

SCIENCE FOR
TECHNOLOGICAL
INNOVATION

Kia kotahi mai –
Te Ao Pūtaiao me
Te Ao Hangarau

Guide for commercialisation development of early-stage technology

DEVELOPED FOR SFTI'S FUNDED RESEARCHERS – JUNE 2020

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ABOUT THIS GUIDE

The aim of this guide is to encourage robust conversations about research commercialisation and delivering on SfTI's mission.

Our mission

SfTI's mission is to grow New Zealand's high-tech economy via the physical sciences and engineering. As a SfTI-funded researcher, you play a pivotal role in achieving this mission by endeavouring to commercialise your research, in alignment to **SfTI's values and principles** (in particular to 'Impact/Hua Rawa').

This document aims to equip you, and your team to:

- understand our collaboration and commercialisation expectations
- develop a common understanding about the commercialisation of early-stage technology within your projects
- know where to find commercialisation expertise and support, and how to effectively engage with those people, organisations and industry partners.

Important documents

Key documents all SfTI researchers need to be familiar with:

- SfTI's **IP policy and principles** and **IP management plan** – these are set out in your SfTI funding agreement.
- Your organisation's IP policies and commercialisation procedures – please consult with your Technology Transfer Office (TTO) for these.

COMMERCIALISATION EXPECTATIONS

Commercialisation of early-stage technology can be challenging at times, however, there is a well-developed network in NZ of people and organisations that support technology commercialisation, starting with your organisation's TTO, that can help your research have real-world impact.

All that SfTI expects is that you engage this network to help identify and follow a pathway towards economic impact.

It is the most significant opportunities that New Zealand is looking for. SfTI can help identify and prioritise these opportunities and direct you to those who can help when inventions arise.

COLLABORATION IS KEY TO SUCCESS

SfTI funds collaboration between researchers (often from different research organisations), industry and Māori as this leads to better science innovation outcomes. When technology commercialisation is the goal, research teams should also collaborate with domain experts broader afield. The odds of success in commercialisation are low, but potentially significant in the long-term if a collaborative approach is taken to include commercialisation specialists. The technical prototype is not the determinant of commercialisation success. The latter involves much more: commercial proof of concept, licensee attraction, company formation, capital raising, product-market fit, scale-up etc.

TIPS TO GET STARTED

- Draw on the expertise of people in many different domains, e.g. industrial design, manufacturing, regulatory, intellectual property and business strategy to name just a few.
- Cast a commercial lens over your research early on by speaking to industry, to shape it in a way that increases the likelihood that the outcomes attract follow-on investment.
- Take advice from your organisation's TTO before publicly disclosing information related to an invention, as once information is published or discussed in public it cannot be protected and its commercial value is greatly reduced.

ENGAGING WITH YOUR TECHNOLOGY TRANSFER OFFICE (TTO)

TTO's have a wealth of early-stage technology commercialisation expertise so engage with them early to get the best value from their support. Consider them as part of your team.

TTO's have many roles and responsibilities including:

- Sole mandate to manage all matters relating to IP ownership, commercial rights, formal protection and financial returns from commercial exploitation.
- Deciding which TTO will be the Managing Party in cases where two or more research organisations have contributed to the creation of IP.
- Assessing IP opportunities on behalf of the organisation for potential to be commercialised.
- Deciding when and how the organisation's commercialisation funds are invested into select opportunities.
- Deciding when and how to use devolved PreSeed Accelerator Funds (PSAF): funds they have the legal right

to invest as per their contract with MBIE or a pooling partner (e.g. Kiwinet) and will notify the funder accordingly.

- Preparing and presenting funding applications for non-devolved PSAF to Return on Science or Kiwinet investment committees, whichever one they have contracted with.
- Determining the commercialisation strategy for a specific IP opportunity.

What commercialisation personnel ideally look for from you?

- A willingness to receive their advice and support at any stage of the research.
- Your own understanding of the real-world problem your research solves, why your approach is better than other approaches and what assumptions you have made.
- Full disclosure of people, organisations and funders involved in the creation of the concept, to determine ownership and resolve joint ownership situations.
- Details of all non-confidential disclosures of information relating to your novel technology concept.

When to engage your TTO?

- Anytime really: when you are wondering whether you have a commercially feasible idea, when need some market understanding or think you have invented something.
- Before you speak to a technology investor, such as a Callaghan Innovation tech-focused incubator.
- When there is the opportunity/need to negotiate agreement with another party.

OWNERSHIP, INVENTORSHIP AND BENEFIT SHARE

The people and organisations involved in collaborative research will have different rights as inventors, owners, beneficiaries or a combination of these. It is important to understand what these terms mean:

Inventor

Defined as per the legal definition under New Zealand patent law which essentially covers aspects of the conception of an original idea and its reduction to practice.

Owner

The legal entity (person/company/organisation) that holds the legal title to some property in accordance with law or contract.

Beneficiary

The legal entity that has the right to benefit from successful commercialisation for monetary gain in accordance with organisational policy and/or contract. For non-monetary gain, people can benefit in other ways such as attribution rights in accordance with contract or otherwise.

Why are these terms important?

