

FRST: The myFRST portal

The Foundation for Research, Science & Technology (FRST) invests around \$400 million annually to provide positive results for NZ citizens and businesses.

In 2000 the GPSRD system was developed to provide an end-to-end internet-based application, contracting, reporting, and payments process. The myFRST portal takes the more *significant public good investments* and combines proposal submission, contract profiling, peer review, contracting, reporting, and user management. The GPSRD application is 5 pages and is approved internally with relatively little change; on the other hand, a *public good science* proposal might be 70 pages, goes through a complex reference group approval process, may be submitted to international peer-review, and will often be substantially changed in contracting.

Previously, researchers would submit, via their institution, a paper proposal. They would post 13 copies, which coordinated the effort of many people (some proposals requested funding in the order of \$5 million p.a. for seven years, and could involve significant subcontracts). Institutes coordinated this process internally, and then couriered these proposals to FRST. On receipt, every proposal had to be given a unique ID, and significant data entry and validation completed. These would be mailed to committees and peer-reviewers, comments collected and committee meetings held. If the Foundation Board approved the recommendations, results were mailed to institutes who then wrote contracts that were then negotiated, often with a number of iterations, before approval and physical signing of a contract. Each subsequent year a report on contract progress was mailed to FRST.

The myFRST proposal submission and contracting system has changed the process significantly:

- Researchers now receive an electronic ID from their institute (or directly if they are an independent researcher), and then they go online to create a proposal.
- This presents them with a series of customized templates and the electronic form is pre-filled, or limits choices, to ensure that the completion is as straightforward as possible.
- The web allows the researcher to continue working on a proposal when they are overseas, as is often the case.
- The system allows the institute to see a proposal being built rather than the old process of having to prescribe internal deadlines far ahead of the Foundation ones.
- Once finished, the proposal it is submitted to the research contact for the institute who then approves it and submits it to FRST.
- It may then be passed out for electronic peer review, additional information is requested and feedback given. Once approved, the contract is pre-populated, completed, and profiling is done.
- The contracting system does a complete validation at submission (reducing wasted time spent checking figures) ensuring contract negotiation is focused on substantive issues.
- Reporting is also completed online. Because the contract is always available variations can be done at any time, and reporting will be able to be done at any time, rather than annually, as previously was the case.

Distinguishing features and what makes this service excellent

The myFRST system is excellent because:

- It is online, and can be used to create proposals at any time, in any place;
- Multiple people can work on the same proposal at the same time;
- It takes writers through a wizard process, breaking the required information down into pieces;
- It pre-selects and reuses information to save proposal and contract writer's time;
- It validates data at entry eliminating the need for time consuming checking of tables and figures;
- It breaks the information required into sections that can be added at any time to a proposal, and which fit seamlessly into the proposal without requiring a re-write. e.g. for an initial selection process only 20% of the full proposal is required. This information is submitted to FRST and 1/3rd of applicants are eliminated (thus saving them significant data entry). Once an applicant makes it through to the second round, the remaining 80% of the data can be requested and fitted into the original application without any alteration to the original information.
- It adds or removes sections based on the applicants choices (e.g., if the applicant marks an application as responsive to Maori then this section is displayed, but the majority that are not responsive to Maori never even see this section);
- FRST can arrange peer-review applications electronically with reviewers worldwide, in shorter time.
- It allows an institute to manage their proposals, contracts and reports coming to the Foundation. They manage their own users, and only the organisational contact can ever submit something to the Foundation.
- It requires no client installation of software other than a web browser.
- The system allows the upload of word documents and web-forms, but at any time can merge the work to date into a complete document for download.

The myFRST system was used to submit 400 research proposals this year. The ones which are funded will taken through to contracts (of which we have 409 at present) and then through to reporting (again 409 reports, 1 for each contract).

The Foundation's aim is to move all its investment management processes online. The benefits in cost, flexibility and timeliness demand an increasing use of the technology. A crude estimation of costs and benefits (tangible only) shows the overall annual cost to build and support the proposal creation, contracting and reporting system is \$31,025. The net savings to the Foundation are \$70,000 per annum, and to the provider community a net saving of \$375,000 (assuming that the system is used optimally).

FRST estimates for every \$1 in development and support costs for this system they are generating \$15 of benefits for the Foundation and our stakeholders.

This analysis does not cover the intangible benefits. Perhaps the key one is that this system enables us to collect a vastly more useful array of information to underpin our future investments and advice to the Minister. For the first time the Foundation has quality information to support its policy advice and thus we are being more effective in our role as a catalyst of the innovation system.