

MASSEY UNIVERSITY

STAGE GATE COMMERCIALISATION PROCESS



**MASSEY
UNIVERSITY**
TE KUNenga KI PŪREHUROA

UNIVERSITY OF NEW ZEALAND

The Process Outline

Massey University is committed to helping inventors to translate innovative academic research into commercial opportunities, through existing companies or new spin-out companies. Our shared goal is to create and transfer knowledge for the benefit of New Zealand. Massey Enterprise has the exclusive responsibility for commercialising intellectual property from research and discovery within the University. Our overarching philosophy is to work with inventors and ecosystem partners (KiwiNet, Return on Science, incubators, accelerators) to quickly and seamlessly move knowledge and IP out of the University to the business community.

0 Disclosure

The objective of submitting a Confidential Invention and Technology Disclosure Form is to ensure Massey University Commercialisation Office receives written notification that you have invented or created something during your research, study or teaching activities that may have commercial benefit

1 Preliminary Evaluation

The aim is to achieve an understanding of the technology or invention. This is usually achieved through discussing with you the technology or invention you have disclosed in the Disclosure Form and some initial market research.

2 Workshop Assessment

The purpose of the workshop assessment is twofold. Firstly, it provides a platform for all participants who will/may be involved in the commercialisation of the technology to meet the inventor(s), be informed of the technology, ask any questions relating to the technology and provide input around the entire process for the project from the outset.

Secondly, the workshop acts as an early stage investment committee, assessing the technologies commercial potential and determining investment allocation and next steps. The MVL CEO has authority to approve investment of up to \$30k post-workshop, and up to \$59k may be approved by the MVL Board.

Anything from \$60k upwards to \$200k will need to go through the Kiwinet Investment Committee for approval and would require a lot more information on the commercial and market opportunities.

3 Market Development and Commercialisation Strategy

In this phase, we are ultimately trying to form a commercialisation strategy that describes in detail how the technology will be commercialised. The commercialisation team lead will be working closely with you and undertaking a significant amount of market and patent research. Your project will also get a project manager from the commercialisation team who will guide you through the stages and will be responsible for ensuring the documentation and reporting is completed. The inventors usually take responsibility for the technology development or work closely with those who are contracted to do so.

4 Negotiation and Deal

This is where the commercialisation of the invention or disclosure is concluded. The main outcomes are either a sale of the rights to use the invention, a licence for use, or the establishment of a Start-up company to exploit the invention. All three outcomes require careful negotiation in order to agree fair valuation and capture value for the University and Creators. The deal is always concluded by the signing of range of contracts.

