## Transition Consulting Limited White Paper

# Value through a Test Policy

### Version 1.00

Author:	Barry Weston
Abstract:	How to generate strategic value through the creation of appropriate test policy.
Status:	ISSUED
Copy Number	2
Date:	8 June 2006
Filename	Strategic Value Through a Test Policy V1.00 BW 080606.doc



#### **Table of Contents**

1	DO	CUMENT INFORMATION II	ł
	1.1 1.2 1.3 1.4 1.5	AUTHORISATION	   
2	INT	RODUCTION	ŀ
	2.1 2.2 2.3 2.4	PURPOSE	1 1
	<b>۱۸/</b> ⊔	Y YOU NEED A TEST POLICY	5
3	VVII		
3 4		EATING A TEST POLICY	
-			777333
-	<b>CRI</b> 4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8	EATING A TEST POLICY 7   SCOPE 7   DEFINITION OF TESTING 7   TEST PROCESS 7   EVALUATING TEST RESULTS 7   TEST PROCESS IMPROVEMENT 8   POLICY OWNERSHIP 8   SOURCES OF KEY INFORMATION 8	77733333
4	CRI 4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8 EXF	EATING A TEST POLICY 7   Scope 7   Definition of Testing 7   Test Process 7   Evaluating Test Results 7   Test Process Improvement 8   Policy Ownership 8   Sources of Key Information 8   Target Audiences 8	· · · · · · · · · · · · · · · · · · ·

Print Date: 6/8/2006 5:44:00 PM



#### **1** Document Information

#### 1.1 Authorisation

Name	Role	Email
Stewart Noakes	MD	Stewart.Noakes@TransitionConsulting.co.uk

#### 1.2 Author

Name	Role	Email	
Barry Weston	CP	Barry.Weston@TransitionConsulting.co.uk	

#### 1.3 Review and Approval

Name	Туре	Email	
Mark Garnett	Standards	Mark.Garnett@TransitionConsulting.co.uk	
Steven Field	Peer Review	Steve.Field@TransitionConsulting.co.uk	

#### 1.4 Distribution

Name	Role/Location	Version Number	Copy Number
TCL Library	Exeter	1.0	1
Key Stakeholders and Industry Leaders	Various	1.0	2

#### 1.5 Document History

Date	Version	Author	Description	
02/06/06	0.01	Barry Weston	First Draft	
07/06/06	0.02	Stewart Noakes	Update to all sections	
08/06/06	0.03	Barry Weston	Minor changes	
08/06/06	0.04	Stewart Noakes	Final review and polish of all sections before moving to issue.	
08/06/06	1.00	Barry Weston	Move to baseline and issue.	



#### 2 Introduction

It is a sobering thought that in 2003 over 80% of IT projects failed to advance the strategic goals of the organisation where they were implemented and furthermore fewer than 25% met their project goals. These results were obtained from a study of 145,000 major IT projects undertaken by Fortune 500 companies (costing more than \$265 billion) in the USA.

There is little evidence to suggest this situation has changed in recent years. If this trend isn't to continue there needs to be a significant change in mindset of managers and a change of approach to the delivery of every project.

Clearly, this isn't a problem that testers can solve in isolation. It is a problem that is endemic within the whole architecture and development process. In order to maximise the alignment and advancement of corporate goals we need to ensure that each new solution satisfies the corporate goals at each level of development.

Using the test team as the assurance function for corporate goal adherence will undoubtedly highlight those projects that fall outside the scope of goals but getting the overall test policy right will have a much greater impact on adherence and advancement of goals as it is pervasive throughout all development activity. By ensuring adherence to corporate goals we will maximise the strategic value of the testing we undertake.

#### 2.1 Purpose

The purpose of this white paper is to provide the audience with an insight into the strategic value that testing can bring to an organisation.

It has a target audience of senior business managers and testing professionals.

#### 2.2 Scope

The scope of this document is limited to:

- Strategic value of software testing
- The unique proposition of consultancy from TCL.

The document does not intend to explain in any detail the existing TCL solutions, but further information can be obtained from our website (<u>www.TransitionConsulting.co.uk</u>) or by contacting Steven Field (<u>Steve.Field@TransitionConsulting.co.uk</u>).

#### 2.3 Terminology

Terminology	Definition	
SMaRT	The TCL test methodology. Acronym stands for: Structured, Managed and Realistic Testing.	
TCL	Transition Consulting Limited – <u>www.TransitionConsulting.co.uk</u>	



#### 2.4 References

Reference	Name	Author	Version	Location/Filename
1.	ISEB Practitioner Certificate in Software Testing syllabus	ISEB	1.0	www.bcs.org.uk
2.	Aligning Test Strategies with corporate goals	Stewart Noakes	V2.00	StarWEST papers 2005 – www.sqe.com
3.	Project success data	N/A	N/A	www.bptrends.com



#### 3 Why You Need a Test Policy

The frequent failure of software projects to deliver their anticipated benefits can often be traced back to poor or non-existent guidance from senior management on the required approach, quality and quantity of testing.

Setting an appropriate test policy by senior managers provides a robust framework within which testing practitioners can then operate. This will help to ensure the maximisation of the strategic value inherent in every project.

