Business Driven Test Management

Test, Analyse & Verifikation von Software
Stuttgart, 7 December 2007
Leo van der Aalst
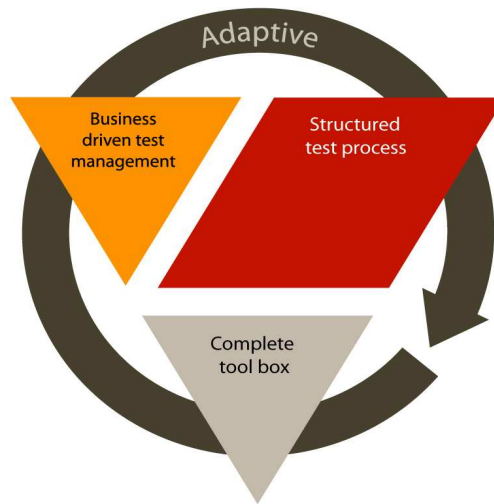
1

SOGETI

Agenda

- Essentials of TMap
- The business case in testing
- The process of business driven test management
- From test goals to test design
- Reporting

2

SOGETI

Essentials of TMap

Adaptive

Business driven test management

Structured test process

Complete tool box

3

SOGETI

Business Driven Test Management

- Gives client grip on test process
- Uses client language
- Delivers appropriate test coverage on right spot
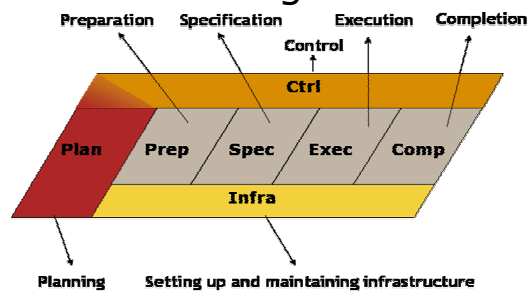- Makes test results visible for client

4

SOGETI

Structured test proces

- Covers all aspects and activities
- Breaks down into phases, activities and products
- Clear (test) responsibilities
- Plannable and manageable

5

SOGETI

Complete tool box

- Ready to go tool set
- Right tool for the right job
- Tips and examples
- Cost reduction
- Techniques that fit the identified risks
- Uniform way of working
- Insight and support to tailor your solution

6

SOGETI

Adaptive

- Applicable 'everywhere'
- Adaptable to changing circumstances
- Provides options to bring flexibility into the test process
- Enforces learning from experience
- Sets up a test process that is suitable for re-use

7

SOGETI

Business Driven Test Management

BDTM
Start

8

SOGETI

Spilled IT-expenditure

- US yearly 150 billion dollar spilled in IT
- EU yearly 140 billion dollar spilled on IT

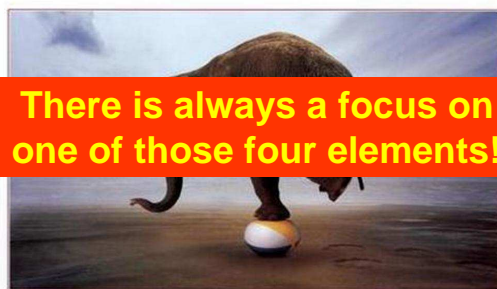 [RAE/BCS: The Challenges of Complex IT Projects.
   April 2004]

The increasing prevalence of IT systems, coupled with overseas competition in this area, means that failure to improve the collective professionalism of the IT industry and strengthen the national infrastructure supporting project delivery is likely to have serious and ongoing economic consequences for the UK.

