

PhD & business collaboration toolkit





About the toolkit

The South East Network for Social Science (SeNSS) Doctoral Training Partnership promotes collaborations between social science researchers and private business and industry.

Following a mapping exercise, the SeNSS partnership has identified key types of collaborations and developed checklists to support doctoral students, supervisors and businesses looking to create successful research collaborations. The toolkit is designed to enhance the capability for private sector engagement, increase the understanding of business benefits of collaboration, and to enable the SeNSS partnership to respond to the UK government's industrial strategy and relevant funding opportunities.

Research found there is a positive view of engaging with private industry, although challenges remain around alignment of research goals, timescales of doctoral research

projects and the translation of research into meaningful outputs for business. This toolkit will help the different stakeholders think through how best to overcome these challenges, ensuring successful collaborations.

There are clear advantages for all stakeholders when they undertake collaborative doctoral research including the expansion of networks, the solving of real world problems, gaining industry experience, impact and enhancing career opportunities.

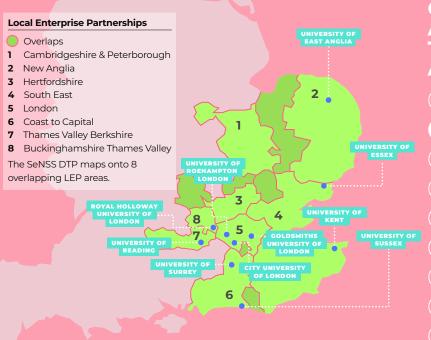
The SeNSS network is well placed to engage successfully and support business growth in a range of sectors including Big Data, Artificial Intelligence, Health and Wellbeing and Human Resources.

Senss and Local Growth

Social Science research makes a crucial contribution to the UK economy, worth £24.3bn according to researchers at LSE (social science teaching and research alone is valued at £4.8b p.a.)

Social science insight is increasingly recognised for its contribution to UK prosperity, security, and wellbeing

In the coming years, economic growth
(in skills, industries and infrastructure) will be
driven by national and local Industrial Strategies



COLLABORATIONS TAKE PLACE ALL OVER THE WORLD



SOCIAL SCIENCE COLLABORATIONS ALREADY TAKE PLACE IN THE FOLLOWING SECTORS ACROSS THE NETWORK



Management Consulting Services

(Accounting and Auditing Services

Banking and Consumer Lending

 $\widehat{+}$) Biotechnology and Pharmaceuticals

Finergy and Utilities

Food and Beverage Production

Healthcare Services

🅜 Manufacturing



4 THINGS WHICH MAKE A SUCCESSFUL COLLABORATION

Relevance

BEING CLEAR ON HOW THE RESEARCH IS OF INTEREST AND BENEFIT TO A BUSINESSES

Communication

REGULAR COMMUNICATION BETWEEN PHD STUDENT, SUPERVISOR AND BUSINESS

Trust

TAKING TIME TO BUILD A RELATIONSHIP

Language

ADAPTING LANGUAGE FROM 'ACADEMIC' TO 'BUSINESS' TO ARRIVE AT A SHARED UNDERSTANDING

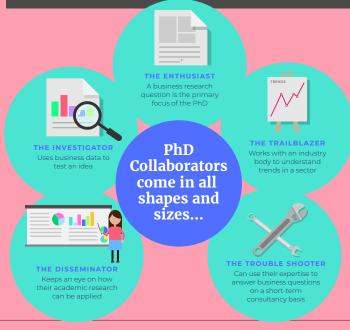
Selecting the right supervisor is key to success

Supervisor contacts is the most common way in which PhD students identify business collaborators. This is closely followed

by student's own



contacts. PhD students who were consulted for our research unanimously stated that selecting the right supervisor was key to a successful collaboration.