An effective test policy will deliver the following tangible benefits:

- Testing that is directly linked back to the higher level requirements of brand, goals, value and ethics
- Testing that is a consistent and repeatable activity rather than a bespoke activity for each project
- Effective team-working through the adoption of a homogeneous approach across the organisation
- An efficient and lean testing organisation
- A decision making framework under which test planning and test execution can take place.



#### 4 Creating a Test Policy

A test policy document specifies the following:

- scope of the policy
- a definition of testing
- the organisation's test process
- how test results will be evaluated
- approach to improving the process
- policy ownership
- sources of key information
- target audiences.

#### 4.1 Scope

Organisations need to specify which parts of testing are covered by the policy. In research and development environments there may be merit in their exclusion from the rigour that the policy will introduce. Also in organisations where there are multiple unrelated products a degree of decomposition may be required in the policy to accommodate the differing needs of the different product types.

#### 4.2 Definition of Testing

Organisations need to be clear why they are testing. This will influence the remainder of the policy document and also the detailed testing techniques that are selected by test managers at the programme and project level.

From the understanding of why testing is required it is possible to specify what the purpose of testing is within the organisation. Without this fundamental linkage the test effort is destined to fail.

To some the purpose of testing will be to maximise the coverage of requirements through the testing process; to others it might be to maximise the benefits that are realised from implementing the final solution.

#### 4.3 Test Process

The process used by test teams needs to complement the processes used by developers. Without a synergistic approach to development and testing the management of the project and the deliverables becomes much more difficult and the deliverables of the developers may not satisfy the needs or requirements of the test team.

#### 4.4 Evaluating Test Results

In order to determine whether a software product can be released to the next stage of testing, or if it is suitable for release to operate in the live environment, the method of assessment needs to be determined. Organisations often simplistically describe this in



terms of requirements coverage and the number of defects that can remain in the system under test (profiled by test phase).

The test policy should identify the profile of attributes that need to be considered in the evaluation process. It might consider prioritising customer facing functionality higher than other infrequent activity and detail the numbers and types of defects that can remain accordingly.

The policy should also take a longer term view of test results and detail the expected quality characteristics of software products post implementation. This definition is likely to encompass such things as performance and defect profile for the system in live. These requirements may well be derived from the organisational goals, values and ethics.

#### 4.5 Test Process Improvement

The efficacy of the testing process needs to be maintained over time. The test policy should define a standardised approach to identify improvements to current testing practice and define at a high level the methods by which improvements can be implemented.

The testing function has a responsibility to be as efficient and effective as the other areas within the project and the business. In many regards it should take the lead, and drive changes to the organisation through example.

#### 4.6 Policy Ownership

Test policies are often written by senior testing professionals with domain expertise, on behalf of the chief technical officer or the senior management team.

Ownership and therefore communication of the policy falls within the remit of the CTO (or equivalent). Without this senior level buy in the policy will be ineffective and unlikely to deliver significant value.

#### 4.7 Sources of Key Information

The test policy needs to consider applicable legislation; national, international and industry specific standards, local best practice; and other information sources in its creation. Where referenceable sources are to be used these need to be documented within the policy to avoid duplication of effort and opposing dialogues.

#### 4.8 Target Audiences

The test policy will not solely impact the test team. The audience is much wider, spanning the development, business and management domains.

By identifying these areas within the policy itself the test effort is included in early stage thinking across the organisation thus inducing the overall unity of the approach.

Test policies typically have audiences including:

- Development personnel
- Test personnel

- Business managers
- Senior management team
- External software suppliers



#### 5 Experience of Test Policy Implementation

With testing increasingly becoming a focus for senior managers, and as Test Managers themselves become more strategically placed within organisations, the cost of not aligning the approach for the entire business is much higher.

It is no longer sufficient to strategise and organise solely at the project level. Testing costs, technology challenges and market forces drive a need for the achievement of savings through scope and scale wherever possible.

At TCL we implement testing strategy at the project, programme and organisational levels. Through this work we recognise that the greatest savings, changes and value are seen from appropriately shaped organisational level policies.

There is an opportunity for many organisations to build on their existing test models by taking hold of this approach and driving out a sea change within their product lifecycle. By doing so they will push testing into a more strategically valuable position and deliver tangible benefit.



#### 6 About Transition Consulting Limited (TCL)

Transition Consulting Limited (TCL) is a specialist consultancy in software testing. As a consultancy, our core purpose is to Deliver World Class Solutions in Software Testing that are Innovative, Structured and Professional – we are geared to deliver in all areas of software testing, from Unit Testing to Performance Testing, and everything in between.

Our competencies are best displayed in shaping test activities to the benefit of our clients, and assuring that the products are successfully implemented - not just tested. Our experience, and delivery process, has been repeatedly proven and reinforced in many challenging environments.

We provide strategic consultancy to organisations looking to establish mature practice and to measure the effectiveness of the testing approaches they are using. Through the provision of training services we are also able to share the knowledge and experience we have gained and provide support in the implementation of these concepts at our clients. Our training solutions include:

- all aspects of testing and test management
- ISEB Qualification courses
- bespoke courses constructed to meet our clients' specific needs
- Coaching and mentoring
- Security Testing.

#### 6.1 Contact for Further information

Further information on TCL can be found at our website (<u>www.TransitionConsulting.co.uk</u>) or by contacting Steven Field (<u>Steve.Field@TransitionConsulting.co.uk</u>).

End of Document