

# How to Test in IT Operations

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nnit

Not only applications and software

# Who test **operations**?

My context, cases, approach, lessons

# A model of an enterprise IT context

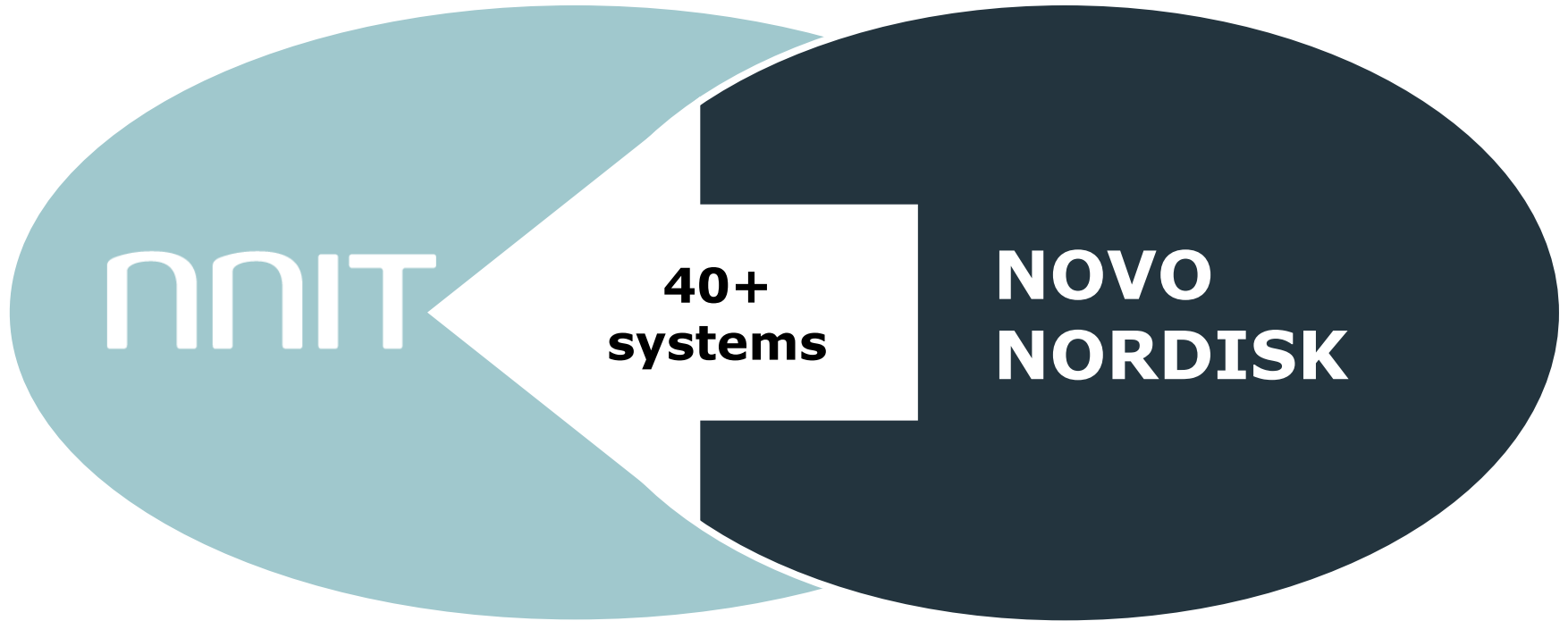
IT Service management  
Change management  
Incident management

Business requests  
Portfolio management  
Project management

Servers  
Network  
Middleware

Solutions delivery  
Test management  
Development model

After 20 years NNIT moves away from home



# Changing horses on the stagecoach

- **IT Change request** management
- Network deployment tools
- Configuration Item management
- Customer Incident management
- Development servers
- **Test management Servers**



**It has to work  
as before**

just better strategic fit

# 80 sites with 10 to 2000 users

1. Malmö
2. Oslo
3. Riyadh
4. Manila
5. Vienna
6. San Paulo
7. Chicago
8. Dubai
9. Baku
10. Zurich
11. Beijing
12. Copenhagen
13. Ballerup



