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Commercialisation of Research out of Social Sciences (CRoSS)



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Leeds Social Sciences Institute (LSSI) Commercialisation of Research out of Social Sciences (CRoSS)

Universities are increasingly engaging in commercialisation activity in the social sciences. LSSI is a cross faculty platform which supports interdisciplinary collaboration across the University of Leeds and with external stakeholders. Commercialisation of inventions and discoveries has been a significant activity in STEM subjects for some time.

LSSI has hosted an Economic and Social Research Council (ESRC) Impact Acceleration Account (IAA) since 2019 and has been successful in being awarded further funding for [CRoSS](#).



Introduction

This guide has been produced by LSSI through a series of workshops held in March 2023, supported by funding from the ESRC IAA.

The purpose of the guide is to support all social scientists at the University of Leeds in considering commercialisation opportunities from their research as a route to greater impact and societal benefit.

This guidance also introduces some important considerations for you to be aware of, and the steps of the commercialisation process itself.

What is Commercialisation of Research out of Social Sciences (CRoSS)?

CRoSS is the process of developing a research-derived idea or output (innovation) into products and/or services which can benefit the environment, wider societies and/or economies through a financially sustainable enterprise mechanism. Whilst CRoSS follows the same overall commercialisation process as in Science, Technology, Engineering and Mathematics (STEM), there are some important differences. For example, CRoSS is not just about spin-out companies or licensing. It's much broader, encompassing social enterprise and consultancy pathways, or partnering with a company to work together to achieve long-term impact from your research.

What is impact?

In the UK Higher Education Research Excellence Framework (REF), impact is defined as “*an effect on, change, or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond higher education.*” Impact is increasingly important for research and academic careers, and research funding success.

While impact-generating activities, such as research commercialisation, can be tricky to fit in alongside your competing priorities and workload, they can create a range of new opportunities for you, your team, and your research.

How to use this guide

If you want to find out who to contact to start the commercialisation process for your idea there is a brief overview of the support for CRoSS on pages 13-15.

Maybe you are unsure whether commercialisation is the right route to enhancing the impact your research has for (our) wider society, but would like to find out more. This guidance provides a summary of what CRoSS is and why it is important for you, your research, and the wider communities and/or individuals who will benefit from your research.

How does commercialisation differ between Social Sciences and STEM?

CRoSS follows the same overall process as STEM, and both rely on Intellectual Property (IP) to underpin success.

In addition, and perhaps more so for CRoSS, you, as the founder and inventor of the idea, are essential to its development.

However, CRoSS comes with its own distinct challenges such as the promotion of awareness and opportunities for commercialisation.

We have summarised some of the key differences between STEM and CRoSS below:

STEM	Social Sciences
The IP is often protected by patents – can take many years to obtain	The IP rarely involves patents – mostly includes copyright, design rights and brands
Technology more likely to have a long development time, requiring sustained funding and time commitments	Product/service development time is usually quick
Typically high costs involved in protecting IP and developing the technology	IP and project development costs are typically low
Although more costly to support, the financial returns tend to be greater in the long term	Driven even more strongly by market need and the value proposition
Strength of the IP often makes route to market decisions clearer	More time is needed to be spent by you and the Commercialisation Team to shape the idea initially
Impact is measured in terms of classic metrics such as job creation and financial return	Development of your brand is key to the IP strategy and so needs consideration much earlier on
More likely to be commercial licensing or a for-profit spin-out company	Freedom to operate assessment may be more complex due to the types of underlying IP
	Impact is measured more in terms of social value
	More likely to have difficulties around scaling and growth
	Multiple routes to market may be required along the commercialisation journey

Why engage in CRoSS?

For many Social Scientists, the overall goal of their research is to have social impact. Taking a thoughtful approach to commercialisation can be a powerful way to achieve widespread, sustainable, positive impacts on society.

Here are three reasons why commercialisation of your research is valuable for social impact:

1. Demonstrating the impact of University of Leeds' teaching and research outcomes

From the university's perspective, CRoSS outputs provides one of many ways in which to strengthen its reputation. Impact generation through commercialisation contributes towards REF case studies, demonstrating the quality of research at the University of Leeds. Revenue from commercialisation activities may also be used by the university to provide internal funding opportunities for research staff in a sustainable way.

2. Contributing to local economic growth and social wellbeing

Successful CRoSS, for example via the creation of a social enterprise, positively impacts on the local economy and social wellbeing through job creation,

service provision, wealth generation and the attraction and retention of talent to the area. For example using academic research to meet a particular need and benefit or improve the lives of individuals in the local community.

3. Cultivating a healthy innovation ecosystem

Encouraging CRoSS enables academic research staff and students to leverage research via sustainable funding that stimulates further research opportunities whilst also supporting entrepreneurship - ultimately cultivating an ecosystem of multipronged approaches to solve social issues and challenges.



How will I benefit from CRoSS?

