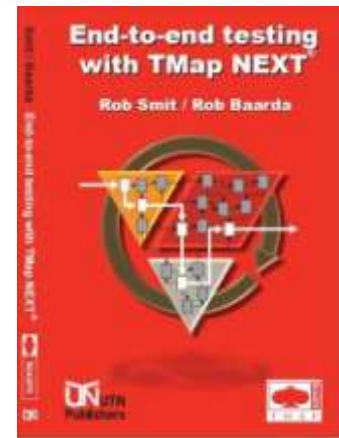


# End-to-end testing in the public domain

4 November 2010

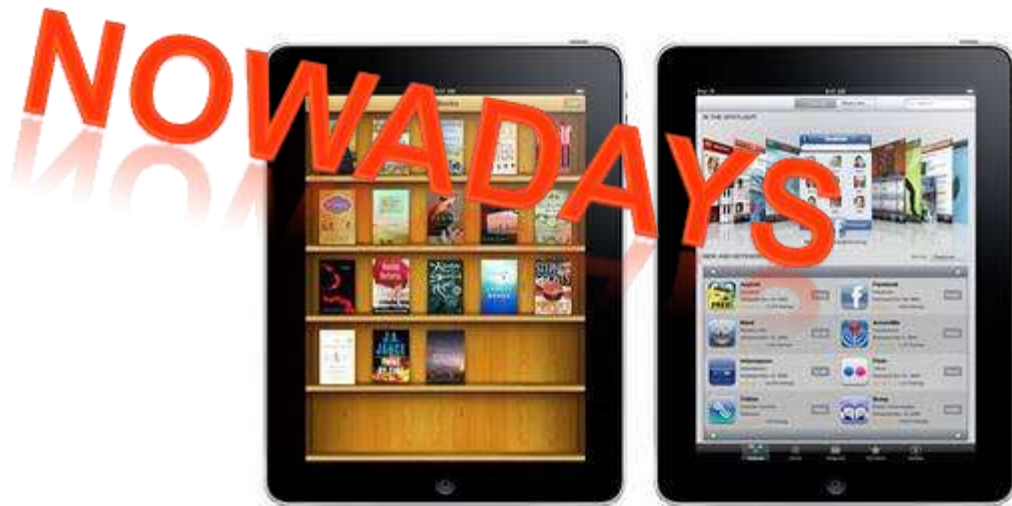
Rik Marselis



DE 16E NEDERLANDSE  
**TESTDAG**



# Buying a book



# Introducing: Rik Marselis

- **Senior Test consultant (& teststrategist)**
- **Over 30 years in IT**
- **Over 15 years in testing & quality assurance**
- **Involved in  and BNTQB **
- **Advisor at various organizations**
- **Leader expert group E2E-testing**
- **Author of books and articles**
- **Trainer for various test-trainings**
- **TMap & ISTQB certified**
- **Prince2 practitioner, CMMI en CISA**

