

Research
Commercialisation
Toolkit

Aspect

Stimulating the Pipeline for Social Science Research Commercialisation

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The Aspect Research Commercialisation Community of Practice (CoP) seeks to share best practices, find opportunities for shared activities and identify and test new and experimental models for commercialising social science research. The CoP recently hosted a workshop series on stimulating the pipeline for social science research commercialisation, the outputs from which are reported in this document.

We anticipate the learnings to be informative for practitioners who are involved in Research Commercialisation activity within their organisation, in particular representatives from Technology Transfer Offices (TTOs). Since applicability of learnings will depend on the relative maturity of social science research commercialisation at the particular university or within particular departments at the university, the learnings and best practices are organised according to four developmental stages.

- (1) **Nascent:** In the nascent stage, on average there is little to no awareness of research commercialisation among social science academics or Early Career Researchers (ECRs) at the university.
- (2) **Seeding:** In the seeding stage, early awareness has been established but there is little to no active interest in research commercialisation.
- (3) **Towards a Critical Mass:** In this stage, strong awareness and an active and increasing interest in research commercialisation has been established among social science academics and ECRs at the university.
- (4) **Building a Scalable, Repeatable Process:** In this relatively mature stage, successful research commercialisation has taken place and a model for social science research commercialisation is emerging.

Stage 1: Nascent

Key Takeaways

- Avoid too much emphasis on the word 'commercialisation'. Framing as alternative applications of research and generating impact can be more effective for engaging social science researchers.
- Experience has shown that ECRs, including master's and PhD students and post-doctoral researchers, are more receptive and interested in research commercialisation compared to senior academics. ECRs make good champions for innovation, playing a role in peer influence, along with being able to draw senior academics into innovation teams.
- Leverage alumni as resources—as mentors, linkages to wider networks and more.
- The IP-driven model of STEM research commercialisation is not as applicable to the social sciences—new models or pathways are required and are yet to emerge. Joining efforts with other institutions offers an opportunity to speed up the identification of an early basis model by collectively tapping into more examples of social science research commercialisation.

What is it?

The nascent stage is characterised by little to no awareness of research commercialisation among social science academics or ECRs at the university.

What's the goal?

At the earliest stage of stimulating the pipeline, the goal is to build early awareness.

What may I learn?

We present experience in using events and simple business idea competitions to build early awareness of different applications of social science research from Aspect member the University of Oxford.

At the earliest developmental stage, there exists little to no awareness of the possibility of commercialising social science research. This stage can be understood to generally reflect the social sciences disciplines across a university or in reference to particular departments. For instance, Aspect member, the University of Oxford, shared that different departments and subject areas are at different stages of maturity—the School of Geography at Oxford has seen a lot of activity with increasing interest in commercialisation as a potential route, while Humanities in general have much lower awareness of this avenue.

One way to raise awareness is through competitions and other fun ways to engage

To build early awareness among academics or ECRs in the humanities, Oxford shared their experience in running the ‘**Humanities Innovation Challenge**’—a business idea competition (£1,000 prize) and events alongside, run during the summer term. When first launched in 2017, the competition aimed to stimulate (ideally IP-based) ideas from Humanities, raise awareness of commercialisation for Humanities, create a portfolio of examples for Humanities researchers and engage stakeholders in the Humanities. The programme targets academics, PhD students and, to a lesser extent, Master’s students.

How does the competition work?

Step 1. Applicants submit a one-page application including a summary of the proposed venture, proposed market, who are the customers and a plan for the £1,000 prize money. *The prize money does not have to be used towards venture-building.*

Step 2. Five applications are shortlisted and invited to pitch practice by the Oxford University Innovation Investment team (two-hours practice sessions with prepared draft pitches).

Step 3. Event final – pitch competition.

Step 4. Post-event dinner.

How successful has it been?

After three runs of the Humanities Innovation Challenge, over 2017 to 2019, the programme has averaged about 15 applications per competition (45 in total) and 2 ‘spinouts’ (none with IP).

Oxford shares the following learnings.

Though application numbers for the business idea competition are high, very few are based on university IP. Most business ideas, from this competition, were not based on research conducted at the university, though they apply social science or humanities methods or topics.

For example, one of the ‘spinouts’, Rogue Interrobang Creativity, developed a gaming and workshops business for executive education. Founded by a Humanities ECR, the business concept utilises methods and concepts in education and learning, but it is not based on research carried out at Oxford. Another ‘spinout’, LitHits, offers curated extracts of literature to read on the phone, on-the-go. Again, the business concept is grounded in Humanities but not derived from university research.

