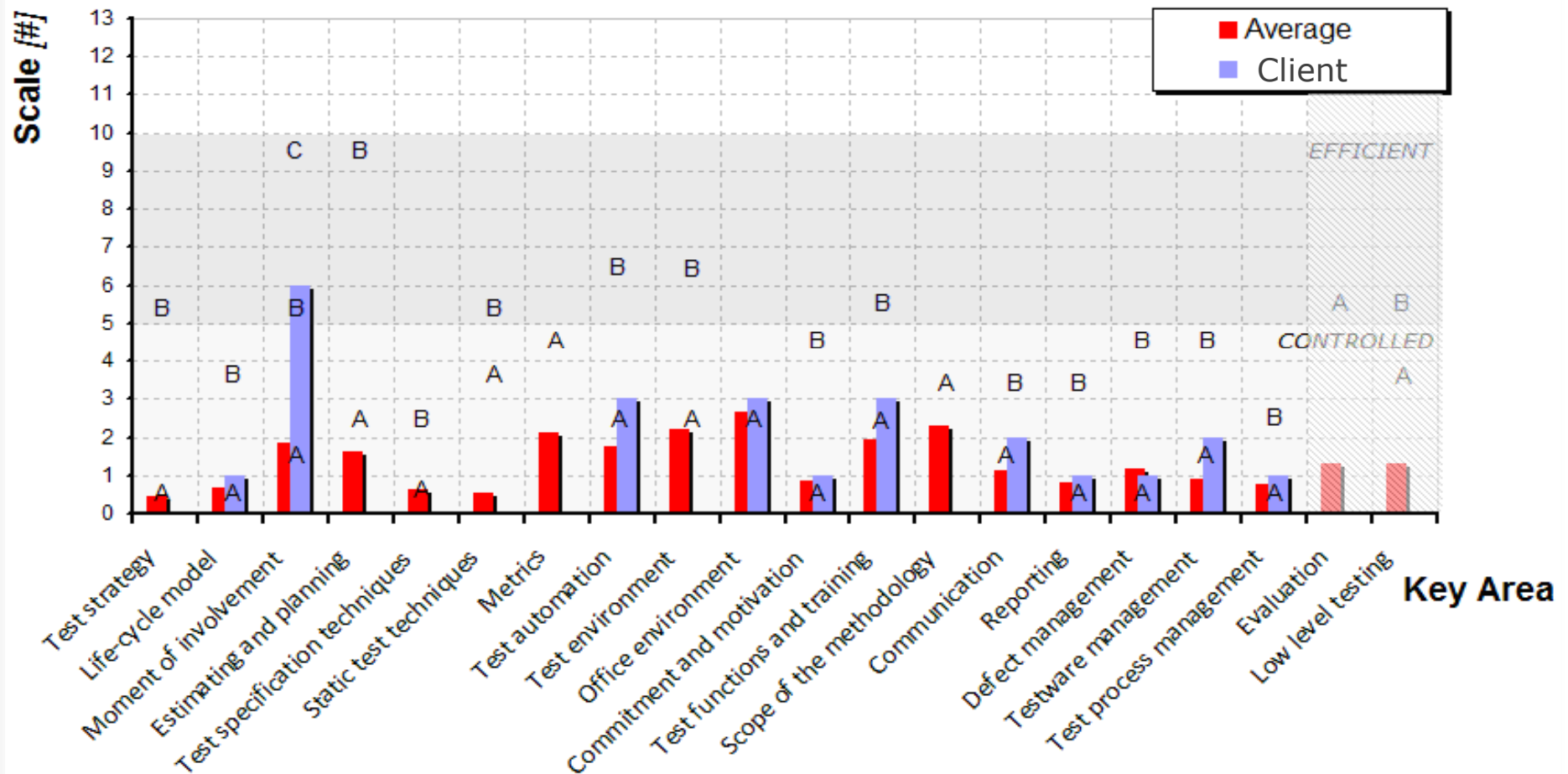
Test resource pool

Test factory

Basic Change Method

End

Average TPI score ...



