

Does it
STAND THE TEST...



Improve Testing, Reduce Costs!

“Failure to test properly is an invitation to poor performance, poor service delivery and therefore an embarrassment to our company.”

*Trevor Howcroft
Divisional Director: Group
Software Services (GSS)*

Software testing has an image problem. Like tax returns, exercise and visits to the dentist, testing is a chore done grudgingly and not as regularly as recommended. Nonetheless, its value is enormous and its implications range from staff turnover and sales success to legal liability and even business failure.

A 2002 study by the National Institute of Standards and Technology in the US found that software bugs cost the US economy an estimated \$59.5bn every year!

How does not testing impact YOU? Here are some examples:

- **Your retirement plan** - In 2001 a major systems development contractor was fired and sued over problems with a large retirement plan management system. The system deliveries were late, the software had excessive defects and it caused other systems to crash
- **Electricity accounts** - A small town in Illinois received an unusually large monthly electric bill of \$7m in March 1999. This was about 700 times larger than its normal bill. It turned out to be due to bugs in new software
- **Some of Nedbank's own significant outages** have been due to ineffective testing

MAKE THINGS HAPPEN

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Does it STAND THE TEST...

yes
no



Why does Nedbank need the Testing project?

- Instability in the GTSS environment is mainly caused by changes introduced into production. 59% of all incidents were caused by changes implemented but not tested properly
- Even though all Nedbank changes are formally signed off, indicating that user acceptance and technical testing have been completed, Process and Product Quality Assurance (PPQA) statistics state that approximately 81% of changes assessed do not show evidence of testing in accordance with the test plan
- Over the past few years we have made various attempts to get testing right within Nedbank. None of these attempts have been successful. This is evident in the following key measures:
 - The required maintenance effort on Nedbank software
 - The number of software incidents experienced
 - The time needed to test versus the time spent on testing

Some more reasons to test projects:

- Testing early in the development cycle costs 90% less than fixing a problem in production
- Poor testing puts a developer's credibility on the line and leads to additional governance costs
- Well-tested products are easier to upgrade and maintain
- Money spent fixing poorly tested applications detracts from forward development
- Happy customers buy more software, while poorly tested products squander goodwill

- Testing protects the developer and the customer
- Regular testing throughout the development cycle delivers better products at less cost
- Solid testing is essential to meet rising customer expectations about software quality
- Testing reduces risks associated with business-critical software

Testing project key features and objectives

The Testing project aims to implement testing processes, methods and tools which allow projects and support areas to conclusively test their changes by:

- Developing an appropriate methodology that is agreed to by all parties in the bank
- Defining and implementing clear roles, responsibilities and a testing methodology
- Agreeing upon and implementing a governance model
- Configuring, building and supporting suitable testing environments
- Automating (where feasible) to improve quality, time, coverage and resource dependency
- Ensuring that testing processes are measurable and that continuous improvement processes are established

**For more information please contact
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Testing, testing, 1, 2, 3 ...

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