9

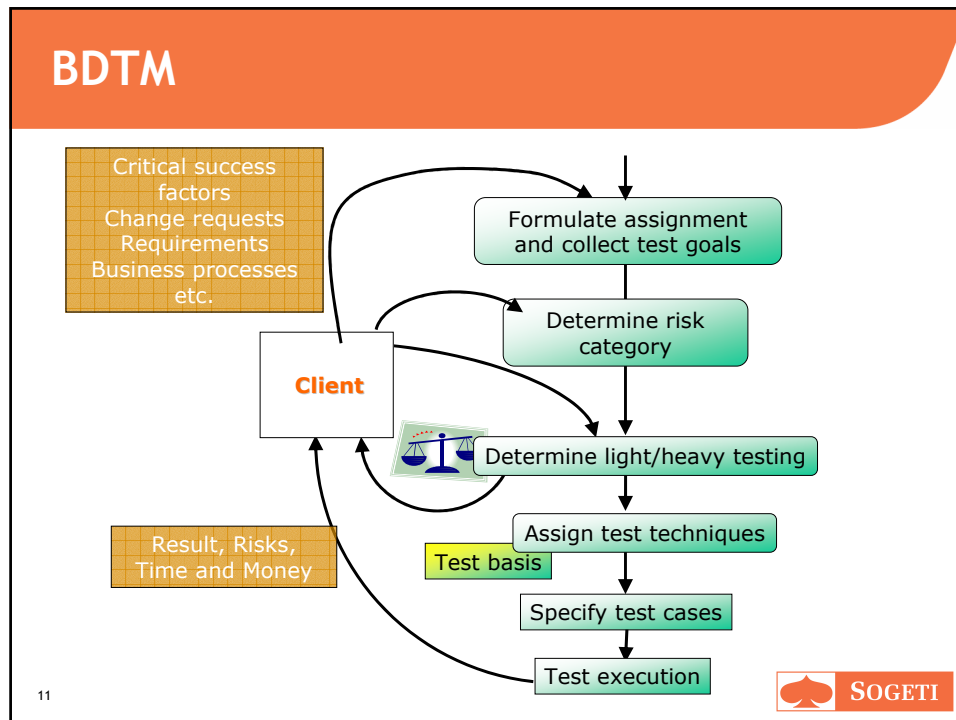SOGETI

Thinking in Business Cases

- Results
- Risk

There is always a focus on one of those four elements!

The Key to BDTM is Balance

- Money
- Time

10

SOGETI

BDTM

Critical success factors
Change requests
Requirements
Business processes
etc.

Client

Result, Risks, Time and Money

Formulate assignment and collect test goals

Determine risk category

Determine light/heavy testing

Assign test techniques

Test basis

Specify test cases

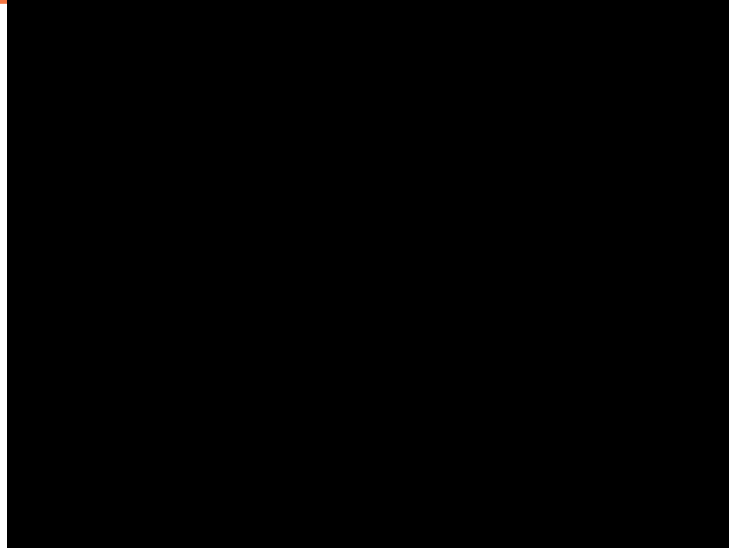Test execution

11

SOGETI

Formulate assignment

- Who and what?
- Focus on?
- Secundary request?
- Software to be tested, but more specific?

Speak in terms of 'test goals' and use client's language ...

