

# Having a Holistic View of Your Application Quality



George Wilson  
Original Software



Original Software



# What We Will Cover

- The view from C-Level?
- What is AQM?
- AQM Challenges
- What is quality and how to measure it?
- AQM Utopia





# The View from C-Level?





# Market Drivers


## Business Drivers:

- Time to market
- Risk reduction & management
- Compliance
- Competition
- Maintenance cost of existing solutions

## Technological Drivers:

- IT complexity
  - » Many projects and applications
- Multiple methodologies
  - » Agile, Waterfall, etc.
- Heterogeneous IT environments
  - » Multiple platforms
  - » Open Source

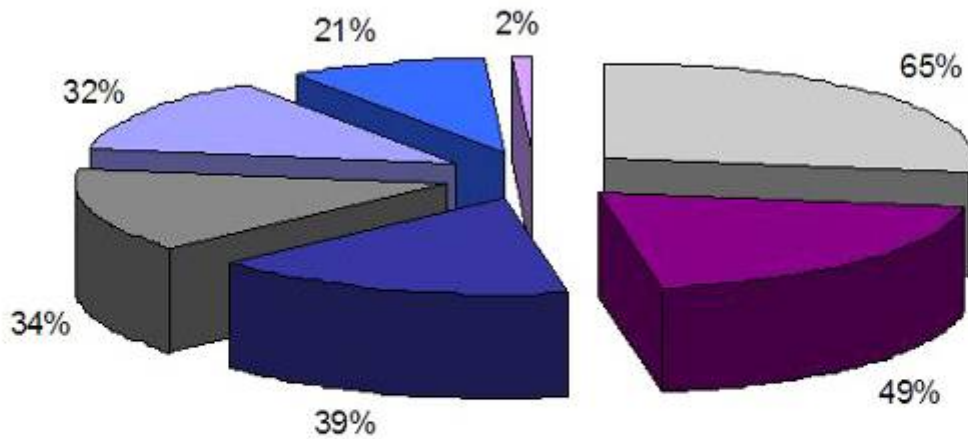


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- What is your No. 1 priority/objective for managing the software quality lifecycle in your organisation?
    - Shortening application delivery timescales
    - Reducing business risk with poor software quality
    - Ensuring compliance with industry regulations and organisational governance
    - Increase QA productivity – fixing bugs faster
    - Improve collaboration & improve visibility into project lifecycles





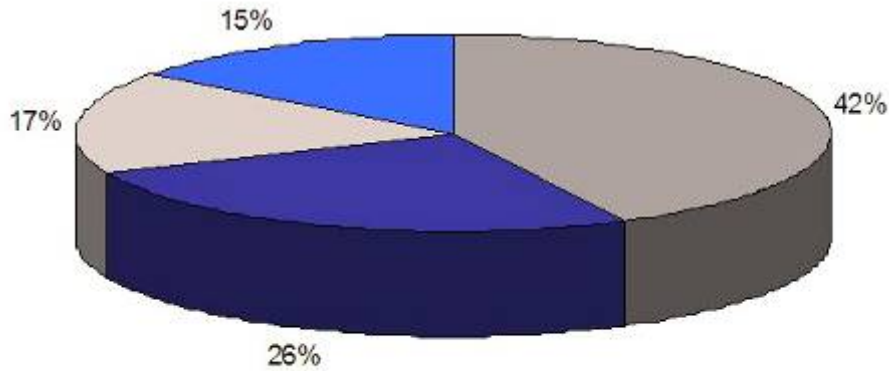
# Drivers for Improving Quality



- Need for increased business agility
- Increased complexity in IT environments
- Need for increased competitive advantage
- Increased business risks
- Changing market requirements
- Introduction of open source technology platforms
- OTHER



