

INNOVATIONS

Innovation@ The Junction

The what, why & how of creating spinouts

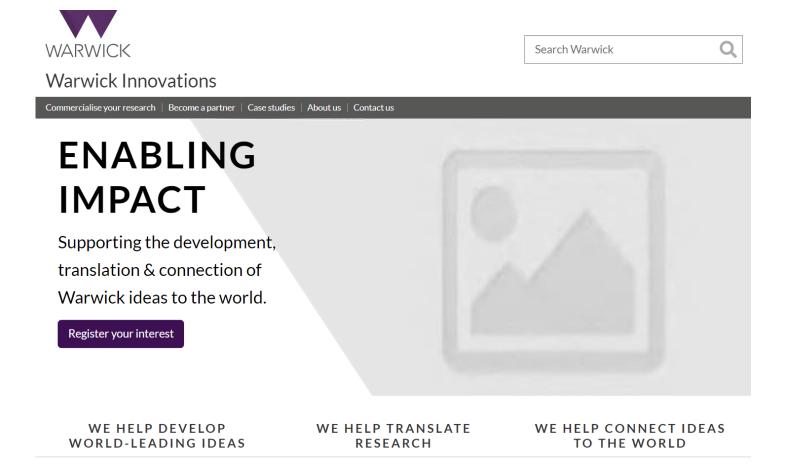
Dr Tim Francis

Business Development Manager

Thursday 27 June 2024



What we do?



Deliver impact through commercialisation Manage university research intellectual property



Why we do it?

WE HELP DEVELOP WORLD-LEADING IDEAS

We provide expertise and resources to help Warwick academics to develop skills and world-leading disruptive ideas.

WE HELP TRANSLATE RESEARCH

We help Warwick academics to translate their ideas, protecting IP & making research commercially viable.

WE HELP CONNECT IDEAS TO THE WORLD

We identify end users for innovations and deliver real world impact through commercialisation.



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WARWICK ACADEMICS & RESEARCHERS

Explore how we can support Warwick academics and researchers to achieve commercial success.

Get started



PARTNER OPPORTUNITIES

Make connections and discover a range of exciting and beneficial opportunities to work with us.

Work with us

Because it benefits the public (taxpayers) who funded our research in the first place

Spinout companies

Spinout companies are start-up companies that are created based on intellectual property (IP) generated through a university's research

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Over 100 Warwick spinouts in the last 20 years













Why spinout?



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Commercialise IP from publiclyfunded research -IMPACT

Support/incentivise your researchers

Attract research funding / staff

Boost innovation eco-system (socio-economic)

Positive institute reputation

Talent acquisition (staff & student)

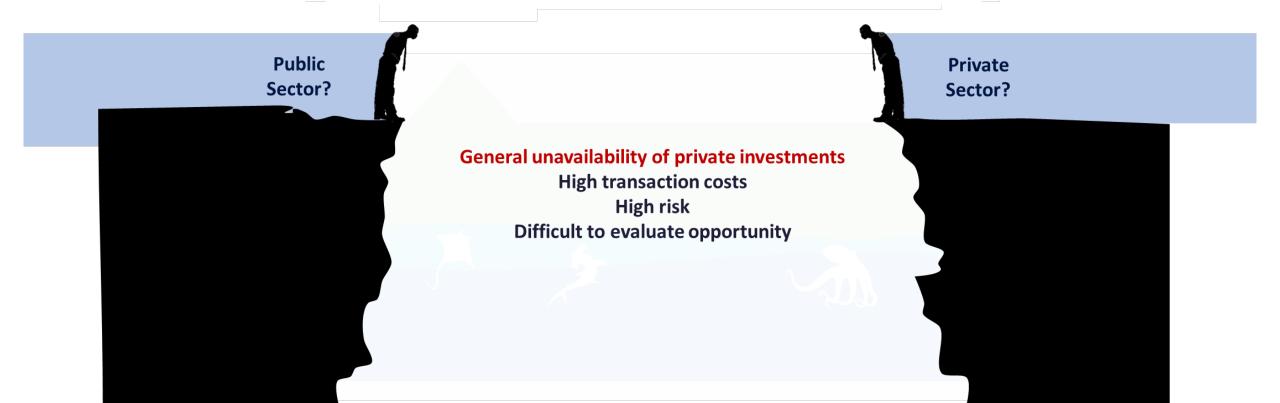
Contribution to curricula

Incubator client

Potential "pay-day" (unlikely)



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Idea/ Discovery Research Grants

Private Sector?