12

SOGETI

Test goals

13

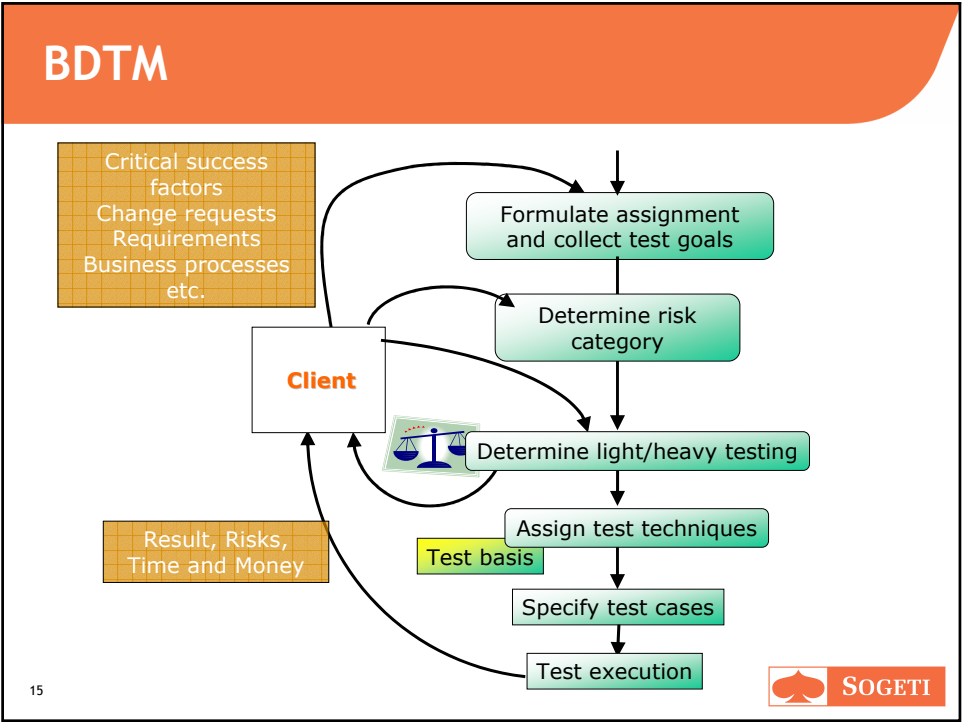## Test goals

- Types:
  - > Business process
  - > Subsystems
  - > Product risks
  - > Requirements
  - > …
- Focus on the result of testing
- To close the communication gap

Goal for testing relevant to the client
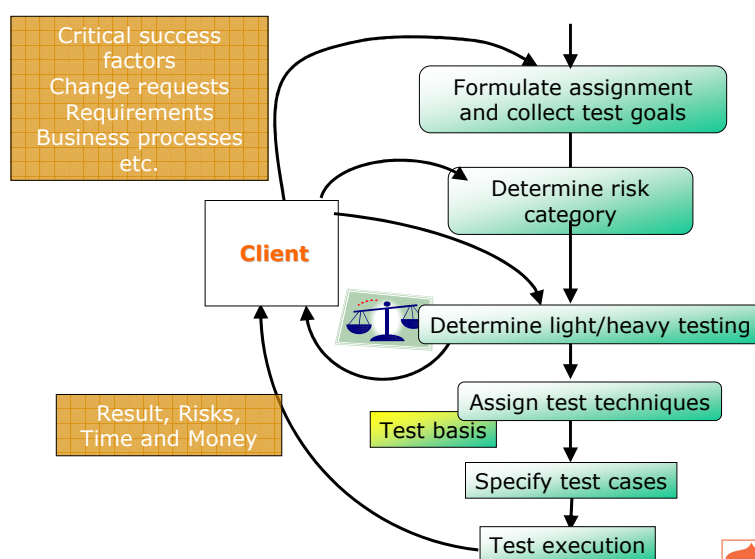
14

BDTM

Critical success factors
Change requests
Requirements
Business processes
etc.

Client

Formulate assignment and collect test goals

Determine risk category

Determine light/heavy testing

Result, Risks, Time and Money

Assign test techniques

Test basis

Specify test cases

Test execution

15

SOGETI

Determine risk category

16

SOGETI

Risks – finding a balance

17

BDTM

Critical success factors
Change requests
Requirements
Business processes
etc.