For many academic researchers, personal financial reward is not the main driving factor for their career, or for CRoSS.

Often, Social Scientists are attracted to enterprise activities by the opportunity for their research to be more relevant, influential and connected to their communities. Making a difference to the world is often a strong driver. CRoSS can be based on mission driven solutions for social problems and addressing pressing socio-economic challenges. It can be personally rewarding to see your research directly impacting on people's lives.

Here are the five top benefits of CRoSS for you and your research:

1. Sustaining and diversifying your research funding

A benefit for both the individual and the university, income generated from research commercialisation can be used in different ways, whether for personal financial benefit, or to sustain and develop teaching, research, and student work carried out at the university. In this way, setting up a new business or a social enterprise can be a way of achieving sustainable and long-term impact.

2. Developing new career pathways

CRoSS can open up new career opportunities through, for example, empowering individuals to identify different career pathways, such as making the step into industry or consulting roles within businesses or new venture creation.

3. Providing valuable professional development opportunities

Through participating in CRoSS you will develop new skills along the way, ultimately helping you to grow professionally too.

For you as an academic, for PDRAs and students involvement in commercialisation will develop your

'business -focused' skillset, mindset and the knowledge-base required for commercialisation, including leadership and project management skills.

4. Deriving personal financial benefits

You may feel that receiving income from CRoSS is important for you. For example, as a supplementary income stream and/or as recognition for the effort you have invested into developing your research-derived idea and bringing it to the market.

5. Creating networks with future collaborators and funders

CRoSS activities involve a lot of engagement with a wide range of stakeholders. For example, target populations/communities, to learn what matters to them (which can then feed back into your research), potential partners and/or funders who will provide expertise and/or resource for you to develop your idea and other entrepreneurial individuals to motivate, share ideas and support each other. This can result in innovative co-produced research projects and programmes in addition to commercial activities.

