

Independent Quality Assurance IT Project Governance and Risk Management

Some Lessons Learned

Business  Cycles

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Introduction

Introduction
The development of IQA

Our Challenges and Learnings

1. That will never happen
2. Many perspectives
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Bringing it back to the ANZ risk standards



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Introduction

Why are large IT projects so hard to implement?
 Are IT project failures solely a failure of risk management?
 What contribution does Independent Quality Assurance play in
 the success
 or failure of an IT project?

We explore these questions using our experiences and public
 material about
 large IT project failures.

We have selected attributes that bring out the human
 component, noting that
 other aspects are equally important.



This is a large topic, we have only 45 minutes!

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Doing something that has not been done before

Unique combination of technology
 Change to organisational structure / new organisation
 Changes to interaction with
 international organisations,
 government agencies,
 business,
 the general public
 New rules, regulations, legislation

“A world first”

“An untapped opportunity”

“Becoming the market leader”



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IQA

Governance = strategy + resources + conformance + performance

Independent Quality Assurance supports the governance role of monitoring/conformance

IQA is a periodic assessment of performance against relevant standards and methodologies

Akin to a comprehensive risk assessment
 but
 performed by people independent of the project

Are we doing it right? vs.
 Are we doing what we should be doing?



Information technology — Governance of IT — Framework and model SO/IEC TR 38502:2014(E)

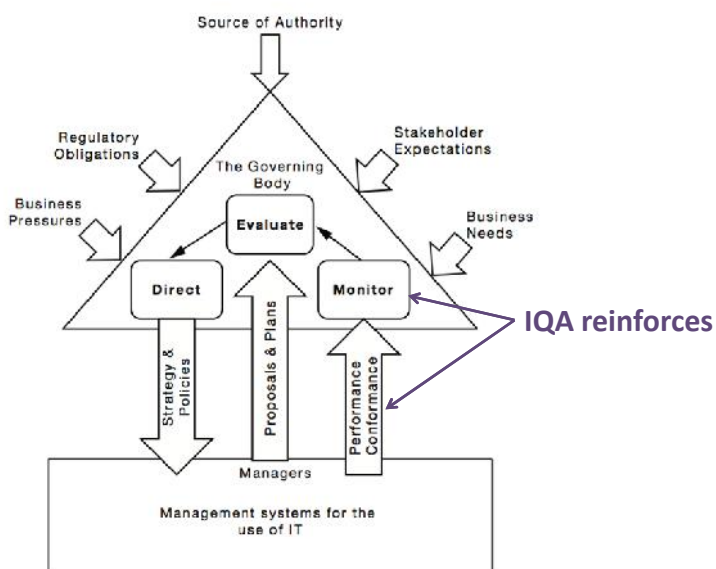


Figure 1 — Model for governance of IT (adapted from ISO/IEC 38500:2008)

The development of IQA

- 2010 The Gateway Regime is introduced
SSC publishes Guidance for Monitoring Major Projects and Programmes
- 2002 SSC publishes Guidelines for Managing and Monitoring Major IT Projects
- 2000-01 Major projects are defined, IQA becomes mandatory for major projects
CE's accountability is reaffirmed
The role of SSC in ICT monitoring is formalised
- 1999 The OAG Report into large government ICT projects and the Ministerial Inquiry into INCIS lead to more formal IQA
- 1998-99 SSC became more active encouraging IQA
- 1997 Treasury developed the first risk based IQA framework
- 1995 Treasury first used IQA for a review of a business case to upgrade the DOSLI system
Later incorporated IQA into the *Landonline* Programme.
Both LINZ and Treasury had IQA teams
- 1990's Agencies were responsible for quality assurance, use was adhoc



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That will never happen ...

Dangerous Enthusiasms

Otago University academics Robin Gauld and Shaun Goldfinch describe the biggest threat to the success of government IT projects as a "dangerous enthusiasm", which causes managers to overstate the benefits of IT and blinkers them to potential problems.