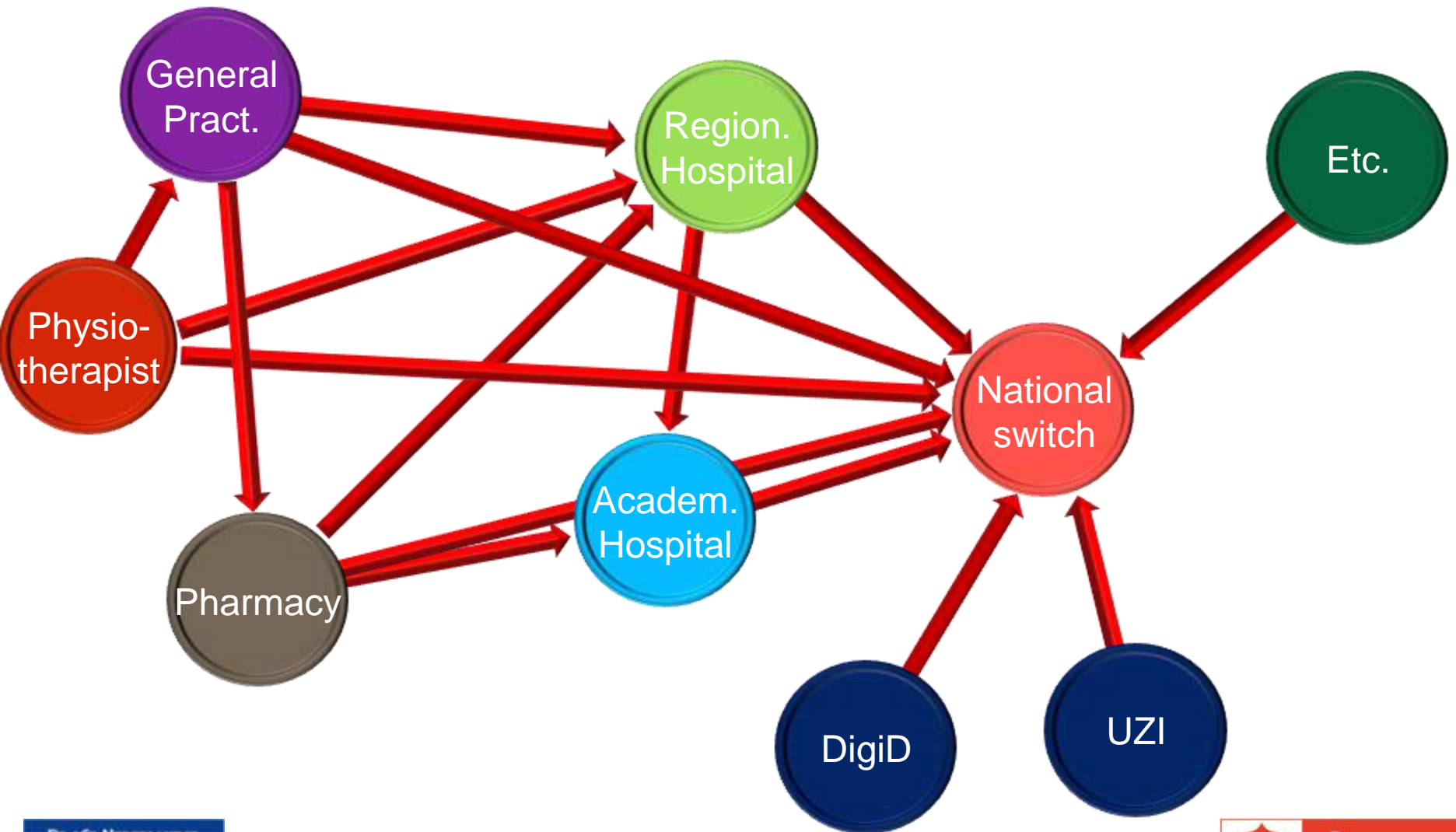


# From IT to BT

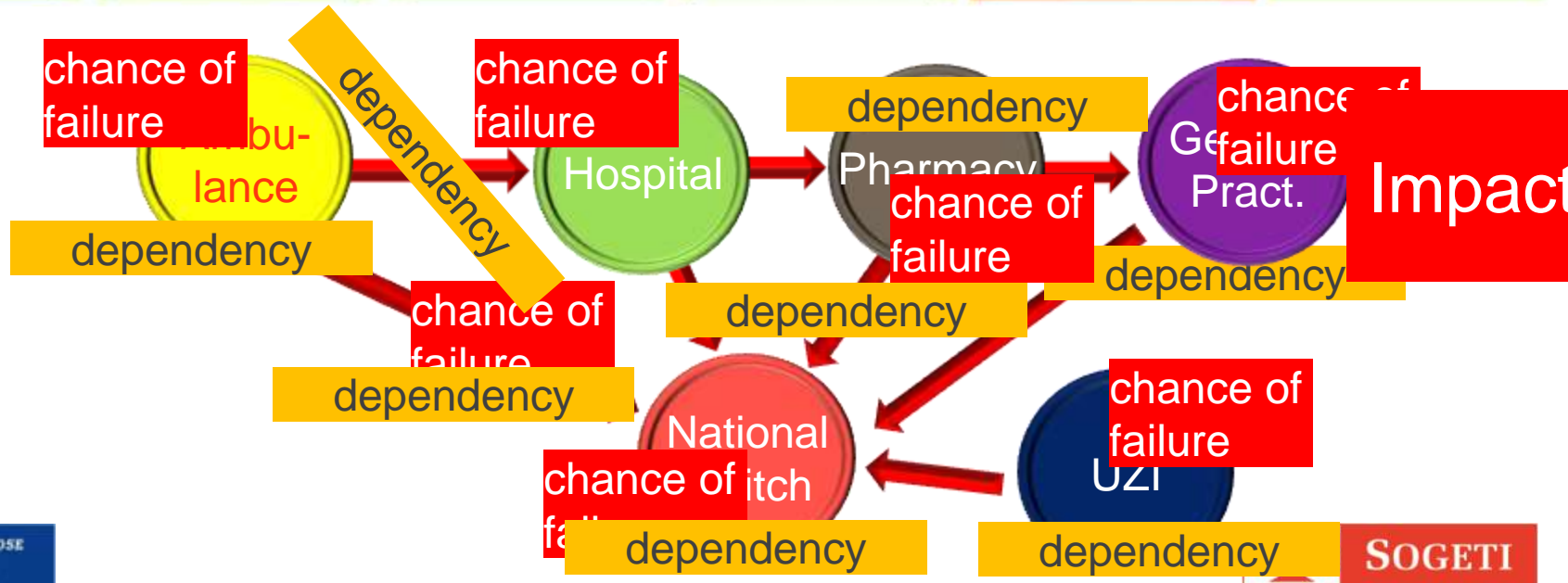
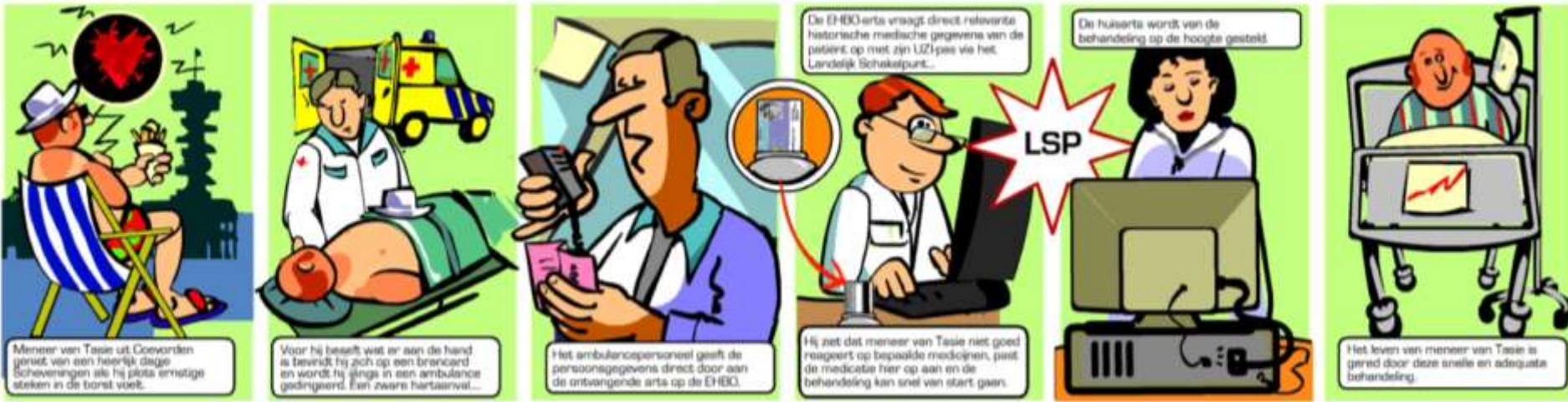
- **We are on the eve of Business Technology (BT)**
- **IT is a commodity, computers are a fact of life**
- **How you use computers in your business process → that is the key difference between success and failure**
- **Business processes keep growing more and more complex**
- **What's the impact of BT on testing?**
  - End-to-end testing the business processes
  - Testing of various systems must be linked
  - Every test must have a comparable maturity level