MISALIGNMENT OF PRIORITIES AND MUTUAL MISUNDERSTANDING BETWEEN SECTORS ARE THE MAIN BARRIERS TO SUCCESSFUL COLLABORATION

of academics feel that misalignment of priorities or interest is the main barrier to successful PhD and business collaboration

of academics cite a lack of understanding between academia and business/industry as hampering collaboration

of academics feel a lack of funding support can limit the opportunities to work with business and industry

Supervisors are keen to know more about how to supervise a PhD business collaboration

80% of academics in the SeNSS network are interested in supervising doctoral students with a business focus

of academics report that they feel somewhat confident in supporting doctoral students with business collaboration but recognise some gaps in knowledge or confidence



"I have only started to do this
[business collaborating] myself,

but over time imagine I'll become

more experienced/comfortable"

Academic

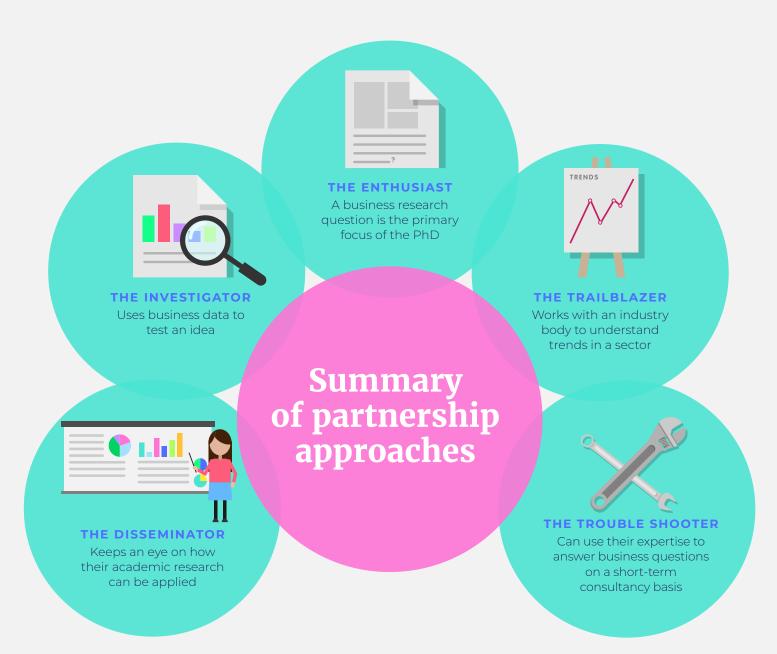


"I am lacking industry experience

myself"

Academic





Collaboration comes in all different shapes and sizes - our research found that relationships between academia and businesses are unique.

However, we have identified a number of different ways in which a PhD student can collaborate with business and industry. Some PhD students fall into one of these categories but many spread across categories - showing traits of both an Investigator and Disseminator for example. These collaboration types are to be used by both PhD students (and potential PhD students) and businesses as inspiration - perhaps they will help you to think about what collaboration might look like for you, how to go about it, and the skills and resources required.



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THE DISSEMINATOR

Keeps an eye on how their academic research can be applied



The disseminator is a PhD student who:



Will ensure that their research is of relevance to business and industry



May present at an industry conference



Will look for innovative ways to get their research findings to as many non-academics as possible. They may write blogs, create podcasts and arrange round-tables



May engage a supervisor from business or industry to ensure that research stays on track and is of relevance

Skills required from the PhD student to make dissemination possible:



CLARITY Ability to find a common language between academic and business partners



COMMUNICATION

Strong communication to keep business partner up to date with progress and findings

THE INVESTIGATOR Uses business data

The Investigator will:

to test an idea



Work with a business or a range of businesses to get access to data – qualitative or quantitative



Use the data to test an idea – a theory or a methodology



Spend time collecting data - data collection can be primary or secondary. Primary data collection may take the form of surveys, interviews, focus groups, document analysis and ethnographic fieldwork

Some characteristics:



Research question(s) are often applicable across a range of businesses or a sector.



The research results can be disseminated to those businesses taking part including relevant sector bodies



Skills required from the PhD student to make this collaboration work:

ETHICS Ensure that you are operating within ethical guidelines – both academically and for the business

RESOURCEFULNESS Find ways to make your research useful to the business you are seeking data from

NETWORKING Networking to find the most relevant business partner(s)



THE ENTHUSIAST

A business research question is the primary focus of the PhD



The Enthusiast is a PhD student who...

- Has a passion for helping a business or small number of businesses to answer specific research questions
- Is willing to spend at least 3 years working on those questions
- Usually spends time at the business to collect data
- Is interested in how academic ideas can be applied to business and industry

Some characteristics of this sort of PhD...

- The business may fund or part-fund the doctorate.