Disclosure

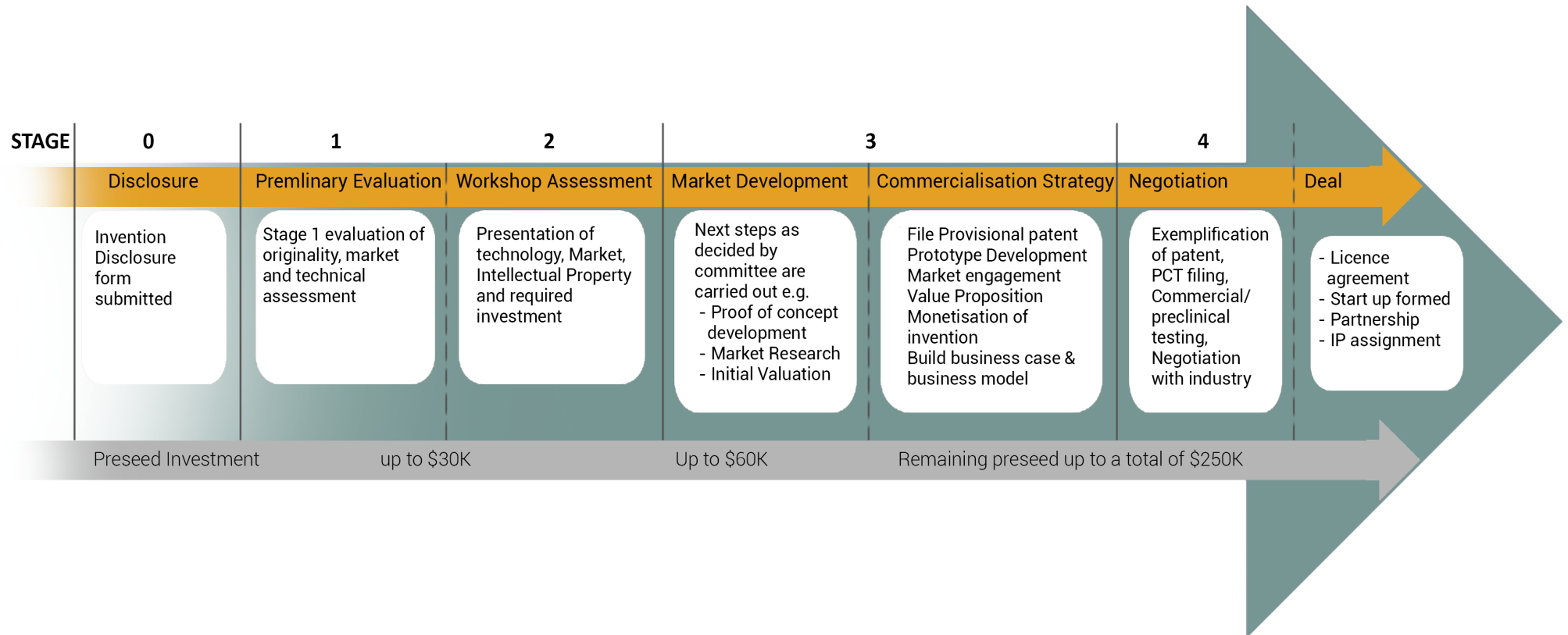
Preliminary
Evaluation

Workshop
Assessment

Market Development
& Commercialisation
Strategy

Negotiation and Deal

The Process Outline



What is an Invention Disclosure

An invention disclosure is a confidential description of an invention submitted by the inventors to the commercial office to initiate the commercialisation process. The invention disclosure addresses technical aspects of the technology, such as the science behind the invention, its advantages over other products, its potential drawbacks, and its scope of use. In addition, the invention disclosure addresses legal matters such as IP ownership. By submitting a disclosure, the inventor enables MVL to offer assistance and support throughout the commercialisation process if the university sees commercial opportunity in the technology.

1 What we want to achieve

The objective of submitting a Confidential Invention and Technology Disclosure Form is to ensure Massey University Commercialisation Office receives written notification that you have invented or created something during your research, study or teaching activities that may be of commercial interest to Massey University.

You should complete an Invention and Technology Disclosure whenever you feel you have discovered something unique with possible commercial value or when the terms of your sponsored research require disclosure of inventions. This needs to be done well before presenting the discovery through publications, poster sessions, conferences, press releases, or other communications. Once the essence of an invention is publicly disclosed (i.e., published or presented in some written form), the potential patent rights may be limited. Be sure to inform the Commercialisation Office of any imminent or prior presentation, lecture, poster, abstract, website description, research proposal, dissertation/master's thesis, publication, or other public presentation of the invention. Embargoing a thesis does not protect the technology.

The requirement for you to submit a Confidential Invention and Technology Disclosure Form relates to the Massey University IP Policy. As stated in the IP Policy, "where a Massey University employee or student develops, creates, or conceives (whether totally or in part) any New Intellectual Property that is related to the business of Massey University in any way and/or that may be of commercial interest to the University, he or she must discuss that New Intellectual Property Right with a team member of the Commercial Office as soon as practicable and must complete and return to the Commercial Office a confidential disclosure about that New Intellectual Property, unless the Commercial Office agrees in writing that the confidential notification is not required".

More detail found
in the University IP
Policy
Schedule 3-page 7

Stage Gate 0 - Disclosure

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2 Information Required

We need you to fill in the Confidential Invention and Technology Disclosure Form available online:

https://masseyuniversity-znaeb.formstack.com/forms/untitled_form

This Form is a written notice to Massey University that you have created IP that may be of commercial interest to the University. Upon completing the Form begins the formal commercialisation process. This is a confidential document, and should fully describe the new aspects of your invention, including the critical solution it provides and its advantages and benefits over current technologies.

3 Decision we need to make

Does the disclosure enter the commercialisation pathway?

4 What happens now?

Either;

Yes – Move to Stage gate 1

No - Discussion with commercialisation team regarding other pathways as shown in table 1.

Table 1

Option	Description
Pre-pre seed investment	In some cases, generally when the technologies commercial potential is difficult to assess for reasons such as an emerging technology area or new market, up to \$15k of investment may be available to undertake tasks that may help the Commercialization Team make the yes/no decision. For example, funding may be used to undertake additional experiments, commission a patent attorney to undertake a patent landscape search or facilitate industry engagement. Funding is at the discretion of the Commercialisation Director and in some cases co-funding from the Creators School or Department may be requested.
Other	Research Development Team may be able to help you apply for research funding from Government or other funding channels, that do not need a technology to have commercial potential
Publication	Advise you to publish your findings.
Not-for-profit funding	Assist you with other pathways to take your project forward that do not require a commercial imperative such as the Bill & Melinda Gates Foundation.
Transfer	Transfer IP back to the inventors

More detail found in the University IP Policy 3.1
Unwanted IP - page 9

Disclosure

Preliminary Evaluation

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Stage Gate 1 – Preliminary Evaluation

1 What we want to achieve

The aim is to achieve a comprehensive understanding of the technology or invention. This is usually achieved through discussing the technology or invention with you and confidentiality with other people who may have expertise in the area.

Our goal is to determine if the technology has commercial potential. A Stage 1 Filter Form is used as a tool to evaluate commercial feasibility. The invention or technology is assessed against a number of Market Attractiveness 'Pull' factors, and Tech/Resource 'Push' factors (Table 2). A value between 0 and 5 is given for each factor. These values are then summed to provide a score for each of two axis (Market Attractiveness and Tech/Resource).

Generally, both 'Push' and 'Pull' factors need to score above 15 for technology to be considered commercially viable. A score of zero on any factor would suggest a good reason not to proceed further with evaluation.

2 Information required

Firstly, we need the Confidential Invention or Technology Disclosure Form to be completed as comprehensively as possible. Other information required for completion of the Stage Gate 1 Filter Form will be identified by the commercialisation team project lead through patent searching, market research and in some cases confidential discussion with the market. We may need you to review the patents and market information.