Sector?

Public

General unavailability of private investments

High transaction costs

High risk

Difficult to evaluate opportunity



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Idea/ Proof of Concept

Research Grants

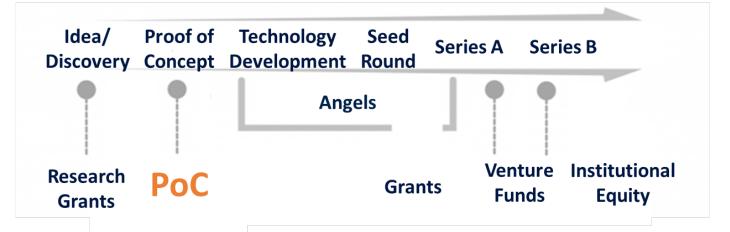
Proof of Concept

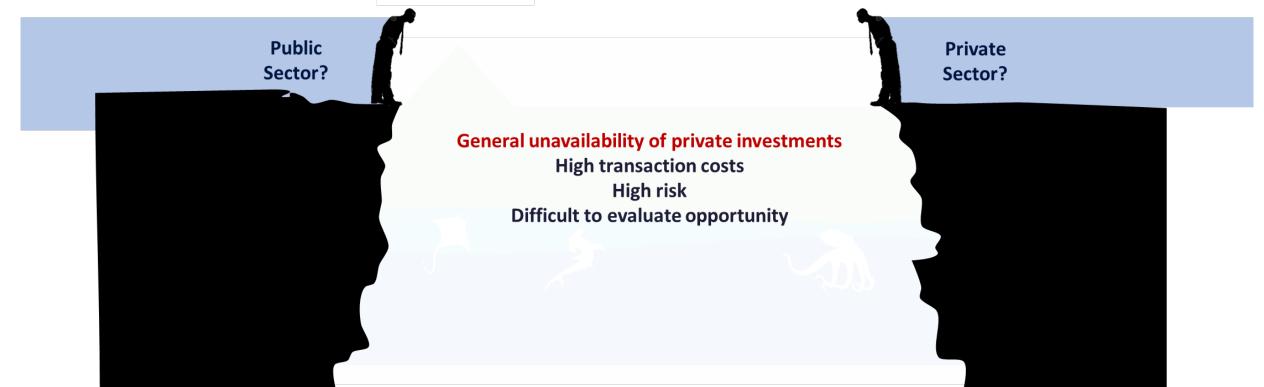
Concept





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Spinout considerations



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Substantial body of work

Inherently risky

Significant investment of time & money

Require:

- Specialist management
- Facilities (labs / manufacturing)
- Funding (investors, grants, customers)

Key components of a spinout











TECHNOLOGY

MARKET

TEAM

FUNDING



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THE TECHNOLOGY



The Technology

- Universities are generally good at this
- But it is the least important!
- IP protection e.g. patents
- Stage of development usually very early stage
- Platform or disruptive technology
- Scale up/manufacturing
- Licence of IP to spinout for upfront fee and royalty
- No assignment of IP
- Timing of when to spinout is crucial



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THE MARKET



Value proposition



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A concise statement of the benefits that a company is delivering to customers who buy its products or services