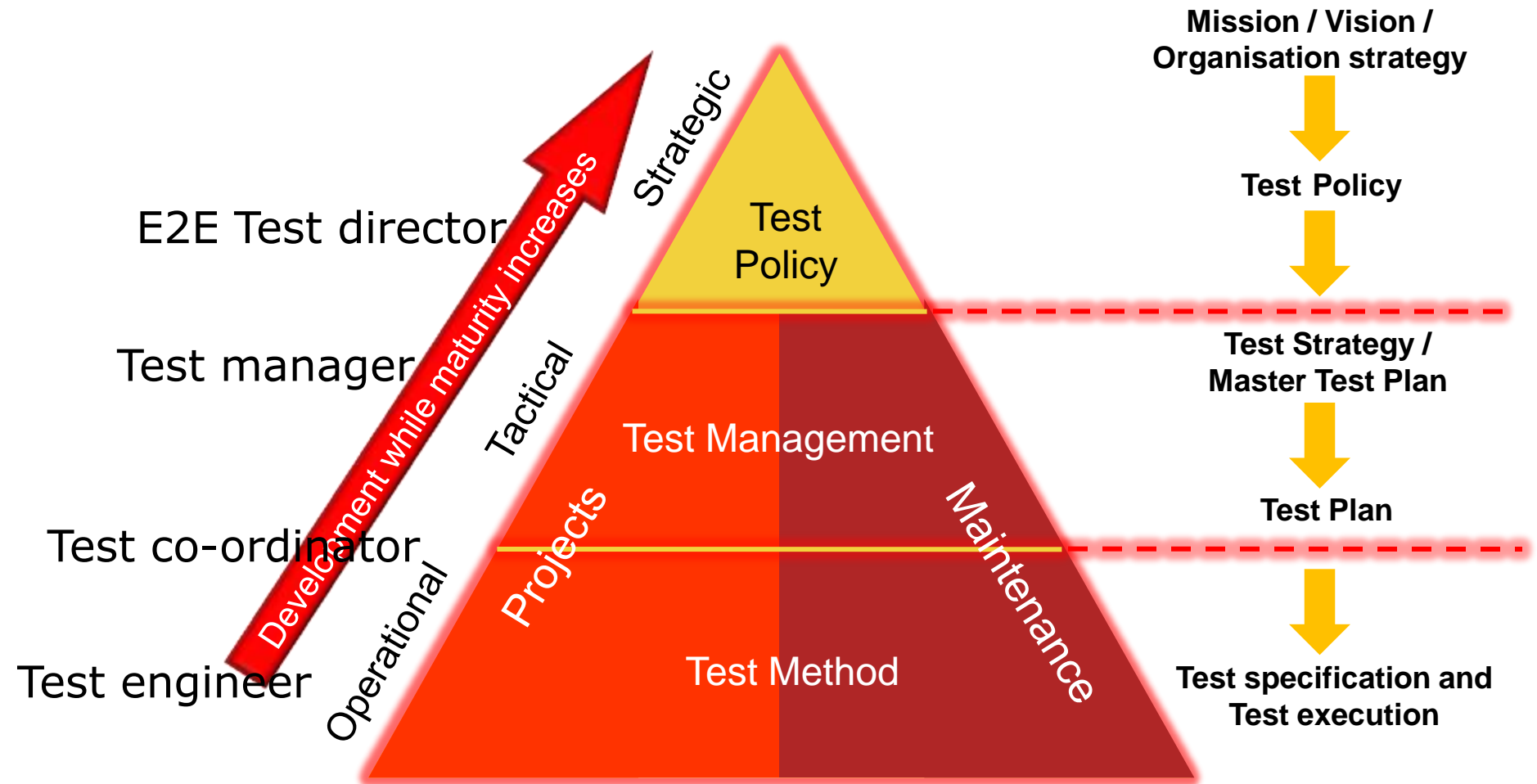
# EPD (electronic patient file) → a chain of systems



