

Women and Spinouts: Continuous Development: Career Development Planning

This section focuses on a framework for **career development** and is based on the accounts of successful women spinout founders.

KEY MESSAGES

1. Becoming a spinout founder is a continuous learning journey with development changing throughout.
2. Support can become increasingly tailored though the journey starting with development programmes and progressing to more individual support based on a managed career development plan.
3. The journey includes the acquisition of new Knowledge, Skills and Attitudes (KSAs), and builds upon existing ones.
4. The principles of equality, diversity and inclusion must be applied to each individual's development journey.
5. The principles of the Concordat to Support the Career Development of Researchers should be applied to develop and support academic entrepreneurs during the spinout journey as part of continuous career development and a healthy innovative research culture.

CONTENTS

- Commentary – perceptions, research findings, reality
- Reflection points for further discussion
- Actions for researchers, research leaders, TTOs and researcher developers
- Development activities and group discussion

LEARNING OUTCOMES:

Increased awareness of:

The changing development needs of founders through the phases of the spinout journey.

The importance of maintaining a career development plan as a 'living document' throughout the spinout journey.

How provision of development support needs to become more tailored as the spinout journey progresses.

Inclusive leadership development as a key element of career planning.

SUPPORTING RESOURCES:

- ✓ [Becoming, Building, Bridging: The 3Bs Framework](#)
- ✓ [Development Discussion Cards](#)



Click here to access the full set of resources

COMMENTARY – PERCEPTIONS, RESEARCH FINDINGS AND REALITY

Our Framework has the following specific elements of particular relevance to women, as identified from our interviews with women founders: Entrepreneurial career planning; Developing inclusive leadership capabilities and styles; Recognising and using transferable research skills; Communicating and engaging effectively with different audiences; Preparing for spinout activity.

The Framework also recognises that in the context of spinout, effective teams are fundamental to success and founders do not need to have all the capabilities in the Framework but be able to recognise what, when and how to leverage into the spinout the specialised capabilities of others.

The resource 'Becoming, Building, Bridging: the 3Bs Framework' maps out critical phases¹ in the spinout journey summarised as:

- Opportunity Recognition
- Entrepreneurial Commitment
- Venture Credibility
- Venture Sustainability

'Being enterprising' is a feature of development both as a researcher and entrepreneur and an integrated approach to development can encourage 'crossover thinking' between research and spinout. A critical 'mind shift' towards entrepreneurship can occur at any career stage, when enterprising researchers perceive opportunities from research as new value creation rather than purely academic research output. This is an important transition where the development needs of a spinout founder will diverge from those required of a traditional academic career.

Career planning should be a consideration throughout the spinout journey but especially in anticipation of transition or 'step-up' between phases. Many emerging founders who are senior academics will have competences that can be transferred to the spinout process, and the Framework encourages

academic women to recognise, affirm and adapt their existing competences from the research context to spinout. To this end we have included career planning as a competency in the Framework.

Founders do not necessarily have to have all the capabilities in the Framework but the team, as a collective, should have. As the spinout progresses through different phases, the composition of team capabilities has to be reviewed and developed. Whether founders decide to become CEO with overview of the business or CTO with overview of the science and technology, founders, as research originators, are leaders who would benefit from inclusive leadership development to enhance their approaches to collaboration, team working, recruitment and retention of staff.

The career development pathway for academic entrepreneurs who develop spinouts alongside their research requires the same consideration as those who stay solely on the research career pathway. In the Concordat to Support the Career Development of Researchers (commonly known as the Researcher Development Concordat), published in September 2019, the Chair of the Concordat Strategy group, Professor Julia Buckingham, recognises that 'whilst talented researchers are vital for our universities and research institutes, the majority will move on to apply their skills in highly valued careers across a wide range of employment sectors.'² As institutions set about creating the very best culture for researchers, there is a nexus or connection between research and spinout as part of a chain of causation.

¹ Vohora, A., Wright, M., & Lockett, A. (2004). Critical junctures in the development of university high-tech spinout companies. *Research policy*, 33(1), 147-175.

² As cited in the Foreword to, 'The Concordat to support the career development of researchers' (2019) Available at: https://www.vitae.ac.uk/policy/concordat/Download_Concordat_PDF



Researchers are expected to take ownership of their careers, identifying opportunities to work towards career goals, explore and prepare for a range of employment options, maintain an up-to-date career development plan, seek out and engage with opportunities to develop their research identity and broader leadership skills, and consider opportunities to develop their awareness and experience through for example knowledge exchange. Academic entrepreneurship and spinout potential offer an optional career path for researchers which both expands and retains talent in the institution, and so should be considered in the implementation of the Concordat.