Common findings

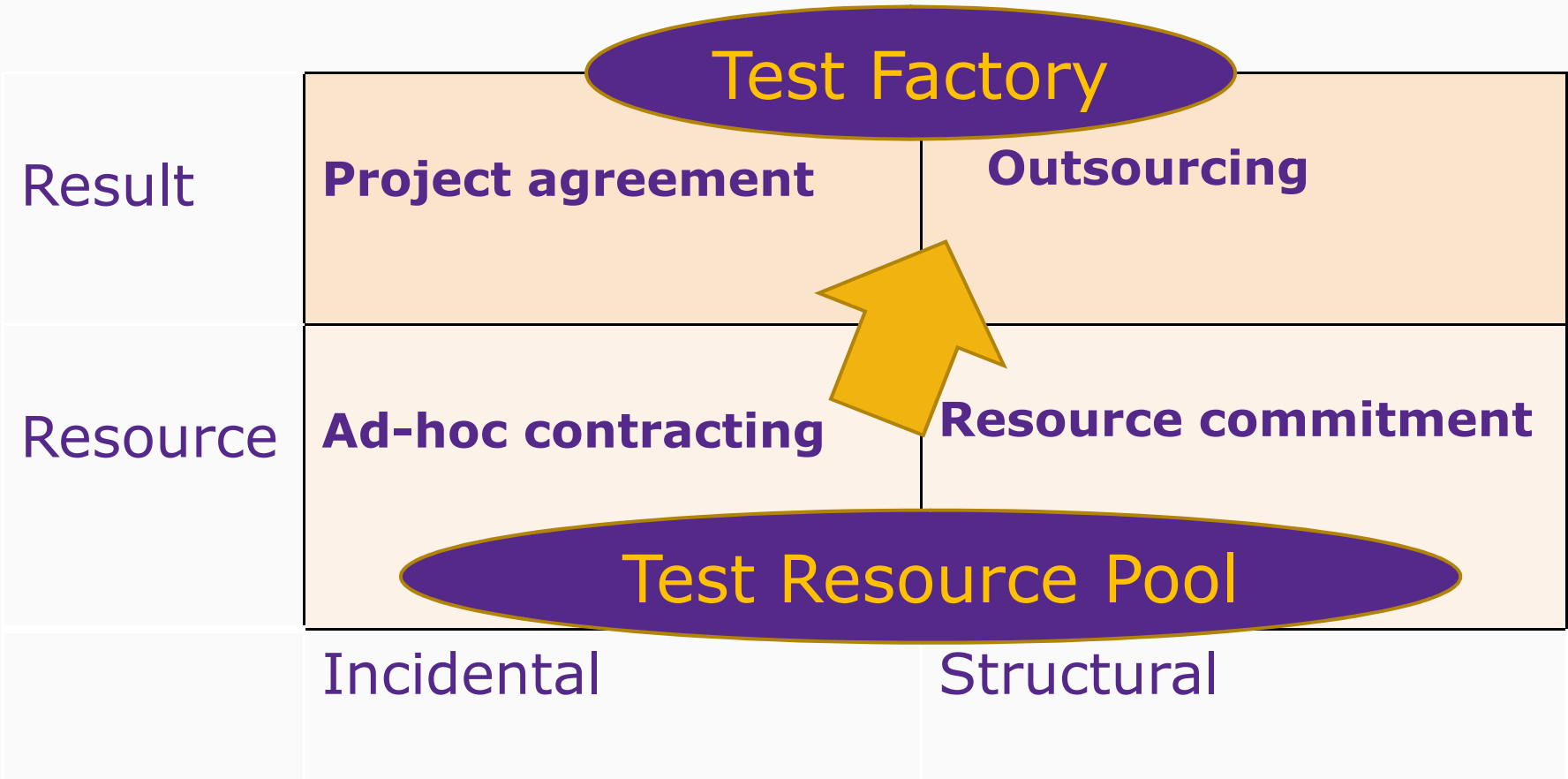
- ▶ Insufficient risk based test strategy
- ▶ Unclear use of test design techniques
- ▶ Lack of a structured test process
- ▶ Some kind of test organisation ...

Typical improvement horizon

- ▶ **No surprise ...**
 - ▶ Risk based test strategy and use of techniques
 - ▶ Structured and transparent test process
 - ▶ Permanent test organisation, "test factory", with clearly defined services
 - ▶ (+ some 1-3 other points)



Different types of organisation



Services existing TRP

- ▶ “Resource pool”
 - ▶ Supplying (internal or external) testers, test managers and test automation specialists
- ▶ And sometimes:
 - ▶ “Guardian” of test method
 - ▶ Test consultancy
 - ▶ Coaching users in an acceptance test
 - ▶ Training.