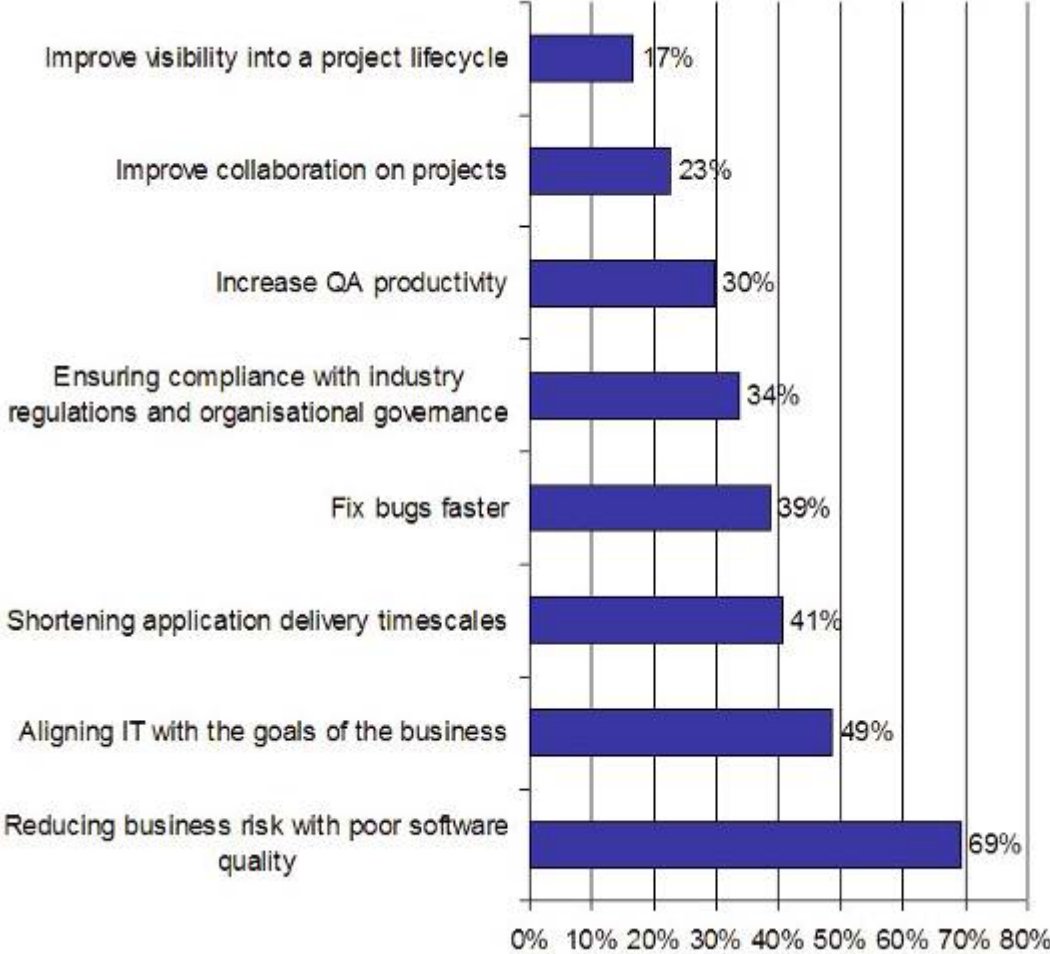
# Importance of Software Quality



- A fundamental business process
- A nice to have
- A necessary cost of doing business
- A strategic business imperative



# AQM Objectives





# What is AQM





# Application Quality Management

AQM coined by Gartner:

*“Traditional focus in the application quality management market has been for specific testing activities (for example, load/stress and functional/regression). The market is **shifting** as organizations seek **greater business value and agility**. This involves business analyst more directly in **overall quality efforts**, along with a shift in focus from finding defects to validation, to **ensuring business objectives** are being met.”*

- » Gartner MarketScope for Application Quality Management Solutions, 27 March 2008





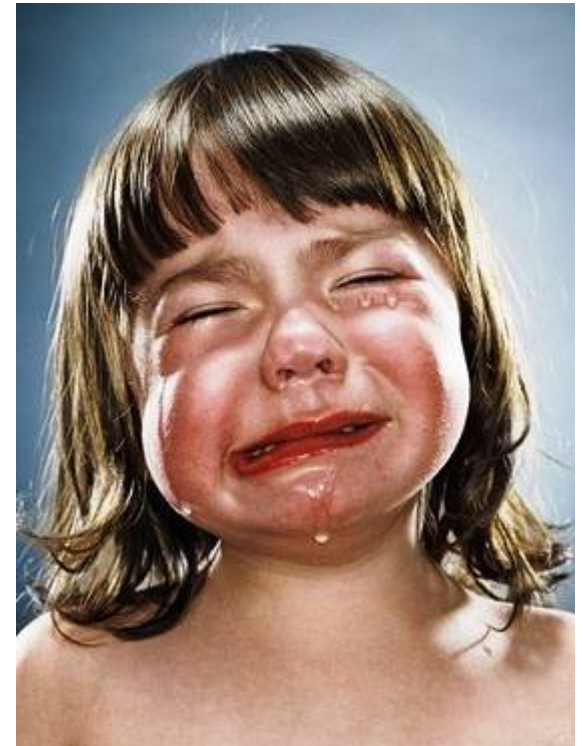
# AQM Challenges

- Quality as a business imperative
- Disparate teams
  - Departmental
  - Remote workers
  - Off shoring
- Access to information
  - Project status
  - Reporting
- Manual nature of testing



# Legacy Test Management

- High maintenance costs
- Specialised skills required
- Inflexibility
  - Processes
  - Users
- User unfriendly
- Project focus
- Not scalable



• Do you currently use a software quality management solution to help you with your QA process? If so, which one?

