

Failure and waste in New Zealand's Project Management Industry – A multi-billion dollar problem

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Abstract

- The application of project management globally and within New Zealand is poor. 53% of global construction organisations report one or more failed projects in 2014, 31% and 25% of projects conducted by these organisations came within 10% of their budget or deadline within the last 3 years (2012-2014).
- Just over half of organisations surveyed fully understand the value of project management, a figure that has not changed in the five years to 2016.
- Projects are 2.5 times more successful when proven project management practices are used (89% vs. 34%) yet the project success rate in New Zealand is 1:3 (29%).
- With an average spend of NZ\$15m per construction project the level of failure equates to a staggering waste of resources.
- The state sector is responsible for nearly 43% of gross domestic product in New Zealand, what the state sector does – and how well it does it – has a direct impact on everyone in the country.
- The state sector conducts 54.7% of all projects in New Zealand.

Keywords: project management summary, staggering waste in projects, gross domestic product loss, level of project failure, project management.

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Where are we now?

In 2013 KPMG-NZ conducted their most recent Project management survey report. This report surveyed nearly 200 respondents across 12 broad industry categories. 54% of the respondents said they completed more than 21 projects across the business with an average project spend of NZ\$15m with only one third of that spend delivering the desired outcome (project success as measured by on-time, on-budget, as per scope) (KPMG New Zealand, 2013).

Note: Since the original draft of this document KPMG have release their 2017 project management “State of the Nation” survey results which highlight a reduction in project success from 31% (2013) to 29% (2017), this success percentage is down from 54% in 2010 (KPMG, 2017).

The Project Management Institute’s (PMI) global survey reported that in 2016, 32% of projects lost their entire budget when the project failed (Project Management Institute, 2016). In the same survey PMI highlighted that projects meet original goals and business intent with an 89% success rate (versus 34% success rate) when proven project management practices are used (Project Management Institute, 2016).

If we compare the 34% success rate of projects conducted with proven project management practices to the ~33% success rate of New Zealand projects, then the argument could be made that “Proven project management practices are not being applied in the project environment of New Zealand.” It is interesting to note that 90% of successful projects were ‘always’ or ‘often’ conducted using a project management methodology and less than 25% of failed projects ‘always’ or ‘often’ used a project management methodology (KPMG New Zealand, 2013).

Global best practice project management is poorly understood by the New Zealand construction sector, with most project managers the author surveyed having risen through the construction ranks from labourer to site foreman and then “promoted” to PM (on-the-tools approach).

The weakness of this approach is lack of exposure to international best practice project management as the employees are provided with the in-house methodology, which in turn has been developed by other on-the-tools project managers with the end result being a self-fulfilling cycle of project managers “not knowing what they don’t know” (West, 2013).

The second largest collection of Project Managers within the construction sector is the professional Engineer (or Architect) that has been re-deployed outside their area of expertise as a project manager. It is interesting to note that within the Bachelor of Engineering degrees offered by New Zealand tertiary institutions that Project Management is an elective and not a core course or a major for the degree. Therefore there is no guarantee that any particular Engineer assigned to a project as the project manager, may not have had any exposure to project management theory, practice and application.

The New Zealand government expended a total of \$6.3Bn in 2009/10 towards Crown capital expenditure on property, plant and equipment. This figure does not include the operational costs associated with project: Initiation, Scoping, Business case preparation, pre-tender project planning, project assurance nor the support of the investments over their economic lives (KPMG, 2011). If the split between the public and private sectors of project management are applied, and the figures include an estimate for the additional inclusions is made, then the 2009/10 total value of Projects, Programmes and Portfolios in New Zealand would be in the order of \$20 Billion per year with a 1:3 failure rate.

In 2016 Price Waterhouse Coopers (PWC) calculated the value of the construction sector alone at \$35.4Bn annually (PWC, 2016). Considering that this figure would be inflated above the “normal” values due to the addition of construction costs around the Canterbury Earthquake Sequence (CES), it is readily apparent that the total annual figure of expenditure on projects (and through them project management) has grown substantially in the six years following the KPMG report.

As at the publishing date of this report no organisation has updated the research around the national project management industry with regard to dollar figures. In order to provide a rough estimate of expenditure the author has elected to breakdown project management into sectors;

1. Construction
2. Fast Moving Consumer Goods (FMCG)
3. Defence
4. Energy
5. Pharmacy
6. Information Technology (IT)

Assuming an even expenditure across all five sectors and using the researched Construction sector figure as a basis then a rough estimate for the total New Zealand expenditure on projects would be **\$212.40 Billion annually** at a 1:3 failure rate and 66% expenditure on non-project delivery costs.

Methodologies, Frameworks and Standards

In descending hierarchical order of precedence, project management is led by the International Standards Organisation through the publishing of the ISO 215XX series of Project, Programme and Portfolio standards. The next level is project management Frameworks the most globally accepted of these being PMI's Guide to the Project Management Body of Knowledge (The PMBOK Guide[®]). From frameworks, methodologies are extracted, modified and published i.e. MSP[®], Method 1, 2, 3[®], PRINCE2[®] etc.

85% of project management methodologies used in New Zealand is not recognised as “proven” practices i.e. in-house methodologies or proprietary/ad-hoc methodologies (KPMG New Zealand, 2013). While PRINCE2[®] as a methodology represents 45% of the methodologies in use (KPMG New Zealand, 2013). It should be noted that the original design of this “off the shelf” methodology (by the UK government in 1989) (Haughey, n.d.), was for complex information system projects (IT) and that certification in a methodology does not make a practitioner a project manager.

