Commercialising research: demystifying Isis, IP & commercialisation

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Isis Innovation Ltd

26 June 2014
What is Isis Innovation?

Discuss in groups what you understand about Isis Innovation.
Isis Innovation Ltd

A company 100% owned by the University of Oxford

Oxford Technology Transfer
IP, Patents, Licences, Spin-outs, Software Start-ups, Material Sales, Seed Funds, Isis Angels Network

Oxford Expertise
Consulting, Services

Isis Consulting Business
Technology Transfer and Innovation
Year-ending March 2013

- **313 Disclosures**
- **105 Patents Filed**
- **98 Licence Deals**
- **297 Consultancy Engagements**
Year-ending March 2013

- **£11.5m** Annual Turnover

- **£5.6m** Returned to University & Researchers

- **105** Patents Filed

- **10** New Companies
Agenda

Recent Isis news → Technology transfer and IPR

Oxford University Consulting group exercise → Isis software incubator case study
Isis making news – 2014 – Natural Motion

- Isis activities have made big headlines in recent months – you may have heard success stories such as……

- The sale of Isis spin-out **Natural Motion**, founded by Torsten Reil in 2001 (ex Dept of Zoology), to Zynga for $527m

- The University will benefit from more than £30m in cash and shares from the deal, which will replenish seed funds managed by Isis that will help launch the next generation of spin-outs
Isis making news – Nightstar (Jan 2014)

• Restoring sight – formation of Isis spin-out Nightstar with £12m investment from Syncona (Wellcome Trust)

• First programme is gene therapy for an inherited form of progressive blindness (choroideremia) developed by Professor Robert MacLaren at Nuffield Laboratory of Ophthalmology
Isis making news – OxCEPT (Jan 2014)

- **OxCEPT** – secure mobile-to-mobile payments, enabling information to be transferred simply and securely so that mobile phone users can safely pay merchants and each other.

- Based on IP from Prof Bill Roscoe’s group in Computer Science.
TECHNOLOGY TRANSFER
PATENTS, LICENSING AND SPIN-OUTS
Summary

• Commercialisation / technology transfer
  • Work with new discoveries
  • Protect the underlying intellectual property to provide security
  • Find the best route to market

• Return money to the University and inventors
• Create impact
What is Intellectual Property?

• Intellectual Property (IP) can be ideas, information and knowledge
  • In a University context IP is the results and outcomes of research
• “Intellectual” because it is creative output
• “Property” because is it viewed as a tradable commodity
• Intellectual Property Rights (IPR) are specific legal rights that protect the owners of IP
What are Intellectual Property Rights?

**Patents**
- Innovations, Methods, Processes, Physical Matter, Reagents, Compounds, Devices

**Trademarks**
- Logos, Jingles

**Copyright**
- Music, Art, Software, Questionnaires, Business Plans, Databases

**Know-how**
- Expert skill, information, knowledge
But what is a patent?

**Novel**
» Never disclosed or made public anywhere in the world before the application date

**Inventive**
» Not an obvious modification of what is already known

**Applicable**
» Capable of being used or made in any kind of industry

**Enabling**
» Sufficient detail for others to be able to practise
Where’s the IPR?

Discuss the case study in your groups
What can you do with Intellectual Property Rights?

• Commercialise the technology using two main routes:
  • Licensing – give an existing company the right to use the technology in exchange for money
  • Spin-out – set up a new company specifically to develop/sell the technology
## Licensing versus spin-out

<table>
<thead>
<tr>
<th>Licence</th>
<th>Spin-out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low risk</td>
<td>High risk</td>
</tr>
<tr>
<td>Relatively low investment</td>
<td>Requires a large investment</td>
</tr>
<tr>
<td>Doesn’t require a large market</td>
<td>Need a large market to justify the investment</td>
</tr>
<tr>
<td>Suitable for technologies that make small,</td>
<td>Suitable for completely new technologies that don’t fit the current</td>
</tr>
<tr>
<td>but significant, improvements over current</td>
<td>market stereotype</td>
</tr>
<tr>
<td>products</td>
<td></td>
</tr>
<tr>
<td>Best for technologies that are close to</td>
<td>Suitable for technologies that require a lot of money to develop</td>
</tr>
<tr>
<td>market</td>
<td>the final product</td>
</tr>
<tr>
<td>Suitable for products with specific</td>
<td>Best for platform technologies that address a number of different</td>
</tr>
<tr>
<td>applications</td>
<td>applications</td>
</tr>
</tbody>
</table>

What would you do with these technologies?

Discuss the case study in your groups
Chilli Sensor

- Licensed to Bio-X in 2013
- Company already produces a number of biological / chemical diagnostics
- Contacts within the food and beverage industry
- Trials ongoing at a variety of food and beverage companies throughout the world
pH Sensor

• Spin-out formed in 2008
  • Now called Senova Systems
• Secured $10 million in funding
• Launched the world’s first calibration-free pH meter in 2012
• Won a variety of innovation awards
Isis Software Incubator

• Case study – Oxiway Ltd
The traditional spin-out model?

- IP
- CEO
- $$($$)
The (different) approach taken by the incubator – 3 principles

• All (software) ideas welcome
• (but) No Patents
• An emphasis on building a business (rather than writing a business plan)

“Those are my principles, and if you don't like them... well, I have others.” Groucho Marx
So...(it all starts with) two founders with an idea
Q1: What do you do with an idea and £5k?

https://www.youtube.com/watch?v=gCR2zkJuqdA
Q2: You have a growing user base, but no revenues, how do you monetise?
What happened next?
## The budget

<table>
<thead>
<tr>
<th>Category</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware</td>
<td>250.00</td>
</tr>
<tr>
<td>Presenting at freshers’ fairs</td>
<td>900.00</td>
</tr>
<tr>
<td>Marketing material</td>
<td>600.00</td>
</tr>
<tr>
<td>Software and hosting</td>
<td>750.00</td>
</tr>
<tr>
<td>Software development</td>
<td>2,500.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5,000.00</strong></td>
</tr>
</tbody>
</table>
Good News!

huge congrats to @IsisIncubator venture @Oxiway on getting accepted to Microsoft AppCampus, well done guys! #AppCampus

6:47 AM - 7 Feb 2013
Bad News!

• Ad based business model doesn’t live up to revenue predictions

• So… if Oxiway is getting a student everything they need during their student years, what do they need next?
A Job!

Innovating Recruitment

mevitaecoming soon!

apple android windows
The Journey Continues…

• Accepted to UKTI highly competitive Sirius programme

• Several recruitment sector clients
Oxford University Consulting

To help **academics** identify and manage consulting opportunities.

To support **departments** in arranging external services (including consultancy) work.

To provide **external organizations** with access to University expertise.
Academic Consulting & Services

“Consultant”
Professor/PI/Post-Doc/DPhil
Student/Department

ADVICE
EXPERTISE
SERVICES

£ FEES

“Client”
Company, Charity, Government body

Important: Done while employed/studying at Oxford
Group Exercise

• Examples of academics’ interactions with external organisations.

• In groups, discuss each example and decide what type of the opportunity exists and who should the academic be directed to for help?
Consultancy: Licensing & Spin-outs

Licensed Technology

CONSULTANCY TO: SUPPORT, ADVISE, GUIDE, ENABLE

DEVELOP

GROW

New Spin-out
QUESTIONS?

FEEDBACK FORMS
Working with Isis

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