# Chance of failure all over, impact at the end



# Natural development while maturity grows



# So many test levels! Do we need E2E?

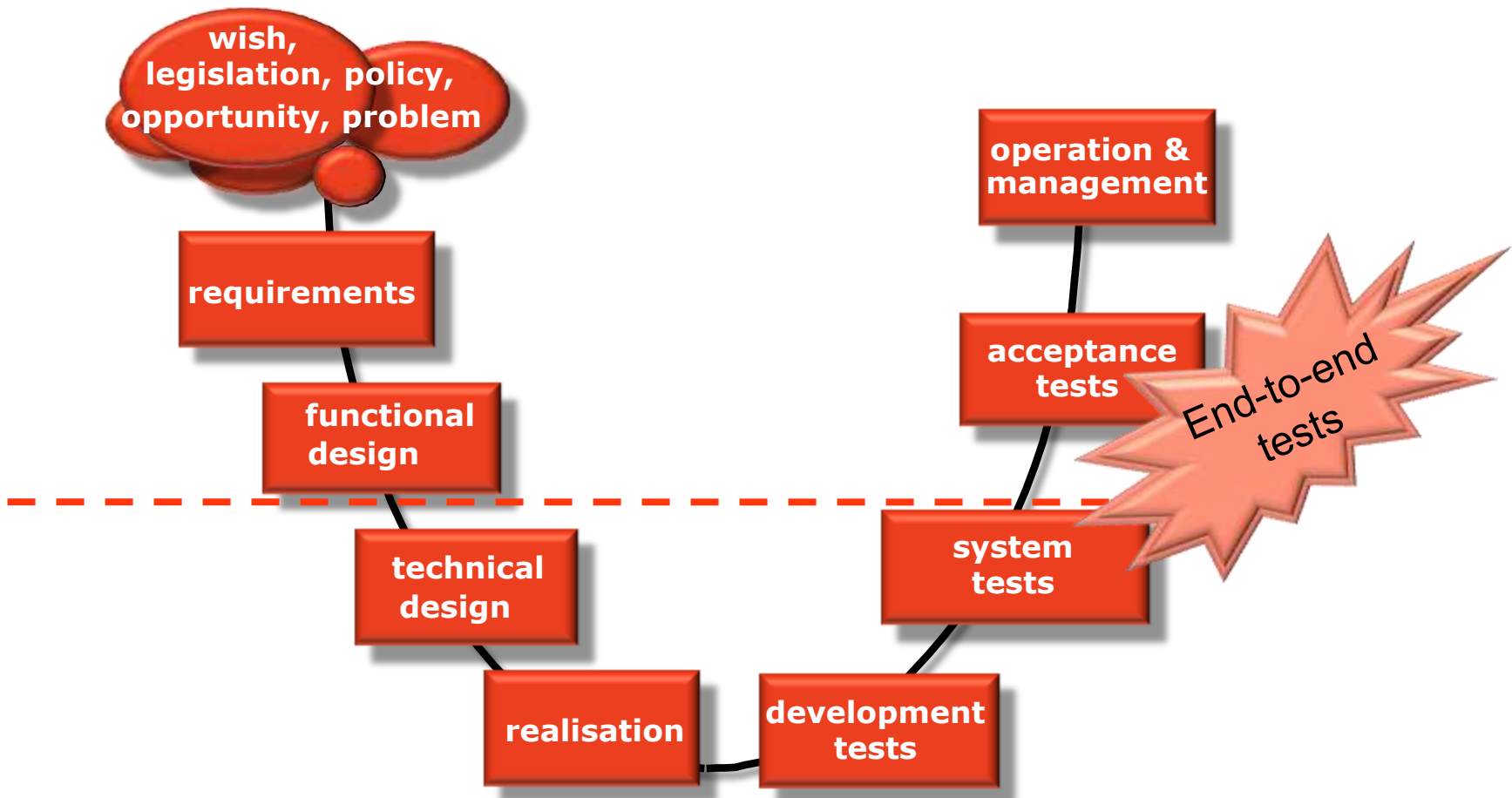




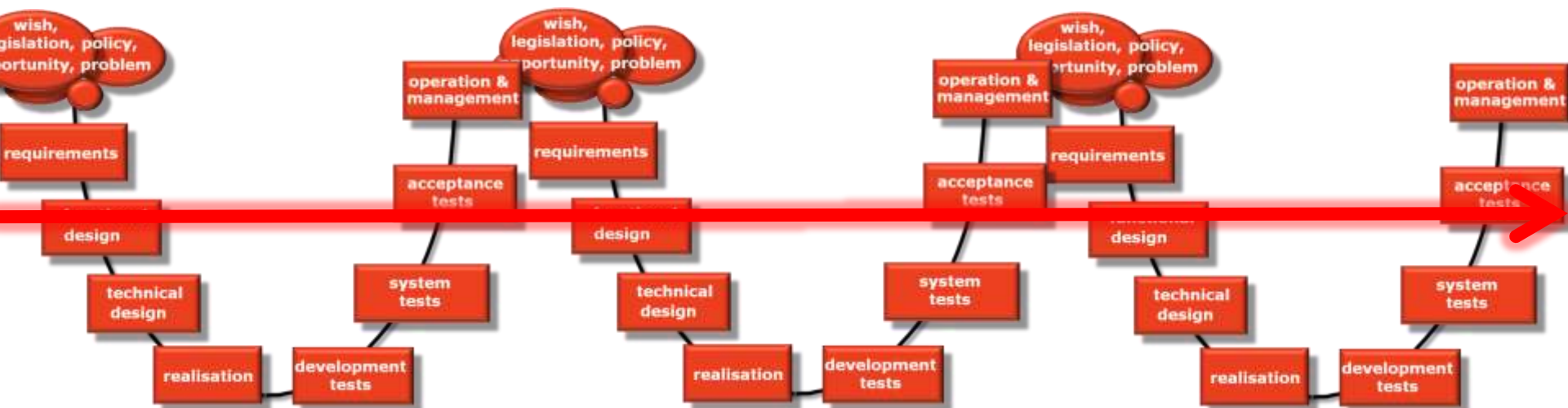
# E2E test: testing the process!