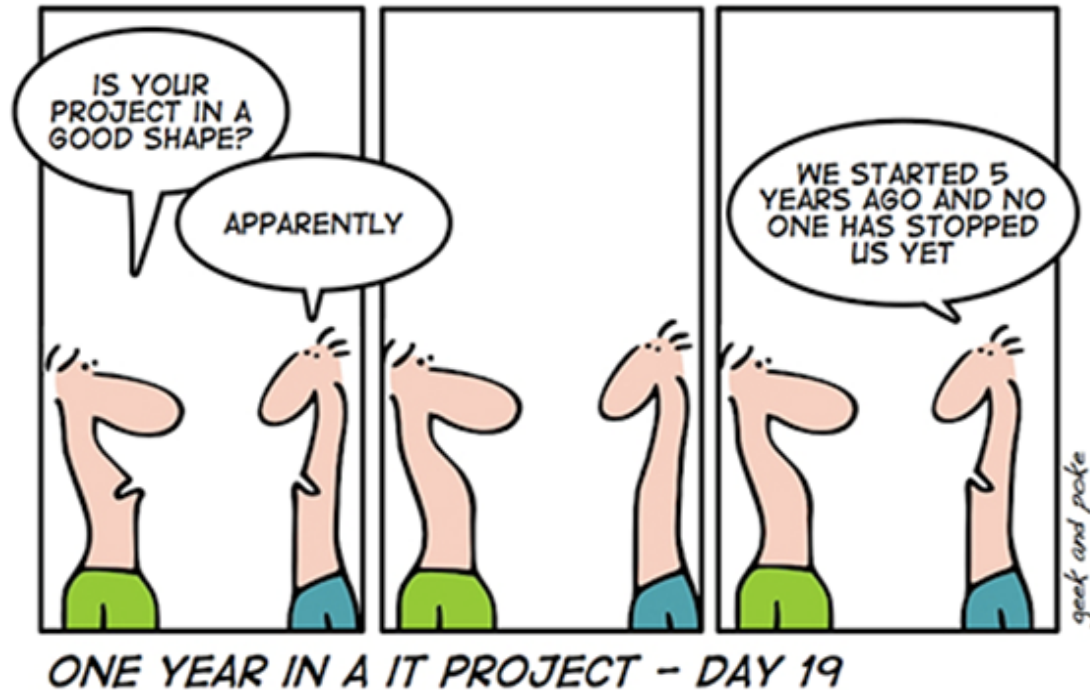
- Original Software – Qualify
- HP - Quality Center
- IBM - Rational Quality Manager or Oracle – Test Manager
- Microsoft – Test Manager 2010
- Electronic documents (spreadsheets, etc) or other





# What is Quality?

- Perfectic
- Free from
- Satisfact
- The cust  
They ha  
want.
- Business





# Application Quality Management

Communication - **Collaboration** - Control

Planning

Test Strategy  
Risk Analysis  
Test Plan  
Resource strategy

Requirements

Functional Test

Regression

UAT

Deploy

Defects

Test Estimation

Scripts  
Data  
Environments

Manual exec

Automation exec

Review  
Account  
Preserve

Pair-wise data

Database





# Quality Metrics

- Numbers of defects
- Getting better or worse?
- Forecasting
- QA efficiency





# Basic Metrics

	Total	In period	By risk
Scripts	x	x	x
Scripts executed	x	x	x
Scripts planned	x	x	x
Scripts failed	x	x	x
Scripts passed	x	x	x
Defects raised	x	x	x
Defects / Scripts executed	x	x	x
Defects fixed	x	x	x