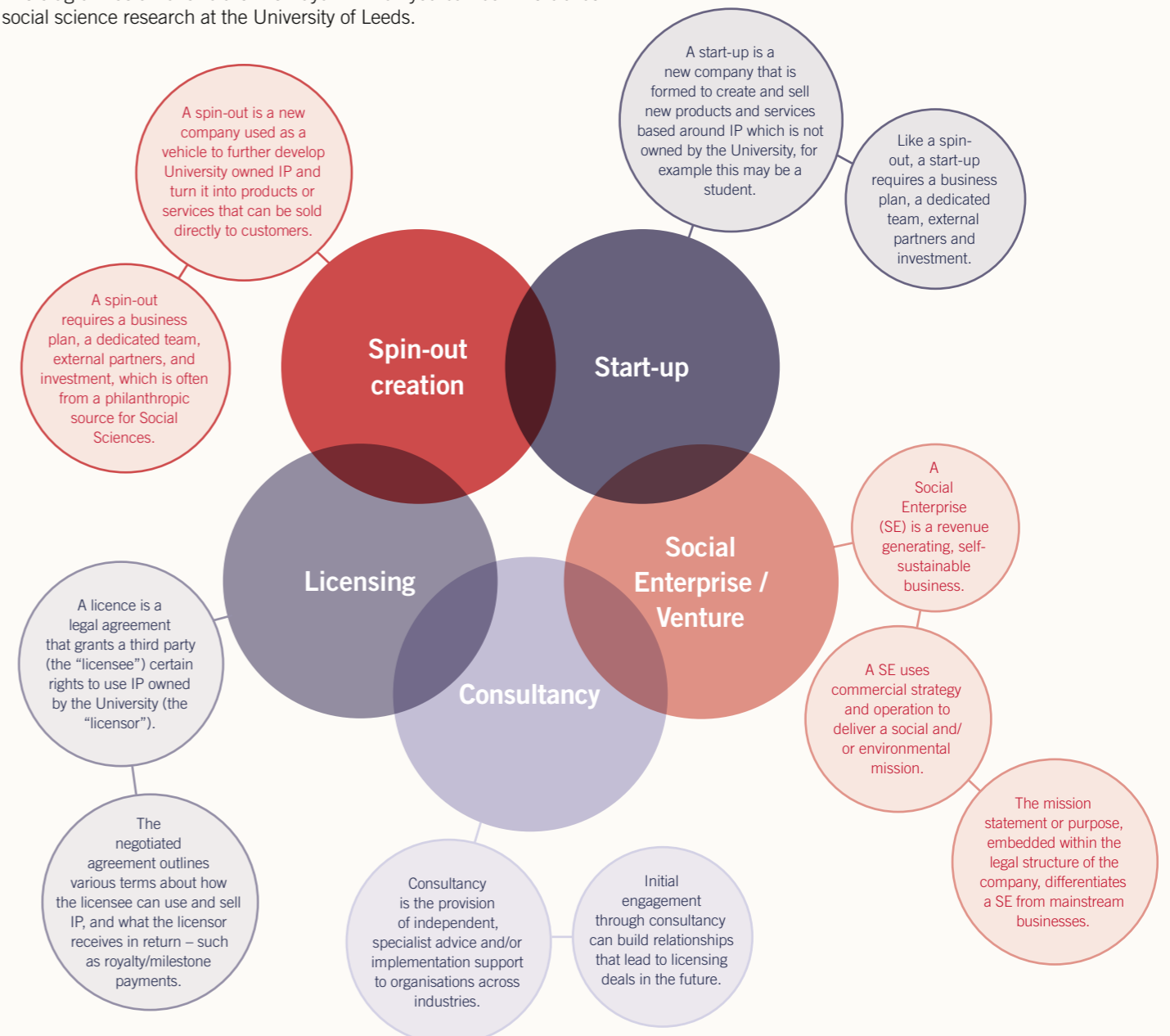
Being realistic

Income is not necessarily a guaranteed result of commercialisation activities. There may be no financial returns in the short term, or even at all, in some instances. For example, a new social enterprise may not generate surplus immediately and may take years before any significant returns are realised. However, through research contracts with the new social enterprise, you might get resources to support research development of this new venture. For consultancy activities, you will have to generate income in accordance with your faculty's policy.

Routes to CRoSS

A Social Science research idea may be commercialised through multiple routes, for example starting out as a consultancy offering and then growing into a new venture such as a social enterprise.

The diagram below shows the five ways in which you can commercialise social science research at the University of Leeds.



What is Intellectual Property (IP)?



IP is described by the [World Intellectual Property Organisation \(WIPO\)](#) as “creations of the mind, such as invention; literary and artistic works; designs; and symbols, names and images used in commerce.”

Why is IP important for CRoSS?

Through your Social Sciences research you are constantly generating IP. Examples of different types of rights that can be applied to IP that are of particular relevance to CRoSS are copyright, design rights and branding. Your ideas and knowledge (know-how, trade secret perhaps) are IP assets that can be protected in a variety of ways as illustrated below in this guide. IP underpins the commercial success and longevity of the commercial opportunity (your idea).

As the IP from Social Sciences research is typically not as ‘strong’ - legally defensible to stop someone copying your idea, for example like a patent protected STEM research derived technology - you really need to be providing significant value to the market through your idea and focus on the customers and users. For CRoSS, one of the most important considerations is freedom to operate, or the **freedom to be able to use the IP on which your idea is based.**

The importance of Freedom to Operate (FTO) in CRoSS

When your idea involves the use of data, even if this is from freely available sources, it is very important to consider FTO early on as it can have important implications for the development of your idea. There can be different types of FTO considerations, for example based around design rights and/or patents of competing solutions impeding or impacting your route to market. However, a common FTO consideration for CRoSS involves data.

Imagine you were developing an idea for a service offering such as software or a website, which relied on third party information (e.g. freely available information on other websites and/or database(s)) to provide this service. The reliance of your service

offering on external data presents a potential FTO barrier. You may not necessarily be legally allowed to use that information or data for commercial purposes. It will depend on the terms and conditions of those third party data sources (e.g. the website and/or database(s) that your service offering uses). Early on in the development of your idea, the University of Leeds Commercialisation Team will work alongside you to identify any potential FTO barriers, such as this data-specific example, and support you with the next steps along your commercialisation journey.

Universities and IP

From a university's perspective, the creation and protection of IP is an essential aspect of its teaching, research, and knowledge exchange strategy. As most research is publicly funded, the university has a responsibility to ensure that IP generated from its research activities is managed correctly, and importantly to benefit the wider society/public. The table below highlights the different IP rights that exist and which might apply to CRoSS

IP	For what	How	Duration
Copyright	Original creative or artistic forms	Exists automatically	Life +52 years (variations in different jurisdictions)
Know-how	Information, skill, expertise	Recorded in any form or kept in memory of inventor	Until it is discovered (may not necessarily be secret)
Trademark	Identification of products or services	Use and/or registration	Indefinitely (renewed every 10 years)
Registered design	External appearance	Registration	Max 15 years
Trade secret	Certain methods, source code etc...	Employee contracts/ confidentiality agreements	Until no longer secret
Patent	New inventions	Application and examination	20 years



What does the CRoSS journey look like?

Although the main steps of the [CRoSS process](#) at the University of Leeds are the same for social sciences and STEM, the development time and importance of different activities within those steps are different.

Once you have identified your preferred commercialisation route, you need to identify the activities and resources required to establish your enterprise. You are likely to require funds and/or investment. At this point you need to start engaging with philanthropic investors and/or other organisations or individuals who will fund Social Sciences innovations or be in a position to help develop the idea further. Social Science ideas are sometimes commercialised through formation of a social enterprise and our Entrepreneur in Residence is available to provide support and advice.

Alternatively, you may have decided that the route to market with highest impact and likelihood of success is through consultancy and/or licensing. In this case, you need to engage with potential licensees and negotiate what shape that agreement will take.