Some degree of failure - whether in terms of timeliness, budget, specifications or usability - may be the norm in large-scale IT projects. But dangerous enthusiasm for such projects, Gauld and Goldfinch assert, makes failure even more likely. Good management oversight of IT projects is not sufficient to overcome the problems created by this enthusiasm.

Julienne Molineaux: 'Dangerous Enthusiasms' dooms project to fail
The New Zealand Herald, 6 July 2010



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When projects hit the news headlines

Demands for information consume resources

Costs can be eye watering

Reputational damage can be huge

IT crash seen as crippling court reform

Digital archive failure threatens centenary commemorations, warns MP

Another govt IT project failure - this time at DoC

Novopay inquiry to cost \$500K

Ministerial inquiry will be headed by former CEO of DPMC, Maarten Wevers and chairman of Deloitte NZ, Murray Jack.

Computerworld Staff on 03 February, 2013 22:00

\$1.4m bill to bury Incis project



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That will never happen

Overconfident sponsor, too many other pressures, not paying enough attention

Ambitious (aggressive) project plans, especially early in the project life cycle

Risks and issues down-played in project reports

Key players have different assumptions and expectations

Undue dependence on the supplier(s) who are saying all is well



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Many perspectives

Multiple organisations and people with influence

Different business drivers and assumptions

Complex governance arrangements

Priorities not defined and agreed

Frustrated staff with no recognised voice

Friction between staff and suppliers

Indecisive and late decision making

Relitigation of decisions



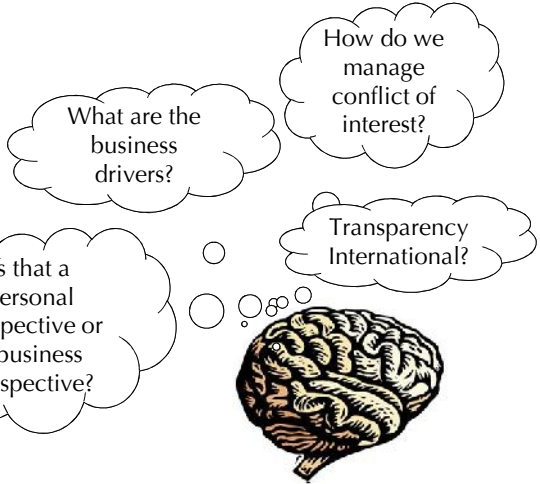
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Many perspectives

How do you establish the context for risk management?

Who is involved?

- Ministers
- The Board
- Business Managers
- Regulators / monitoring bodies
- Business partners
- Suppliers – local and international
- Technical experts
- Business experts
- Project Managers
- Architects
- Analysts
- Testers
- Customers
- Staff
- The Public



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Many perspectives

"Of the elements involved in establishing the context, those concerned with considering the internal and external environment will inevitably give rise to at least some of the issues that will have been noted when evaluating and understanding the internal and external context of the organization in the design of the framework. However, the **purpose of understanding the internal and external environment** when applying the process is different. In the framework, the purpose is to **tailor the framework to the organization**. In the process, it is to reveal the **sources of uncertainty** that relate to the relevant objectives and the particular decision that the process is being applied to."

SA/SNZ HB 436:2013 Risk management guidelines — Companion to AS/NZS ISO 31000:2009



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Multiple roles



Priorities
Understanding
Training
Ability to act



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Multiple roles

From **Novopay**:

“The SRO was the Deputy Secretary Schooling which covered School Policy, teacher supply, Industrial Relations, Curriculum (including National Standards and NCEA), School Infrastructure (including national planning), a very large workload.”