Follow-through with commercialisation is low.

Participants are interested in engaging with the competition and the events alongside, including the final business competition pitch, but few are driven to then pursue commercialisation of their business ideas.

The Challenge improved engagement with the Humanities.

How can the programme be improved?

Drawing from the learnings, the Oxford team plans to adapt the programme to make it more relevant for engaging the Humanities, as the discipline remains at a nascent stage in research commercialisation.

Less emphasis on commercialisation.

Frame as alternative applications of research.

Moving to earlier stage – ‘impact idea’ – less focus on building a venture, more focus on generating innovative ideas that can be applied in various ways, including through knowledge transfer partnerships.

More fun and events-focus instead of just business idea competition. For instance, in the next term, Oxford plans to launch a Hackathon will generate engagement and focus on ideas-building while simultaneously exposing social science or humanities disciplines to software development.

Stage 2: Seeding

What is it?

The seeding stage is characterised by early awareness with little to no active interest in research commercialisation among social science academics or ECRs at the university.

What's the goal?

At this relatively early stage of stimulating the pipeline, the goal is to **grow awareness and generate active interest in research commercialisation.**

What may I learn?

We present experience in using a number of **different approaches and recommendations** from Oxford, Sheffield, Manchester and LSE.

“ Innovation is the process in which research is applied outside academia in ways which benefit society, any part of society.”

LSE Innovation

According to the workshop discussion, much of the social science research commercialisation activity across Aspect member institutions may be considered to be in the seeding stage. In this stage, early awareness exists but there remains little to no active interest in research commercialisation among researchers. To grow awareness and channel the awareness into active pursuit of social science research commercialisation, Aspect members – the Universities of Oxford, Sheffield, Manchester and LSE share a few strategies that they have employed with success.

It is important to note that these strategies tend to work well together and can build on one another to form a virtuous cycle of seeding. Manchester and LSE note the importance of keeping the innovation conversation alive and well by showing up, applying consistent messaging and remaining in researchers' consciousness. All of these activities taken together help to engender an atmosphere or *cultural shift* towards embracing (or at least being receptive to) innovation through research commercialisation in the social sciences.

Hotspot and Champions Strategy

In part due to resource limitations, focusing initially on one or more social science departments where there is a degree of pre-existing research commercialisation activity offers efficiency in stimulating an early pipeline. With the *hotspot strategy*, the engagement focus is on departments with a track record of engagement such as Geography or International Development. Support is still provided to everyone, but this approach acknowledges that different departments have different priorities. International Development at Oxford boasts one of the first social sciences spinouts in the UK, with the formation of [Oxford Policy Management](#) in the 1970s.

From the hotspot departments or subject areas, academics and/or ECRs who have had success with research commercialisation or are highly engaged with innovation can be identified as case studies to inspire and influence their peers. These innovation *champions* give authority and credibility, complementing TTO engagement. For example, Oxford is piloting an Innovation Leaders programme funded by Aspect, wherein academics chosen as Fellows come up with a plan to raise the profile of innovation in the social sciences disciplines at Oxford.

Continued...

How does it work?

By focusing on a social sciences discipline with pre-existing research commercialisation activity, both the champions and the technology transfer office (TTO) face a receptive audience to. *The Hot Spot and Champions Strategy can be scaled by building a network of academic champions for social science research commercialisation across the UK and beyond.*

TTOs may promote Champions as successful case studies in their engagement with social sciences disciplines. Champions may speak to social science departments through panel discussions, lectures or other more informal means. Champions play an important role in peer influence, even if simply *keeping the innovation conversation going*. In the case of the Oxford's Department of International Development (ODID), the Innovation Leader is able to utilise the department's past experience in delivering successful spinouts to craft its communications and messaging to stimulate commercialisation interest and activity among academics and ECRs.

Further, Champions give support and credence to the work of the TTO—a powerful asset for communicating the importance of supporting social science research commercialisation with senior management at the university. It also helps to align the narrative with strategic priorities of the institution, such as by connecting the UN Sustainable Development Goals with university social responsibility goals.

Hotspot and Champions Strategy— Challenges and Learnings

TTOs may face pushback from senior management at the university – arguing that departments across the university should be equally supported.

In some cases, the institution may even argue for more support to be allocated to departments with the least research commercialisation activity.