# Virtualization of operations services

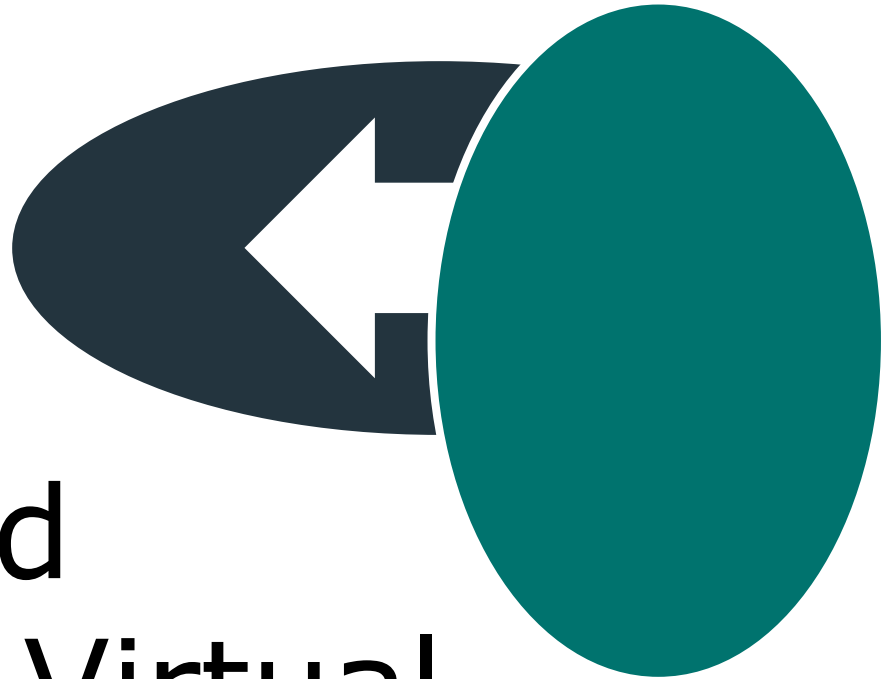


- WLAN / LAN
- Firewall
- VMware
- Monitoring
- VoIP
- File-server



# Change is the new normal

- Outsource
- Going Cloud
- Physical to Virtual



We don't know the  
details of **AS-IS**

We know the **TO-BE**

# My role ... is part of the solution we used

- Innovate with new, borrow, Novo-blue
  - Implement the strategy context-driven
  - Facilitate many different people
- 
- Raise and prepare change requests
  - Collect information and signatures
  - Insist upon work and fallback plan



