

CAPABILITY STATEMENT

To date, no institution (*globally*) possesses the capability to be aware of their Risk Exposure with respect to undiscovered defects within IT-Systems. Undiscovered defects can be a platform for exploitation as parties, of various motivation, seek to gain financial advantage for potential mischief; *e.g.* the North Korean government, terrorist groups, organized crime. However, we can uplift an organisation's existing Risk Management Capability by including our proprietary technology, experimentally validated to greater than **98.07%** accuracyⁱ, & offer to provide the following capabilities:

1. A scientifically formulated Toolⁱⁱ; *to a scientific standard of proof*
2. Continuous (*real time*) re-estimation & re-evaluation of QA-Risk
3. Standardisation, transparency, repeatability & objectivity of QA-Risk Management
4. Predictive probability of finding defects prior to project commencement
 - Demonstrating that superior measures were undertaken to minimise QA-Risk
 - Providing clear delivery targets to service providers
 - *e.g.* outsourcing of any kind
 - Providing a contractual basis (*specification*) for service delivery
 - *e.g.* outsourcing of any kind
5. Predictive probability of residual defects within systems (*real time*)
 - Can be applied to proportion accountability for defects resulting in \$ loss
6. A ground "for or against" litigation
 - *e.g.* AUSTRAC

Please also consider that predicting the mathematical probability of defects, not simply hand waving & narratives, is commonplace in the manufacturing sector & a natural expectation of the public: our lives rely upon it (*e.g. aircraft, medication, motor vehicles etc.*). Our technology leverages-off the vast wealth of experience & experimental validation techniques employed by the manufacturing sector since the era of mass-production began.

Note

- *It is impossible to predict the existence of defects; it is only possible to predict the mathematical probability of their existence. Please contact us if this is unclear.*

ⁱ A comprehensive Proof-of-Concept (**PoC**) is available upon request. The **PoC** contains all experimental results (*in great detail*) validating the **98.07%** claim of accuracy; Confidentiality Agreement (**CA**) required.

ⁱⁱ We are prepared to offer inspection of the scientific formulism (*if required*) under a strict Confidentiality Agreement (**CA**).

Capability	Description of predictive capability offering
Quality Assurance	Minimum number of required tests
	Maximum number of required tests
Risk Management	% Probability of finding defects
	% Risk exposure
	% Code changes covered by testing
	% System covered by User Acceptance Testing (UAT)
	% Level of Quality Assurance (QA) being provided by 3 rd parties
Project Management	Testing man-day effort
	Project budgeting

Tab. (1), Predictive Capability Offering

We believe that public declaration regarding the adaptation of new technology to an organisation's processes minimizing the potential for undiscovered defects, may assist in demonstrating a long-term commitment to Quality Assurance & Risk Management:

- Example of public loss-of-confidence
 - Application "Alert-SA" is developed for SA Government by a local vendor
 - Application was Risk Assessed by a large international corporation; given "OK"
 - Application is deployed; 99% system reliability was contractually defined
 - Application catastrophic failure in critical situation (*SA bushfire weekend*)
 - Legal action being considered by SA Government against vendor
- Post mortem (*by Testimation*): how to restore public confidence
 - Neither the SA Government, nor the Risk Assessment Firm engaged, completely or accurately understood the full spectrum of potential Risks; neither party adequately numerically defined their Risk Profile
 - Solution reliability is typically only defined by server uptime (*e.g. 99%*). This is an inherently incomplete reliability metric. Uptime addresses only a single mode of potential failure based upon transactional performance constraints
 - The Defect-Free Confidence (*exclusive to Testimation*) of the solution was never determined. Therefore, a solution of unknown reliability was deployed to the public in a potentially life threatening situation
 - **Interesting analogue:** it is illegal to release medication of unknown failure rate, yet corporations routinely deploy solutions of unknown Defect-Free Confidence

**Respectfully,
Testimation Team**