Client

Result, Risks, Time and Money

Formulate assignment and collect test goals

Determine risk category

Determine light/heavy testing

Assign test techniques

Test basis

Specify test cases

Test execution

18

Determine light/heavy testing: Strategy table

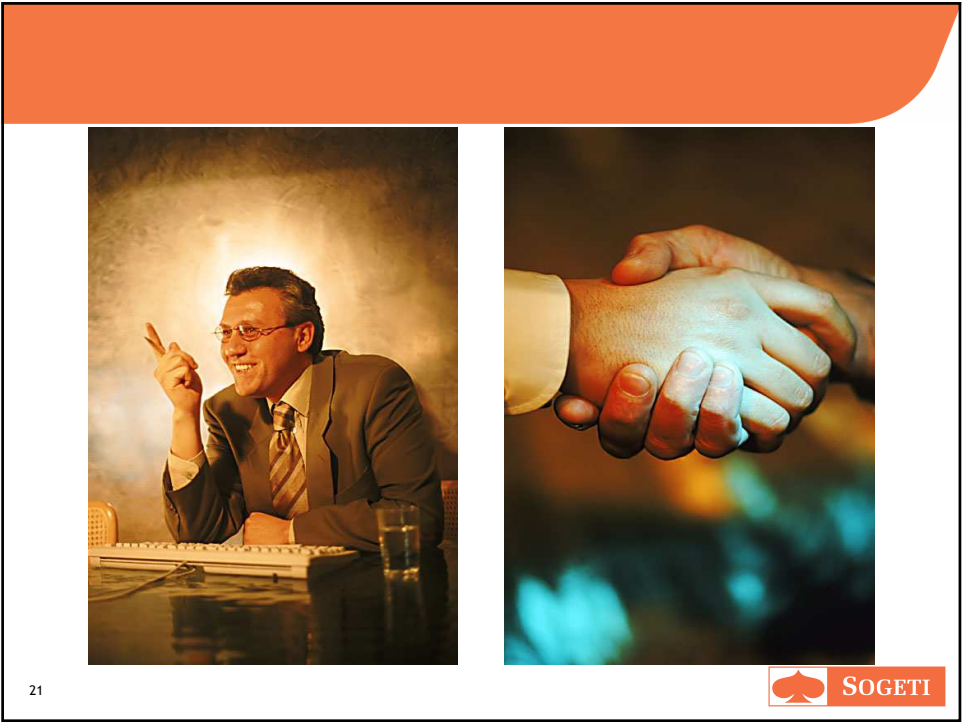| Characteristic/ Object part	RK	Eval	Dev	ST	UAT	PAT
Functionality						
- sub 1	A	●	●●	●●●	●	
- sub 2	B	●	●	●●	I	
- interface	B			●	●●	
User friendliness	B	●		I	●●	
Performance						
- online	B			●		●●
- batch	C					●