Regardless of the route to market, support is available to you at the University, see page 15 for further details.

CRoSS and social enterprise

A social enterprise is a type of company which aims to make a positive social, environmental or cultural change. After consultancy and licensing, it is one of the most common vehicles used to commercialise Social Sciences research, which is why we provide more information on social enterprise in this guidance.

Social enterprises achieve measurable social impact alongside financial return, and they are positioned on a spectrum between for-profit commercial businesses (such as spin-outs and start-ups), and charities (with a primary driver being to achieve social value). Regardless of where the venture 'sits' along this spectrum, it must operate in a self-sustaining manner. This means that a social enterprise will still generate 'profits' but it is what is done with this surplus which is one of a number of factors which distinguish this type of venture from a for-profit company. Self-sustainability of a social enterprise

can be realised by recycling sufficient revenue before the initial invested capital runs dry.

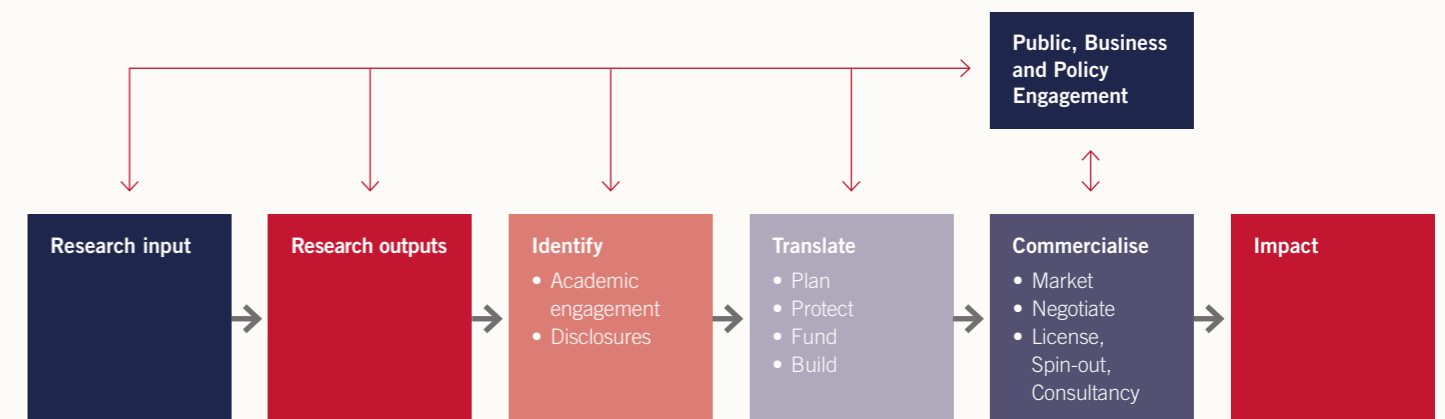
How do I know which commercialisation route to market to choose?

It's OK not to know which route to market is the right one for you or even whether if your idea is suitable for commercialisation. Not all ideas or research outputs may be suitable for commercialisation through spin-out or social enterprise formation. In fact, CRoSS often starts as consultancy and grows into something else later on.



You may have an idea for a business derived from your academic research outputs, or want to explore the possibility of using your expertise and knowledge

derived from your research to benefit society. Below is a summary of the main steps involved in CRoSS.



Identify

The first step to understanding the potential of your idea and whether it is suitable for commercialisation is to request a confidential discussion with the Commercialisation Team (commercialisation@leeds.ac.uk). During your first meeting (known as the disclosure meeting), the Commercialisation Team will listen to your idea, or research, and your plans for how your research findings could make a difference. They will also need to verify IP ownership and the nature of the IP underpinning your idea. The team will help you to understand the commercial viability of your idea and which route to market is most suitable. However, a very important factor, in addition to IP and market potential, is you and your aspirations. LSSI encourage you to talk and engage with us to discuss your commercialisation opportunities.

Due to the nature of Social Sciences innovations (ideas) it is important to speak with LSSI early on in the development of your idea because Social Sciences ideas often take more time to shape, and it will also give you the opportunity to fully understand what will be expected of you over the course of your commercialisation journey.

It is important to be aware that the outcome of this step may be that you discover that your idea is not suitable for commercialisation or there is a need for further research and/or information before you can move the process on. These are both quite normal outcomes, as the commercialisation journey is iterative in nature.



Support for CRoSS at the University of Leeds

As part of LSSI's [ESRC IAA](#) activities, we are able to support activities through our [CRoSS](#) work.

At this point you might want to explore different routes to impact as Social Sciences research has the potential to benefit wider society through other forms of knowledge exchange (KE). During the commercialisation process there may be opportunities for you to engage in other forms of KE. This is illustrated in the diagram on page 11. The boundaries between research commercialisation and other types of KE are typically less well defined for Social Sciences research than for STEM.