To address this challenge, it is recommended that TTOs build evidence to support communications with senior management to demonstrate that it is ineffective and inefficient to spread already limited resources across all departments at the same time. Further, given that social science research commercialisation remains in its early stages, TTOs have an opportunity to learn through supporting hotspots and this learning can be applied towards better engaging and supporting departments that are less receptive to research commercialisation.

Though it is nice to have a well-regarded academic serve as a Champion for innovation, academics are often busy and not always interested in driving research commercialisation. Notably, ECR or PhD students may sometimes be just as well-connected in their discipline and play an important role in being able to draw in senior academics into joint research commercialisation activity.

Unable to identify or recruit Champions at own university. If none can be identified from a particular institution, use Champions from the Aspect network of universities or alumni from the [Aspect Research Commercialisation \(ARC\) accelerator](#). This may also indicate that social science research commercialisation at the institution remains at a nascent stage – therefore, consider holding events and simple competitions as described in under 'Stage 1: Nascent Stage' to generate early awareness.

Early Engagement in the Research Journey

It is important for the TTO to engage researchers early in their research journey so that they are well-informed regarding different applications of research, whether at the start of their research careers or early in the research design phase of a study. Researchers develop consciousness of different applications of research and will have opportunities to build their research career or research projects in a fashion that is compatible with commercialisation, should they desire to pursue commercialisation in the future.

Both Sheffield and LSE view early engagement with ECRs as being particularly pertinent across their institutions because recent studies show that the vast majority of PhD candidates either do not enter academia upon graduation or do not remain in academia after a few years. HEPI finds that [70.1 percent of UK PhD holders have left the academic sector 3.5 years after graduation.](#)

How does it work?

To engage ECRs early in their research journey, Sheffield recently launched a [Doctoral Training Programme](#) to provide PhD candidates with alternative routes for their research, including thinking about business models and research commercialisation opportunities. The programme offers a chance for the community of PhD candidates to meeting and network with each other, while bringing in industry professionals to share their insights on translating research into industry or business applications. Social science academics are also invited to share their efforts and experience in research commercialisation (see Champions Strategy).

The programme takes PhD students through a series of skills development topics that aim to inspire and empower the students to feel that they can pursue alternative routes to impact, including enterprise-building or knowledge transfer partnerships with industry. LSE also offers a similar-intended support programme through its [PhD Academy](#). [LSE's Innovation team](#) (TTO) collaborates with the PhD Academy by delivering

talks on research commercialisation to engage ECRs and provide awareness of alternative channels for research impact.

Early awareness offers a better opportunities to develop research that is 'commercialisation-compatible' rather than trying to engineer in commercialisation design at a later stage of research.

Enabling Factors

Leverage existing institutional access to engage researchers early. The LSE team successfully leveraged its position within the larger Research and Innovation Division to visit academics alongside the research and grants support team at early stages of project development. By being there early enough, there is a real opportunity to shape the academic study. For ECR engagement, the team leveraged exposure offered by LSE's PhD Academy.

Using language that resonates. Whether engaging with ECRs or academics, it's important to frame the message around generating 'impact' for their research rather than using the term 'commercialisation'. Social science researchers are often motivated by mission and societal impact; it is resonant to communicate the opportunity to generate real-world impact.

Demonstrating value of TTO as bridge to accessing wider network and resources both within and external to the university. Through these early engagements, it is important for the TTO to articulate its value as an access point to a wider network of alumni and industry networks that could be valuable collaborators or mentors, as well as additional funding resources beyond research grants.

Funding Competition

In the nascent stage, simple business idea competitions and events are effective at generating early awareness; in the seeding stage, more involved funding competitions can be used to build on early awareness and channel interest into active pursuit of social science research commercialisation. We share LSE's experience with the [LSE Innovation Fund](#) competition for academics, targeting the minimum viable product (MVP) stage.

How does it work?

The LSE Innovation Fund has an annual budget of £200,000 to encourage academics to apply for innovation funding to move them towards a commercialisation endpoint. The funding has two thresholds. If under £20,000, then the Strategic Director of Innovation makes the decision, normally within two to three weeks. For funding up to £50,000, a small panel of senior LSE leaders deliberate over email to arrive at a joint decision.

The application is 3-10 pages, taking applicants through the [lean canvas](#)—responding to questions such as 'who is your customer?', 'why is your solution compelling?', 'what is the MVP and what is the expected outcome of the MVP stage testing?'. The preferred outcome for successful applicants is to use the funding to develop their MVP and conduct testing to build validation points. This will strengthen their case to be able to attract longer-term funding from government grants, social enterprise funding or venture capital (VC).

