

Risk Rated Estimating

Customisation of Quality Centre's Requirements Risk Rating

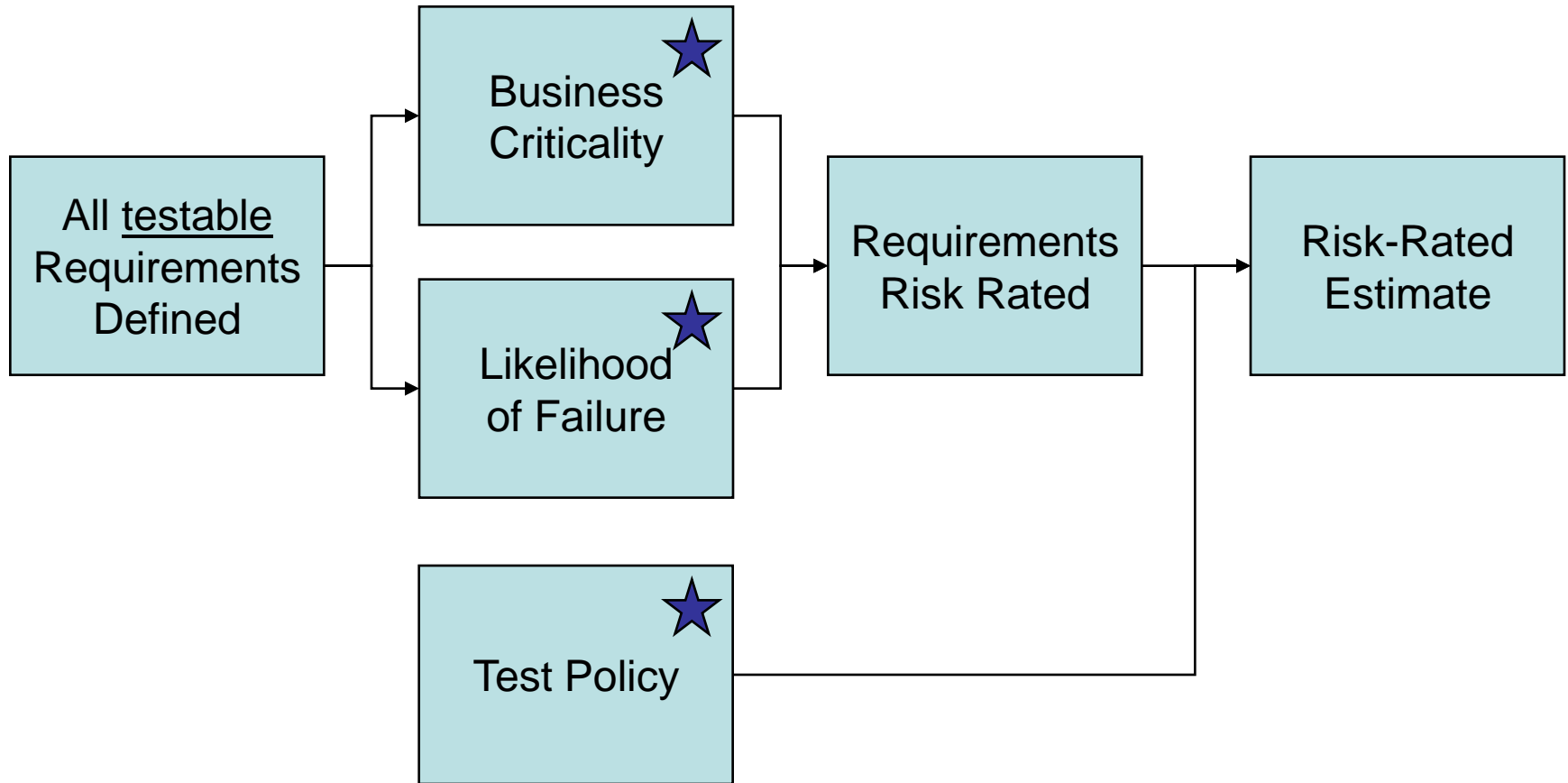
Agenda

- Western Power's estimating requirement
- Requirements Risk Rating
 - Business Impact
 - Likelihood of Failure
 - Test Policy
- Customisation of default Quality Centre
- Results
- Questions

Estimating Requirements

- Western Power has a professional testing team to provide testing to multiple, concurrent IT projects
- Bespoke, package, COTS, and SOA software and also hardware
- Quality Centre and Quick Test Pro
- Default risk rating values for standard projects but not suitable for many projects
- Need to be able to provide detailed, accurate estimates quickly to project managers