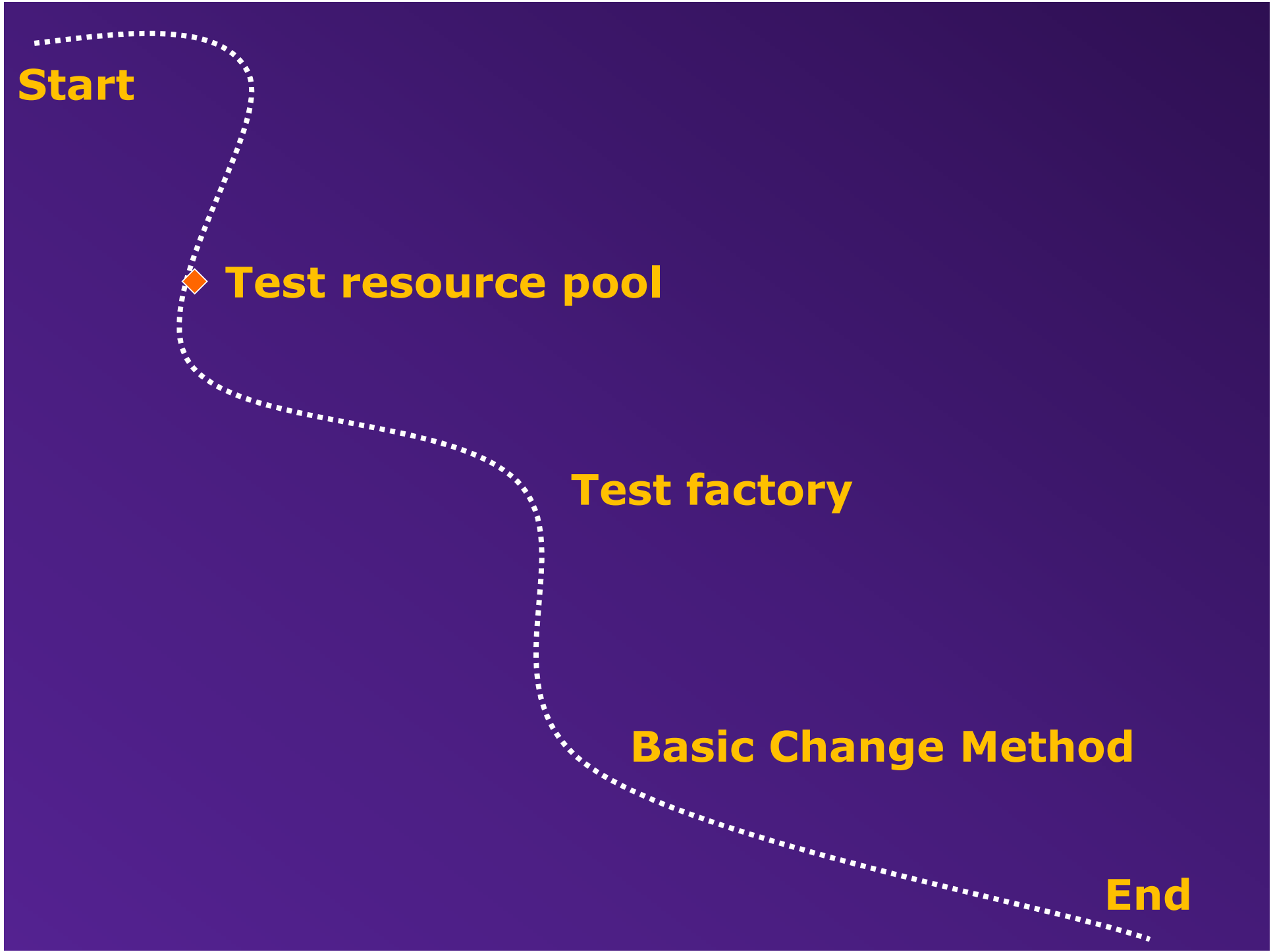
Start

◆ **Test resource pool**

Test factory

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Level of ambition: Test Factory

Test Factory as lever for improvement:

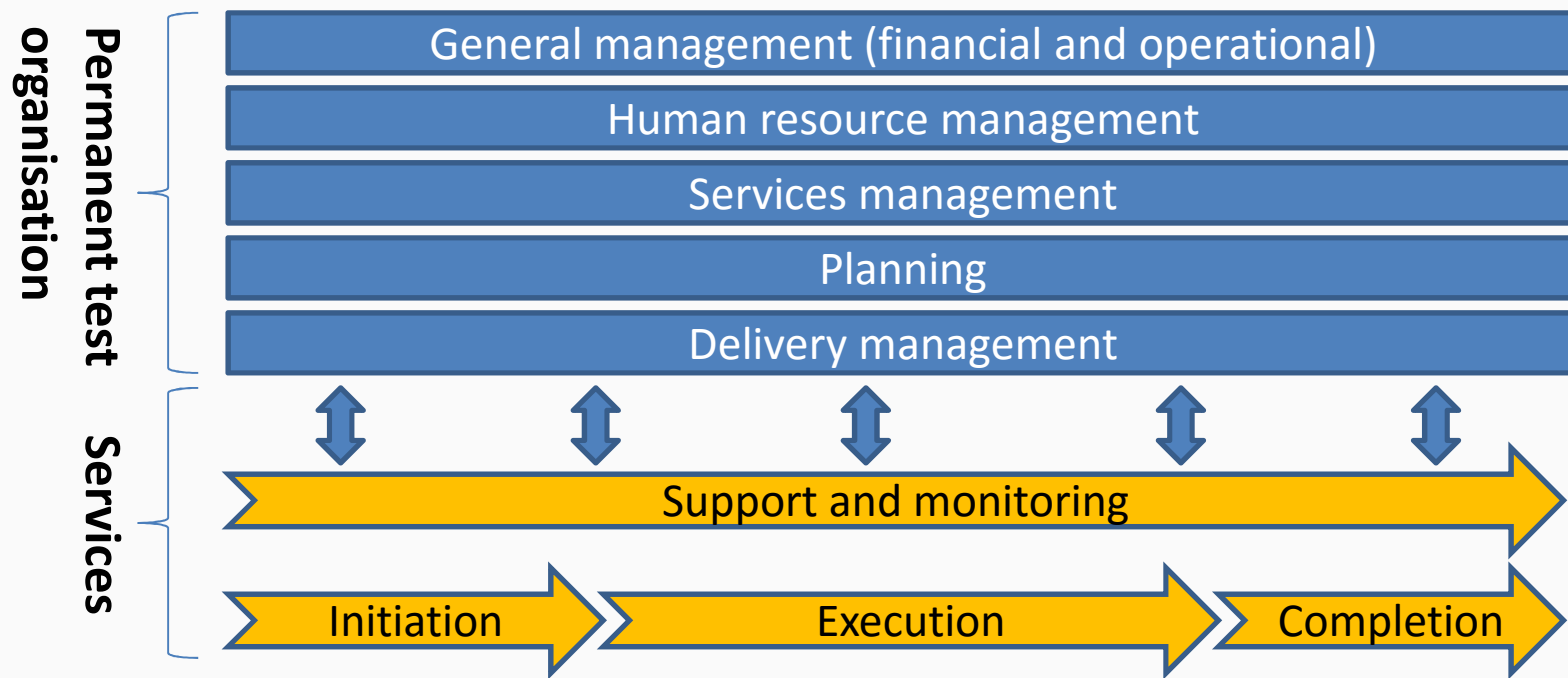
- ▶ Permanent
- ▶ (More) delivery commitment
- ▶ Motivator
- ▶ More power in organisation

Test Factory?

- ▶ What does it look like?
 - ▶ Processes
 - ▶ People
 - ▶ Services
 - ▶ Infrastructure
- ▶ Advantages

Process model

► Organisation / process model set-up



People

- ▶ Function descriptions, career path and training for testers

Test consultant	Test manager
Test specialist	Test coordinator
Senior tester	
Junior tester	

Services

- ▶ Examples:
 - ▶ System and acceptance testing
 - ▶ Agile testing
 - ▶ Management of test processes
 - ▶ Test consultancy
 - ▶ Test automation
 - ▶ Auditing test processes
 - ▶ Test environment management
 - ▶ Training
 - ▶ ...