Value proposition



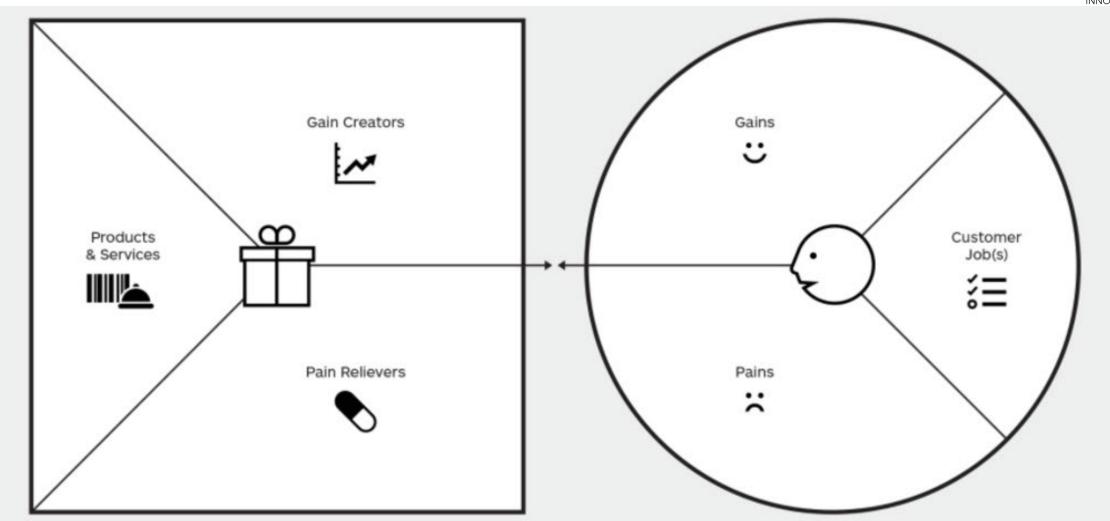
A concise statement of the benefits that a company is delivering to customers who buy its products or services

Benefits not features

Pains and gains



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The biggest mistake that startups make...?

#1 Mistake

"Building something nobody wants"



How to validate a market

Talk to people! ICURe and other accelerators Consultants Also: Size of market • Accessibility of market – eg. regulations • Timing



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THE TEAM



The Team



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This is why investors invest...

- Industry expert
- CEO Does everything to start with! Leads the team. Academic?
- CTO/CSO Academic? Coachability
- Chairman?

Who else?

- Scientific advisors
- Investor director
- Non-executive director (NED)
- University observer/director

Managment



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Relevant experience and track record is key



Must be able to think big



Needs to establish a rapport with the founders, TTO and investors



May transition as the company grows



May be rewarded with equity

Engaging service providers











Lawyers

Patent agents

Accountants

Marketing

Recruitment agents



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THE FUNDING



Pre-spinout

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INTERNAL FUNDS

IP Protection costs



Proof of Concept Funds



EPSRC IAA



MRC IAA



EXTERNAL FUNDS

Range of national & international, gov, charity & private sector funds



Post-spinout



Business grants eg. Innovate UK

Investment – business angels, venture capital. What do they want?

Loans

Can you manage without investment?

Don't spinout too early

Business plan





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Business Model Canvas

Key Partners

Who are our Key Partners? Who are our key suppliers? Which Key Resources are we acquairing from partners? Which Key Activities do partners perform?

Optimization and economy Reduction of risk and uncertainty Acquisition of particular resources and activities

Key Activities

Our Distribution Channels?

Customer Relationships?

Revenue streams?

Production
Problem Solving
Platform/Network

What Key Activities do our Value Propositions require?



Value Propositions What value do we deliver to the customer? Which one of our customer's problems are we

What bundles of products and services are we offering to each Customer Segment? Which customer needs are we satisfying?

Customization "Getting the Job Done" Design
Brand/Status
Price
Cost Reduction
Risk Reduction
Accessibility
Convenience/Usability

Customer Relationships



What type of relationship does each of our Customer Segments expect us to establish and maintain with them? Which ones have we established? How are they integrated with the rest of our

How costly are they?

EXAMPLES
Personal assistance
Dedicated Personal Assistance
Self-Service
Automated Services
Communities
Co-creation

Customer Segments



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For whom are we creating value? Who are our most important customers?

Mass Market Niche Market Segmented Diversified Multi-sided Platform

Key Resources



What Key Resources do our Value Propositions require? Our Distribution Channels? Customer Relationships? Revenue Streams?

Physical Intellectual (brand patents, copyrights, data)

Channels



Through which Channels do our Customer Segments want to be reached? How are we reaching them now? How are our Channels integrated? Which ones work best?

Which ones are most cost-efficient? How are we integrating them with customer routines?

2. Evaluation
How do we help customers evaluate our organization's Value Proposition?
3. Purchase
How do we allow customers to purchase specific products and services?
4. Delivery
How do we deliver a Value Proposition to customers?

Awareness How do we raise awareness about our company's products and services? Evaluation

After sales How do we provide post-purchase customer support?