Risk – Likelihood & consequence



# Our Performance

- QA Efficiency
- Quality measure

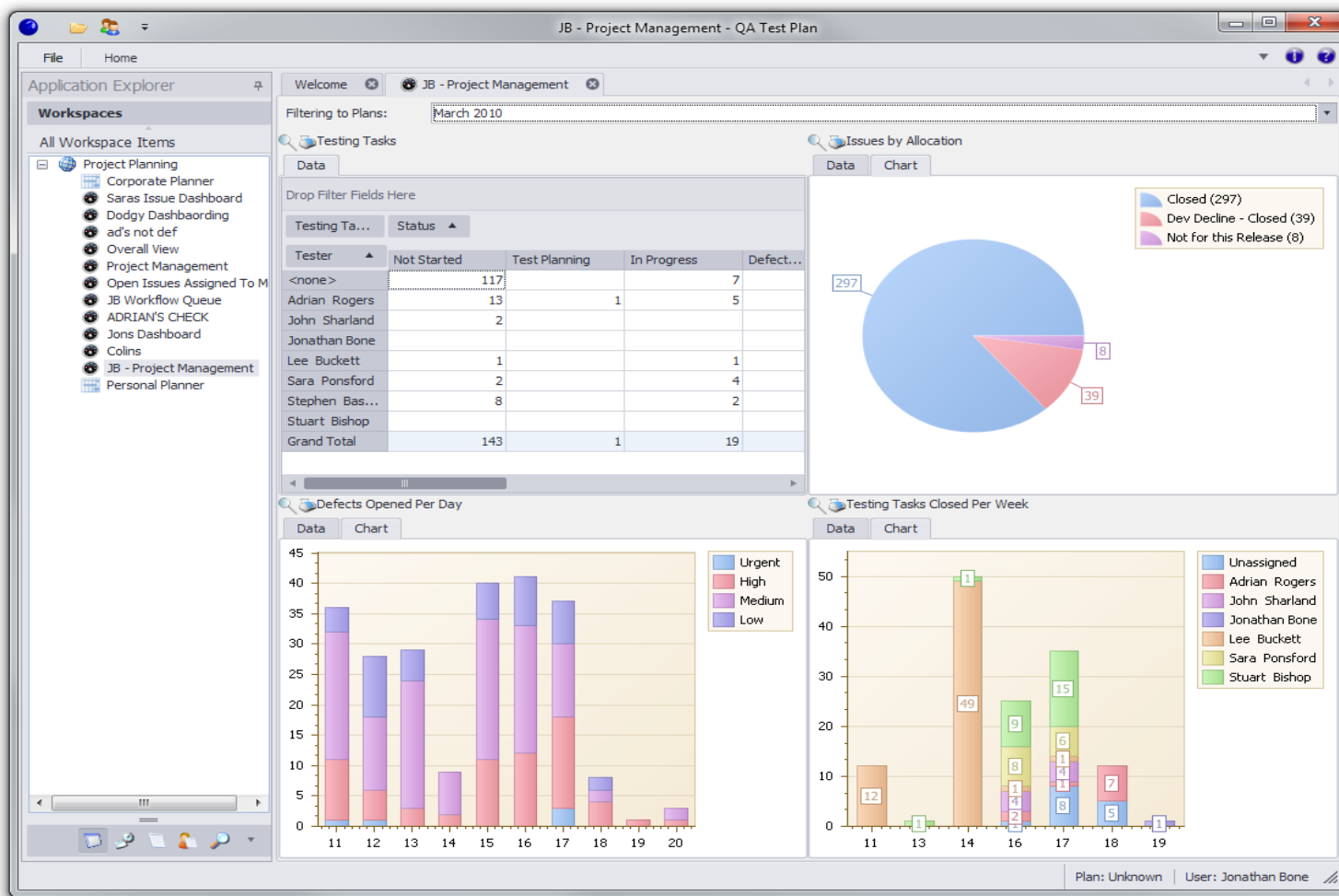
Defects in QA %  
Total defects







# AQM Utopia





Do what you do.....

**Issues by Priority**

Priority	Count
Fixed (10)	10
Send New Info (0)	0
To Do (0)	0
Delayed (1)	1
Required (0)	0

**Testing Tasks**

Task	Start	End	Progress	Assignee	Status
Unit Test	11	43	0	0	3
Integration Test	11	43	0	0	3
System Test	11	43	0	0	3
UAT	11	43	0	0	3

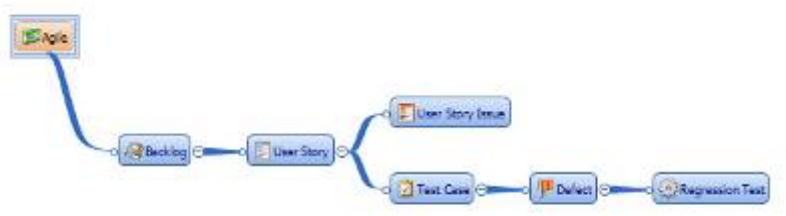
**Test Case Editor**

ID	Name	Priority	Status
1001	Basic Functionality	High	Pass
1002	Advanced Planning	Medium	Fail
1003	Personal Planning	Medium	Pass
1004	Personal Planning	Medium	Fail
1005	Personal Planning	Medium	Pass
1006	Personal Planning	Medium	Fail
1007	Personal Planning	Medium	Pass
1008	Personal Planning	Medium	Fail
1009	Personal Planning	Medium	Pass
1010	Personal Planning	Medium	Fail

