Business creation – incubation & acceleration

Macro-Regional Innovation Week
28 September 2016
Trieste, Italy

Dr Tim Hart
Managing Consultant, Isis Enterprise
Outline

• Who we are

• An international problem

• Our experience in incubation design and support

• Thoughts and experiences in entrepreneur support services

• Incubation experiences in Oxford

• Why incubation will become even more important in the future
**Isis Enterprise: Our Mission & Services**

**Our mission is to provide high quality innovation management consulting services and advice to universities, corporates, investors and governments, adding value and enabling economic growth at all levels.**

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About the speaker

Managing Consultant Tim Hart

Entrepreneur and CEO of several spin-out companies
>25 years experience in international technology commercialisation
Background in Microbiology

Experience

- Isis Enterprise
- CEO, ZYOXEL Ltd
- CEO, Cybersense Biosystems Ltd

Education

- PhD
- University of Surrey
- BSc
- University of Nottingham
An International Problem: two extremes

“Too many universities jumped on to the spin-off bandwagon in the early 2000s without the wherewithal to necessarily produce good-quality businesses. Consequently many were burnt when their spin-offs failed to take off or deliver any returns”

Glenn Crocker, CEO BioCity
How many incubators are there?

- 1,200 incubation programmes in the US, and over 7,000 worldwide.
- 260 start-up support programmes (both incubators and accelerators) across 10 European countries, 50 UK based

*European Incubators and Accelerators in selected countries, 2001-2013*
Some recent editorial on incubation


Efficiency

The evolution of startup incubators - an insider's view

Incubators are a growth area, helping entrepreneurs create sustainable companies while benefiting the wider business community

https://www.timeshighereducation.com/news/how-to-create-a-successful-start-up-incubator/2017018.article
Impact and Benefits... for participants and community

• **Benefits to the Community**
  1) Business Retention & Job Creation;
  2) Increased Tax Revenue - $30 in local tax revenue for every $1 spend (NBIA)
  3) Development of an entrepreneurial ecosystem and culture

• **Benefits to Participants**
  1) improved success rates for new ventures - 85-98% compared to 30% (UKBI)
  2) overcome cost barriers
  3) knowledge building and exchange
  4) increased exposure

References:
NBIA, Business Incubation Works,1997
What the difference between an incubator and accelerator?!
It all starts with understanding the local context...

- We used to preach the ‘Oxford Model’

- Our approach now is to listen and use our global experience to co-develop a bespoke solution – and support implementation if required
Our approach to developing incubators and support services

- Benchmarking studies
- Best practice reviews
- Ecosystem analysis
- Stakeholder analysis
- User needs survey
- Process and policy
- Business plans

- Training design
- Operating procedures
- Process and policy
- Seed fund design
- Incubation services
- Mentor networks

- Programme management
- Staff training programmes
- Application review
- Seed fund management
- Mentoring and training
- Accelerator programmes
- Workshops and interventions
- Market assessment services
Entrepreneurship Centres: Common Offerings

- **Incubation (Workspace & Supports)**
- **Accelerator (intensive kick-start programme)**
- **Mentoring (regular support from experts)**
- **Competitions & Awards (business plan, pitching)**
- **Funding instruments (capital, development)**
- **Educational programme (focused on learning and coursework)**
- **Events (conferences, forums, debates, networking, platforms)**
Planning for a new entrepreneurship centre in Leiden

- During 2015, IE supported the creation of an exciting new entrepreneurship centre in the Dutch city of Leiden by providing a detailed business plan
- IE applied its expertise to ensure a strong start for the new Leiden Center for Innovation and Entrepreneurship (LCIE) which aims to catalyse the region’s entrepreneurial activity
- To inform the plan, IE conducted:
  - stakeholder meetings with members of the Leiden entrepreneurship and innovation ecosystem
  - desk-based benchmarking research on US, UK and Dutch entrepreneurship centres
  - benchmarking interviews with UK and Dutch entrepreneurship centres and incubators
- The business plan sets out a development programme and service offering, governance structure, financial model, staffing plan, implementation model and KPIs
Results

