

Theory: Determining the right commercial path for the technology and market

Elena Andonova 27th January 2011

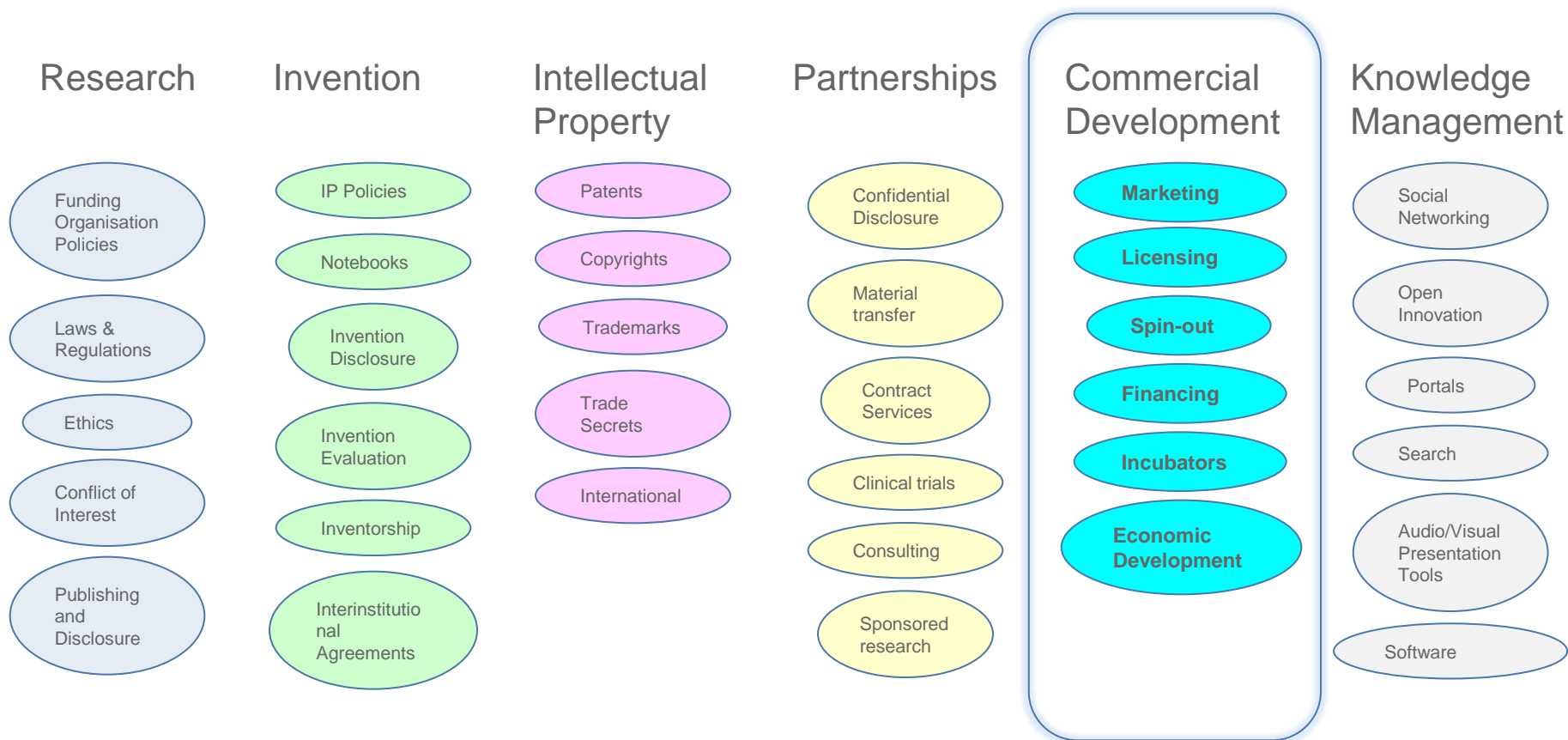
Public Policy - Spin-Out vs. Licence

- The decision to create a spin-out company, licence technology or a combination of both is influenced by public policy and will have a social and economic impact on the region.
- Public policy, regulation and incentives can be designed to encourage one choice or the other.
- There are a variety of social and economic impacts related to the two choices
- The **European Parliament** adopted an initiative report calling upon Member States
 - to make more intensive use of positive examples from other Member States for their own programmes to promote entrepreneurship;
 - to speed up the implementation of the European Charter for Small Enterprises
 - to make greater efforts in the areas of education policy, rules and regulations, cost and time involved in establishing new businesses, provision of risk capital and start-up finance, innovation and technology transfer and tax relief.