Translate

Supported by the commercialisation team, you will work to carry out important due diligence activities such as exploring the market potential of your idea in more detail, ensuring there are no barriers to stop you from being able to commercialise your idea (i.e. freedom to operate) and map out a potential route to market and IP strategy.

For Social Sciences ideas, an important step is gathering market feedback early on to hone the value proposition, decide on the route to market and product and/or service offering. Market feedback includes a mixture of desk based research but it is also important to carry out primary market research early on. e.g., talking to potential customers to understand their needs and tailor your solution to them. Depending on feedback and your findings whilst shaping your idea, you will now understand the value of your idea to the market, have validated your route to market, and be moving forward with your business planning.

Commercialise

For CRoSS to be financially sustainable, it is important to know who the users, customers and beneficiaries are for your innovation. The customer is the person who pays or has general influence over the purchase decision. The user is the person who ends up experiencing the product or service, and the beneficiary is the person whose life improves because of the product or service. All three play an important role when planning a way to achieve sustainable research commercialisation, but the customer should always be the main focus. Achieving financial sustainability for a business or social enterprise will require a strong value proposition for your products and services.

LSSI can assist researchers who are unsure of the commercialisation route to take with their project. With the support from the Commercialisation Team, we guide social scientists through pathways to commercialisation.

Commercialisation Team

The University of Leeds has an experienced Commercialisation Team who will help you to understand if your idea(s), originating from your research, have commercialisation potential. If the potential is there, a member of the Commercialisation Team will work with you to develop the opportunity from the initial idea stage or "disclosure of invention" stage, all the way through to a licensable or investable proposition.

The starting point is to get in touch with the opportunity development sub-team at commercialisation@leeds.ac.uk to assess and potentially develop the opportunity. Further details can be found on the university's commercialisation [web page](#).

Social Enterprise - Entrepreneur in Residence

The University of Leeds is delighted to have its first Entrepreneur in Residence. Peter Ptashko FRSA is providing social enterprise support to the Leeds research community. This can be through tailored workshops, one-to-one coaching sessions and expert advice as an ambassador for social enterprise and knowledge exchange. Peter currently delivers and mentors the [Michael Beverley Innovation Fellowship](#).

Consultancy

The first point of contact for consultancy is your Faculty Research & Knowledge Exchange Officer, a list of the Faculty Research and Innovation Offices can be found here: <https://ris.leeds.ac.uk/contacts/faculties>.

If you are unclear if there is potential consultancy that falls within the scope of scholarly work, you should consult your Head of School. Each faculty will have its own policy or approach regarding whether or not consultancy is recognised and supported within the relevant workload model. It is for faculties to confirm if this is in the University's interests to recognise consultancy and other external work within the workload model.

Early Stage Funding

LSSI is in the process of developing an Early-Stage Commercialisation (Proof of Concept/Market) funding opportunity. This will provide funding of up to £3k for a 12-month period. Applicants will need to have completed at least one of the canvases, scoped with input from the LSSI IAA Manager, who will then liaise with colleagues to identify potential before submitting your application to an awarding panel.

Scoping and planning your ideas

The tools listed in the table below are useful for you to plan and shape your ideas. These tools are not static documents, but change as your idea develops. They are versatile and can be used throughout the different stages of the commercialisation process.

Value proposition canvas
The value proposition is a description of how your idea/innovation solves the customer's problem. It is a mixture of the practical needs and emotional wants.
Business Model Canvas & Lean Business Model Canvas
The Business Model Canvas is a description of how the value proposition will be brought to your customers. The Lean Business Model Canvas is similar but focuses more on the solution and problem which you are solving.
Social Enterprise Lean Canvas
The Social Enterprise Lean Canvas is tailored to meet the needs of social enterprise and/or impact-led business planning.
Elevator pitch canvas
The elevator pitch or 'ad-lib' is a great way to develop your idea's value proposition through refining it into a short concise description of what your idea is and how it is valuable.

How to use a canvas to develop your business model

We have given you several templates below to help you shape your plan (develop your business model). Each canvas template contains some useful guidance on how to complete the respective sections. The Business Model Canvas (BMC) is a well-known tool that helps entrepreneurs develop and conceptualise their business model. The process of working on and iterating your canvas will help you develop an understanding of the main components of your business and how they interconnect.

Your Value Proposition is central to the canvas: the unique benefit or solution that is being offered to customers. All the customer facing elements are on the right-hand side: Customer Segments, Channels, Customer Relationships and Revenue Streams. Internal aspects are on the left side: Key Activities, Key Resources, Key Partnerships and Cost Structure.

Components of the Business Model Canvas

Customer Segments: The different groups of people or organisations a company targets with its products or services.

Value Proposition: The unique benefit or solution that a company offers to its customers.

Channels: The ways a company delivers its value proposition to its customers.

Customer Relationships: The types of relationships a company establishes with its customers.

Revenue Streams: The sources of revenue for a company.

