

## Adding Value Through Outsourcing Testing Related Risk

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## Objectives

- 1 Explore why organisations seek to outsource *testing related risk*.
- 2 Develop *test management considerations* for managing projects of this nature.
- 3 Illustrate how this has been applied to implementing *regression test packs*.
- 4 Suggest how *added value* can be gained from outsourcing testing related risk.

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## 1 Why outsource risk?

- “Can you {the supplier} fix price?”
- Common {client} reasons
- General examples
- Some experiences...
  - What is reasonable?
  - What is realistic?

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## “Can you fix price...?”

“... yes, if you can give me something to fix on?”



Further Questions:

- What risk are you looking to outsource?
- Why do you want to outsource this risk?
- Will I own the whole risk?
- How will we control that?
- Is this about *partnership*?

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## Common reasons

- General Risks
  - History of going over (testing) budget
  - Lack of confidence as to whether can test adequately within the project timescales
- Specific Risks
  - An aspect of testing is integral to the project's success
  - Lacking in capability to undertake that aspect of testing

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## General examples

- General Regression Test Automation
  - Complexity/investment underestimated
  - Additional process & control considerations
  - Technical expertise required
- Specialised Regression Test Automation
  - Y2K {Time travel}
  - Euro {Currency conversion}

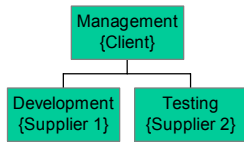
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## Is it reasonable?

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### Example 1:

Client wished to outsource development and testing to different suppliers.



- Questions {& Answers}
  - Fault level {*assumed low*}
  - Turnaround SLA {*none*}
- Unreasonable
  - Can't fix on test execution
  - Unlimited execution cycles
- Driver {& Result}
  - Client wants to fix cost
  - *We went Time & Materials*

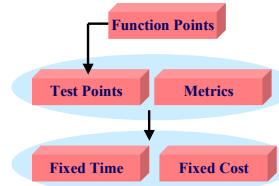
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## Is it realistic?

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### Example 2:

Client wished to outsource testing with function point driven estimates.



- Questions {& Answers}
  - Why {*move up CMM*}
  - Current level {*CMM L2*}
  - Change control {*No!*}
- Unrealistic
  - CMM level too low for FPA
  - Change control essential
- Driver {& Result}
  - Client wants a partner
  - *We went Time & Materials*

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## 2 Test Management Issues

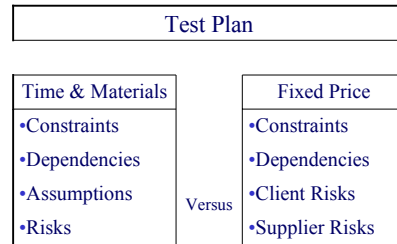
- The Test Plan – Assumptions or Risks?
- General Risk Areas
- Boundaries – System Testing stage
- A basic regression test pack process
- Automated test pack considerations
  - The software-testing-software model

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## Assumptions or Risks?

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*“There are no assumptions, only risks.”*



Client & supplier risks will tend to be 'paired off'.  
They will need to be controlled and, if possible, measurable.

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## General Risk Areas

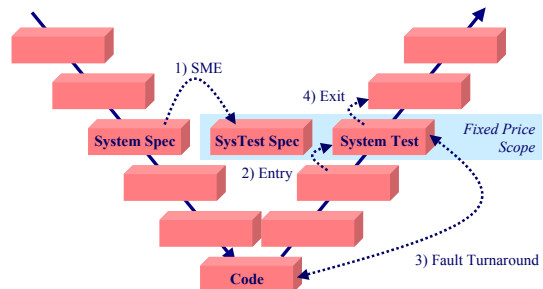
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- Subject Matter Expertise {SME}
  - The Oracle Assumption
    - Oracle: *“a mechanism to produce the predicted outcomes to compare with the actual outcomes of the software under test”* {BS7925-1}
- Test Execution
  - Significant aspects outside the testers' control
    - Number of faults, and execution cycles required
    - Fault turnaround time
    - Regression levels