- **Estimate**   (resources, hours, money)
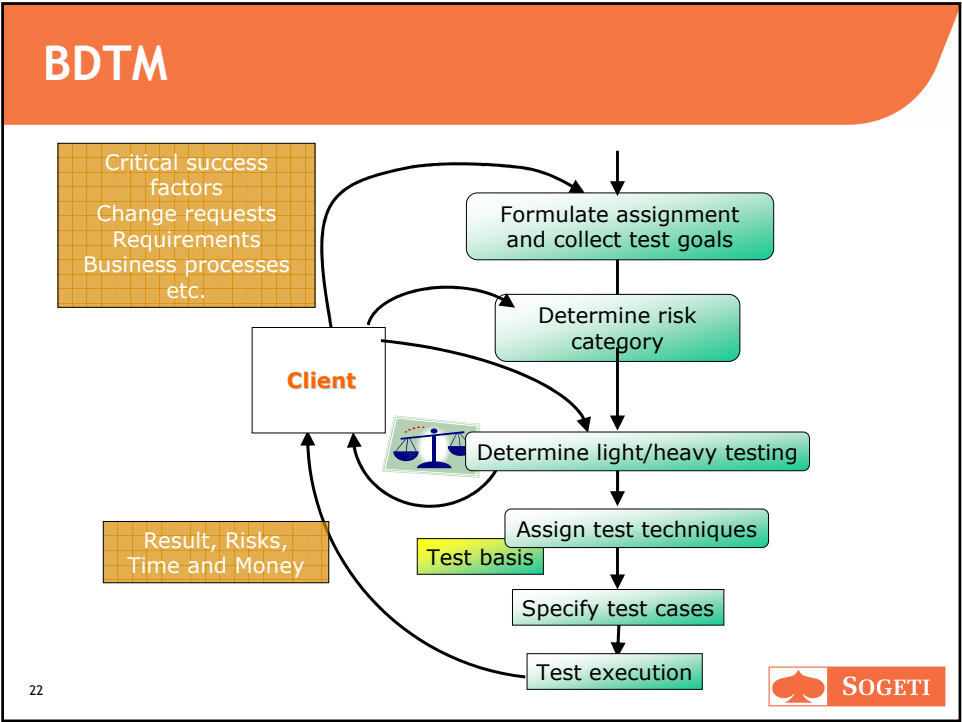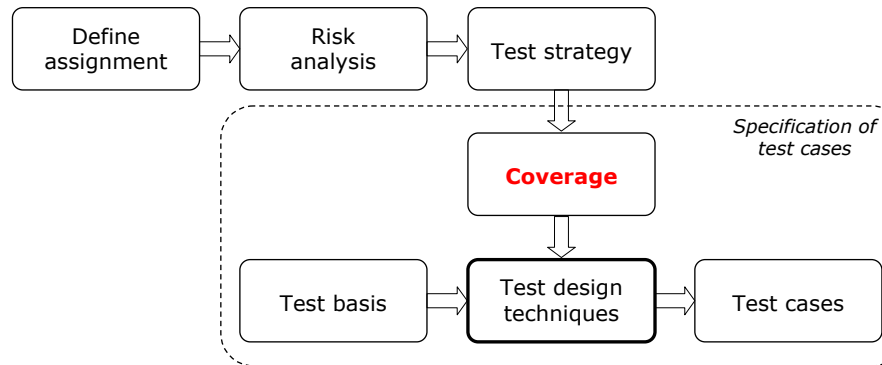- **Plan the effort**   (milestones, activities, …)