- Funding approved by project partners December 2015
- Launch planned for June 2016
Case Studies  Incubator Analysis and Design

Andalucía TECH LINK Incubator

Icra Enterprise worked with Andalucía TECH to assist with the development of incubation and entrepreneurship services at the University of Huelva. The project had three phases:

- Ecosystem analysis
- Impact and recommendations
- Bespoke training in technology transfer and entrepreneurship for staff

The findings from the project are being used to inform Andalucía TECH's programmes and funding strategy for the future.

Leiden Centre for Innovation and Entrepreneurship

In a high-profile project to establish a new entrepreneurship centre in the Dutch city of Leiden, Icra Enterprise worked closely with project partner Lesta, to develop a business plan and a service offering for the centre.

To form the analysis, we conducted interviews and created focus groups with members of the local entrepreneurship and innovation ecosystem, and provided a benchmarking analysis of UK, US, and Dutch entrepreneurship centres and incubators.

The output was a detailed business plan and a presentation to key decision makers and stakeholders. The stakeholders have approved funding and the centre is due to open in 2022. We look forward to achieving its objective of becoming a vibrant hub and catalyst for regional entrepreneurial activity.

TAKEOFF: A new business incubation centre for Malta

From 2012 – 2014 we advised the University of Malta on the creation of a brand new business incubation centre and seed fund. This involved developing a business plan, providing policy advice, and training staff in technology transfer and business incubation.

The new centre, named TAKEOFF, helps technology and knowledge-based entrepreneurs and start-ups transform their ideas and innovations into market-ready businesses. TAKEOFF has already experienced great success, in its first year alone, it attracted 16 ventures and distributed over €100,000 in awards for start-ups and proof-of-concept projects.
Basic elements of the perfect incubator

• Community (preferably in the same place) of start-ups who can share resources and experiences

• Creates a critical mass, attracting specialist support and funding opportunities

• Low cost, flexible, serviced office and meeting space
Components of an Ecosystem for Entrepreneurship

The existence or non-existence of these seven components may impact the ability of a company to grow in a sustained way for the next 3-5 years.

[Diagram showing the components of an ecosystem for entrepreneurship: Markets, Culture, Support Mechanisms, Funding and Finance, Education and Training, Regulatory Framework and Infrastructure, Human Capital / Workforce Availability]
Emulating Silicon Valley’s success

- World class industry access to research
- Primary, almost exclusive source of its research budget is the federal government
- Developing “T-shaped” students
- Involvement of alumni
  - Mentoring / coaching
  - $6.32Bn in donations to University over five years
- Proximity of Venture Capitalists / alumni
  - Competitions (BASES 150K / E-Challenge)
  - Classes (Launchpad and Creating a Startup)
  - Accelerators (StartX or at Y Combinator or Lightspeed Ventures Summer Fellowship Program)

The EY G20 Entrepreneurship Barometer

Access to Funding
- Seed
- Start-up
- Growth
- Expansion

Education & Training
- Pre-University
- University
- Entrepreneurial Education
- Informal Education

Support
- Incubators
- Networks
- Mentors

Tax & Regulation
- Tax
- Business Friendly Regulation
- Government Incentives

Entrepreneurial Culture
- Fear of Failure
- Attitude to Risk
- Entrepreneurship as a career choice
- Celebration of self-made wealth
- Innovation & Research Culture

Strengthening Poland’s entrepreneurship

- An intensive nine-week course saw 75 delegates from Polish universities and research institutes develop their technology commercialisation skills at the Universities of Oxford and Cambridge

- IE collaborated with Cambridge Enterprise to deliver the annual Top 500 Program course for 2015, funded by Poland’s Ministry of Science and Higher Education