Cost Structure



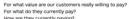
What are the most important costs inherent in our business model? Which Key Resources are most expensive? Which Key Activities are most expensive?

IS YOUR AUSINESS MORE
Cost Driven Geanest cost structure, low price value proposition, maximum automation, extensive outsourcing)
Value Driven (focused on value creation, premium value proposition)

SAMPLE CHARACTERISTICS

Fixed Costs (salaries, rents, utilities)
Variable costs
Economies of scale
Economies of scope

Revenue Streams



How would they prefer to pay? How much does each Revenue Stream contribute to overall revenues?

Asset sale
Usage fee
Subscription Fees
Lending/Renting/Leasing
Licensing
Brokerage fees
Advertising

List Price
List Price
Product feature dependent
Customer segment
dependent
Volume dependent

Negotiation (bargaining) Yield Management Real-time-Market





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HOW – THE PRACTICALITIES

Limited liability company



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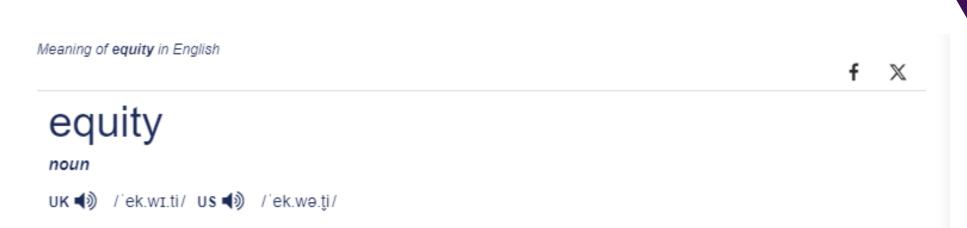
Typically used for University spin-outs

Professional & investable

Shareholders are liable for only what they have invested into the company (face value of shares in the business)

There is no reach through to your private assets (Provided that the company has been run in accordance with applicable laws and regulations)

Equity



equity noun (VALUE)

[C or U] • FINANCE & ECONOMICS • specialized

the value of a company, divided into many equal parts owned by the shareholders, or one of the equal parts into which the value of a company is divided:

- He sold his equity in the company last year.
- The rights give holders the opportunity to purchase additional equity interests in the company at a big discount.

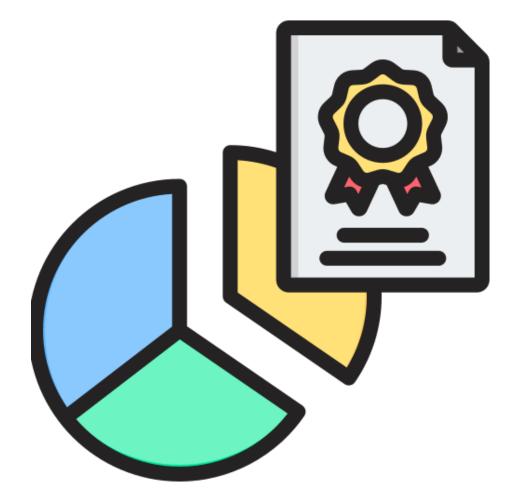


Add to word list !≡

Financial Rewards – share value in spin-outs

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- Shares are normally monetised on exit (public or private sales), but could also be via dividends
- There may be a direct cash payment or transfer of shares into the buyer's business
- There are tax implications on capital gains which can be managed via EMI option schemes



Typical spinout shareholders



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Inventor/Creator of the technology

Founder (may be a creator or not)

University

CEO

Chairman

Investor

Non-executive director

Employees

Why do universities get equity?

Legally the employer owns the IP Recognition of support & contribution to original idea (marketing support, state research funding, staff salaries, lab/equipment, business model building..) Recognition of support to the wider research eco-system (incubation, entrepreneur-in-residence, TTOs, research support services, investment, alumni, leveraging University brand....) Staff motivation (departmental income, income re-invested) Underpinning State support received Maximise socio-economic benefits to region Aligns University & spin-out interests (keen to provide on-going support) Might be investor (through University investment fund) e.g. Midlands Mindforge

Why do creators get equity?