3 Decision we need to make

Does the Technology have commercial potential? Yes/No

4 What happens now?

Yes – Move to Stage 2 or,

No – Discussion of options as shown in **Table 2**

Table 2: Factors used to assess a Technologies Commercial Potential

MARKET ATTRACTIVENESS 'PULL' Factors	TECH/RESOURCE 'PUSH' Factors
Distance to Market	Massey Specialisation Strategic Fit
Value Creation Potential	R&D Quality
Intellectual property potential	Human capital commitment
Competitive Advantage	Technology development risk mitigation
Market size and scale	Technology window of opportunity
Potential exit points available with return on investment	
Score Total 0-30	Score Total 0-25

Stage Gate 1 - Preliminary Evaluation

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Examples

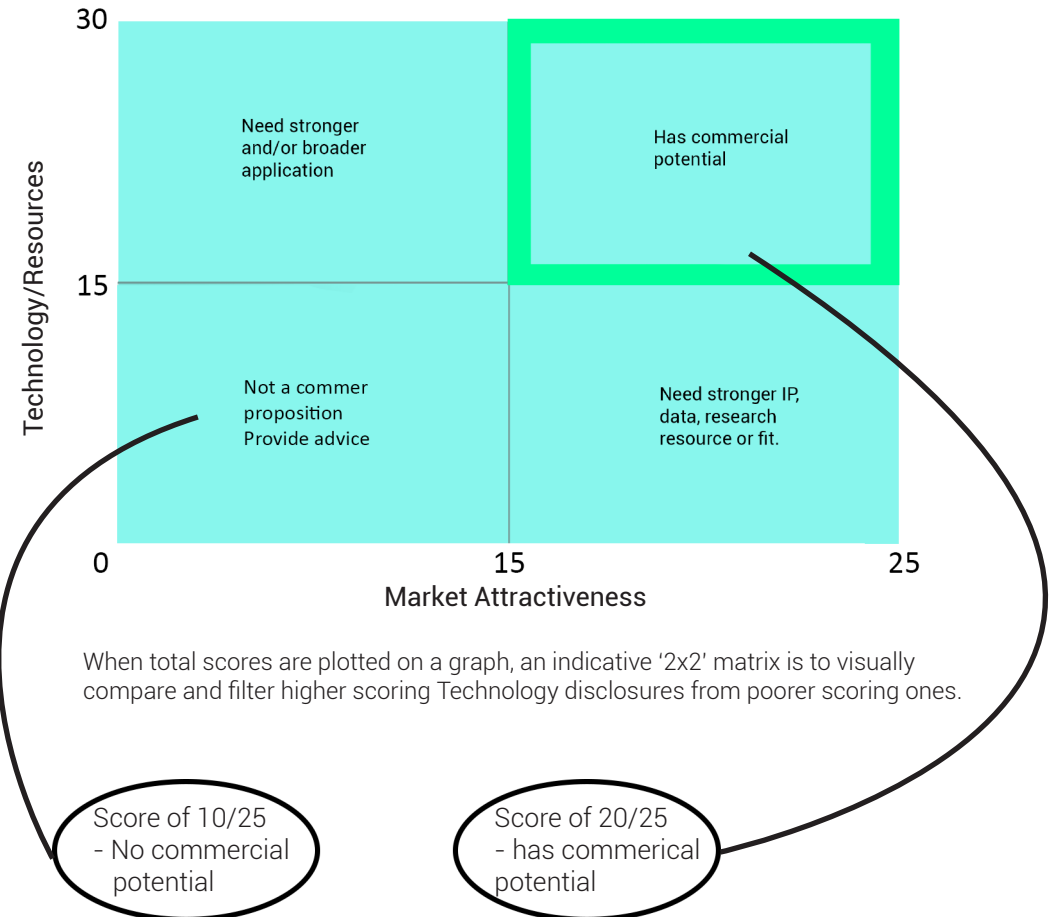
Market Attractiveness 'Pull' Factors - Score 17/30

- Distance to market - (3/5) Have a prototype already.
- Value Creation potential - (2/5) One or two possible applications.
- Intellectual Property potential - (3/5) Preliminary searches suggest novelty.
- Competitive Advantage - (4/5) Superior outcomes, add value. Few alternatives, difficult to replicate.
- Market Size and scale - (3/5) Potential end users up to 1,000,000. NZ, Aus, other, new and growing market.
- Potential exit points available with return on investment - (2/5) Some early direct exit paths possible, including the option of codified IP with franchised or sale under trade secret.

Tech/Resource 'PUSH' Factors - Score 15/25

- Massey Specialisation Strategic Fit - (2/5) Fit with department or institute specialisations. Some brand value to that unit, could attract a student or hold a staff member or two.
- R&D Quality - (3/5) Good quality, researcher has peer reviewed relevant journals. Is a co-researcher or part of a team within an institute.
- Human capital commitment - (3/5) Inventors reasonably motivated but limited commercialisation experience. Some time is able to be given to disclosure but not strongly dedicated.
- Technology development risk mitigation - (3/5) Multiple development pathways.
- Technology window of opportunity - (4/5) Better than average window of opportunity. Topical domain. Good access to funds and resources.