Key Activities: The essential things a company does to create and deliver its value proposition.

Key Resources: The assets and resources required to deliver the value proposition.

Key Partnerships: The external relationships a company has with other businesses or organisations.

Cost Structure: The expenses associated with delivering the value proposition.

A useful approach to developing your BMC is to colour code the different customer segments. Where appropriate, use the same colour code on other BMC components to define how your enterprise will operate with respect to each customer segment.

You can also use your BMC to help you communicate your business strategy, either by itself (presenting the different elements of your business), or by distilling the content into an elevator pitch. For example, using this template: Our [product/service] helps [customer segment] who want to [value proposition] by [your USP/ addressing a customer need] and [reducing a customer pain] unlike [how the problem is addressed today].

Finally, creating your BMC and recognising what assumptions you have made will help you realise steps you must take to validate your business plan. You should always regard your BMC as a living document, and when you collect evidence that contradicts your assumptions you will need to modify or pivot your BMC.

Variants of the BMC

Lean Business Model Canvas: can be useful in helping to understand how you are going to develop your business, in contrast to the BMC that helps you visualise what your business will look like. Some of the elements in the Lean BMC are the same as the BMC (Value Proposition, Customer Segments, Revenue Streams, Cost Structure), but the new elements help focus on what needs to be done now (e.g. early adopters – the first customer segment you must focus on). Capturing existing solutions, your problems and solutions, and Key Performance Indicators (KPIs), also helps focus on how you should develop the business.

Think of the Lean BMC as complementing the BMC, rather than an alternative. Completing both canvases will provide greater insight.

Social Business Model Canvas: an adaptation of the BMC specifically for social enterprises. The Value Proposition is divided into *social* Value Proposition, *customer* Value Proposition, and impact measures. Similarly, the customer segment section is divided into beneficiary and customer (the payer). An important addition is the 'surplus' component, where you describe how you reinvest surplus (not profit) in furthering your social mission.

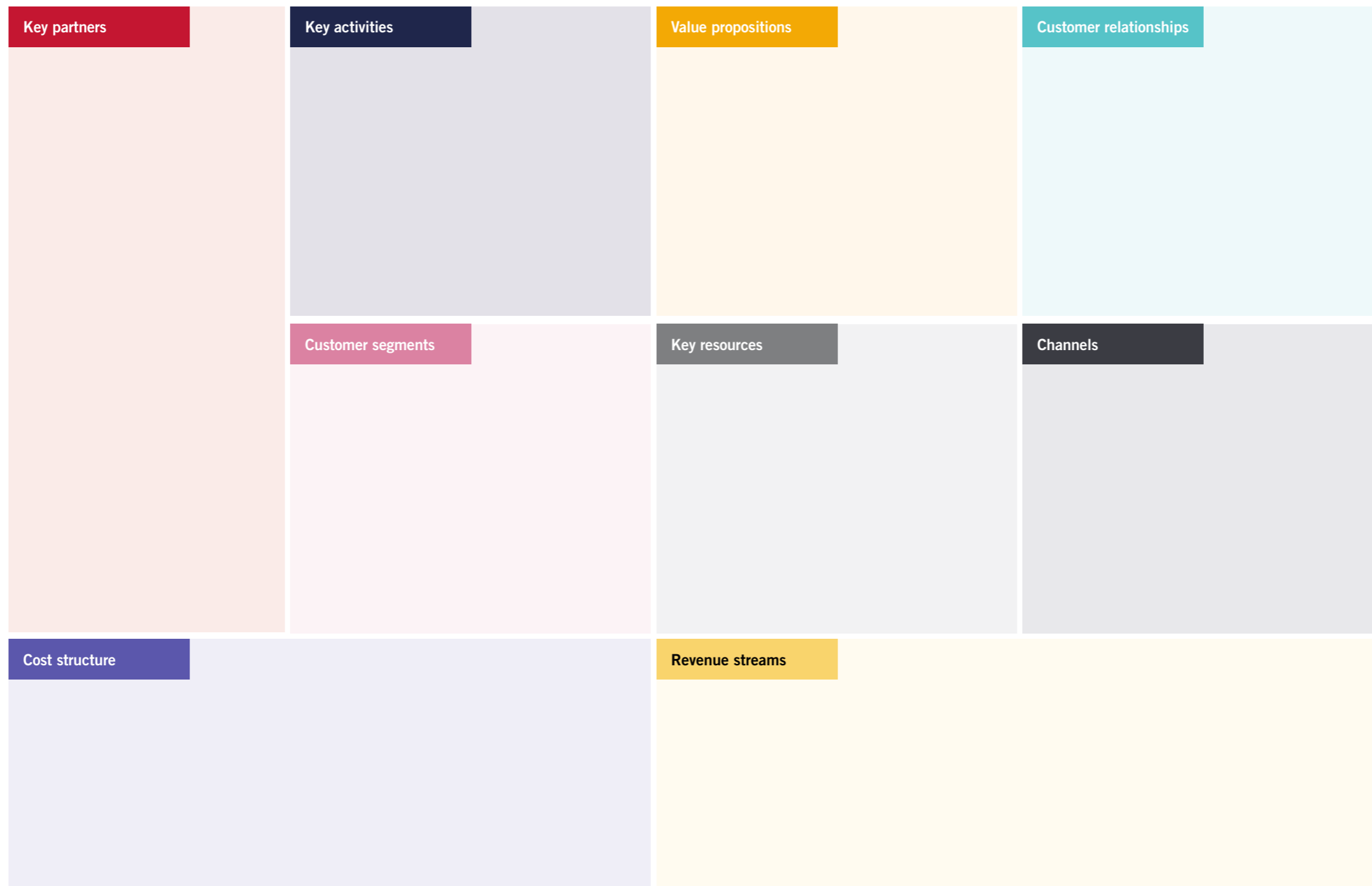
The additional layers of complexity in the Social Business Model Canvas makes you think harder about your offering, which is necessary for social enterprises as they typically have more complicated stakeholder relationships than traditional transactional business models.