There are also clear responsibilities for institutions and research leaders that resonate with the findings of our interviews with founders. Here are examples from each of the three Concordat Principles:

Environment and Culture: for example, being inclusive, ensuring equitable and transparent practices, promoting good mental health and wellbeing, effective management of workloads and people.

Employment: for example, clear and transparent merit-based recognition, reward and promotion pathways.

Professional and career development: for example opportunities and time for researchers

to develop their research identity and broader leadership skills (in addition to 10 days of professional development allowance), regular career development discussions, enabling researchers to explore and prepare for a diversity of careers through use of mentors and career professionals, allow time for researchers to develop their research identity.

Continuous career development and recognition including academic entrepreneurship and spinout is also supported in the Concordat for Advancement of Knowledge Exchange in Higher Education (the Knowledge Exchange Concordat) which identifies enablers such as routes and support to engage in all aspects of knowledge exchange including enterprise and entrepreneurship; the development of entrepreneurial skills for postgraduate students; recognising and rewarding academic staff for successful and innovative KE within promotions criteria and reward processes; recognition of knowledge exchange activity in workloads and time allocations; and assurances of ethical integrity and quality. An important aspect of the Concordat is reference to consultation with postgraduate students to understand their needs.

These policy drivers support equality, diversity and inclusion in career development and support for academic entrepreneurs engaged in point spinout at all career stages.

REFLECTION POINTS FOR FURTHER DISCUSSION

Founders are likely to have a mix of strengths, and areas for development that change with the phases of the spinout journey. Women founders frequently described having to ‘learn from experience’, making sense only ‘on reflection’ whilst ‘learning on the job’. The Becoming, Building, Bridging: The 3Bs Framework illustrates the likely requirements at different spinout phases so that emerging founders can anticipate, plan and more easily transition to the demands of the next stage, based on the experiences of other women academic entrepreneurs. The nature of development support may change and become more individualised and targeted as the spinout progresses, for example

through coaching and mentoring, networks and peer support. An integrated long-term development support plan, with regular reviews, would provide a focal point for identifying and providing increasingly tailored support, which should be underpinned with the core principle of equality, diversity and inclusion. The Concordat to Support the Career Development of Researchers and the Concordat for the Advancement of Knowledge Exchange in higher education are drivers for change and present opportunities to integrate continuous development for spinout founders into institutional practice.



WOMEN TALKING ABOUT CONTINUOUS CAREER DEVELOPMENT AND TEAM CAPACITY BUILDING

PHASE 1 Opportunity Recognition	PHASE 2 Entrepreneurial Commitment	PHASE 3 Venture Credibility	PHASE 4 Venture Sustainability
<p><i>Most PhDs and postdocs won't go on to academia, most are thinking, well, a lot are thinking of going on to industry anyway at some point and these are the people that are quite passionate about what they're doing, they've done the research themselves and understand the project and can learn the skills to actually be useful for the company.</i></p>	<p><i>...being able to build up a network and having people, well certainly for me because I didn't have any business experience and being able to chat to people about that and find some really helpful people to get advice from.</i></p>	<p><i>Lots of other people are necessary to bring to bear on that project, but nonetheless I think it needs, ...a champion and it needs to be someone that can stand behind it with the overarching vision and say what needs to be done with it, and then assemble the team around it that are going to actually deliver on that. So that's really where the control element comes from.</i></p>	<p><i>...it's critical to recognise how a business evolves even after it's been set up, and recognising that the expertise that you need to build and incorporate in your team also evolves with your evolving business over time. It's got to be fluid, it's got to be dynamic, and you've got to be constantly looking at it.</i></p>

‘It’s got to be fluid, it’s got to be dynamic, and you’ve got to be constantly looking at it.’

Woman founder

CONTINUOUS DEVELOPMENT: **ACTIONS FOR ALL**

Researchers

Use the Becoming, Building, Bridging: The 3Bs Framework as a tool to help to self-evaluate and plan your continuous development throughout the different phases of the spinout journey. Use your plan to consider what type of support would suit your needs and circumstances.

TTOs, researcher developers, managers and mentors

Use the Becoming, Building, Bridging: The 3Bs Framework in your role in supporting the career development of spinout founders, and in the preparation and review of career development plans. It might be that your responsibility starts and ends at different stages of the founder’s journey, in which case it is important to ensure a smooth transition in continuous support for development that is clearly communicated to the researcher. Continuous development and support for founders should be included in strategy and implementation plans for The Concordat to Support the Career Development of Researchers and the Concordat for the Advancement of Knowledge exchange in higher education.