Misunderstandings or conflict often occur when people confuse these terms. Therefore, it is important that you understand which of these applies to you/your organisation and which you are most interested in. Furthermore, if you do not have a personal vested interest (i.e. time or capital at risk), and you are not willing to leave your day job to run a company or sell technology, then relax about what you do and do not own, and may or may not stand to benefit from.

The following section provides more details on these terms and how they are applied to collaborative research situations.

Joint ownership

Collaborative research may result in joint **ownership** situations. These need to be resolved to make commercialisation easier and more attractive for next stage investment.

Common issues arising from joint ownership

Unlike benefit sharing, joint ownership is not looked upon favourably by commercialisation personnel, investors or businesses. This is for practical reasons, for example:

- Too much management/admin overhead transacting with multiple parties.
- The inherent risk of deadlocks: There have been many cases of deadlocks around commercial decisions because joint owners cannot agree with one another, leaving a commercial partner with an inability to act, resulting in a loss of time, money and opportunity.

Therefore, joint ownership situations need to be resolved to make commercialisation easier and more attractive for next stage investment.

Call on your TTO for their advice and support, it is their job to resolve joint ownership issues.

You can help make their job less complicated by understanding the following:

- Students are typically treated separately under the IP Policies of most universities, whereby they as individuals retain ownership of IP they have been involved in creating. IP agreements can be used with students at the start of projects.
- In the event that Mātauranga Māori IP and Taonga is involved in the commercialisation of the technology,

an irresolvable joint ownership situation is essentially created through the application of the **SfTI IP Management Plan**. This plan provides a mechanism for achieving negotiated agreement with Māori for obtaining commercial rights to such IP, through approaching an identified kaitiaki or the SfTI Kāhui Māori to help identify the appropriate kaitiaki. Conversations should be initiated early with your TTO, kaitiaki and Kāhui Māori in such cases to clarify implications for commercialisation.

- When IP has potential to be commercialised from R&D, commercialisation personnel from the TTOs of the collaborating organisations need to determine:
 - Ownership, by identifying which parties contributed and get legal title. Invariably this will mean that only a subset of individuals (e.g. students) or organisation (e.g. those employing the researchers) within the project can lay claim to owning IP.
 - The Managing Party (Clause 4(ii)a of the **SfTI IP Management Plan**) and how to effect the required chain of title (assignment of ownership by Deed to the Managing Party). The Managing Party will have full responsibility for all IP management and commercialisation decisions, including developing the commercialisation strategy and executing the plan.

Inventorship

Inventorship is a way that contributors meeting the legal definition of an inventor can be recognised for their contribution to the novel technology. Such individuals must be part of any related patent application as a legal requirement.

Benefit share

Benefit share is often what parties are most interested in as this relates to the potential for monetary gain. Thus, benefit share can be used to recognise a party's contributions regardless of whether they are ultimately the legal owner or inventor.

Benefit share is determined by recognising each party's relative inputs to the Project IP (Clause 4(ii)b of the **SfTI IP Management Plan**). A party's inclusion in the distribution of benefits depends on their organisation's IP Policy or a given contract. Universities typically distribute a share of net revenue to their researchers, while Crown Research institutes do not.

With ownership then resting with one party and a clear agreement around benefit sharing, the Managing Party can then operate freely to take the lead on commercialisation in the most efficient and unencumbered way.

INVOLVING INDUSTRY

Involving industry is key to successful commercialisation. Industry here can constitute users, customers, suppliers, manufacturers, distributors etc. Their contributions will be different at various stages of R&D. It could be providing general information, confidential disclosure/review, facilitating introductions, offering trial sites, providing services etc.

It is best to be very clear with industry what the nature of the relationship is and to put this in writing, especially when their commitment in time and resource increases. Written agreements prevent misunderstanding and set clear expectations for each party. Even if conversations with industry are preliminary and exploratory about what a relationship could eventually look like, put this in writing in such terms.

Forms of written agreement that can be used include:

- Emails: these track the purpose and outcomes of discussions. List what was shared and how. Get email recipients to acknowledge receipt by reply email.
- Non-legally binding agreement: these are essentially agreements to agree and could be called Heads of Agreement, Memorandum of Understanding or something else. When stakes and risks are low, these agreements are great for documenting each party's respective contributions to a collaboration and their expectations. Compared to binding agreements, non-binding agreements are easier to negotiate.
- Legally binding agreement: These are essential when the stakes and risks are high, and they require legal drafting/review. These could take the form of Non-disclosure Agreements, Materials Transfer Agreements, Collaboration Agreements, Joint Venture Agreements etc. Only certain individuals in your organisation (e.g. business development, industry engagement, commercialisation or legal personnel) are authorised to negotiate, agree and execute these agreements.

Tips for dealing with industry partners

- Share key SfTI documents with your industry partners: SfTI values and principles, IP policies and principles and IP management plan. Because they are involved in your project and considered long-term collaborators, they need to understand the rules by which the rest of you are engaging with one another.
- Sometimes, even people from industry might have a limited understanding of collaboration, open innovation and commercialisation strategies typically employed by universities and CRIs. If they appear unreasonable in their demands, try find a common understanding and/or consider alternative options. If all else fails, perhaps some individuals, companies or industries are not a good match for your project. If so, find another industry partner, perseverance is key to success.