Scoring Matrix for Stage Gate 2



Stage Gate 2 – Workshop Assessment

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1 What we want to achieve

The purpose of the workshop assessment is twofold:

Firstly, it provides a platform for all participants who will/may be involved in the commercialisation of the technology to meet the inventor(s), be informed of the technology, ask questions and provide input into the project from its outset.

Secondly, the workshop acts as an early stage investment committee, assessing the technologies commercial potential and determining investment allocation and next steps. The MVL CEO has authority to approve PSAF (Pre-seed Accelerator Funding) of up to \$30k post-workshop, and up to \$59k may be approved by the MVL Board.

Workshop participants and their roles are listed across in **Table 3**.

2 Information Required

Information on three aspects: the technology, market and Intellectual property (IP) is required to be presented at the workshop. Specific information includes:

Technology

- Description of the technology and the current status of development.
- Advantages/Unique selling proposition of Technology.
- The uniqueness of the technology and how it compares to similar technology or solutions.
- Potential applications and/or end-users.
- Summary of the development objectives and plan.
- A brief budget outlining the scientific work that needs to be undertaken to progress the project.

Table 3: Workshop Assessment participants roles

Participant	Role
Creator and team (if applicable)	Provide a Technology Description both in writing and as a presentation.
Commercialisation Team members	Complete an initial high level novelty and patentability search and identify any obvious prior art. Work with the inventor to determine likely applications and present market information relating to these. Outline the recommended next steps and budget.
Massey Ventures CEO	Chair the workshop, determine if the project is commercially viable and approve investment if applicable.
Angel Investor	Provide an investor view on the opportunity.
Head of Department	Support the inventor and team and contribute to the discussion regarding commercial viability.

The one hour workshop usually consists of a 10 minute technology presentation, 10 minute market and IP presentation followed by 30 minutes of discussion. The final 10 minutes focuses on agreement from participants on commercial potential, next steps and funding approval.

Disclosure

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Market

- Define the problem or opportunity that the proposed technology or expertise specifically aims to solve and how it will do this.
- The size of the addressable market. If there is more than one market segment, which one will be the first priority?
- Market Validation - What has been done to validate the value proposition for this technology? Which companies or end users have you talked to?
- Outline of what market research needs to be completed.

IP

- Summarise the novelty, inventiveness and utility.
- High level understanding of prior art.
- IP strategy.

3 Decision we need to make

- Does the project appear to have commercial potential?
- Decision and agreement on what the application of the technology is and the potential markets it may enter into.
- Decision on what the next steps need to be (i.e. a patentability search, development of a proof of concept device and market engagement).
- Determination of amount of investment that may be sought.
- Approval of funding if applicable.

4 What happens now?

1. Commercial potential? Yes.

If the project has been deemed to have commercial potential then the next step may be to complete the paperwork required for investment followed by moving to Stage 3.

2. Commercial potential? No. See options in **Table 1**.

3. Investment approved? Yes. See **Table 4** for paperwork requirement and approval pathway.

5 Document Hyperlinks

More about Preseed: <https://www.kiwinet.org.nz/Investment>

More Kiwinet resources:

<https://www.kiwinet.org.nz/Services#CommitteeResources>

Table 4: Investment requirements

Investment Required	Documentation requirement and approval pathway
Less than \$30k	A Commercialisation Partner Network (Either Kiwinet or Return on Science) Project Notification Form needs to be completed (by both inventor and commercialisation team project lead). This is submitted to the MVL CEO for approval, then submitted to the CPN for their reference.
Between \$30k and \$59K	CPN Project preview Form needs to be completed and submitted to the MVL CEO, who will then submit the form to the MVL Board at the next board meeting (MVL Board meets bimonthly). The MVL Board approves the investment this form and is submitted to a CPN committee for their reference.
Greater than \$60k, up to \$250K	CPN Project Development Plan needs to be completed and sent to both the MVL CEO and MVL Board for approval, prior to presentation at a CPN investment committee. The investment decision is at the sole discretion of the CPN investment committee, who may include conditions on the investment.

Stage Gate 3 - Market Development & Commercialisation Strategy

1 What we want to achieve

In this phase, we are ultimately trying to form a commercialisation strategy that describes in detail how the technology will be commercialised. By this point, the commercialisation team lead will be working very closely with you and undertaking a significant amount of market research and patent searching. They will be responsible for ensuring the documentation and reporting is completed and provide guidance on the technology development. You usually take responsibility for technology development, or work closely with those who are contracted to do so.

1. Intellectual property

- Determine if the technology is novel and patentable.
- If appropriate, file a provisional patent application protecting the technology.
- Develop an IP strategy and determine what experiments need to be undertaken to exemplify the patent claims.

2. Market

- Have a clear understanding of the market for the technology and how big it is.
- Identify companies of interest and competitors in the market.

3. Technology

- Development of the technology to a point that another person/company could replicate or use the technology reliably.

4. Investment

- Investment must be sought as described in **Table 4**.