Services in detail

Aspect	Short description
Input	Required input from customer
Entry-criteria	What requirements must the customer meet for the service to be successful?
Approach	Required processes, standards and techniques (norm)
Required functions	Test manager, tester, test automation engineer
Output	Expected output of the service: products, reports
Type of assignment	delivery commitment / resource commitment / no commitment
Service level	The service level of the service: measured in time, money and/or quality, also: knowledge conservation, reliability
Costs	Costs of the service in money or hours ...
Added value	What is the added value of the service? \$

- **KISS!**
- **Start from current situation**
- **Communicate**
- **Make type of commitment explicit**

Infrastructure

- ▶ Often owner of test infrastructure
- ▶ Optionally managed by another department
- ▶ Under control of Test Factory
- ▶ Tooling: projects x line (system management, licences), integration with development

Advantages

- ▶ Test organisation in general:
 - ▶ Better use of (scarce) expertise
 - ▶ Potentially lower costs through centralisation and scaling
 - ▶ Shorter start-up time
- ▶ Test Factory versus TRP:
 - ▶ More predictable quality of testing
 - ▶ Continuous improvement
 - ▶ Knowledge preservation and development
 - ▶ Costs and lead time are better manageable

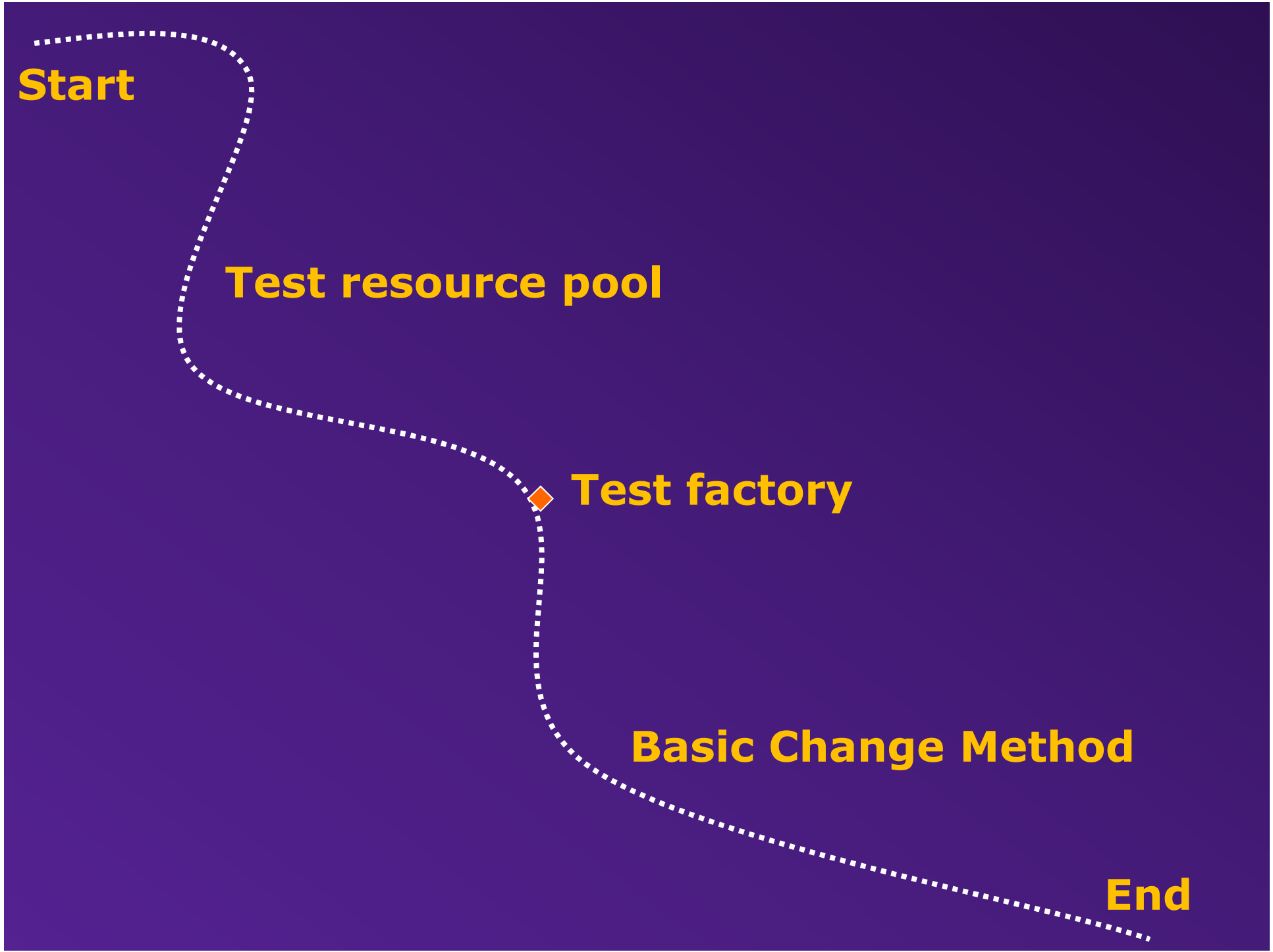
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Change process steps