Timing context : introduction of National Standards and Canterbury Earthquakes with subsequent restructure of Canterbury schooling infrastructure

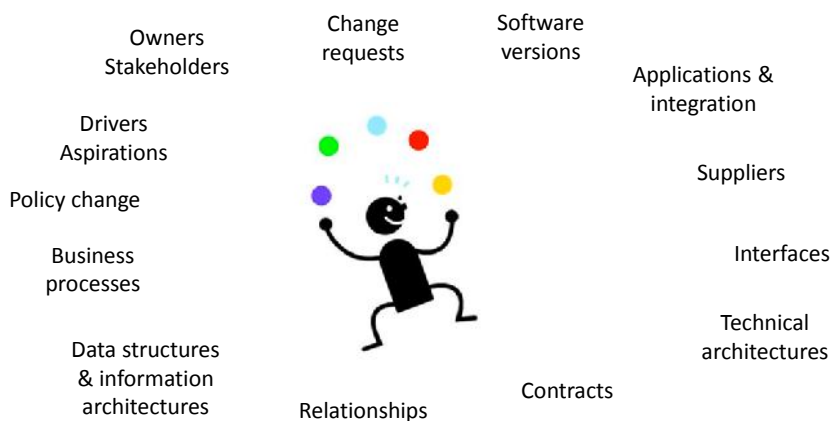
From **INCIS**:

This wasn't a problem



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Complexity



Permutations and Combinations



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Complexity

From **INCIS**:

“Typically, the risks in a large IT project are very high both because of its complexity and also because the context of rapidly-developing technology leads to a high degree of uncertainty. Without a pervasive and thorough quality management and risk management policies at all levels, there is a high likelihood of under-performance if not outright failure.”

From **Novopay**:

“Clearly define the problem and identify and evaluate all options, including the opportunities to remove complexity and transform business processes, at the project conception stage.”

“When assessing risks, always consider the implications of a combination of them arising and plan accordingly.”



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Complexity

Risk management standard:

“Large IT projects should have comprehensive formal quality management and risk management processes that are fully integrated within all aspects of project management. All personnel should have an awareness of risk, and of the risk consequences of all their decisions and actions.”



How can I understand the consequences of my decisions?

What else is happening that could impact on my responsibilities?



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Control

Sponsor
Board Members
Organisational structure
Culture
Suppliers
Project Manager (s)
IQA



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Control

From **Novopay**:

“The management of the governance structure did not always accord with the structures and roles set out in project documentation. The number of different bodies and roles diffused accountability and unduly complicated the decision-making process. Formal governance disciplines (such as the preparation of accurate minutes) were not consistently demonstrated.”

From **INCIS**:

“Major problems in a large IT project do not arise suddenly. There are always prior warnings of trouble and indicators that all is not well. If the warnings and indicators are sought, seen and dealt with promptly, the risks to a project can be reduced and problems averted. On the other hand, to not heed warnings and to hope optimistically that all will be well is a sure path to disaster.”



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Control

Risk management approach:

Large IT projects must have properly established governance boards with balanced mix of skills and experience, chaired by the sponsor who holds an executive management position with requisite delegated authority. The core governance functions are carried out aligned to the organisation's risk management framework.

The project manager should be appointed by the sponsor and should report to the sponsor. The position has the responsibility to deliver to the agreed project plan and should have the delegated authority to fulfil those responsibilities.



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Communication

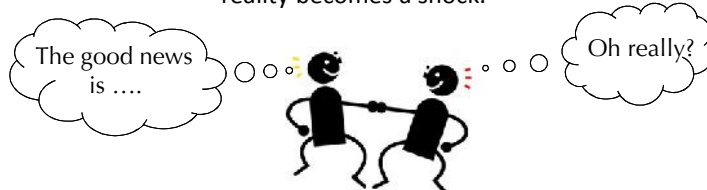
Importance of building a functioning project culture through leadership and communication not understood

Time allowed for communication insufficient for project needs

Disconnects between the official story and the ground level story, issues softened, buried for governance reporting

Formal reporting too detailed/too summarised

Communication with internal and external stakeholders dumbed down, reality becomes a shock.



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Communication

From **Novopay:**

“The failure to involve users appropriately was a key weakness. The Ministry was negotiating on behalf of the users in the schools sector without an appreciation of all of their requirements. For projects with significant business impacts, agencies should ensure the engagement with, meaningful involvement of, and adequate preparation of users.”

From **INCIS:**

“A project manager's report should be monthly and include a report on risk management as against identified risks and initial baselines. The report should be sent to the Chief Executive, the Project Sponsor, the Steering Committee and the Monitoring agencies. The report needs to be concise, focused and properly directed.”



