Software Quality Assurance & Testing Services

The Guarantee of Project Success

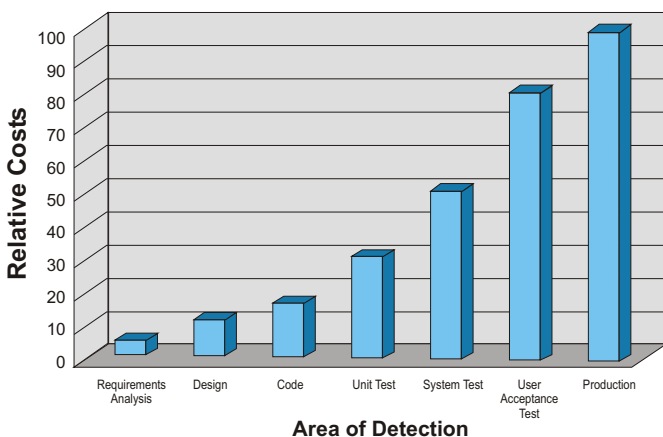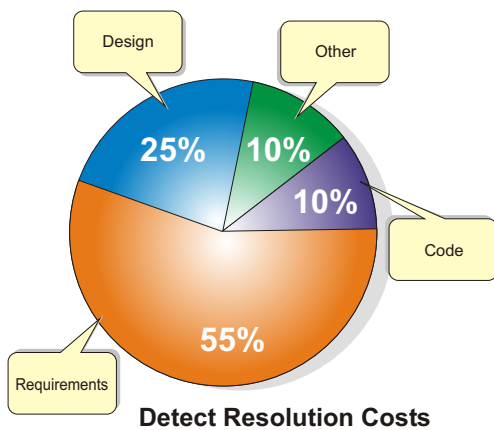**SoftCHECK**

By Zeta Cyber Solutions (P) Limited

Independent Quality Assurance

A QA & Test Team must be an **independent team** within a project. They are responsible for assuring that Client's requirements have been met prior to implementation. This is the SoftCHECK way.

Project Quality Assurance

Quality Assurance and Testing activities is performed throughout a project's lifecycle. The SoftCHECK Team assess the Client's requirements. A Risk Analysis is performed using a RAID's (Risk, Assumptions, Issues, Dependencies) spreadsheet along with risk mitigation. Test Scenarios are designed to map back to requirements using a Traceability Matrix. This ensures a comprehensive testing and quality assurance process along with full audit trail.

In the diagram below approximately half of a project's defects are introduced during requirements gathering. It is **cost effective** to have a SoftCHECK Team onboard early in a project finding defects during the requirements phase ensuring they are testable and unambiguous.
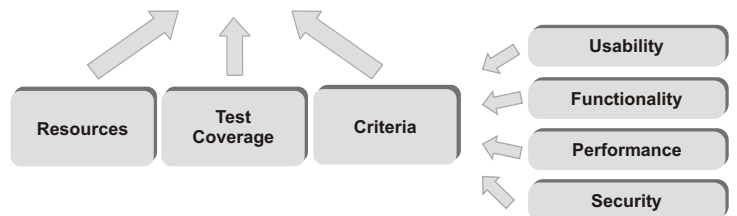
Detect Resolution Costs

- Design 25%
- Other 10%
- Code 10%
- Requirements 55%

Area of Detection (Relative Costs vs Area of Detection: Requirements Analysis, Design, Code, Unit Test, System Test, User Acceptance Test, Production)

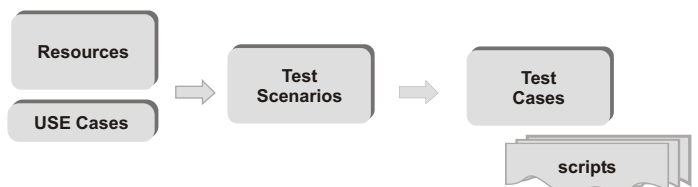## Typical Test Process

Analysis Phase

Requirements → defects → Impact to Process

Analyse application requirements and determine how defects may impact the processes being implemented.