Therefore, to be a project manager one should have a proven knowledge of either the project management standards or certification in one of the globally recognised project management frameworks.

Impact on GDP

In September 2016 the Construction Strategy Group (NZ) commissioned a report from Price Waterhouse Coopers on “Valuing the role of construction in the New Zealand economy” (PWC, 2016). This sector is New Zealand’s fifth largest by employment (10% of total employment across the economy), has the highest rate of job growth and contributed one in five jobs between 2011 and 2015 this equates to contributing 8% of the NZ-GDP directly and indirectly has a much greater impact on GDP through enabling other sectors to expand (PWC, 2016).

A 1% increase in labour productivity to this sector equates to a NZ\$139m GDP increase. Insufficient project management practices are cited as one of the contributing factors to low productivity (PWC, 2016). While labour productivity is one aspect of construction that PWC looked at, neither this report nor the 2013 KPMG report focussed on the effect of failed projects in construction. Should failed construction projects¹ across both residential and commercial spheres be considered, it is the author’s belief that significant gains to GDP could be made in excess of the NZ\$139m per percentage increase in productivity as reported.

PWC highlight poor project management practices as one of the primary areas for improvement within the construction sector – highlighting the issue some sixteen times throughout their report.

Recommendations

To lead project management best practice application for the subsequent national benefits, including international reputation gains, GDP gains and targeting goals of sustainability and professional excellence through:

1. The professionalization of the terms “Project manager” and “Project Management” with legislation being similar to and based on the “Chartered Professional Engineers of New Zealand Act 2002”
2. Funding be provided to Standards New Zealand to change New Zealand’s involvement with the ISO/TC258 committee from “Observer” to “Participant” thereby increasing the level of detail and input available to New Zealand. Note: New Zealand currently has three people allocated to the above technical committee – the author is one of the volunteers.
3. Funding is made available to Standards New Zealand to adopt the currently published ISO 215XX standards as New Zealand Standards and to continue to adopt the remaining standards as they become published.
4. As there is currently no singular Ministry or department that would naturally maintain oversight of project management, The council formed under suggested legislation would become the point of contact and a de-facto government working to coordinate activities, information and implementation through the New Zealand chapter of The Project Management Institute (PMINZ), this working group to include representatives from Treasury, MBIE, PMINZ and members of the NZ ISO observers.

5. Subsequent to the adoption of ISO 21500:2012, a directive be issued to state sector organisations to implement change projects to achieve compliance with the standard
6. Government tenders to external partners be required to prove compliance with the project management standards as a condition of tender. Note: this recommendation would be superseded by the ability to become externally certified in ISO 21500:2012 in the same process that ISO 9001 certification is achieved.

Additional future considerations

The establishment of a GPMO (Enterprise Project Management Office) would remove the current replication inherent with individual ministries and departments maintaining individual Project Management Offices (PMO's) benefits would include (but not be restricted to);

1. Better project management resourcing across programmes and portfolios,
2. Consistent application of Best Practice project management across the public sector,
3. Increased inter-department/ministry communication and reduced replication of personnel, tasks and projects,
4. More efficient usage of project/programme/portfolio management personnel
5. Increased Public Sector project productivity and the attendant increase to ROI and the simultaneous reduction in costs.

There exists no current natural ministerial or departmental “home” to house the proposed GPMO, given the wide ranging scope of the projects within various Government departments. With the reduction in replicated staff positions and through combining individual PMO budgets the GPMO would be funded through existing allocations and various mechanisms exist for its creation, one such approach may be to create a Crown entity under the purview of The Treasury Department.

How a GPMO is envisaged to work in practice

In a general theoretical outline this would mean a government department;

1. Creates and gains ministerial approval on a business case (better business case model),
2. Submits the business case to the GPMO with a project charter,
3. The GPMO then Initiates and Plans the project,
4. The GPMO Initiates the project and tasks project resources (project managers, researchers, requirements gatherers, operational project expertise/knowledge),
5. The project scope, time, cost, quality, risk and benefits realisation “baselines” are provided to the originating department/minister for project go/no-go authority,
6. The GPMO (on receipt of a “Go” authority) then conducts the project in accordance with the relevant project management standard (Executes, Monitors & Controls then Closes the project),
7. The PMO returns the deliverables to the authoring department and conducts project/phase closure,
8. The PMO reassess benefits realisation and the remaining planned project baselines post-project and reports to the department and the relevant minister on project success.
9. Lessons learned are collected and filed for input into future projects.

References

Haughey, D. (n.d.). *The history of PRINCE2*. Retrieved from Project Smart:

<https://www.projectsmart.co.uk/history-of-prince2.php>

KPMG. (2011). *Portfolio, Programme and Project Management (P3M) Capabilities in*

Government - Increasing success rates and keeping costs down. Wellington: KPMG and The Treasury.

KPMG. (2017). *Driving Business Performance: Project management survey 2017*. Wellington:

KPMG.

KPMG New Zealand. (2013). *Project Management Survey Report*. KPMG New Zealand.

Project Management Institute. (2016). *The High Cost of Low Performance*. Philadelphia: Project Management Institute.

PWC. (2016). *Valuing the role of construction in the New Zealand economy*. Price Waterhouse Coopers.

West, J. C. (2013). *PMO Analysis, Design and Implementation*. Christchurch.

Footnotes

¹Failed projects include projects that have been withdrawn (apartment developments etc.) as the New Zealand construction sector operates in a primarily bid-tender-build environment a significant capital expenditure is incurred prior to construction start. If construction fails to start, then this represents lost capital and by extension a failed project.

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