2 Information Required

In-depth information on three aspects: the technology, market and Intellectual property (IP) is required to determine the commercialisation strategy for the project. Specific information includes;

Technology

- Description of the core technology or expertise in greater detail.
- Description of what aspects of the technology or expertise are novel compared to other technologies or expertise that already exist.
- Description of new products, services or process improvements that this technology will enable for the end-user and how they are differentiated from competitors (unique selling proposition).
- The stage of development of the technology or expertise (e.g. just an idea, proved in principle, prototype build, product demonstrated).
- Outline high level technical objectives/target outcomes.

Intellectual property

- Outline the required IP protection strategy including: whether patents are to be filed; whether expert advice is needed and why; whether you need to license in the technology of others etc.
- Understanding of novelty, patentability, trademark ability and FTO is applicable.

Market

- Describe what other technologies or expertise are available that could be used to address the market pain, including potential competitors working in this space.

- Identify the target end-users for the technology or expertise. Who will the ultimate customers be and why would they choose to use your solution? Identify which end-users will ultimately make the purchasing decision.
- Describe the size of the potential market of the technology or expertise and what percentage of it is realistically accessible, including evidence you have to support the market analysis (market validation). Describe who will be the first initial customers for the technology (the Beachhead Market)
- How will you get your technology into the hands of your end-users? Define the value chain. Identify relevant companies that are operating in the space that could manufacture, distribute or sell the technology. Describe the benefits the technology or expertise provides to potential supply-chain partners that will justify them taking on the new product or services
- Indicate when you expect products or services to be in the market, provide an estimate of financial benefits that will be realised from these at each point along the value chain (e.g. manufacturers, distributors, etc), and highlight any key assumptions.
- Outline current and potential commercial issues or risks that may affect pathways to market and identify how you will mitigate these risks.
- Personnel
- Detail any external mentors or experts which have been recruited to support the project Brief summary of how well the project aligns with important strategic objectives such as: the PreSeed Accelerator Fund; CRI core purpose statements; organisational statement of intent; university research capability; areas of strong/potential national economic growth.

Maori engagement

- Describe potential opportunities to engage with Maori knowledge, resources and people.
- Describe plans for engagement with Maori knowledge, resources and people (if any) for this project.

3 Decision we need to make

Ultimately the aim is to decide;

1. Do we continue commercialising the technology and,
2. If so, what is the commercialisation strategy.

To continue commercialising a technology, the below factors required;

- Novel IP which is protectable in some way either by patent or trade secret. If not, another strategy must be applicable such as first to market.
- Identification of a large enough market to warrant the commercialisation spend and identification of potential licensee's or customers.
- Determine the commercialisation strategy; either licensing or Technology must be progressing to a point in which it can be reliably replicated within parameters that are industry lead.

4 What happens now?

If Yes – Project continues to Stage 4.

No - Either more work in a particular area may be required or the options in **Table 1**.

Stage Gate 4 - Negotiation and Deal

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1 What we are trying to achieve

Our aim is to negotiate a deal where the technology is transferred to a company, organization or individual that has the resources, capability and drive to take it from University research to a commercially viable product or service. This may occur in one of three ways. Either via;

1. An exclusive or non-exclusive license agreement with an existing company(s) – a suitable licensee(s) for the technology is identified and license agreement negotiated between Massey University and the company.
2. License to a start-up company that has been established with the purpose of commercializing the technology.
3. Partnership or other agreement.

To determine the best strategy, the commercialization team must have an in-depth understanding of companies and organizations who operate in the technologies field, potential customers and market size. This is achieved through market research, such searching online for companies working in the same area or assignees of patents who may be interested in a technology in a similar. Sometimes existing relationships of the inventors are useful in marketing an invention.

Licensing

A license is a permission granted by the owner of intellectual property that allows another party to act under all or some of the owner's rights, usually under a written license agreement. License agreements describe the rights and responsibilities related to the use and exploitation of intellectual property developed at the University.

A licensee is chosen based on its ability to commercialize the technology for the benefit of the general public. Sometimes an established business with experience in similar technologies and markets is the best choice. In other cases, the focus and intensity of a start-up company is a better option.

The signing of a License Agreement is usually the beginning of a long term relationship. Most licensees continue to develop an invention to enhance the technology, reduce risk, prove reliability, and satisfy the market requirements for adoption by customers. This can involve additional testing, prototyping for manufacturability, durability and integrity, and further development to improve performance and other characteristics.

License Agreements

License agreements often include requirements for payments in the form of upfront fees, minimum annual royalties, milestone payments, earned royalties and sometimes equity. Licensing fees (upfront, annual minimum, milestones) range from very modest amounts to hundreds of thousands of dollars. If licensed products are eventually developed and sold (which can take years to occur), earned royalties can generate revenues. These payments are usually based on product sales and can vary considerably. If equity is included in a license, it may yield a return for the inventors and the University, but only if the equity can be liquidated through a successful public offering or the sale of the company. Most licenses do not yield substantial royalties. A study of licenses at U.S. universities demonstrated that less than 1% of all licenses yield over \$1 million. However, the rewards of an invention reaching the market are often more significant than the financial considerations alone.

Royalty distributions are described in Massey Universities IP Policy.