Public Policy - Spin-Out vs. Licence

- Jobs creation – direct and indirect
- Economic growth and building the corporate tax base
- Balance of trade – wealth being retained locally or leaving the region or country
- Building the innovation community with businesses, universities and government
- Retaining benefits from local research for the local economy and population
- Rate of failure of start-ups
- Maximizing return on government investments in research
- Maximizing return from government subsidised start-up companies

Same background issues for Licence or Spin-out



Licensing may be appropriate if:

- There are significant barriers to a new company entering the market
- The marketplace comprises a small number of large companies
- It is a niche technology (this can also be a spin-out bonus)
- There is a single patent
- The technology is near market and requires little further development and investment. The product may have been targeted for this development path
- A company is linked with the research either as a sponsor or interested observer
- The technology fits an existing company's IP/product portfolio
- Licensing is a common strategy within the industry sector
- Licensing links are strong within an industry sector

Licence Income

Licence income has a time lag element

- The time lag between first invention disclosure and product launch
 - +5 years
 - +10 years Pharma
- Licence income tends to build up over a very long time, occasionally you get a nice surprise – TT Oxford

Licensing

Pro

- They do the work, you get paid
- Can generate significant revenue
- Usually faster time to market
- Lower cost, less risk

Con

- Usually needs patent protection
- Sometimes it is a long wait for the revenue stream to flow
- Relies on licensee to do the work and market the product
- May need proof of concept (resources)
- They might bury it or under resource the effort

Spin-Out

A spin out company may be appropriate if:

- Entry to the market by a new company is relatively easy with few significant barriers
- The marketplace is fragmented with a lot of small companies
- The technology has many applications
- There is a portfolio of patents
- Further investment is required in the technology and associated infrastructure in order to reach the market
- There is a group of founders motivated to start a company
- It is likely that investment funds can be raised for a company
- There is a financial exit route for investors, including the University
- Keep an eye on the economic climate, there may be odd shifts that you need to be ready for.

Spinouts

Pro

- Exciting and attracts attention and recognition
- You can potentially make more money
- You still retain some control

Con

- Usually needs IP protection
- Large competitors may present an insurmountable barrier to entry
- Needs Investment
- Needs management
- Needs a lot of your time
- Needs a lot of external advice
 - Management, Lawyers, etc.
- Higher risk

Macroeconomic Environment and Biotech

- Global credit crunch
- Change of Government
- UK particularly badly hit

'risk' drove sector specific withdrawal from start ups, particularly Biotech

- No IPO exits
- Less capital for venture funds
- Public share prices fall
- Less public capital for start ups

The Problem for Investors

- Clinical phase assets in 'distress'
- Funds conserving capital for existing portfolio companies
- Limited appetite for new investments
- Unable to achieve 'exits'
- No recycling of funds
- Lower risk assets more attractive
- Increased activity from Corporate VCs

However - good news?

Funding drought appears to be easing

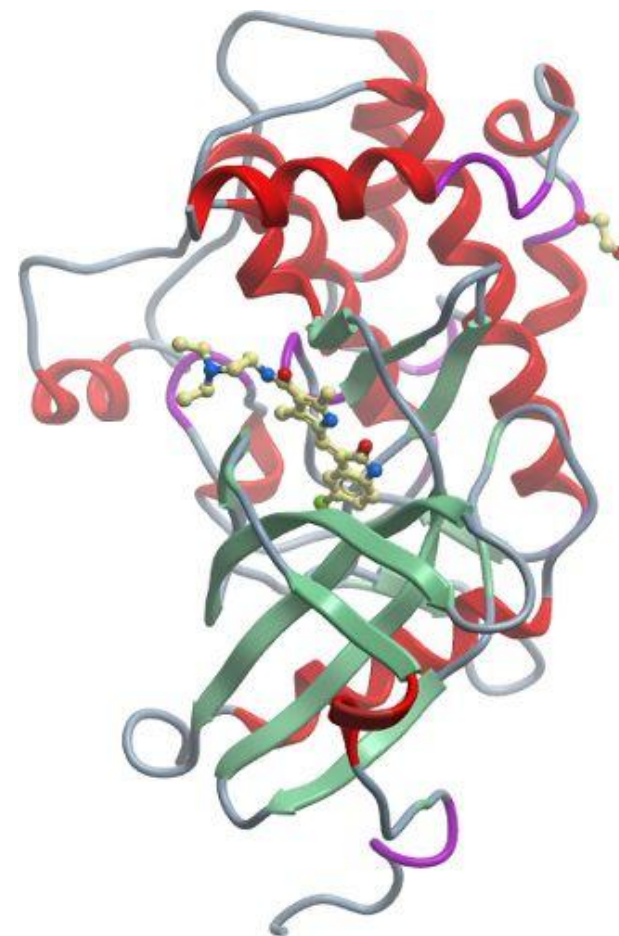
- Financings closing in 2010
- IPO market – glimmer of opening
 - Movetis (Human Genetic Therapies) raises €85m on Euronext
 - Forecast increase in IPO in 2011
- Trade sales recycling funding back
 - Abbot acquires Facet for \$722m
- Corporate funds investing heavily – ‘cash is king’
- Generally more optimism in sector
- Companies report toughest end to year but...
- BioEurope Spring in Barcelona much more upbeat