Reward and recognition

Motivation

Founder

Non-founding creator

Ongoing work for the company (share options)



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Independent Review of University Spin-out Companies

Final report and recommendations

November 2023

Investment and dilution



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Total Shares = 2/10 or 20%

Post-Dilution





Total Shares = 2/15 or 13.3%



Investment and dilution

Valuation of £1 million

Valuation of £1.5 million

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£500k investment







Total Shares = 2/10 or 20%

Post-Dilution



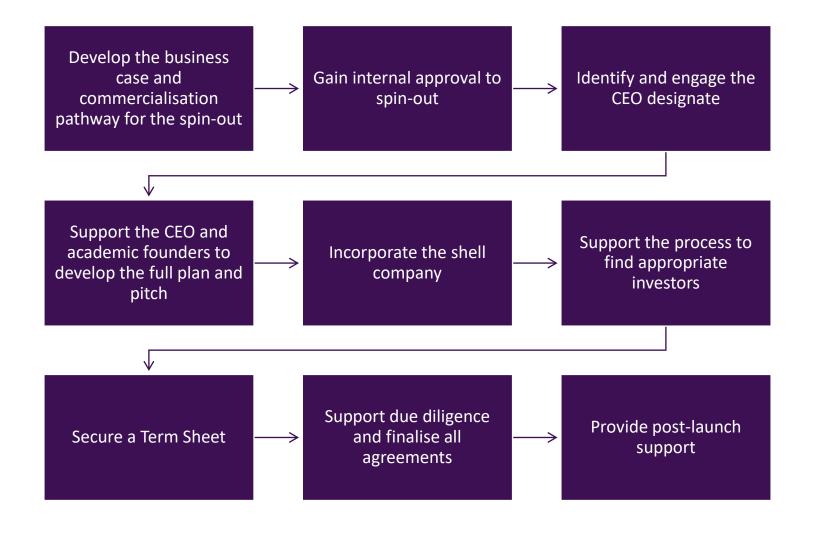




Total Shares = 2/15 or 13.3%



Spin-out Company Formation Process





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STRENGTHS	WEAKNESSES
OPPORTUNITIES	THREATS



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 STRENGTHS Get to put your research into application Paid from consultancy work and royalties on IP Diversify your achievements 	WEAKNESSES
OPPORTUNITIES	THREATS



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STRENGTHS

- Get to put your research into application
- Paid from consultancy work and royalties on IP
- Diversify your achievements

WEAKNESSES

- It will take time
- Long process (and you are part of it)
- There are legal obligations

OPPORTUNITIES

THREATS



INNOVATIONS

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OPPORTUNITIES

- May make some money
- Collaborative R&D funding opportunities for university lab
- Learn new skills and knowledge
- Opportunities for your students

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THREATS

- Failure may affect your reputation
- May lose control of how your technology develops

Academic to Director

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- Founder Director must ensure they understand their role as a Director
- A director must act in the interest of the company





Personal responsibility for the actions of the business



The Warwick Innovation Ecosystem



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Warwick Science Park

Junction Building

Life & Medical Sciences



Bringing resources & talent in & around the campus

The Exit



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Trade sale



Initial public offering



Merger





























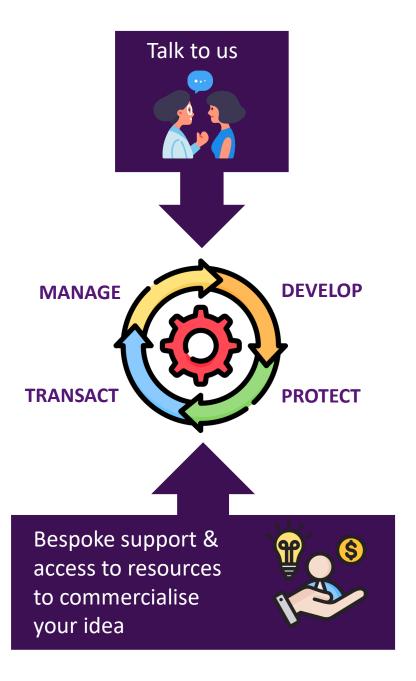




zoom

± instacart

So where do I start?!









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NEXT SESSION:

Communicating Ideas & Impact

Thursday 11 July 1530 h *Dr Frances Pitt*



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THANK YOU

NOW IT'S QUIZ TIME!