Allocation of Net Revenue

1. Each year, the University will allocate a percentage of Net Revenue received in that year in accordance with this clause. The percentage of Net Revenue allocated to the Creator(s) and the applicable College and the percentage retained by the University will depend on the total cumulative value of Net Revenue received by the University over the life of the Commercialisation up to the date of the allocation, as follows:

Cumulative Net Revenue	Creator(s)	College	University
\$1 to \$15,000	100%	0%	0%
\$15,001 to \$50,000	50%	25%	25%
More than \$50,000	30%	35%	35%

Where there is more than one Creator, their percentage of Net Revenue set out above will be shared equally between them, unless they have otherwise agreed in writing.

2. Where a Creator(s) has been allocated shares under clause 3 of this Schedule:
 - a. That Creator(s) will not be entitled, under this clause 2, to any Net Revenue from revenue received by the University in relation its shareholding, including revenue received by the University from distributions, share sales or similar;

- b. Half of the portion of Net Revenue that would otherwise have been allocated to that Creator(s) will be allocated to the College and half will be retained by the University;
- c. If, in relation to the same New Intellectual Property Rights, another Creator(s) has not been allocated shares, the Commercial Office may enter an agreement with that Creator(s) to set out the appropriate allocation of Net Revenue to that Creator(s). That allocation must recognise the reduction of the University's Revenue from distributions and share sales resulting from the other Creator(s)' shareholding.

Start-up Company

If a suitable licensee is not identified Massey University may consider licensing the technology to a start-up company. The start-up company must offer a viable plan to commercialize an invention in order to receive a license. If a new business start-up is the best choice for commercializing the technology, we will negotiate with a representative of the company to grant a license to the new company.

The inventors may decide to be involved in the start-up company either as technology consultants, advisors, or in some other technical developmental capacity. In many cases, the start-up investors and management team identify the best role for an inventor, based on the inventor's expertise and interests.

More detail found in the University IP Policy 2.1
Allocation of Net Revenue - page 11

An entrepreneur must decide to form a start-up. In some cases the inventor may also be the entrepreneur. An entrepreneur should consider a few key factors when thinking about becoming involved in a start-up company:

- Development risk – often large companies in established industries are unwilling to take the risk on an unproven technology.
- Development costs versus investment return – because of the high risk of start-up companies, investors will consider the potential to obtain many multiples of return before committing funds to a new company.
- Platform technology – few companies survive on one product alone; technologies that can be commercialized for multiple products or services are more likely to enable successful start-up companies
- Competitive advantage and target market – these must be sufficiently large for the start-up to succeed
- Potential revenues – this must be sufficient to grow and sustain a company

It is also wise for inventors to have agreements regarding their roles with a start-up reviewed by their own counsel to ensure that all personal ramifications – including taxation and liabilities – are clearly understood.

Massey University can accept equity as part of the financial terms of the license. License agreements to start-ups frequently include equity as a substitute for some of the cash consideration because new companies often prefer to conserve their cash. When the University takes equity it also shares some of the risk associated with the start-ups. A decision to include equity in a license must make sense for both the University and the company.

2 Information Required

At this point considerable information regarding companies and organizations operating in the market in the field of the technology is required. Additionally, intel regarding license deals and acquisitions of similar types of technology is useful for guiding the type of deal that is sought and the terms of an agreement.

3 Decision we need to make

1. The commercialization pathway i.e. license, startup or partnership.
2. The companies or individuals who will either license the technology or be involved in the startup company.

4 What happens now?

Commercialization, deal negotiation and establishing a startup are all time consuming exercises that require detailed planning, patience and continual endearment and progress monitoring. It can take months and sometimes years to locate a potential licensee, depending on the attractiveness of the invention and the size and intensity of the market. It is often challenging to attract a licensee because most inventions tend to be in the early stage of the development cycle and require substantial investment to commercialize them.

Starting a company requires a considerable amount of time and effort. Until the start-up team is identified and engaged, the entrepreneur will need to champion the formation effort. After the team is in place, you may be asked to be involved in investor discussions, help the company put together a research group, or help with business strategy, etc.

Patents – Protecting your idea

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What is a patent?

A patent is a grant by the government of an exclusive right for a specific term (20 years in New Zealand) to prevent others from using your invention.

The purpose of this exclusive right is to give you a chance to at least recover development costs, which encourages research and development.

You may patent new:

- Products
- Machines
- Electronics
- Processes
- Computer-implemented inventions

You cannot get a patent for a basic idea on its own without explaining how to put the idea into practice.

Inventions should be protected if they are likely to be commercially popular or important to industry.

Your invention should be secret before you file your patent

You must not reveal, sell, or advertise the invention to the public before applying for a patent.

If you use your invention before filing an application you may limit your patenting options. If you need a third party to assess or help your invention, make sure they sign a confidentiality agreement before revealing your invention to them.

The date that you file your patent application becomes the 'priority date'. You may reveal your invention after the priority date is established.

If you make any significant improvements to your invention after filing an application, you may need to file other patent applications to protect those improvements. Therefore, you should keep secret any significant improvements to your invention until you have discussed the options with your patent attorney.

Ensure your invention is new and inventive

To get a patent for your invention in New Zealand, your invention must be new and inventive before the date that you file an application for patent protection at the Intellectual Property Office of New Zealand (IPONZ).

Recommended searching before filing your patent application.