DEVELOPMENT ACTIVITIES AND GROUP DISCUSSION

Becoming, Building, Bridging: The 3Bs Framework (see pages 6-8) sets out the 4 phases of spinout and the knowledge, skills and attitudes likely to be needed during each phase. A comparison with the *Entrecomp* framework is provided for reference to the broader concept of being an ‘entrepreneur’. Please note that in spinout it’s the team that requires all these capabilities and not necessarily an individual. You will already have some capabilities and preferences that you can build into your career plan.

The Becoming, Building, Bridging: The 3Bs Framework is presented in 3 separate sections:



B1 Becoming Entrepreneurial



DEVELOPING AWARENESS AND UNDERSTANDING ABOUT ONESELF

	PHASE 1 Opportunity Recognition First steps, being enterprising, knowing self, overlapping with researcher development, focusing on spinout opportunity and self-awareness as entrepreneur	PHASE 2 Entrepreneurial Commitment Getting real - moving from research to spinout, convincing others, gaining support, understanding business and finance of spinout	PHASE 3 Venture Credibility Creating the spinout – getting investment, operations, appointment of key staff, infrastructure, production	PHASE 4 Venture Sustainability Company leadership for sustainability, diversification, increase in staff, long term company growth
B1.1 Identify personal values and motivations for spinout and opportunities for creating value	Follow passion, understand motivation to create value through unique opportunities to address society needs that have not been met	Seize and shape opportunity to create value for others and address needs for society that have not been met	Seize and shape different types of opportunities to respond to challenges in creating value	Seize and shape opportunities, enable others to do the same for venture sustainability and growth
B1.2 Creative and innovative thinking to respond to challenges	Identify multiple ideas from research that can create value for society	Develop creative and purposeful ideas and solutions, to respond to challenges and create value for society	Develop creative and purposeful ideas and solutions with colleagues, to respond to challenges and create value for society	Develop creative and purposeful ideas and solutions, enable creativity in others for venture sustainability and growth
B1.3 Build an inspiring vision that engages others, and guides strategic decision making	Create a vision for the future, and work towards it	Build an inspiring vision that engages others	Use vision to guide strategic decision making in company formation	Use vision to guide strategic decision making, create shared vision and enrol others into activities for company sustainability and growth
B1.4 Appreciate and assess the value of different ideas to create best value for the spinout	Understand and appreciate the value and differences of ideas	Evaluate ideas to assess their different values and how ideas can be used in different ways	Develop strategies to make the most of the value generated by ideas for company formation	Develop strategies to make the most on the value generated by ideas form self and others for company sustainability and growth

B1 Becoming Entrepreneurial (continued)



DEVELOPING AWARENESS AND UNDERSTANDING ABOUT ONESELF

	PHASE 1 Opportunity Recognition	PHASE 2 Entrepreneurial Commitment	PHASE 3 Venture Credibility	PHASE 4 Venture Sustainability
B1.5 Recognise and maintain ethical stance, and act to ensure ethical and sustainable goals are met	Recognise the impact of choices and behaviours both within the community and the environment	Be driven by ethics and sustainability when making decisions	Act to ensure ethical and sustainable goals are met in company formation	Act to ensure ethical and sustainable goals are met by oneself and others in company sustainability and growth
B1.6 Undertake academic entrepreneurial career planning, challenge assumptions, maintain work-life balance	Challenge assumptions in academic entrepreneurship, understand personal needs in work-life balance, flexibility, freedom, managing time and different responsibilities	Take into account multitasking and time management to combine academic work, entrepreneurship and family life	Take into account multitasking and time management to combine academic work with entrepreneurship and family life	Take into account multitasking and time management in leading a company and be a role model contributing towards changing mind sets and transforming structures
B1.7 Recognise and use transferable research skills in the spinout process	Understand and apply personal transferable skills developed in research to the spinout processes	Apply research skills and experience of running research groups in early spinout processes	Apply research skills and experience of running research groups in developing the company	Apply research skills and experience of running research groups in sustaining and growing the company
B1.8 Maintain self-awareness, self-confidence, and self-efficacy through experiential learning and reflection, make the most of strengths	Recognise own strengths and limitations, through reflection and experiential learning	Make the most of strengths and plan how to overcome limitations of knowledge skills or attitudes	Compensate for limitations by teaming up with suitable people with complementary expertise, by further developing oneself, and building on strengths	Compensate for limitations by recruiting suitable partners and staff, and by further developing their strengths
B1.9 Sustain motivation, perseverance and resilience, follow passion to create social and economic value	Follow passion to create value for others	Put effort and resources into following passion and create value for others	Stay focused on passion and keep creating value in spite of setbacks in establishing company	Stay focused on passion and keep creating value in spite of setbacks in establishing company