Action Planning

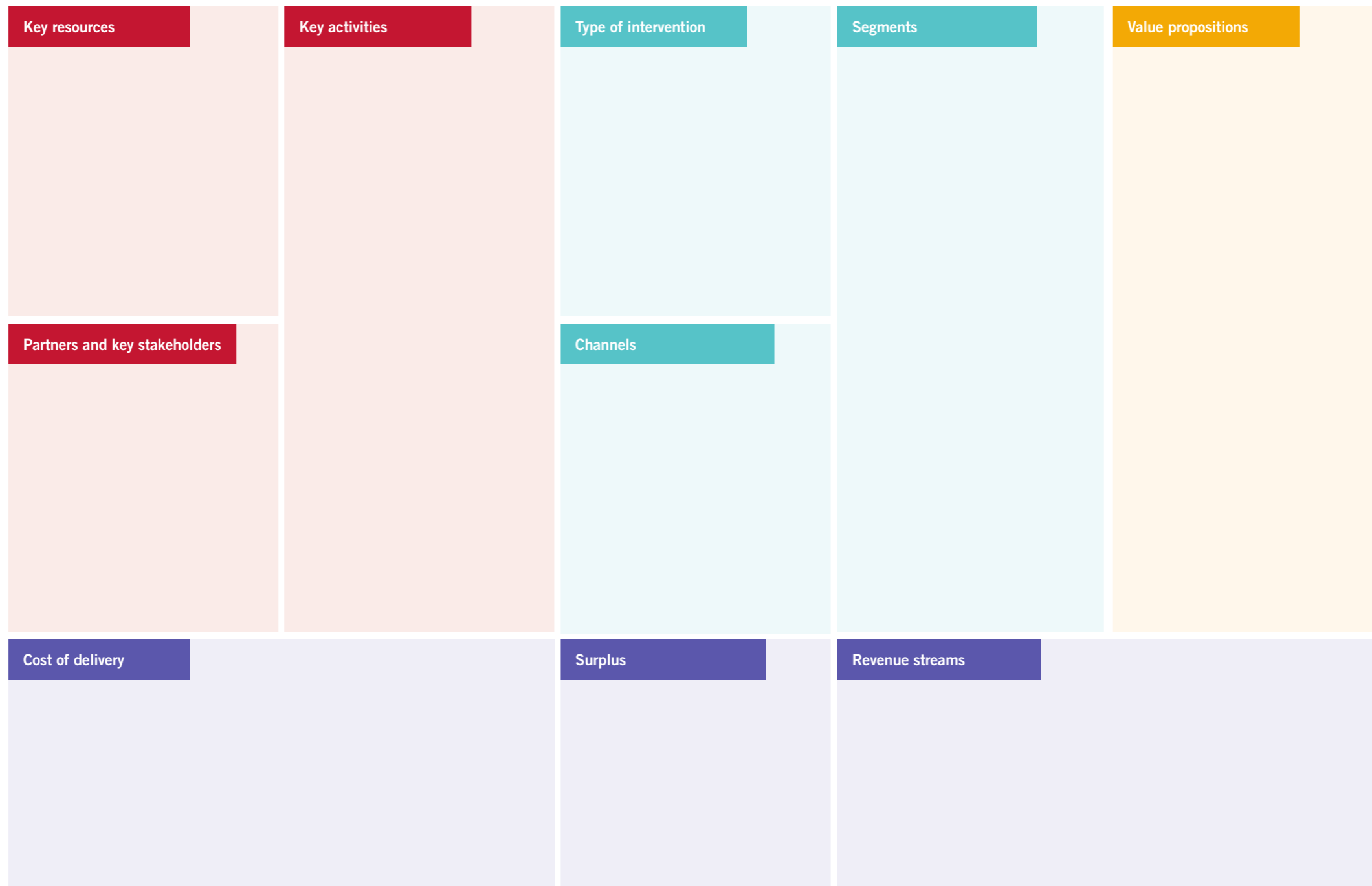
Having completed a Lean/Social Business Model Canvas, it is important to reflect on what questions remain and to create an action plan. Be honest with yourself and recognise what assumptions you have made, and remember to identify milestones and a timeline. Your next actions should involve validating the assumptions that you have made, and collecting the evidence you need to defend your business model – so that you are ready to pitch to investors.