File a patent application and description of your invention at IPONZ

Once your search indicates that your invention is new, you should quickly file a patent application at IPONZ. There are two ways you can file a patent application.

Provisional application

You can file an application with a provisional specification. Provisional specifications are sometimes cheaper and faster to prepare and file than complete specifications.

Filing a provisional specification gives you 12 months to develop and assess the commercial opportunities for the invention before deciding whether to continue the patent application.

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Complete specification

You can file an application with a 'complete specification' that describes the detail of your invention.

If you file an application with a provisional specification, and want your patent application to continue, you must file a complete specification within 12 months.

IPONZ examines your application

A few months after your complete specification has been filed, IPONZ will direct you to request examination of your patent application and pay an examination fee.

After you request examination, IPONZ will consider matters including the application's formal correctness and the inventions novelty.

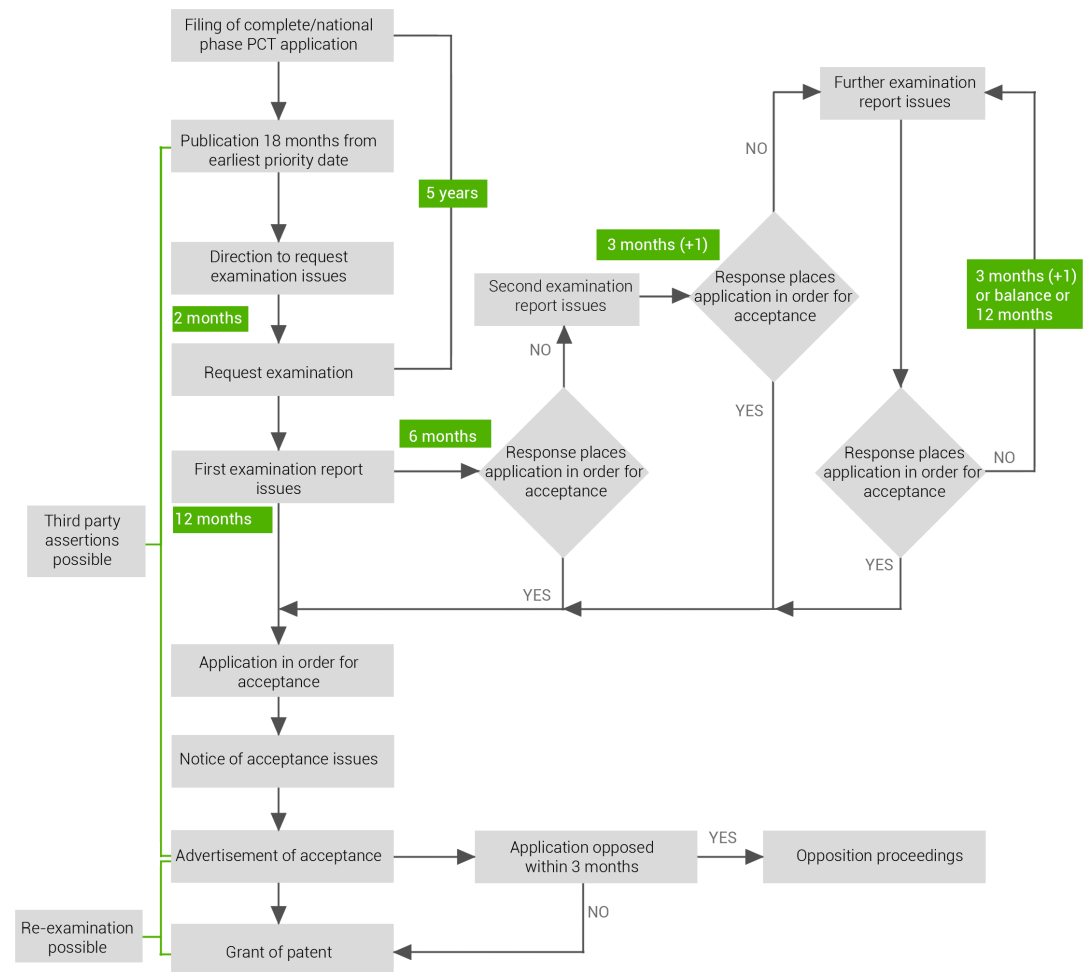
IPONZ will accept your patent application if it meets the requirements of NZ Law.

The flowchart here shows you the New Zealand Patent application process under the Patents Act 2013.

Keep your patent alive

Once granted, a New Zealand patent lasts 20 years from the filing date, which must be renewed every year from the 4th anniversary of the filing date to keep the patent alive.

New Zealand patent application process



Protecting your Invention Overseas

A New Zealand patent protects an invention in NZ only. To get patent protection overseas, you must either:

- file patent applications with intellectual property offices in overseas countries, or
- file an international application under the Patent Cooperative Treaty (PCT)

When to file overseas patent applications

The best time to file overseas patent applications is within twelve months from filing your first application for this invention. It may, in fact be the only time you can file applications overseas, depending on the details of your situation.

New Zealand is a member of several international patent treaties. If you file an original patent application in a member country of one of the international patent treaties, such as New Zealand, your 'convention deadline' is one year from that filing date.