# A New V-model for testing Operations

**AS-IS**

User  
Baseline

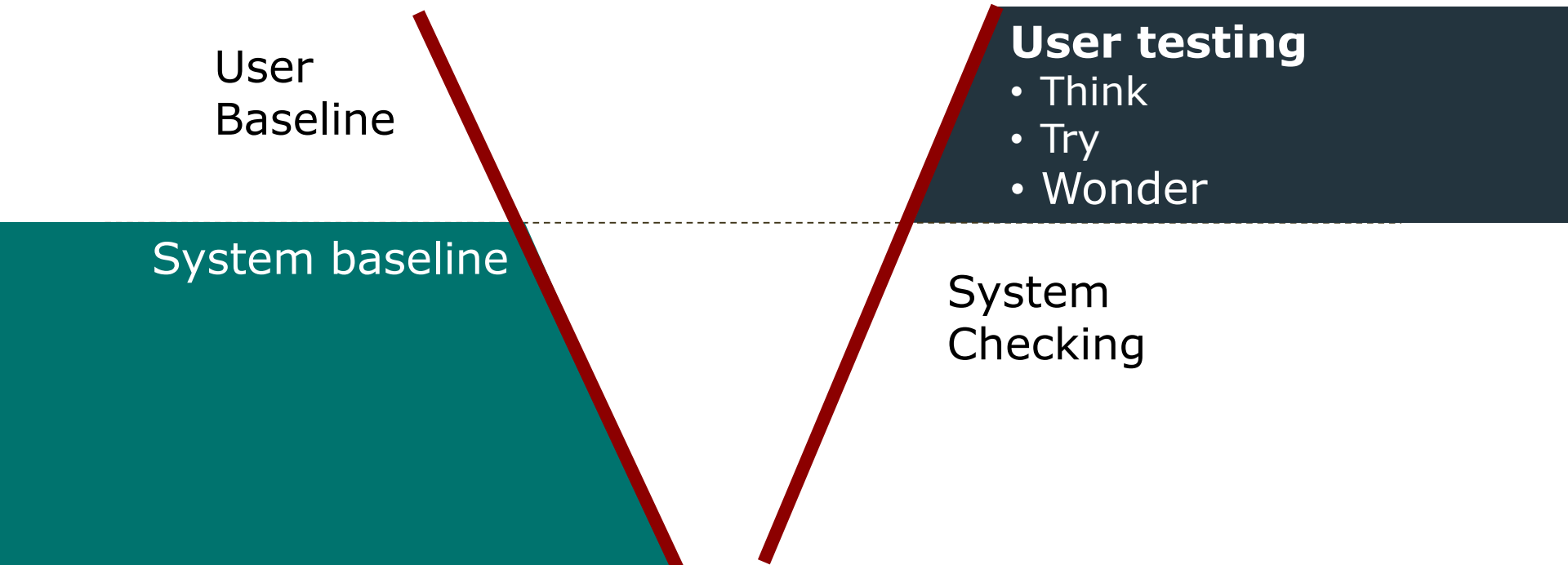
System baseline

**TO-BE**

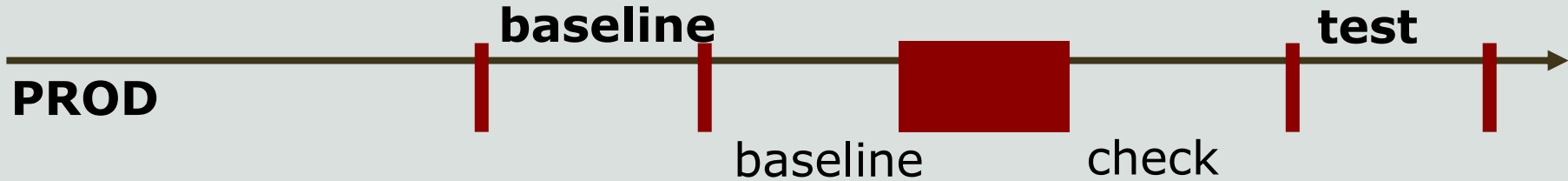
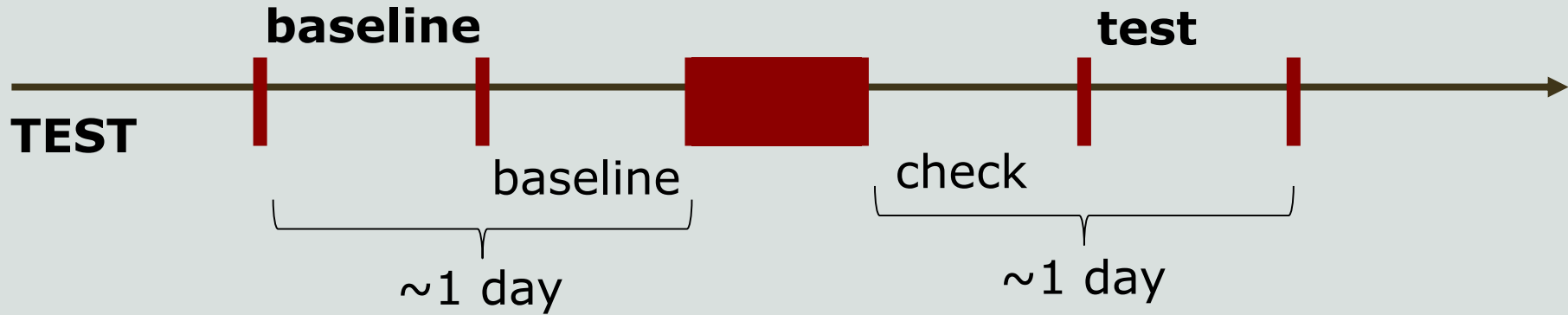
**User testing**