Risk Rated Estimating Process



Business Criticality

- Defined by:
 - Business representatives
 - Business analysts
- Depends upon:
 - Business objectives
 - Scope of business change
 - Safety, environmental & financial factors
- Recorded by testing services in Quality Centre
- Value set (A-Critical, B-Important, C-Nice to have)

Likelihood of Failure

- Defined by:
 - Solution Architects
 - Development teams
- Depends upon:
 - Technical solution
 - Experience of development team
 - Interoperability with existing systems
- Recorded by testing services in Quality Centre
- Value set (1-High, 2-Medium, 3-Low)

Risk Rated Requirements

Details | Requirements Traceability | Test Coverage | Linked Defects | Risk | Attachments

Risk Analysis

Last saved on date: 19/08/2008 Filter:

Perform Risk Analysis

Click to aggregate assessments and custom estimates from child requirements that match the current filter.

Results

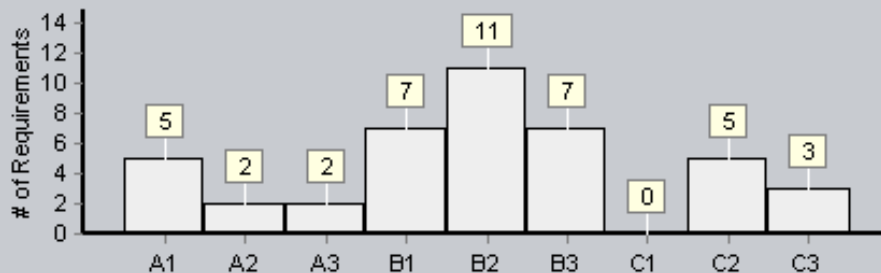
Processed 59 Requirements (42 with assessment, [0 missing assessment](#), [17 not assessable](#))

Test Total required testing time:

Total allocated testing time:

Dev Total required development time:

No. of Requirements per Risk Category



Quality Centre Test Policy

Change Analysis Constants

Testing Time and Testing levels
Testing Time (full) per failure probability:

1 - High Hours

2 - Medium Hours

3 - Low Hours

Testing level (Full = 100%, None = 0%)

Partial %

Basic %

Testing Policy (in Hours)

Criticality	Probability		
	1 - High	2 - Medium	3 - Low
A - Critical	Full (18) ▼	Full (15) ▼	Full (12) ▼
B - Important	Partial (12) ▼	Partial (10) ▼	Partial (8) ▼
C - Nice To Have	Basic (6) ▼	Basic (5) ▼	Basic (4) ▼

Risk Rated Estimate

Details | Requirements Traceability | Test Coverage | Linked Defects | Risk | Attachments

Risk Analysis

Last saved on date: 19/08/2008 Filter:

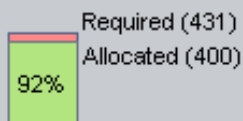
Perform Risk Analysis

Click to aggregate assessments and custom estimates from child requirements that match the current filter.

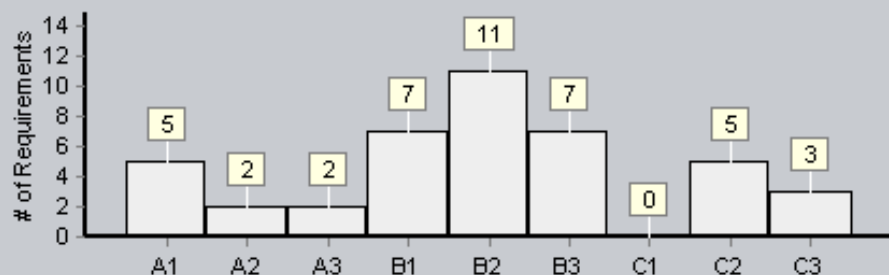
Results

Processed 59 Requirements (42 with assessment, [0 missing assessment](#), [17 not assessable](#))

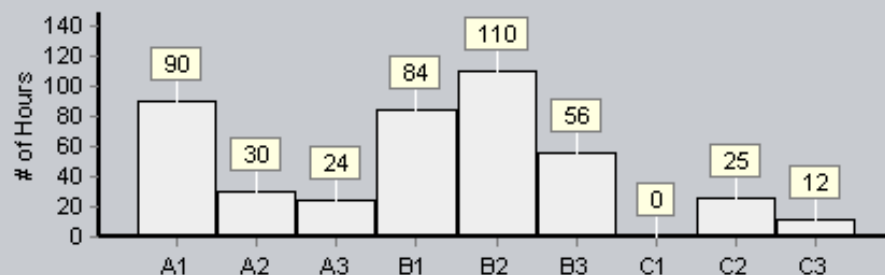
Test Total required testing time: 431 Hours
Total allocated testing time: Hours
Dev Total required development time: 0 Hours