The convention deadline means that any equivalent applications you file in other treaty member countries by the convention deadline, may claim the benefit of the filing date in the first country ('priority date'). The advantage of an early filing date is that you may exclude prior art that was published in the intervening period for assessing novelty of your invention.

You can file overseas applications after the convention deadline, but you risk your application being invalidated by:

- third party use or publications
- use or publication of your own invention, (eg if your invention is no longer secret), or

- publications of one of your own equivalent patent applications filed in another country.

Not all countries are members of the international convention or have similar reciprocal agreements with New Zealand. It is important for you to decide all the countries you want patent protection moving forward.

Strategies for filing overseas patent applications

Filing patent applications overseas and continuing those applications to granted patents is expensive. You will first need to prepare a complete specification to file the overseas application.

Preparing the complete specification

When preparing and filing a complete specification for the New Zealand provisional patent application, you can use this specification as a base for specifications filed in other countries. For some countries, IP lawyers will need to tailor the complete specification, which may incur extra costs. If you are not filing a complete specification in New Zealand, sometimes IP lawyers may charge a fee for preparing the complete specification. There are two ways to file overseas applications. The first is by filing separate applications into individual countries and the second is to file using the international patent route.

Filing separate applications in countries of interest

You can file an application at the patent office of each country that interests you. You can also file an application that covers the European region. You should consider filing applications in countries where your product could be made, sold or licensed now or in the future. We can help you develop a patent filing strategy that works towards your commercialisation goals. The filing requirements vary between countries. We can explain the requirements in detail once we know which countries you want to file.

Costs for filing separate applications overseas

Overseas patent application fees vary depending on:

- the patent office and patent attorneys' fee structures in each country
- exchange rate fluctuations
- the length of the patent specification (which must be translated for non-English language countries)
- number of claims
- whether we receive instructions from you close to the deadline - if so you may incur late penalty fees in some countries.

The table below shows average fees for preparing and filing patent applications in some countries. These fees are in addition to the fee for preparing the complete specification as mentioned above.

Australia: \$3,000	Mexico: \$7,000 - \$12,000
Brazil: \$6,000 - \$10,000	Singapore: \$4,500
Canada: \$4,500	South Africa: \$4,000
China: \$7,000 - \$12,000	South Korea: \$6,000 - \$10,000
Europe (UK & 31 countries): \$15,000 - \$20,000	Taiwan: \$7,000 - \$12,000
India: \$3,000 - \$5,000	UK (only): \$5,000
Japan: \$10,000 - \$15,000	USA: \$6,000 - \$10,000
Malaysia: \$4,000	

If your application initially includes several inventions, to continue your protection, you have to file separate 'divisional' applications for each invention in each country. The cost of filing several applications is high but the costs are usually delayed until each patent application's examination starts. Each divisional application costs about the same as the original application.

Depending on where you file your patent application, other fees can include:

- annual fees after filing the application to keep an application pending
- examination fees
- dealing with patent office examination reports
- final fees to have a patent issued

If you file a European application, once the patent has been granted, there will be fees for validating the patent in European countries where you want the patent to have effect.

Patent Cooperation Treaty (PCT) patent application

The Patent Cooperation Treaty gives an alternative route to filing patent applications overseas. **Page 15** shows a flowchart showing you the PCT patent application process. You can file an international patent application under the Patent Cooperation Treaty to delay the costs of filing individual national patent applications in each country that interests you. This delay gives you the chance to explore further your invention's commercial prospects before investing more heavily in patent protection. A PCT international patent application can cover over 140 member countries. PCT member countries include: New Zealand, Australia, USA, Canada, UK, France, Germany, Italy, Netherlands, Sweden, Spain, China, Japan, Korea, South Africa, Malaysia, Brazil and others. Not all countries belong to the PCT system. Countries that are not PCT members include Taiwan and many South American countries.

When you file a PCT international patent application, PCT examiners make a patent search and assess your invention's patentability. They issue a patentability report to the applicant usually 2-6 months after you file the PCT patent application. Usually about eighteen months after filing the PCT application, you will need to begin filing patent applications in each country that interests you.

Costs for filing a PCT international application

The average fee for filing a PCT international patent application is usually \$5000-\$8000, including official fees. This filing fee is in addition to fees for preparing the complete specification that needs to be filed with a PCT application. Fees for preparing the complete specification are described above. Filing costs may be higher in complex cases, or if a single application covers more than one invention.

Advantages of the PCT international system

The PCT system offers some important advantages over filing applications separately in each country of interest. The main advantage is that it delays your costs until you are more confident that your invention will be a commercial success. Another advantage of the PCT system is that once your PCT application satisfies a PCT examiner, it should be in better order for those countries where you file national applications.

Searching

A novelty search is important if you are considering filing patent applications overseas or a PCT international patent application. A patent application will only lead to a valid patent if your invention is novel and inventive. Although it is not essential that we do a novelty search before filing patent applications internationally, we strongly recommend novelty searching now even if we searched before filing your provisional application.

A novelty search:

- will give you an idea of how likely your patent application is to succeed, and
- may find documents that affect commercialising your invention.
- We can also do a freedom to operate search in specific countries to find others' IP rights that the commercial embodiment of your invention may infringe. Freedom to operate searches are more expensive and complex than novelty searches.

Indicative Process for filing overseas patent applications