Discovery assets may have most traction

- Innovation key
 - Business models
 - Science
 - Deal-making
- 'Preclinical gap' growing
- Biologics seen as attractive
- Fundamental diseases remain
- Long timeline to exit – 'paradoxical' benefit
- Least cash required at moment

Structural Genomics Consortium (SGC)

- Founded in 2001 as a non profit
- Mission: Aims to determine the 3 dimensional structures of proteins of medical relevance and place them in the public domain without restriction
- The SGC operates out of the Universities of Oxford and Toronto and Karolinski Institute in Stockholm
- The SGC accounts for ~30% of the global output of new human protein structures each year
- ~50% of the annual global output of structures of proteins from human parasites
- The SGC target proteins have relevance to human health and disease, such as diabetes, cancer and infectious diseases such as malaria
- <http://www.sgc.ox.ac.uk/>



Summary for Investment

- Recovery still unstable
- New Government in UK
- Focus of Big Pharma on developing world & generics
 - Possibly more focused on top-line growth
- Early-stage VC funds starved of cash
 - Valuations under pressure
- Non-dilutive funding probably more scarce
- Looking for 'mixed' models

What the Investors say

“We prefer to have our initial investment at the earlier stage to build the company and follow with additional investment in pace with the company’s progress.” – **Novartis Venture Fund**

“Novo's typical investments are as equity ranging from 1 to 15 million Euro. We may invest at any stage of development of a business idea - from seed capital over private placements to IPOs and public companies. We may invest in any part of the world. In extraordinary situations we may provide funds on a smaller scale for embryonic start-ups.” – **Novo Ventures**

Same Process, Different Emphasis

Licensing

Spin - Out

Research

Funding Organisation Policies

Laws & Regulations

Ethics

Conflict of Interest

Publishing and Disclosure

Invention

IP Policies

Notebooks

Invention Disclosure

Invention Evaluation

Inventorship

Interinstitutional Agreements

Intellectual Property

Patents

Copyrights

Trademarks

Trade Secrets

International

PTO

Partnerships

Confidential Disclosure

Material transfer

Contract Services

Clinical trials

Consulting

Sponsored research

Commercial Development

Marketing

Licensing

Spin-out

Financing

Incubators

Economic Development

Knowledge Management

Social Networking

Open Innovation

Portals

Search

Audio/Visual Presentation Tools

Software

Three scenarios

1. Licence into Spin-out vehicle to raise investment
2. Licence into an existing company that has money to invest already
3. Licence into a holding or virtual company for development /translation for licence to 1 or 2

Spin out to licence?

Example –

- Vehicle to take on a family of patents
- Virtual company
- Raised money
- Licensed the technology to third party
- Board engagement poor
- Heavy reliance on Academic
- Key issues with the third party licence agreements and University license agreements
- Due Diligence key issue

Spin out

Example –

Basis for 'spin-out' exists but...

- Package of assets has highest value in company
- Scientist focus on 'current' areas
- lacks market-led linkage
- Needs to be in company with commercial focus
- Strong IP position
- World-class science provides strong basis
- Funding environment loosening up
- Spin-out would not have been possible in 2009/2010
- 'Piece-meal' licensing of assets sub-optimal
- Several partners

Licence

Example -

- Very narrow IP has been filed, with a second filing coming
- Landscape very crowded by big companies
- Technology mature
- Solves and un-met need
- Background licences required
- Academic has no interest in moving to a spin-out
- Academic is an acknowledged world expert with good industrial connections
- University has a small PoC fund and no more.