 They may provide resources such as desk space or a supervisor
- Often the PhD candidate has some work experience within the sector they wish to research prior to the PhD
- Success depends on clear communication channels, with regular updates between researcher, university and business

Skills required from the PhD student to make this collaboration work:

CLARITY Ability to find a common language between academic and business partners

COMMUNICATION Strong communication to keep the business partner up to date with progress and findings

NETWORKING Networking to find the most relevant business partner(s)



THE TRAILBLAZER

Works with an industry body to understand trends in a sector



A PhD student working with an industry body is great because:



An industry body partner can give the researcher access to a wide range of relevant business contacts



Data can be collected across a whole industry in a representative way



The research question(s) will have wide applicability to the sector



The research will often have a policy component which would be useful to the industry body and sector as a whole

Skills required from the PhD student to make this collaboration work:



VISION

Ability to see the bigger picture and ensure that research is applicable to a sector



DISSEMINATION SKILLS

Ability to make academic research accessible for non-experts



THE TROUBLE SHOOTER

Can use their expertise to answer business questions on a short-term consultancy basis



The characteristics of the Trouble Shooter's research include:



The collaboration can sit alongside the doctorate but is not necessarily a key part of the doctorate



It enables the researcher to build business networks



The research timescales are short, often over a few weeks or couple of months



It normally involves some data collection and visiting business sites

Skills required from the PhD student to make dissemination possible:



TIME MANAGEMENT Do you have time to collaborate with a business as well as complete your thesis?



FINANCIAL BARRIERS Is the business able to reimburse you or pay for your time and expertise?



RELEVANT FINDINGS Are you able to use the findings to inform your PhD or add value to your thesis?



IP CONSIDERATIONS Are you and the business clear on who will own any emerging intellectual property?



Researcher

Are you a PhD student or thinking about doing a PhD? Are you interested in collaborating with business?

If so, follow this checklist to get off to the right start...



WHY DO YOU WANT TO COLLABORATE?

To test a methodology?

To get access to data?

To test a theory?

To improve the social impact of a business?

To improve business efficiency or profitability?





IS THERE A SOCIAL VALUE ATTACHED TO YOUR COLLABORATION? IF SO, WHAT IS IT?

Improving corporate social responsibility?

Improving representation of minority groups?

Improving enterprise opportunities?

Improving the efficiency or effectiveness of a business?

If your collaboration idea has a social value, be clear on what it is



WHY SHOULD A BUSINESS COLLABORATE WITH YOU?

What is in it for the business?

How will they benefit?

Will they be more efficient?

More productive?

Have more social impact?

Work on your elevator pitch!



Researcher cont.



WHAT ARE YOU ASKING THE BUSINESS TO DO?

Do they need to supervise you?

Do they need to provide data?

What resources do you need from the business?

Be clear on what you are asking the business to do as part of the collaboration



IS YOUR COLLABORATION CRITICAL TO THE SUCCESS OF YOUR PHD?

Does your PhD need this business collaboration to be a success? What are the risks involved?

Conduct a risk assessment



WHO IS BEST PLACED TO SUPERVISE YOU?

Do you need your supervisor to manage the relationship with business collaborators?

Do you need or want a business supervisor? If so, why?

Do you need or want a supervisor who has good business contacts?

Consider what you need from your supervision team



WHAT SORT OF BUSINESS OR BUSINESSES MAKE SENSE FOR YOU TO COLLABORATE WITH?

Are you interested in a particular sector or sub sector? If so, why?

Does the size of business collaborator matter? Micro, small, medium or large?

Do you need one business collaborator or several?

Which business types are most likely to benefit from and be able to engage in the collaboration?

Do you, or your supervisor, have business contacts that can be approached?

Identify a list of criteria for suitable business collaborators.
 Consider sector, size and any existing relationships you can mobilise



Supervisor

Are you a PhD supervisor or about to be one? Have you considered how your PhD student could work with non-academic partners?

PhD students are increasingly interested in non-academic collaboration and value the role of supervisors in supporting this. Indeed, many PhD students select their supervisor on their ability to support business collaborations. Our research has found that the following are key to a successful relationship between PhD student and business collaborators:

- Regular communication and a shared language
- Shared objectives and clear project plan which accounts for risks
- Placements and/or opportunities for PhD students to spend time at business premises

Our research also found that the majority of academics in the SeNSS network are interested in supporting PhD candidates with business collaboration but recognise there are gaps in their knowledge or ability to do so. This checklist aims to provide some prompts to supervisors supporting PhD students with business collaboration.



