

CIS Summer School 2014

Technology Transfer

Preparing an Investment Pitch

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Queen Mary Innovation (QMI)

QMI:

- 9 Staff:
 - 2 in the Technology and Engineering Team
 - 2 for the BioPharma Team
 - 5 in support functions
- Situated in the Queen's Building

Fundamentally QMI is about Technology Transfer

Technology Transfer: the Basics

Nearly always based on a substantial piece of Intellectual Property

Intellectual Property:

- **Patents:** Potentially the most valuable type of IP. Gives the owner a “monopoly” right
- **Know-how:** Technical information, knowledge or skills
- **Copyright:** Arises automatically and can cover written work, music, sound recordings, software, photographs and film
- **Designs:** Can be unregistered (arises automatically) or registered (at UK patent office)
- **Database rights:** Protect the collection of independent works, data etc that have been systematically arranged. Arises automatically.
- **Trade Marks:** Most identifiable element of a successful product or service. Can be unregistered [™] or registered [®]

IP Commercialisation Options

- **Licensing**

- Partnering with an existing company, with a view to leveraging its expertise and/or market position, in return for a revenue stream.
- Usually commitments to assist with development going forwards.

- **Assignment and revenue share**

- **Spin-Out or Start-Up Company Formation**

- Creation of a new company funded by venture capital to develop and sell products based on the invention with the aim to an exit.

Licensing

- **Based on Intellectual Property (IP)** (patent, software copyright, know-how, design right), which is usually the result of a substantial body of development, and has been significantly de-risked
- Licensed either **exclusively or non-exclusively by field**. Usually includes milestones, min royalty payments to minimise the risk of the Licensee doing nothing
- The licensee often has to do **significant further development** - software probably the exception. Therefore, some support required by inventors
- Signing fees and **royalties** generally quite low: £10k- £100k
- Big Companies notoriously risk adverse – hence **first step can be PoC funding**

Spin-out Company

- **IP licensed/assigned** from University to spin-out - IP usually the result of a substantial body of development
- Generally a **platform technology**, or has a number of applications in different markets
- **Venture Capital investment** in exchange for equity to achieve specific milestones which aim to trigger subsequent investment
- **External management** to drive commercial side. Inventor commitment high – a number of days a week (Chief Scientist)
- Will go through a **series of funding rounds** against milestone achievements where the value of the company increases
- End game: exit either through a **trade sale or IPO** for a significant value (~\$10m to University and inventors)