B2 Building Relationships



DEVELOPING CONNECTIONS AND MANAGING RELATIONSHIPS				
	PHASE 1 Opportunity Recognition	PHASE 2 Entrepreneurial Commitment	PHASE 3 Venture Credibility	PHASE 4 Venture Sustainability
B2.1 Prepare research with an entrepreneurial focus and identify key stakeholders	Find and use resources responsibly, willing to have a go at solving problems that affect their community	Gather and manage different types of resources to create value for others, take the initiative to add or create value	Define strategies to mobilise resources to establish the company, identify and acquire resources to add value	Define strategies and enrol others to mobilise resources to generate value for others, lead others to look for opportunities and acquire resources for the growth and sustainability of the company
B2.2 Work effectively in teams to create value, collaborate in a coalition of diverse people	Communicate ideas clearly and with enthusiasm	Persuade, involve and inspire others in value creating activities	Persuade, involve and inspire others in value creating activities	Inspire others in the company and get them on board in value-creating activity to sustainability and growth of the company
B2.3 Prepare for spinout activity, persuade and involve other people	Prepare and organise research with an entrepreneurial focus	Identify key stakeholders that would support in transferring and commercialising research	Identify key stakeholders that would support establishing the company	Identify key stakeholders and involve other people in sustaining and growing the company
B2.4 Communicate, engage and influence different stakeholders effectively	Communicate effectively with colleagues, and researcher leaders	Communicate effectively with senior leadership team, Technology Transfer Office or commercialisation university office/unit	Communicate effectively with investors, venture capitalists and financial/business advisors	Communicate effectively with Company board, staff and clients/customers
B2.5 Develop inclusive leadership, managerial and social skills	Understand strengths and weaknesses of different leadership styles and identify personal leadership preferences	Develop an inclusive leadership style, able to adopt different leadership practices and behaviours, initiate value-creating activities	Practice an inclusive leadership style, be able to adopt different leadership practices and behaviours in developing the company	Practice an inclusive leader style, adopt different leadership practices and behaviours in leading others for sustainability and growth of the company
B2.6 Collaborate and work effectively with others, initiate value-creating activities	Work in a team to create value	Work together with a wide range of individuals and groups to create value	Build a team and networks based on the needs of value creating activity in establishing the company	Lead a team and networks based on the needs of value-creating activity in sustaining and growing the company

B3 Bridging Research to Business



DEVELOPING BUSINESS KNOWLEDGE, SKILLS AND ATTITUDES

PHASE 1 Opportunity Recognition	PHASE 2 Entrepreneurial Commitment	PHASE 3 Venture Credibility	PHASE 4 Venture Sustainability
First steps to being enterprising – knowing oneself, overlapping with researcher development, focusing on spinout opportunity and self-awareness as entrepreneur	Getting real - moving from research to spinout, convincing others, gaining support, understanding business and finance of spinout	Creating the spinout – getting investment, operations, appointment of key staff, infrastructure, production	Company leadership – for sustainability, diversification, increase in staff, long term company growth

B3.1 Acquire business knowledge, skills and attitudes, create and deliver business plans	Define goals for a simple value creating activity	Create business plan, action plan, identify priorities and milestones to achieve goals	Refine priorities and plans to adjust to changing circumstances on establishing the company	Refine priorities and plans for oneself and others to adjust to changing circumstances on sustaining and growing the company
B3.2 Manage ambiguity, uncertainty and risk, evaluate benefits and risks, and make business choices	Not be afraid of making mistakes and trying new things	Evaluate the benefits and risks of alternative options and make choices that reflect their preferences	Weigh up risks and make decisions despite uncertainty and ambiguity in establishing the company	Weigh up risks including for others, make decisions despite uncertainty and ambiguity in sustaining and growing the company
B3.3 Attain commercial, financial, legal, funding and investment literacy	Draw up a budget for a simple activity	Draw up a budget for a complex activity to include in business plan	Find funding and investment opportunities, manage budget for establishing the company	Find funding and investment, manage budgets for sustaining and growing the company
B3.4 Learn by experience	Recognise learning through taking part in value-creating activities	Reflect on achievements and failures and learn from these	Improve abilities to create value by building on previous experiences and interactions with others	Improve abilities to create value by building on previous experiences and interactions with others