Templates

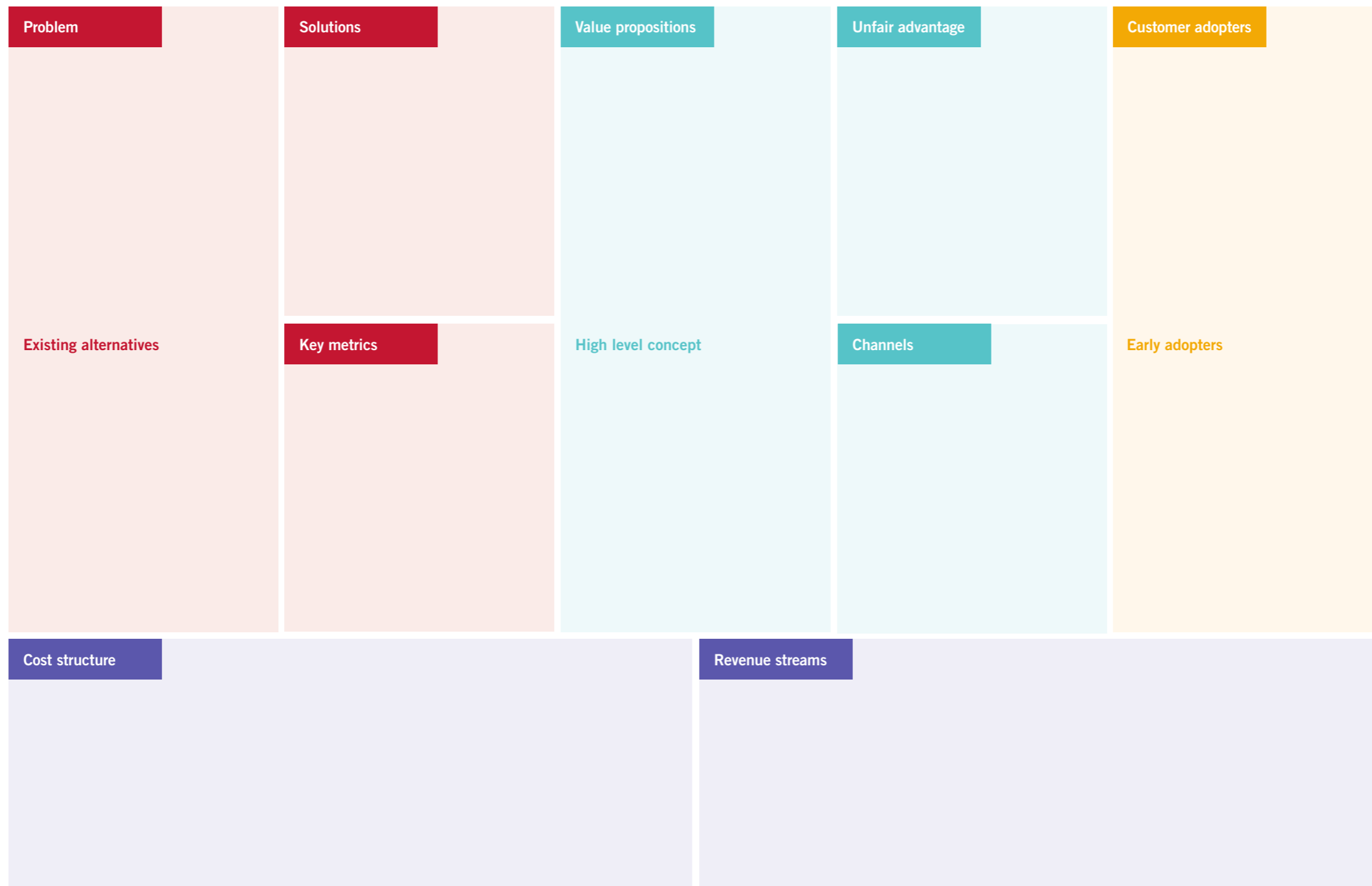
The Business Model Canvas



Social Business Model Canvas



Lean Business Model Canvas



Market Validation Action Plan

Intervention				
	What? The assumptions that need to be tested	Who? Which specific stakeholder group, or individual you need to engage	When? When will you complete this task (now, 6-12 months, 1-2 years)	Resource requirement (HR, equipment, and budget)
Customer				
End-user				
Beneficiary				
Influencer				

Commercialisation of Research out of Social Sciences (CRoSS)

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