Planning Phase

Resources → Test Coverage → Criteria

- Usability
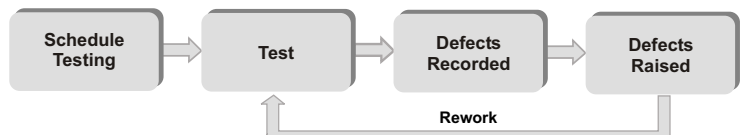- Functionality
- Performance
- Security

Establish the Organisation, Environment, Test Strategy, Acceptance Criteria and the type of testing that is to be performed. Test criteria can include Usability, Functionality, Performance, Reliability, Security.

Design Phase

Resources, USE Cases → Test Scenarios → Test Cases → scripts

Check "Testability" of requirements and USE Cases. Using the requirements, identify the Test Scenarios. Create Test Cases, define the Test Data, and write (reusable) Test Scripts. Ensure all requirements are covered by Test Cases using a Traceability Matrix.

Testing Phase

Schedule Testing → Test → Defects Recorded → Defects Raised (Rework)

Schedule in the Test Execution. Defects are identified, prioritised and resolution planned into the Development lifecycle. Create metrics on defects found and corrected.

Project Acceptance Phase

Quality Report → Project Acceptance → Lessons Learnt → Archive Test Cases

Final Test Report. Assess against Acceptance Criteria. Store the Test Scenarios and Scripts for future use. Review lessons learnt.

Quality Assurance

SoftCHECK offers a service to assure quality by performing activities such as:

- Design Reviews
- Design Specifications Assessment
- Business Requirements Review and Analysis
- Business Requirements to Test Cases Analysis
- Risk Analysis and Mitigation
- Change Control Management Analysis
- Quality Gate Reviews
- Development Reviews
- Infrastructure Reviews
- Content Management Reviews
- Transition Management Reviews
- Stakeholder Management Reviews
- Project Management Reviews

Documentation Quality Assurance

SoftCHECK offers a service to assure the quality of all documentation including on-line help by assessing if they are:

- Comprehensive
- Accurate and Concise
- User Friendly
- Compliant to Standards
- Grammatically Correct
- Consistent

QA Education and Mentoring

SoftCHECK offers a service to educate and mentor Clients and individuals regarding a variety of topics.

- Definition of Quality Assurance and Testing roles and responsibilities and identify a team structure for establishing a QA & Test Team
- Integrating quality into Client's organisation
- Provide classes on Quality Assurance and Testing techniques either in Seminars or by e-Learning using ExcelTrac

Test Tool Expertise

SoftCHECK can provide Test Tool Consultants to a Client or provide guidance on:

- When to use test tools
- Which test tools to use
- Skills required to run test tools
- Defining a test tool strategy
- Training to use test tools

"A project does not become a success if it is not planned and quality assured."

Kurian James CTO

Testing Services

SoftCHECK can either provide resources or a complete team to perform:

Functional (Manual or Automation)

- Unit Testing
- System Testing
- Functional Testing
- Integration Testing
- User Acceptance Testing
- Regression Testing
- Interface Testing
- Risk Based Testing
- Interfaces to Database Verification
- Usability Testing - User Interface

Non-Functional (Manual or Automation)

- Security Testing
- Disaster Recovery Testing
- Database Verification
- Performance Testing
  - *Performance Under Load Testing*
  - *Concurrent User Load*
  - *Volume Testing*
  - *Stress Testing*
  - *Duration Testing*

Management

- Test Process Management
- Test Strategy
- Test Scripting
- Test Execution
- Test Reports
- Change Management
- Defect Tracking Workflows and Analysis
- Test Environment Configuration Management
- Set up and Management of Test Tools

If you like to implement SoftCHECK within your organisation, please contact:

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