Designing engagement into the competition process

Academics do not typically prepare the applications on their own, but rather, after indication of interest, *the TTO team develops the application together with the academics*. This is an incredibly useful process offering insight into academic motivation, ambition and specific plans. By the time that the application has been finished, the innovation plan will have pivoted or changed to an extent compared to initial plans—*suggestive of value-addition from TTO support*.

Self-paced Learning Resource

To nurture early awareness and interest in venture-building, the LSE Innovation team has recently begun to develop an online, self-paced learning resource. The [LSE Lean Launchpad](#) is designed to complement the [Aspect ARC Accelerator](#), while providing a resource that can be conveniently accessed at any time during the year.

How does it work?

The Lean Launchpad contains learning material to introduce academics and researchers to key aspects of the entrepreneurial process and allow them to develop skills in start-up planning and execution. The programme also enables researchers to learn from the experience of mentors and to access their networks. Topics include, among others:

- Mindset and communication
- Market positioning and finance
- Market identification and engagement
- Due diligence, IP and other legal issues
- Assessment, iteration, pivoting.

The programme is delivered through pre-recorded video sessions delivered by industry and/or subject-matter experts, homework assignments and facilitated discussion. Subject matter experts are recruited to serve as teaching assistants to help facilitate discussion. *Notably, each innovation team is treated specifically in terms of mentor-matching and facilitated discussions.*

Learnings and Recommendations

Online and self-paced design increases convenience and access. As a complement to the more comprehensive ARC Accelerator, the Lean Launchpad offers a convenient channel for innovators to access learning resources wherever they are in their enterprise-building journey. Importantly, experience demonstrated the challenge of lining up innovators at the same time for entry into a formal, live programme—a self-paced resource plugs this gap.

Using alumni as resources. The LSE team has been able to successfully engage and enlist alumni involvement, with support from the university's alumni relations office. Alumni are often eager to

be involved and offer unique value as mentors to innovators, access points to wider networks and industry or subject-matter expertise and perspective. Further, some alumni are experts in their own fields and have been happy to record sessions to be used in the Lean Launchpad learning resource. Several other Aspect member institutions also note the value of **leveraging alumni as a multifaceted resource.**

“We can be the most effective TTO in the world, but if our partners don’t know about our capabilities, we won’t have the impact we are looking for.”

Oxford University Innovation Annual Review, 2020

Stage 3: Towards a Critical Mass

What is it?

In this stage, strong awareness and an active and increasing interest in research commercialisation has been established among social science academics and ECRs at the university.

What’s the goal?

The goal is to **translate sustained interest into active research commercialisation efforts among researchers.**

What may I learn?

We present experience in using a number of **different approaches and recommendations** from Manchester, LSE and Queens University Belfast, as well as a pilot software incubator concept.

With an active and increasing interest in social science research commercialisation developed, the time is ripe for translating interest into successful commercialisation. Aspect members offer a few recommended approaches towards building a critical mass.

Integrating with the local ecosystem

Manchester shares its successful experience in integrating research commercialisation efforts with the local or regional ecosystem. The Manchester team recommends building local networks early into the

research commercialisation strategy as bringing in complementary networks helps to amplify and generate quicker momentum. Manchester brought together a number of complementary networks, companies and people aggregators including Enactus, UnLtd, SEUK, Business Growth Hub, local supply chains and accelerators and freelancers.

Since social science research commercialisation is more likely to engage with the charity sector, NGOs or the public sector (as opposed to private sector companies), having the right networks in place locally can generate opportunities for knowledge partnerships, consultancies and early customer validation for social science academics and ECRs.

Syndicating with other universities

The volume of social science research commercialisation may be quite low at any single institution; it can be valuable to syndicate with other institutions and leverage shared resources and opportunities. In this way, TTOs can collectively generate a critical mass and move towards identifying a basis model for social sciences research commercialisation.

Queen’s University Belfast shared their experience in joining the NxNW consortium of northern UK universities and developing a joint research commercialisation programme (initially for STEM, only). The team emphasise the power of the consortium in enabling the programme to grow and scale substantially over a few years. This sentiment is shared among Aspect members, who, for example, have already found the recently launched Aspect ARC Accelerator to be a valuable approach for building a critical mass of social science innovation.