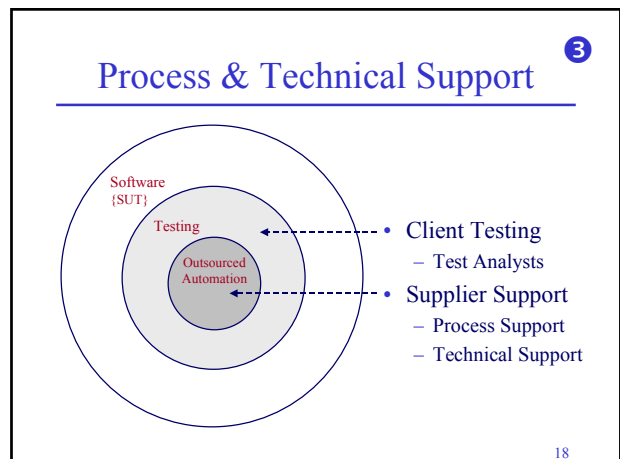
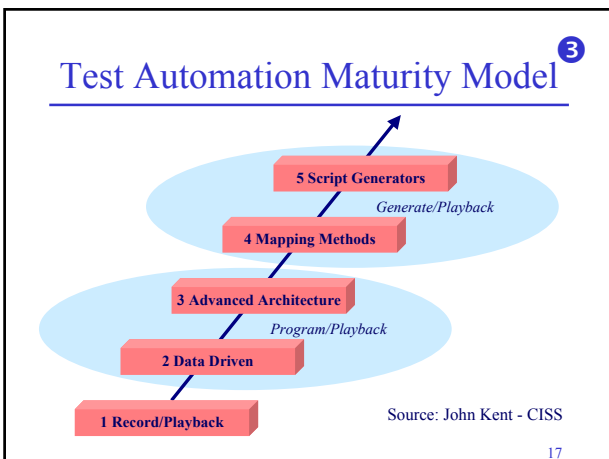
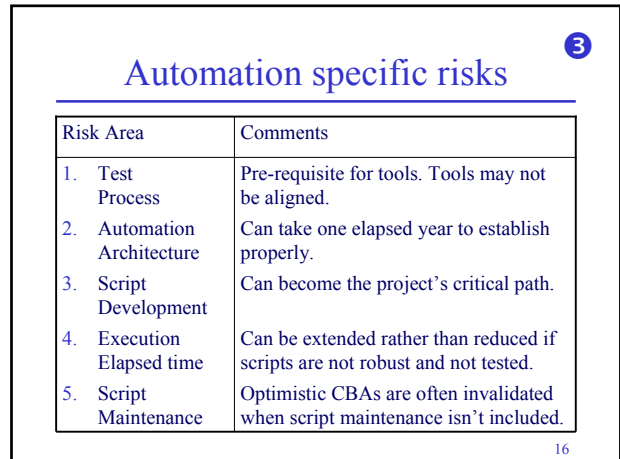
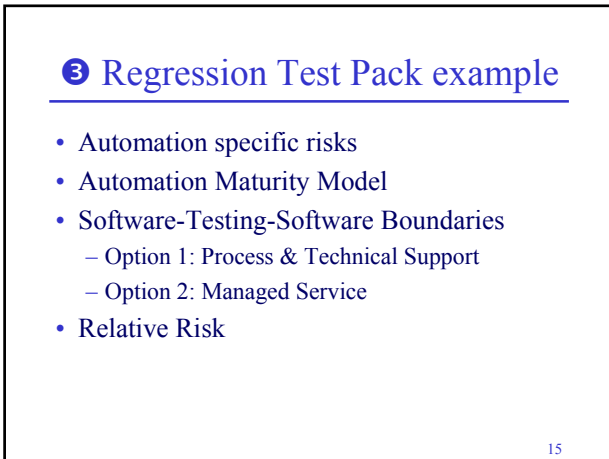
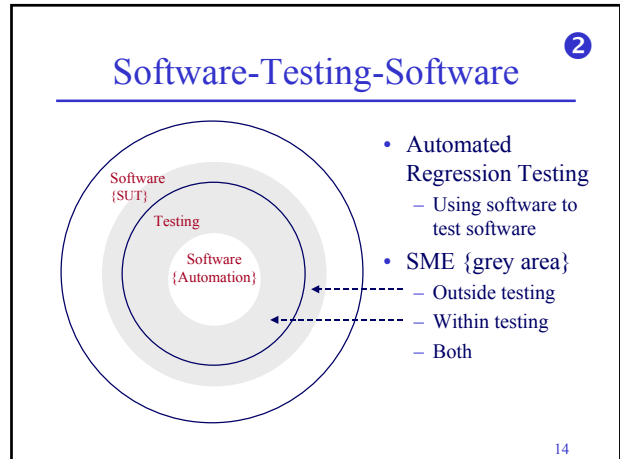
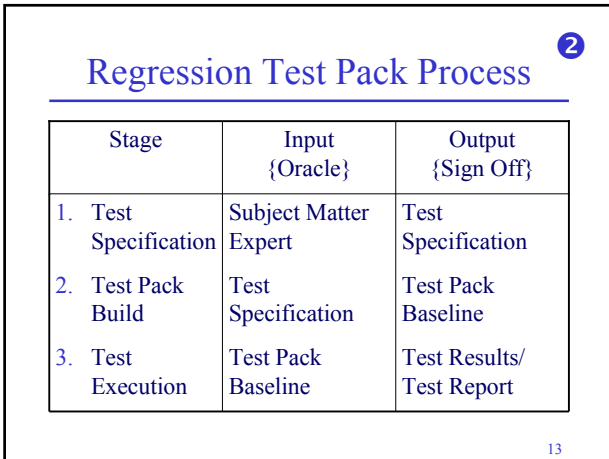
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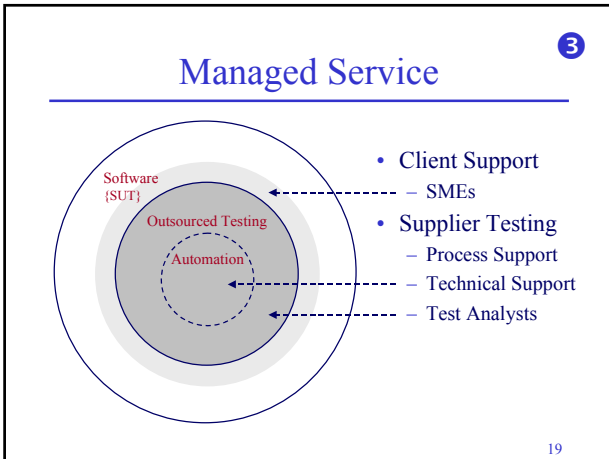
## System Testing Boundaries