No. of Requirements per Risk Category



Total Testing Time per Risk Category



Customisation

- Testing effort differs for:
 - In-house applications;
 - COTS packages;
 - Interface testing;
 - Hardware testing;
 - etc.
- Quality Centre supports customisation of:
 - Test Policy
 - Business Impact
 - Likelihood of Failure

Risk-Based Quality Management

Business Criticality | Failure Probability | Risk Constants

+ New X Delete ↓ Move Down ↑ Move Up

Criterion
Type of process
Impact of failure
Frequency of use
Number/Significance of affected users

Value	Weight
Calculation/ Validation	30
Data Change	18
Display	8

Description of Criterion: "Type of process"

The type of process represented by the requirement.

This criterion has the following possible values:

Calculation/ Validation - The feature represented by the requirement is an important calculation or validation.

Data Change - The feature represented by the requirement modifies application data.

Data Change - The feature represented by the requirement modifies application data.

Calculation of Business Criticality value based on total weights

Grade:	C - Nice to have	B - Important	A - Critical
Range:	32 <= TW < 52	52 <= TW < 76	76 <= TW < 120

Save Help

Risk-Based Quality Management

- HP S Quality C
- User Prop
- Project Us
- Groups
- Module Ac
- Project En
- Requireme
- Risk-Bas**
- Project Lis
- Automail
- Alert Rule
- Workflow

t: WR3408_Columbus_Interfaces, User: n020344

Business Criticality | Failure Probability | Risk Constants

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Criterion	Value	Weight
Type of Process	Interface File Transfer	30
Impact of Failure	Processing Log	18
Frequency of Interface	Display/Report	8
Number/Significance of Affected Records		

Description of Criterion: "Type of Process"

The type of process represented by the requirement. This criterion has the following possible values:

Interface File Transfer- The feature represented by the requirement is a file transfer between systems.

Processing Log - The feature represented by the requirement records transaction or

Calculation of Business Criticality value based on total weights

Grade:	C - Nice to have	B - Important	A - Critical
Range:	32 <= TW < 52	52 <= TW < 76	76 <= TW < 120

Save Help

Risk-Based Quality Management

- HP Soft
- Quality Cer
- User Properti
- Project Users
- Groups
- Module Acce
- Project Entitie
- Requirement
- Risk-Based C
- Project Lists
- Automail
- Alert Rules
- Workflow

Business Criticality | **Failure Probability** | Risk Constants

+ New X Delete ↓ Move Down ↑ Move Up

Criterion
Change type
Software maturity
Defects rate
Number of affected screens/entities

Value	Weight
New Feature	30
Changed Feature	18
Unchanged Feature	8

Description of Criterion: "Change type"

Whether the feature the requirement is new, changed, or unchanged feature.

This criterion has the following possible values:

New feature - The requirement represents a feature that is new in this release.

Changed feature - The requirement represents a feature that previously existed, but has been changed for this release.

Calculation of Failure Probability value based on total weights

Grade:	3 - Low	2 - Medium	1 - High
Range:	32 <= TW < 52	52 <= TW < 76	76 <= TW < 120

Save Help

Risk-Based Quality Management

- User Pro
- Project U
- Groups
- Module /
- Project E
- Requirem
- Risk-Bas**
- Project L
- Automail
- Alert Rul
- Workflow

Business Criticality | Failure Probability | Risk Constants

+ New X Delete ↓ Move Down ↑ Move Up

Criterion
Interface Complexity
Software maturity
Defects rate
Number of affected Interface Files/Log Files

Value	Weight
Complex or Very Complex	30
Medium	18
Simple	8

Description of Criterion: "Interface Complexity"

Whether the Interface is Complex/Very Complex, Medium, or Simple.
 This criterion has the following possible values:

Complex or Very Complex - The interface has been assessed as Complex or Very Complex.

Medium - The interface has been assessed as medium.

Calculation of Failure Probability value based on total weights

Grade:	3 - Low	2 - Medium	1 - High
Range:	32 <= TW < 52	52 <= TW < 76	76 <= TW < 120

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Benefits

- Accurate test estimates
- A standard approach
- Acceptance by multiple project managers
- Estimates are easily updated for change
- Continuous improvement
- Similar projects can be cloned
- Relatively quick to customise

Results

- Still relatively early days
- Many projects are in progress
- Results (so far) indicate high accuracy

Any Questions?

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