WHY DOES YOUR STUDENT NEED OR WANT TO COLLABORATE?

To test a methodology?

To get access to data?

To test a theory?

To improve employability either within or outside of academia?

Get clear on how a collaboration will add value to your student's core PhD thesis



IS THERE A POTENTIAL IMPACT PATHWAY?

Will your student's research achieve real world impact? If so, how?

What support do they need to realise this impact?

What challenges might they face to achieving impact?

What is your role as supervisor in supporting this pathway?

Invite your PhD student to consider the 'impact' potential of their work i.e how their research could change or benefit the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia



Supervisor cont.



WHY SHOULD A BUSINESS COLLABORATE WITH YOUR PHD STUDENT?

What is in it for the business? How will they benefit?

Is your student able to articulate why their research would be of interest to a business using appropriate, accessible language?

Encourage your PhD student to consider the needs of a collaborator



DOES THE PHD STUDENT HAVE THE MOST APPROPRIATE SUPERVISION TEAM?

Does the research question necessitate a business supervisor?

Do you have any business contacts that can be approached? Do you have any contacts that would add value to the supervision team, especially around brokering or developing business contacts?

Consider how you can provide the best team of supervisors for your PhD student



IS YOUR PHD STUDENT AWARE OF THE SUPPORT AVAILABLE TO HELP THEM BUILD A COLLABORATION?

Are you able to put them in contact with institutional knowledge exchange teams and impact officers?

Does your PhD student need any specific skills to enable them to collaborate effectively? Is there any training they can access?

Are there any sources of funding within your institution to support such collaboration and is your PhD student aware of them?

Solution Ensure the PhD student is signposted to relevant services



ARE THE LINES OF COMMUNICATION CLEAR BETWEEN PHD STUDENT, SUPERVISOR AND COLLABORATOR?

Who needs to meet and how often?

What is your role as supervisor in managing the relationship between researcher and collaborator?

Agree a communication protocol



Business Collaborator

Collaborating with PhD students can be great – they are experts in their fields, often at the cutting edge, using innovative techniques and with fresh ideas. There are many ways of collaborating with a PhD student – it can be a long-term relationship, or it can be a short-term consultancy arrangement. Think through the following questions to ensure you get the most out of your collaboration.

WHAT ARE THE BENEFITS OF COLLABORATING WITH A PHD STUDENT?

- PhD students often have expertise or knowledge on specific areas which may be pertinent to your business
- PhD students are often experts in specific methodologies which may be helpful to your business
- PhD students work closely with established academics and can be a great way to access this expertise



WHAT IS THE RESEARCH QUESTION YOU NEED HELP ANSWERING?

Do you have a specific problem you are struggling with in your business? How can research help you solve your problem?

Can your business challenges be framed as research questions?

Opening Define your research question or set of research questions



WHAT IS THE TIME FRAME FOR YOU TO ANSWER YOUR QUESTION?

Is it a long-term question which could be answered over the course of a 3+ year PhD?

Do you need a quick answer which a PhD student can collaborate with you on a short-term consultancy basis?

Be clear on your required time frame



Business cont.



WHAT ARE YOU HAPPY/ABLE TO SHARE WITH A RESEARCHER?

Access to data? If so, which data sets are you able to share?

Access to staff? If so, how much time are you willing for your staff to spend with a researcher?

Access to customers or clients? If so, what are the parameters of this? Do you need a data access agreement in place to enable the research?

Identify what you are happy (and not happy) to share with a researcher



WHAT RESOURCE ARE YOU ABLE TO SHARE WITH A RESEARCHER - NOTE, YOU DO NOT HAVE TO GIVE ANY OF THE BELOW FOR A COLLABORATION TO BE SUCCESSFUL.

Supervision time – are you, or a member of your business, interested in co-supervising a PhD student, helping to keep them on track and ensure that the business-application is considered throughout the PhD?

Funding – is your business able to contribute any funding towards research costs?

Space – if appropriate, are you able to offer a researcher a desk or a space at certain points in the research process?

Communicate the resource you have available to invest in a researcher – there are no right or wrong answers to this, but clarity is key!



WHAT KINDS OF OUTPUTS DO YOU NEED FROM THE RESEARCHER TO MAKE THE COLLABORATION SUCCESSFUL?

A research report?

A presentation?

A workshop or training/professional development?

A toolkit?

Consider how your business can benefit most from the collaboration



Contact us

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