# V-model: parties involved



# An end-to-end test??



# End-to-end test exceeds scope of project; the challenge of the E-to-E test director

**Business  
process**



**Chain of  
systems**



**Involvement**

Project

Maintenance:  
release

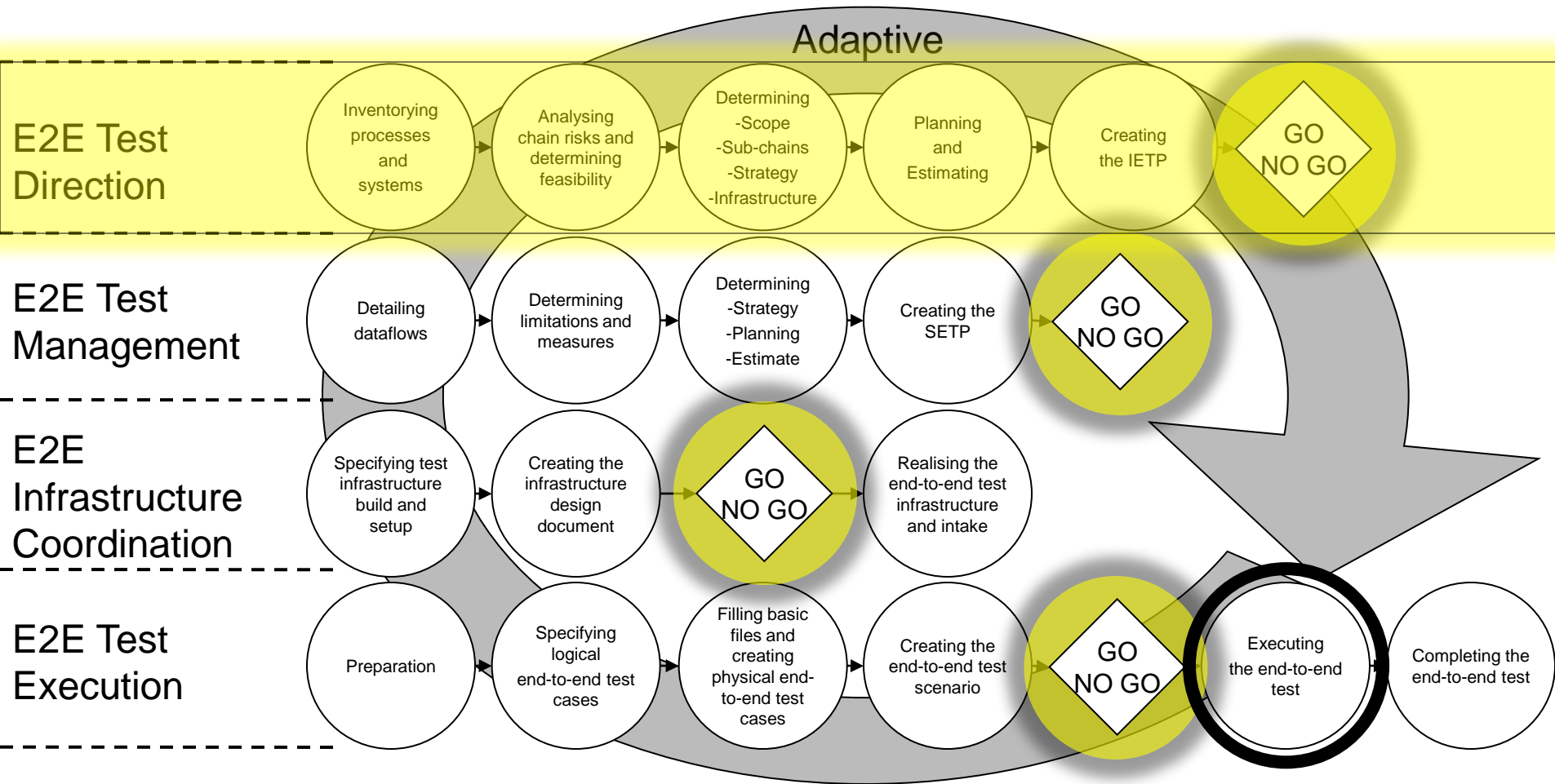
Maintenance:  
No activities

Stable  
system:  
no testset  
available

COTS-  
software:  
no docu-  
mentation  
available

Note: systems often in various organizations

# End-to-end test process



# A chain is only as strong as the weakest link

- **Chains grow across organisations**
- **Damage inflicts all chain partners**
- **E-mail, SOA and the internet make data exchange simple but are a threat for structured business processes**
- **Increasing customer demands reduce tolerance for failures (and on the internet any failure is immediately visible for the customer!)**