Leveraging alumni as resources

It is vital to continue to cultivate alumni relations in this stage, as they are a key resource to access business mentors, wider industry or subject-matter networks and up-to-date perspectives and knowledge in entrepreneurship or industry. In particular, for early-stage involvement where a formal route to commercialisation may not yet be apparent, alumni are helpful in complementing TTO support with their goodwill in offering their time and advice without (or without significant) compensation.

Attending to software development pain points

A few Aspect members shared the observation that social science academics tend to face challenges in the software development aspects of building a technology business. They are unfamiliar with the development process or management of it. In response, LSE developed a plan to pilot a *software incubator for social science researchers*—which they intend to launch this year.

Early conversations indicate strong demand for such services, which will stimulate the pipeline by resolving a common pain point and growing the relationship between academics and TTO by demonstrating another value-addition service.

The software incubator may provide services including:

- Pre-qualified and vetted pool of software developers, along with indication of costs for difference services
- Project management of software development, including scoping and specifications
- Contract negotiation and contract templates
- Funding source assistance.

In addition to solving key pain points for researchers, this pilot software incubator will provide insight into early structures for contributing to a model for research commercialisation in the social sciences. This includes structures for engaging, integrating and managing external suppliers (e.g. software developers) that are critical to venture-building.

Stage 4: Building a Scalable, Repeatable Process

What is it?

In this relatively mature stage, successful research commercialisation has taken place and a model for social science research commercialisation is emerging.

What's the goal?

At this stage, the goal is to **develop a scalable, repeatable model for social science research commercialisation.**

What may I learn?

We present lessons learned from a research commercialisation model in STEM, specifically the ICURRe programme run by the NxNW consortium, led by Queen's University Belfast.

Social science is far from being at a stage to be able to build a scalable, repeatable process. Nonetheless, this is the ultimate goal and important to keep in mind. We present the experience from NxNW, led by Queen's University Belfast, in implementing and adapting the "[Innovation-to commercialisation of university research](#)" (ICURRe) programme over the past few years. Though the programme was conceptualised for supporting STEM research commercialisation and still largely focuses on STEM, the experience offers lessons that may be informative for thinking about a consortium model for scaling social science research commercialisation.

What is it?

The ICURRe programme targets an early stage of research commercialisation activity—namely to support ECRs in identifying product-market fit or market validation for their research. The programme is responsible for 25% of the UK's intellectual property revenue across 164 universities.



Image: ICURRe programme impact figures

Source: NxNW Partners

How does it work?

ICURE is a 4-month programme based on lean start-up methodology and funded by Innovate UK. Innovate UK fund 4 months of salary support for ECRs (up to £20,000) plus the costs of market validation and customer discovery activities (up to £10,000).

ICURE is open to all university ECRs (from PhD to post-doctoral researchers) from across the UK. To apply, *each ECR needs to build a team that includes their Principal Investigator, an Entrepreneurial Business Advisor and a representative from their University Technology Transfer Office (TTO).*

Initially limited to STEM disciplines, ICURE has recently opened to the social sciences and humanities.

“It’s been really important at these early stages to engage with the market to find out what they want.”

Dr Christina O’Neill,
Queen’s University Belfast

Challenges and lessons learned on stimulating the pipeline

First, the team recommends team formation around the ECR. ECRs provide an important anchor point for bringing in senior academic researchers to the team (a requirement for taking part in the programme).

Next, the ICURE programme team faced a challenge in finding and matching business mentors to researcher teams. The solution was to **automate the matchmaking process through an online platform** in which researchers post a profile with their research concept and interested mentors can then message and engage with the researchers. If suitability is established, then a formal match is created (a requirement for the programme). Team formation outcomes from this process have been successful.

Success factors for the platform included:

- Reduce transactions costs for all parties by utilising tools such as social logins—i.e. logging onto the platform using existing online accounts on linkedin, gmail etc.
- Communications strategy
- Integrate with existing TTO channels
- Relationship with alumni relations/fundraising colleagues at university
- Manage unsuccessful connections.

Further work is ongoing to improve standardisation of engagement with external advisors and suppliers, at scale.

About Aspect

Aspect (A Social sciences Platform for Entrepreneurship, Commercialisation and Transformation) is a network for organisations looking to make the most of commercial and business opportunities from social sciences research.

Supported by Research England's Connecting Capability Fund, Aspect members sit at the epicentre of discovery, imagination and progress in the social sciences. We draw together pioneering academics with innovative industry leaders to tackle the most complex societal challenges of our time.

Find out more at www.aspect.ac.uk

Aspect

Transforming Society Through
Social Science Innovation