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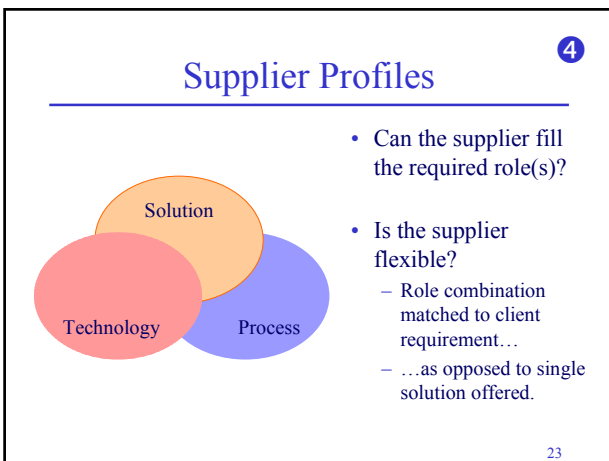
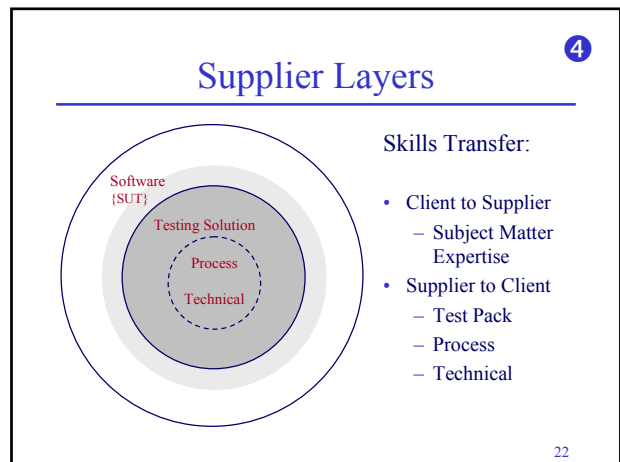


### Relative Risk 3

| Risk Area               | Manual Scripts | Programmed Scripts | Generated Scripts | Risk Owner |
|-------------------------|----------------|--------------------|-------------------|------------|
| Test Process            | Low            | High               | Medium            | Supplier   |
| Automation Architecture | N/A            | High               | Low               | Supplier   |
| Script Development      | Low            | High               | Medium            | Supplier   |
| Execution Elapsed time  | Medium         | High               | Low               | Client     |
| Script Maintenance      | Low            | High               | Medium            | Supplier   |

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- ### 4 Where is the added value?
- Project Focus
    - One off. Client does not need to gain capability.
  - Managed Service
    - Ongoing. Client never gains capability
  - Skills Transfer
    - Managed Service initial test pack build
    - Enable client to maintain/extend test pack
    - Client in control of 'next steps' options
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- ### Summary
- 1 Establish whether the reasons for outsourcing risk are *reasonable and realistic*.
  - 2 **Agree the boundaries** for managing this risk, together with tangible parameters.
  - 3 **Some outsourcing scenarios add risk** to projects, but there are examples that work.
  - 4 Outsourcing testing is a 'means to an end'. **Value is added by suppliers enabling clients to undertake the outsourced testing in future.**
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