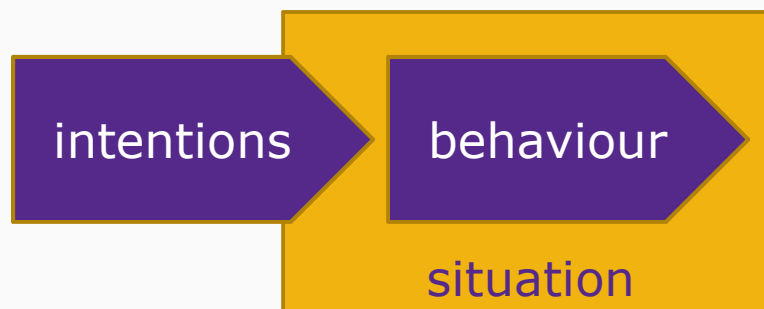
(after assessment)

- ▶ Communicate findings/recommendations
- ▶ (Management) commitment
- ▶ Organise (coordination of) in activities
- ▶ Supporting test
- ▶ Brainstorm over test factory
- ▶ Implementation plan
- ▶ Implement and pilot improvements
- ▶ Going x growing concern

**Hard part:
changing people**

Basic Change Method

- ▶ Combination of most effective notions from cognitive and social behaviour psychology
- ▶ Basis:
 - ▶ Change = adopting new habitual behavior
 - ▶ This requires management of behaviour intentions and change situations
 - ▶ Change goes through phases and has costs (time, money, ...)



Ben Tiggelaar, "Do!"

Phases BCM

- ▶ Get Real
 - ▶ Goal oriented behaviour intentions (required results and other habitual behaviour)
- ▶ Make Plans
 - ▶ Prepare most difficult change situations (with triggers and counter behaviour, action plan)
- ▶ Take Action
 - ▶ First measure behaviour, only later measure results of behaviour
 - ▶ Reward



▶ 20

Growing to a next level test situation



Implementation ...

- ▶ Work groups create all kinds of deliverables. And now ...?

- ▶ For each deliverable

- ▶ Communication
- ▶ Set-up
- ▶ Training
- ▶ Coaching/support
- ▶ Monitoring
- ▶ Feedback

- ▶ Plan these activities

Templates for test plan, design, report, ...
Test tooling
Test process descriptions
New services (testing SOA, packages, ...)
Extraweb / Wiki
KPI's
Resource planning spreadsheet
Function descriptions
Customer satisfaction form
Test environment procedure
...

Example: KPI's

Goal	Managed test processes
Communication	TF-meetings, email, newsletter
Set-up	SAP, extranet, part of standard progress reporting
Training	Instruction meeting for test managers
Coaching/ support	1 x for each test project
Monitoring	Test manager meetings, TF-manager
Feedback	Quarterly evaluation whether KPI's give right info + trends

Resistance?

- ▶ Yes!
 - ▶ *"Not in my (running) project"*
 - ▶ *"Not in my starting project"*
 - ▶ *"My project is just a bit different ..."*
 - ▶ *"No time"*
 - ▶ *"This is just maintenance"*
- ▶ Be patient
- ▶ Management commitment required
- ▶ Don't walk too far ahead ...
- ▶ Counter "Not Invented Here": people create and implement solutions themselves
- ▶ Reward (by giving attention)

Finally: Agile and Test Factory?

- ▶ Can this be combined?
- ▶ Not in it's pure form ...
- ▶ But sourcing testers as a service, where the testers use a transparent process and generate predictable results, comes close

Conclusion

Test organisation is often just a resource pool

Test Factory as a lever for change

Basic Change Method helps

...

but leaves enough of a challenge

...



Questions or remarks?





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