- IE’s course covered innovation, intellectual property and technology transfer, combining practical, team-based exercises with networking opportunities

- Delegates were given the opportunity to experience the Oxford entrepreneurial ecosystem, with direct insight into how companies exploit research

- Real-life examples of entrepreneurship and innovation equipped the Top 500 delegates with the skills to bring high-technology products to market, bridging the gap between academia and business in Poland
Innovation and entrepreneurship training

For two years running Isis Enterprise has designed and delivered specialised training programmes for the Launch in Innovation Scholarship programme organised by the Royal Academy of Engineering (RAE) in London. The prilised training in business modelling, strategy, finance, Intellectual Property and regulation for delegates from around the world, and coached them on how to present their technologies and pitch to investors. The aim was to help the fellows develop business propositions for their innovations. Delegates returned to their respective countries with new insights and contacts, and a clear idea of how to take their projects forward.

Malaysian SME growth and internationalisation

In a two-year project for the Malaysian government, Isis Enterprise worked in close collaboration with its partner BDEC Resources Malaysia to facilitate selected Malaysian producers of light-harvesting plants (AS) targeting world-class competitiveness, tackling vital challenges such as company profile and branding, product certification, and marketing, we engaged carefully selected companies to create tailor-made internationalisation strategies.

The project met its two key metrics, there were total sales of RM 86m (against a target of RM 85m) and 26 LED products were certified for sale overseas (against a target of 20) with over 100 more due to be certified. The companies’ connections with the global marketplace have also flourished, and discussions are underway with potential partners and clients overseas. Isis Enterprise is providing similar assistance to companies in the Malaysian biotech sector throughout 2016.
Oxford Innovation Ecosystem

Organisations and spaces

**Isis Software Incubator**
Support for digital startups

**Launchpad**
Co-working space at the Said Business School with events and resources for startups

**Student Entrepreneur (Careers Service)**
Entrepreneurship information and events from the University Careers Service

**Begbroke Accelerator**
Lab and office space for companies scaling up – due 2016

**BioEscalator**
170,000 sq ft in offices and labs for Oxford companies at the Churchill Hospital – due 2017

Courses and resources

**Isis Innovation**
Protecting and marketing intellectual property and academic expertise

**Building a Business**
A series of lectures from the Entrepreneurship Centre of the Said Business School

**Enterprising Oxford Portal**
Resources, guidance and stories for Oxford entrepreneurs

**Ideas2Impact**
MBA innovation classes for DPhil students to participate in

**Oxfordshire Business Support**
Programmes and events from the Oxfordshire Local Enterprise Partnership

Networks

**Venturefest**
Annual high tech event: lectures, workshops and networking

**Oxford Entrepreneurs**
Largest student entrepreneurs society in Europe with over 10,000 members

**Isis Innovation Idea Idol**
Oxford Entrepreneurs' annual business idea competition – sponsored by Isis

**Oxford Innovation Society**
Oxford's Open Innovation network, managed on behalf of the University by Isis Innovation

Funding

**Oxford Sciences Innovation Fund**
£320m venture Fund earmarked for investment in Oxford IP and ideas

**Isis Angels Network**
Angel network providing investment into UO spinout companies

**University of Oxford Isis Funds & Oxford Invention Fund**
Managed by Isis Innovation, fund proof-of-concept and prototyping