**Factbook Configuration**

**Dissemination Properties**

Property	Value
Rule	push button
Caption	Forward
Class	ThunderK16Contribution
Build Name	
Accessible	True

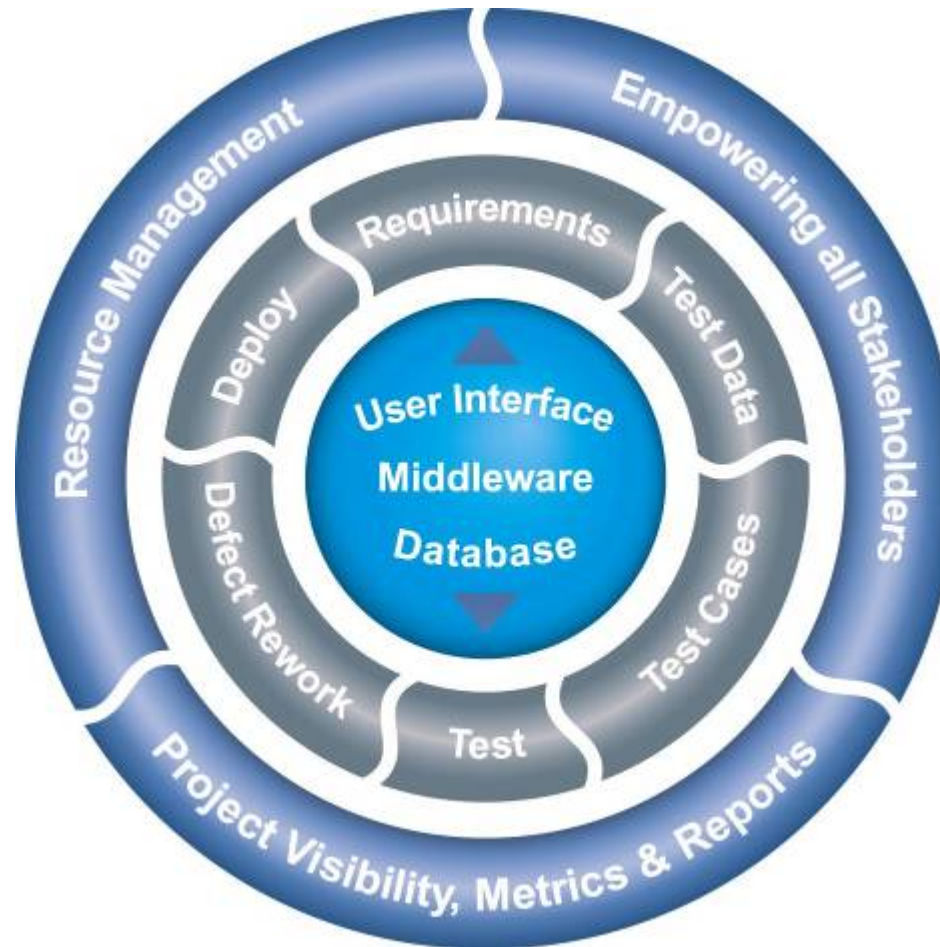


**Project Gantt Chart**

Task	Start	End
Develop the Quality Interface <td>12 Feb</td> <td>07 Jun</td>	12 Feb	07 Jun
Develop the Quality Admin Interface <td>05 May</td> <td>20 Jun</td>	05 May	20 Jun
Search for target based on one column <td>30 Apr</td> <td>20 Jun</td>	30 Apr	20 Jun
Conducts - Load/Post, spelling mistakes etc. <td>12 Feb</td> <td>20 Jun</td>	12 Feb	20 Jun



# Integrated AQM






# Integrated AQM

- All activities
  - » Regression
  - » Functional
  - » Automated & Manual
  - » Test Data Management
- All users
  - » UAT
  - » Business Analysts
  - » Project Managers
  - » Developers
  - » QA
- All system elements
  - » Visual layer
  - » Integration layer
  - » Server side database



- 
- How could you improve your current AQM solution? (tick all that apply)
    - A real-time unified view of all projects underway
    - Flexibility for the solution to be methodology/process agnostic
    - Ability to manage resources effectively
    - Access to management information via multiple devices, i.e. Smart phone
    - Ability to trace requirements across the entire SDLC





# Holistic AQM Summary

- Ensure quality is at the heart of your organisation
- Engage with the customer – they define quality
- Measure
- Improve



# Questions?



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Feedback survey please  
AQM Survey download



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