19   SOGETI
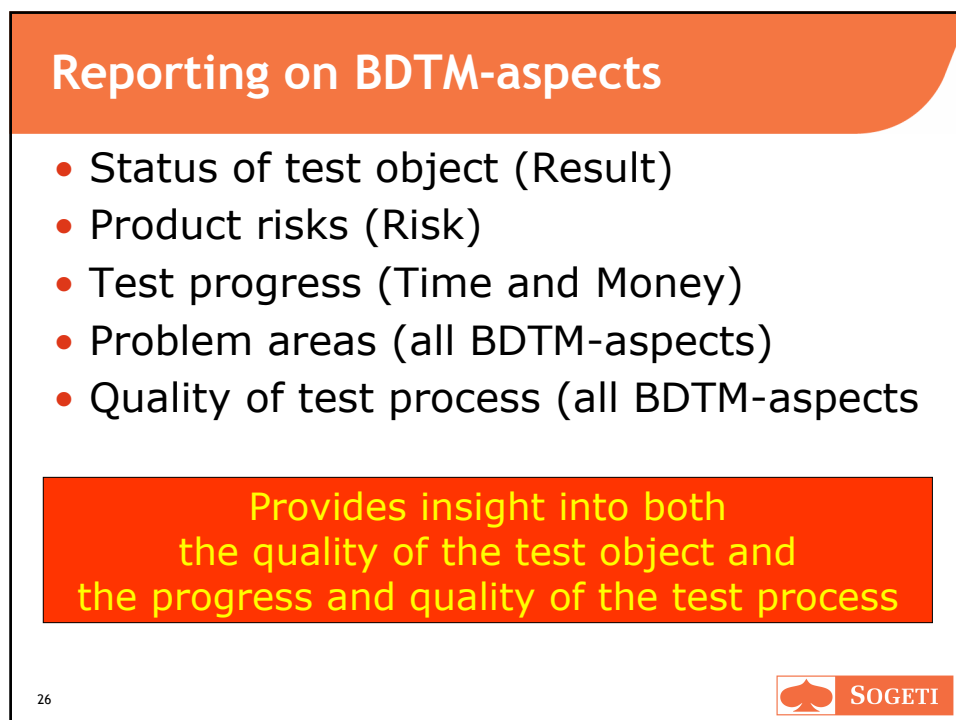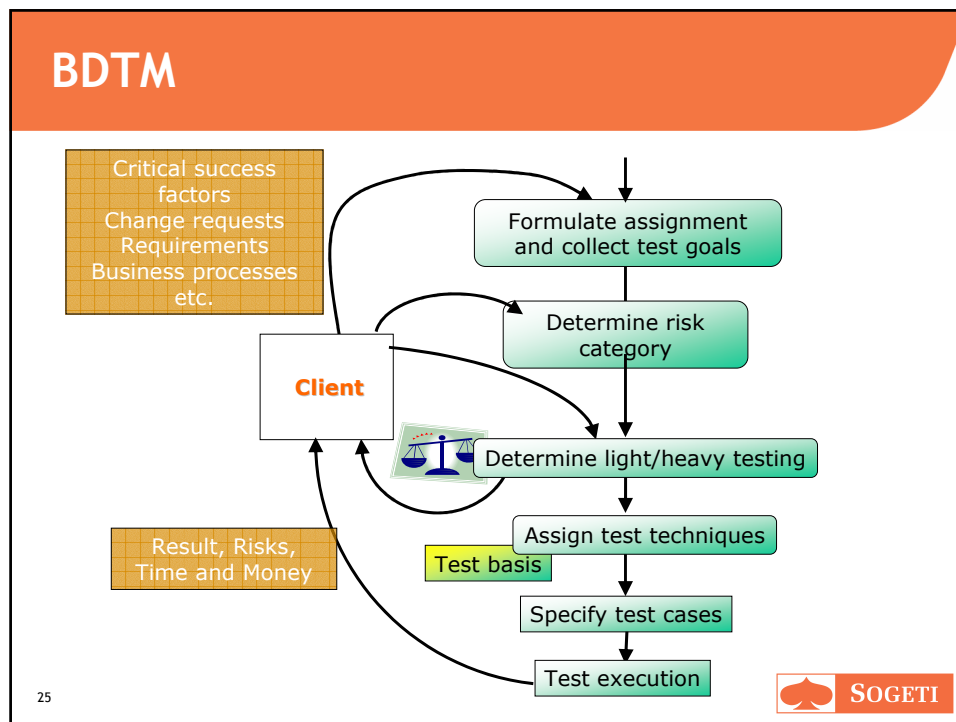

20   SOGETI

21

BDTM

22

Assign test techniques

Define assignment → Risk analysis → Test strategy

Specification of test cases

Coverage

Test basis → Test design techniques → Test cases

23

SOGETI

Result: Test design table

Characteristic/ Object part	RK	UAT	Test type	Techniques
Functionality				
- sub 1	A	●	Functional test	Tu1: DCoT Tu2: SYN, SEM
- sub 2	B	I		
- interface	B	●●	Regression test	Tu3: DCyT
User friendliness	B	●●	Usability test	Tu4: Checklist

← *Risk analysis* → ← *Test strategy* →

24

SOGETI

BDTM

Critical success factors
Change requests
Requirements
Business processes
etc.

Formulate assignment and collect test goals

Determine risk category

Client

Determine light/heavy testing

Result, Risks, Time and Money

Assign test techniques

Test basis

Specify test cases

Test execution

25

SOGETI

Reporting on BDTM-aspects

- Status of test object (Result)
- Product risks (Risk)
- Test progress (Time and Money)
- Problem areas (all BDTM-aspects)
- Quality of test process (all BDTM-aspects

Provides insight into both
the quality of the test object and
the progress and quality of the test process

26

SOGETI

BDTM claims

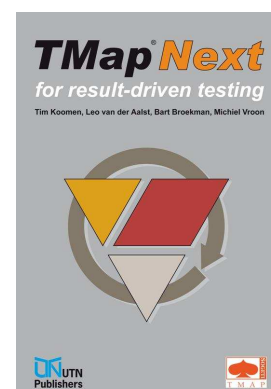- Less damage due to software failures
- Insight into the risks
- Insight into the required test effort
- Control of test progress and results

27

SOGETI

Be adaptive!….use it!

More than 400 tips, cases and examples

www.tmap.net

28

SOGETI

Questions?

29

SOGETI

SOGETI
Staat voor resultaat

www.sogeti.nl