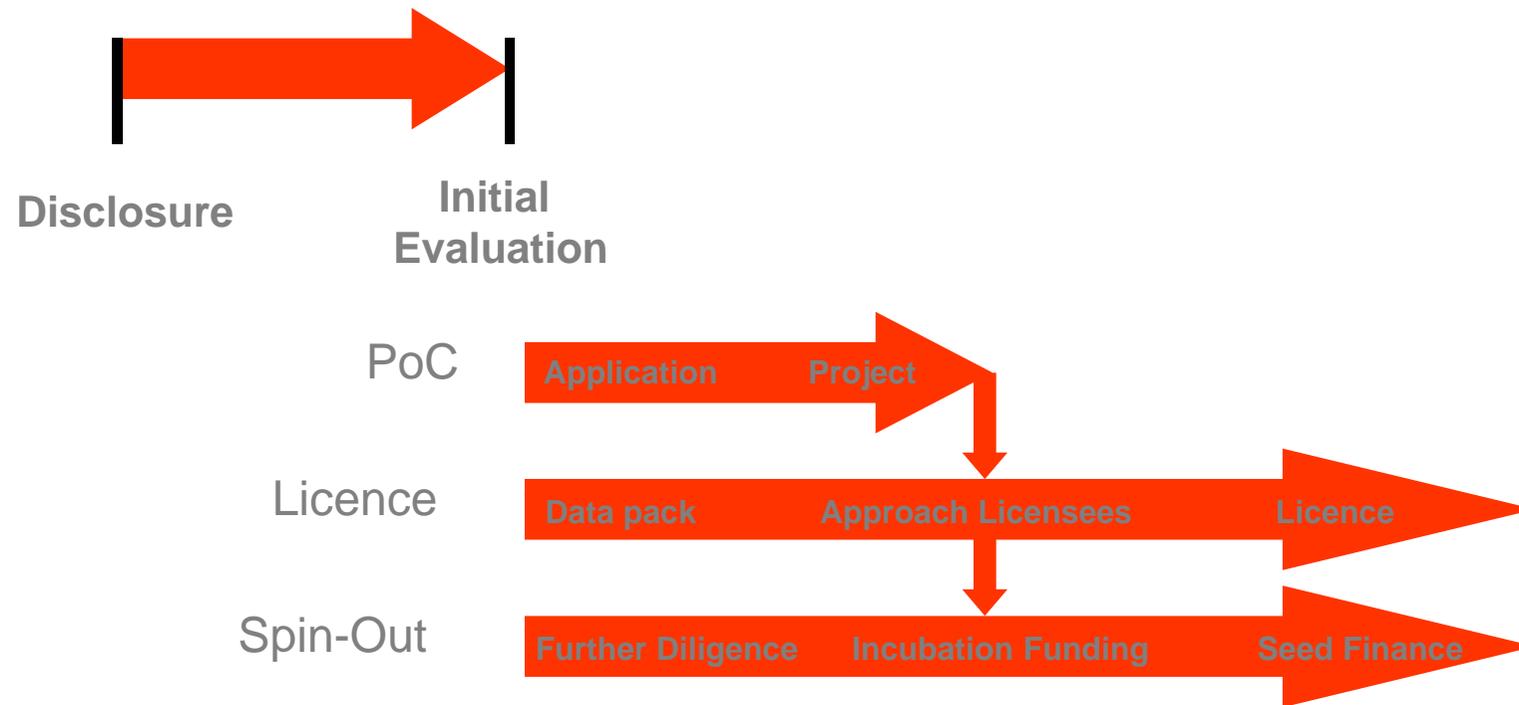
Spin-Out vs Licence

	Spin-Out	Licence
Value	High	Low
Risk	High	Low
Control	High	Low
Human Capital	High	Low
Technology	Less Mature	Mature
On-going support	High	Low

Spin-out vs Licence

- An Obvious Licence
 - **Market is mature** with a small number of dominant players, i.e. these companies are needed to get to the market
 - **Technology is mature** with limited (one) applications
 - Examples: software; established market engineering projects: requiring skills and market position of licensee to be a success – i.e. no go it alone option
- An Obvious Spin-out
 - **Requires significant capital** to de-risk before commercial take up – healthcare for regulatory; large engineering for scale-up
 - **Growing Market**, no obvious dominant licensee. Don't require skills of another company and market position to be a success
 - **Platform technology**: lots of potential applications

QMI Process



The Investment Pitch

Structure of an Investment Pitch

- Opportunity Summary
- Market and Competition
- Technology Solution
- IP and Protectability
- Value Proposition and Business Model
- PoC Project Plan
- Summary

Opportunity Summary

Summarise the overall commercial opportunity succinctly, stressing:

- **the burning need for the product**
- **how benefits of the product meet this need**
- **the scale of the overall opportunity**

Market and Competition

Market:

- **Size and growth** rate of the Addressable Market, with references to sources
- **Need:** desirable vs essential – third party opinion
- **Make-up:** for spin-outs are their comparables – examples of consolidation/ acquisition; for licensing – are there companies with an in-licensing strategy

Competition:

- Identify the **USP** of the competitors
- Match these to the **needs** of the market to hopefully identify a gap

Technology Solution

- Provide an **overview** of the technology
- Highlight the unique **features** and state the stage of development and tangible data which substantiates these features
- Stress the **benefits**
- How do the benefits **meet the gap** identified in the Market and Competition section

IP and Protectability

- Make a statement on how the features in the Technology Solution are protectable by reviewing the state of the art
- State the most appropriate form of IP protection
- Are there other barriers which will stop third parties from copying the technology.
- Has a freedom to operate search been undertaken and if so what was the outcome

Value Proposition and Business Model

- Why will the final customer buy the product – what value is it to them (again with referenced sources or third party opinions)
- What is the chosen business model:
 - How will you get the product to market?
 - What is the distribution channel?
 - Where are you in the Value chain?
 - How much will your route to market cost?
 - And fundamentally how will your product make money?

Commercialisation Plan

- What is the PoC project plan and how much will it cost
- What are the key resources
- What are the milestones and where will the technology be when completed – its it compelling to get to the next stage
- What are stages beyond the PoC project to get the product to the customer

Summary

Present an overview of the key points from the pitch.