**The answer to these challenges:  
End-to-end testing**

Rik.Marselis@sogeti.nl

<http://www.tmap.net/Home/TMap/ketentesten.jsp>  
[http://eng.tmap.net/Home/TMap/E2E\\_Testing.jsp](http://eng.tmap.net/Home/TMap/E2E_Testing.jsp)



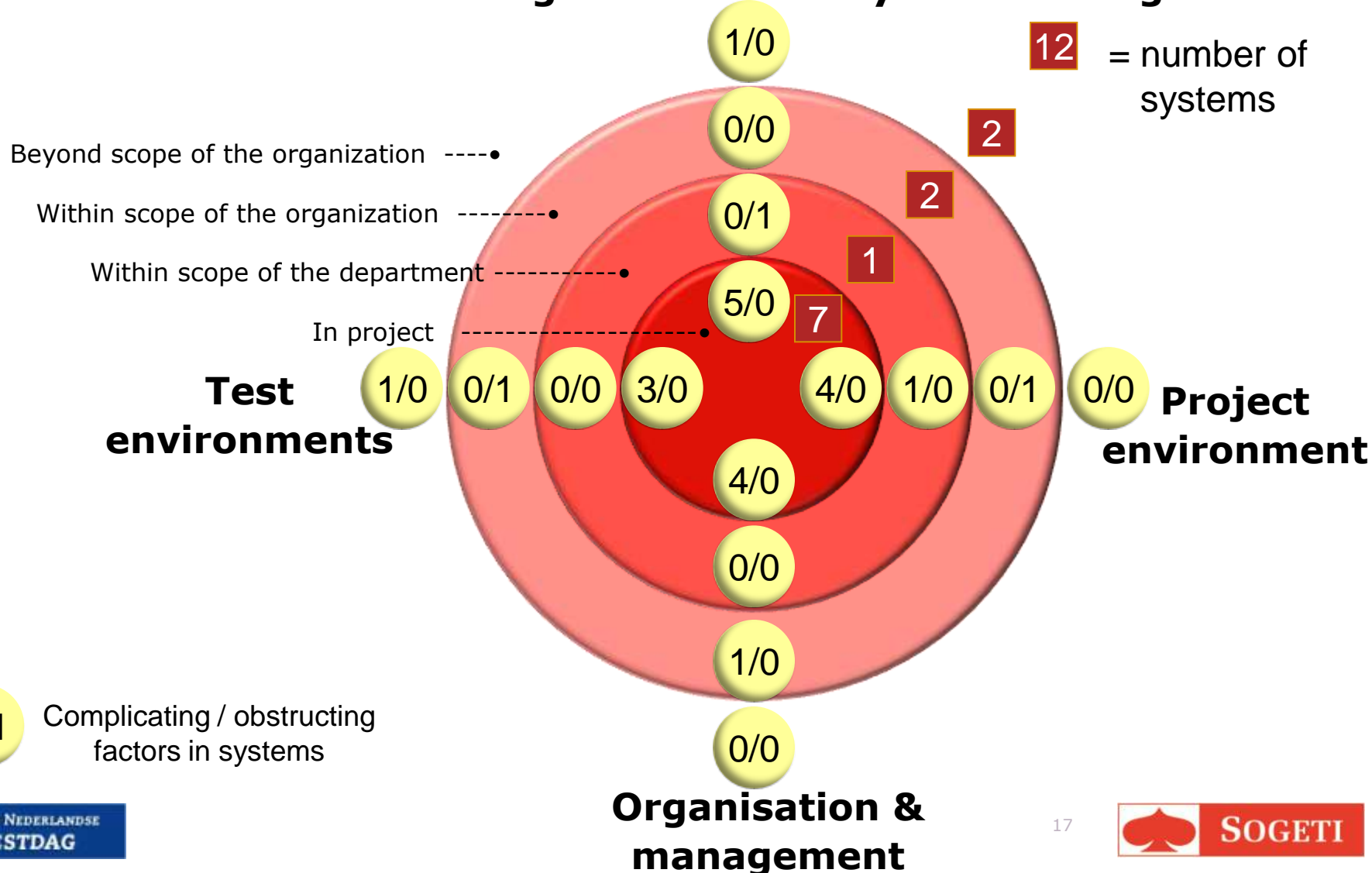
© Sogeti 2010

**The slides after this slide  
are meant to be used  
while answering  
questions**

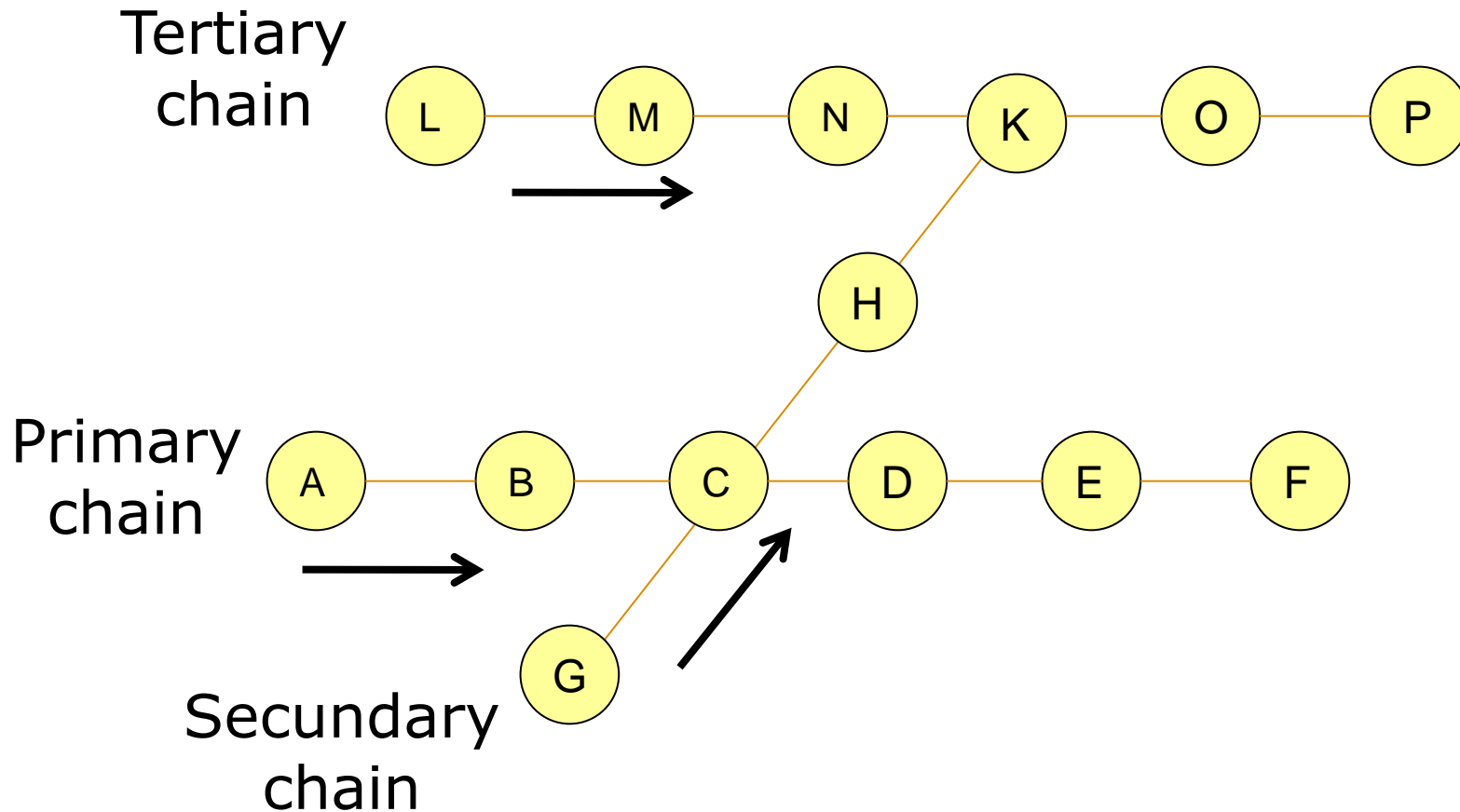


# Feasibility analysis

## Knowledge & accessibility of knowledge



# Types of chains; dependencies



# End-to-end testing not feasible?

## Test sub-chains!

**Business process**



**Sub-processes**



**Chain of systems**



# End-to-end testing with TMap NEXT®

- **Find faults across and beyond projects**
- **Find faults in business processes**
- **Builds confidence in business processes**
- **Excellent business case (it prevents damage, especially to the image of the organization)**

*"End-to-end testing with TMap NEXT® provides the method, activities, tools and examples to handle the complexity of end-to-end testing."*