**SBS Seed Fund**
MBA student run seed fund to support Oxford University startups

**OSEP Awards**
Awards programme from the Oxfordshire Social Entrepreneurship Partnership
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<th><strong>Oxford Invention Fund (OIF)</strong></th>
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<td>• Launched 1999 with £4m (£1m OU)</td>
<td>• Donate to support development of new technologies from Oxford</td>
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<td>• Over £7.5m invested in 143 projects</td>
<td>• Part of Oxford Thinking, the University’s fund raising Campaign</td>
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<td>• One of the few UCSF funds still running in its original form</td>
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<th><strong>University of Oxford Isis Fund (UOIF)</strong></th>
<th><strong>Isis Angels Network (IAN)</strong></th>
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<td>• EIS/SEIS funds for investors managed by Parkwalk Advisors</td>
<td>• For Business Angels and early-stage VCs</td>
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<td>• Isis Innovation is Portfolio Advisor</td>
<td>• 216 registered members</td>
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<tr>
<td>• 1st fund £1.25m fully committed, 2nd closed</td>
<td>• No membership fee</td>
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<td>• Twice-yearly meetings, newsletters</td>
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£320m Spin-Out Investment Fund

- Oxford Sciences Innovation formed to invest in spin-outs from Oxford (MPLS & Medical Sciences Divisions), Harwell & Culham laboratories

- Investing in new and existing spin-out companies, working inclusively with other investors

- Investors: Invesco, IP Group, Lansdowne Partners, Oxford University Endowment Fund, the Wellcome Trust, Woodford Investment Management, Google Ventures and Sir Charles Dunstone

The University of Oxford has lined up a roster of high-profile investors to back a £300m joint venture that will develop science and technology businesses, one of the largest attempts to commercialise intellectual property in the UK.

The University and Isis Innovation, its technology commercialisation subsidiary, are partnering with a new company, Oxford Sciences Innovation, to develop research from the university’s mathematical, physical, life sciences and medical sciences divisions, and commercialise their ideas into companies. The divisions will also advise companies as they grow.

OSI is raising £300m, of which £210m has been committed by six cornerstone investors. These include hedge fund Lansdowne Partners; Woodford Investment Management, an asset manager and the Wellcome Trust.

IP Group, a London-listed intellectual property business that invests in technology companies, is also backing the venture. David Norwood, who founded IP Group is...
Isis Start-up Incubator (established in 2010)

• Support for early-stage software ventures from Oxford University

• Assists the creation and development of a software business opportunity, whether or not a company has yet been incorporated

• Isis provides funding, commercial mentoring, negotiation support, services, desk space, access to business networks

• Projects that have a credible business concept and need:
  • Substantial work to develop IP and build a realistic commercial prospect
  • With entrepreneurial founders
  • But do not need patents, investors, full-time management

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OxCEI Launchpad Co-Workspace

- Hosted by Oxford Centre for Entrepreneurship and Innovation at SBS
- Co-workspace for entrepreneurs from the university and Oxford community
- A meeting space – “to collaborate, create and strengthen ventures, as well as to share knowledge, practice and connections.”
BioEscalator

- £11m funding from City Deal + University contribution
- Hub for the commercialisation of bioscience and medical research and innovation in Oxford
- Meeting point for entrepreneurial researchers, clinicians, medical entrepreneurs and a wide range of bioscience companies
- Managed by KEIT and Medical Sciences Division
Commercialisation strategy - conventional thinking

IP (patent) → license

IP (patent) → spin-out
A new way of thinking – ‘incubation vehicles’

Market/(impact) opportunity → Incubation vehicle → Mass market adoption

- Research collaboration
- Corporate licensing
- Spin-out / start-up
- Exit via trade sale/ IPO
Isis SME Smart IP Scheme – 2 stages

Stage 1
Development Licence

Stage 2
Exploitation Licence

1
SME Manufactures & Sells

2
SME Out-licence

3
Isis Re-licence

... adds more flexibility and reduce business risk for SMEs.
Supported by UK IPO as Fast Forward Winner 2014.
The future of technology commercialisation

‘Offer the broadest range of commercialisation support, with more focus on identifying market opportunities and realising impact rather than being so patent-led.’
Providing expertise and advice since 2004

- Policy and benchmarking studies
- Innovation Management
- Technology Commercialisation
- Translational Funding Impact Reviews
- Commercialisation Training
- Innovation Ecosystem Development
- Technology & Market Due Diligence
- Technology Scouting

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