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Communication

Risk management standard:

“Internal and external communication and reporting mechanisms are established and used as expected. The communication and reporting mechanisms align with the organisational culture and needs and the context of the project. “

But...

As communication is always deemed inadequate,
how do the sponsor and project manager get the balance right?



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One side of IQA

“Be true to yourself.

Honesty and integrity are absolutes, but you will need more.

You will need the determination and courage to see matters through, even when the fainter hearts have already taken counsel of their fears.

You will need to take hardship, danger, fatigue and – perhaps above all – uncertainty in your stride ...

You will need the strength of will and confidence to take the right road when it is not an easy one”

From Soldier: The Autobiography, General Sir Mike Jackson



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The other side of IQA



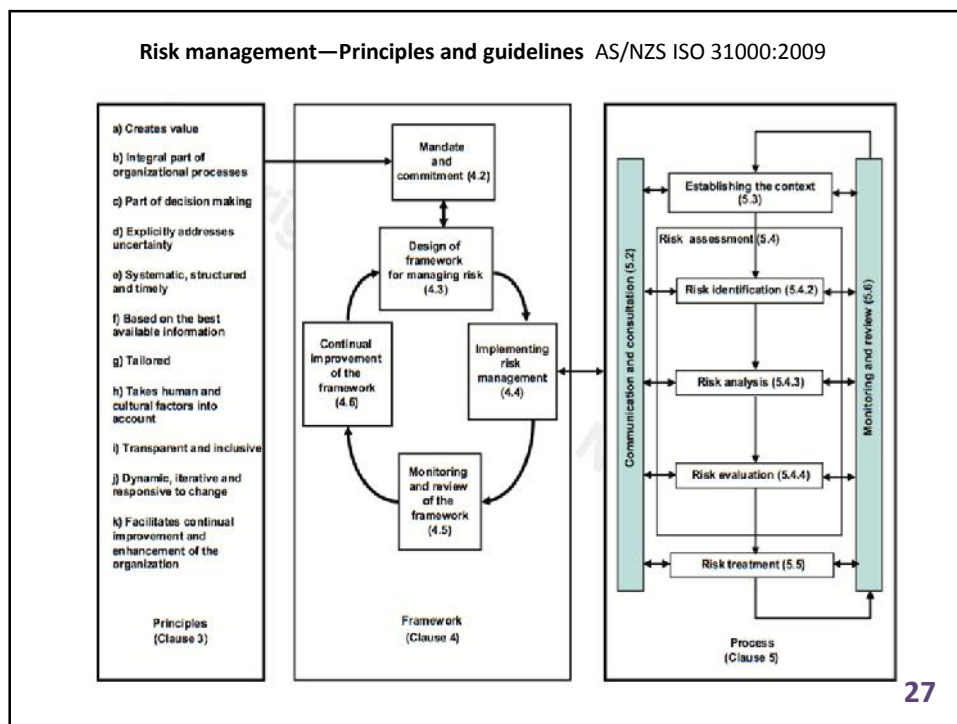
Findings and Recommendations

*“...’s work as a consultant for the Bank in this matter did not demonstrate the necessary **objectivity, integrity, and autonomy** that is now required of consultants performing regulatory compliance work for entities supervised by the Department”*

*... Faces Ban, \$US25 Million Fine Over Banking Regulatory Report
The New York Department of Financial Services*



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Final words from 'Dangerous Enthusiasm'

“Much of the writing on information systems development and information system failure suffers from a hubristic belief that once the correct information is available, the right management system and programming methodology adopted, and rational optimising individuals given the right incentives, the problem of failure will largely be solved.

In contrast we argue that due to problems of agency, immense complexity and the interaction of human beings of, at best, only bounded or even limited rationality, it is difficult to understand and control large ISDs.

It is difficult to monitor and be aware of problems, to find solutions to these problems and hold to account those responsible for the failures.

The sheer complexity of ISDs means humans, whose abilities are not unlimited, are faced with informational overload.”



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Questions?

Thank you

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