- Think
- Try
- Wonder

System  
Checking

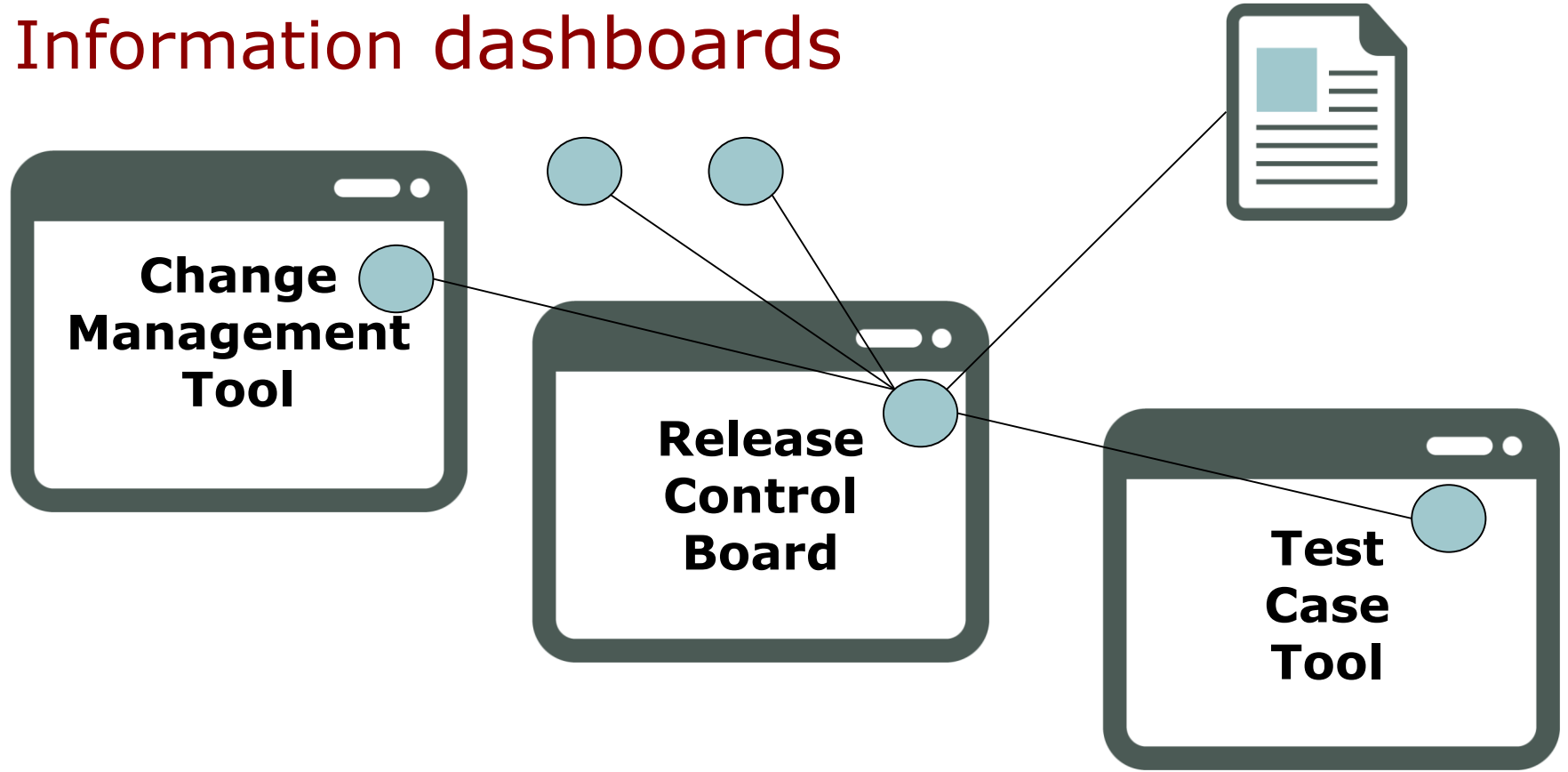


# Multiple environments



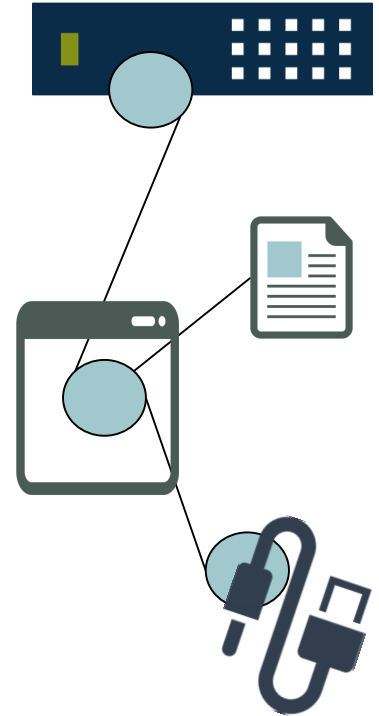
**Finding, Filtering,  
Relating, Presenting  
information**

# Information dashboards



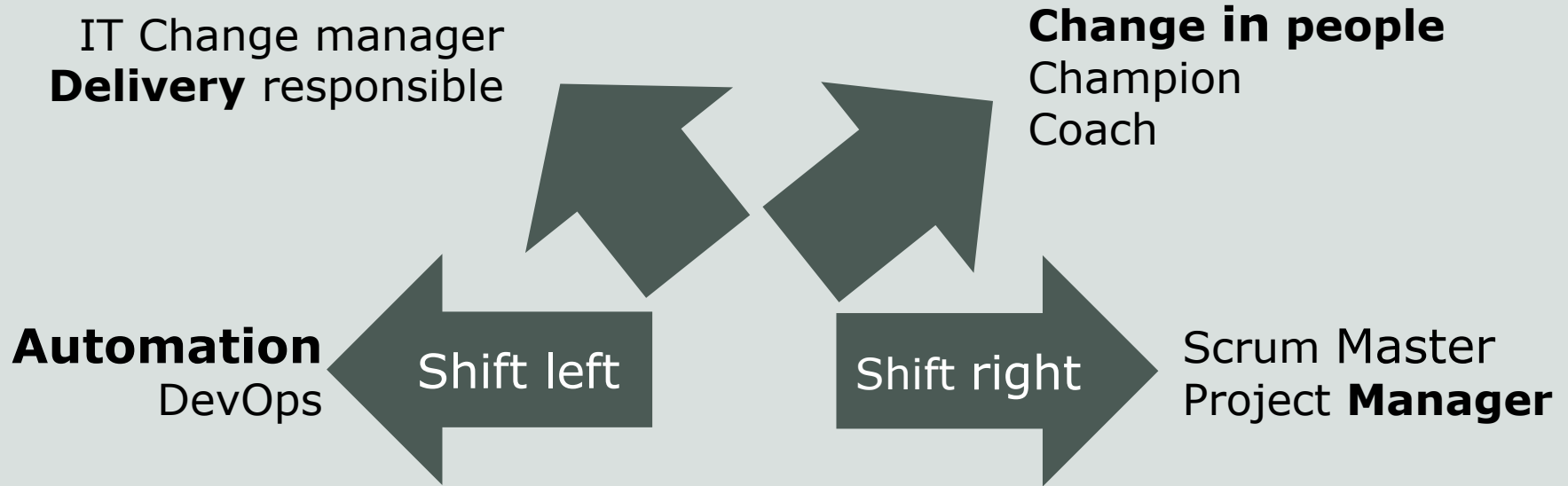
# Experiences

- Systems with active release cycles
- Systems with paper tests, other tools etc.
- System not touched in years, no clue at all
  
- Systems with known bugs in production
- Systems with bugs found under test
- Systems perform better after switch
  
- Applications with pharma GxP compliance





# Expanding roles for the test manager



Is it the same as before?  
- **just moved**

