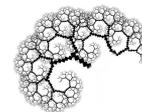# ITC Procurement Taskforce - Consultation Paper

By

Dr Kevin McIsaac
kmcisaac@datascienceinstitute.com.au
Data Science Institute

Background

This submission is prepared by the Data Science Institute, an Australian research and consulting company specialising in Predictive Analytics.

From the consultation paper it is clear that the Taskforce has a firm understanding of the strengths and weakness of the the Government ICT procurement processes. Rather than create a submission that rehashes these issues we provide brief remarks that highlight some of the barriers to innovation and a possible solution.

Barriers to Innovation

Stanford research identified in the public sector that the ability to innovate is derived from the **ability to experiment** and the ability to sunset outdated infrastructure and systems. However the Government ICT procurement processes is focused on projects, which are managed to a budget, timeline and a set of feature.

While a project centered process is appropriate for "business as usual" this approach is the antithesis of innovation as experimentation requires:
- Discarding what gets built for the experiment.
- Committing budget to an activity that does not deliver features.
- Willingness to demonstrate the experimental hypothesis is false.

In short, innovation requires taking a calculated risks to "fail" in order to learn and to make progress.

Attempts to innovate within a project centric procurement method results in over estimation of the budget and time to overcome uncertainty. Since the public service has no incentives for taking risk they typical expect the vendor to carry it. This increases cost and hides the risks from the stakeholders until the project blows-up and the stakeholders are blind sided.

The key to innovation is not procuring new technologies but changing organisational behaviours to remove disincentives to risk taking and creating a new culture that encourages, indeed celebrates, taking on risks and failing while searching for better ways to deliver services.

We believe the key procurement change required is the creation of a new procurement process specifically designed to enable experimentation, risk taking and failure. This is much more than "trialing a product" or running a "proof of concept" before implementing a solution in production.

A true experimentation processes requires a formal framework for
- identifying the hypothesis;
- experimenting with new business models, processes and technologies;
- evaluating the learnings;
- formally publishing the findings which inform subsequent projects.

Recommendations

Our recommendation is simple, but we recognise that the cultural change in the public service to drive adoption will be difficult.

Create a new procurement process that enables experimentation free from the need to implement production features and which accepts failure as an integral part of discovery and progress. We suggest these be called **Clinical Trials** and follow a formal framework build from the best practices, e.g.:

1. Be funded in small phases that allow ideas to be explored but quickly shelved if not viable.
2. Use an open innovation paradigm that ensures ideas are sourced from a wide community that does not work day to day with the department.
3. Engage customers in the development of new products and services.
4. Require staff to walk in the shoes of their customers to feel the experience.
5. Hold public, formal meetings to present and discuss what was learnt from the trial.
6. Accept failure as an integral part of being innovative by focusing on what was learnt in the trial rather than on what was delivered in a project.
7. Celebrate failed trials in the same manner as a successful project.
8. Formally train staff in the clinical trial framework and methodologies.
9. Provide expert support services in key areas such as design thinking and experimentation.
10. Challenge industry norms and departmental preconceptions on a regular basis.