ACTIVITY 1

Self-evaluation

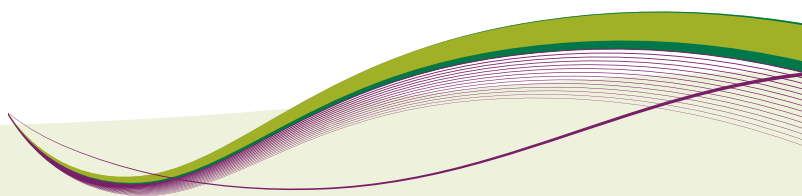


Which spinout stage best represents where you are now? You might find you are somewhere between or have elements from more than 1 phase, if so consider where you are now for each element. (✓) **Tick which phases are most applicable.**

<p>PHASE 1 <input type="checkbox"/></p> <p>Opportunity Recognition</p> <p>First steps to being enterprising – knowing oneself, overlapping with researcher development, focus on spinout opportunity and self-awareness as entrepreneur.</p>	<p>PHASE 2 <input type="checkbox"/></p> <p>Entrepreneurial Commitment</p> <p>Getting real – moving from research to spinout, convincing others, gaining support, understanding business and finance of spinout.</p>	<p>PHASE 3 <input type="checkbox"/></p> <p>Venture Credibility</p> <p>Creating the spinout – getting investment, operations, appointment of key staff, infrastructure, production.</p>	<p>PHASE 4 <input type="checkbox"/></p> <p>Venture Sustainability</p> <p>Company leadership – for sustainability, diversification, increase in staff, long term company growth.</p>
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For your current phase, look at the **Becoming. Building, Bridging: The 3Bs Framework** knowledge, skills and capabilities and make an assessment of where you are:

Do you have all the necessary capabilities already?	
Where do you have strengths?	
Where do you need or want to develop?	
Are they capabilities that you want to acquire?	
Do other people in your team have them already or do you need to bring them in?	
What capabilities do you need to prioritise for this phase?	



ACTIVITY 2

Planning your personal and professional development



In this activity, look ahead of where you are now to the next phase and decide where you have development needs for the next phase.

What are your development priorities for the next phase?

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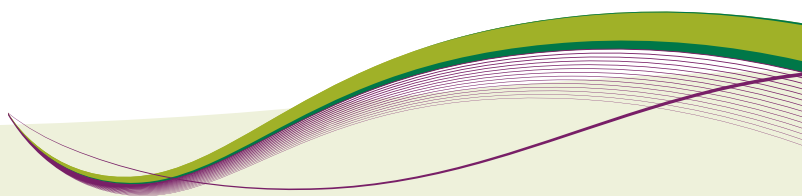
Consider what type of support do you want?

Perhaps it's a training programme, online programme, a mentor or coach, a new network, an external contact or perhaps help from someone in your team.

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Make your plan, prepare your case and request the support you need from your line manager, or TTO adviser.

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ACTIVITY 3

Planning for the long term



Complete the table below with your long term plans.

What is your own career goal?	
What do you want to be doing in 5 or 10 years time?	
What capabilities do you need to acquire on your spinout journey?	
How can you acquire them?	

ACTIVITY 4

Being proactive in your community and your own career development

The Concordat to Support the Career Development of Researchers sets out responsibilities for researchers as well as funders, institutions and research leaders. On the next page is a table of responsibilities for researchers in their career development which can guide you in planning your own development during the spinout journey, and asking for what you need.

The table is adapted from the Concordat to Support the Career Development of Researchers (<https://www.vitae.ac.uk/policy/concordat>) where you can find more information and details of the responsibilities of funders, institutions and research leaders as well as researchers.



Review the table on the following pages which has been divided into the three Principles of the Concordat, **carry out a self-assessment of your own position now and identify priorities for your career development** as a researcher and spinout founder. The principles are:

Principle 1

Environment and Culture – focuses on Equality, Diversity and Inclusion opportunity in the research environment.

Principle 2

Employment – focuses on contribution to the community.

Principle 3

Professional and career development – focuses on being proactive in your own career development.



Concordat Principles and Researchers Responsibilities

Researchers must:

	Where are you now?	Note your priorities and next steps
PRINCIPLE 1 ENVIRONMENT AND CULTURE		
1.1 Actively contribute to the development and maintenance of a supportive, fair and inclusive research culture and be a supportive colleague, particularly to newer researchers and students.		
1.2 Ensure they act in accordance with employer and funder policies related to research integrity, and equality, diversity and inclusion.		
1.3 Take positive action towards maintaining their wellbeing and mental health.		
1.4 Use available mechanisms to report staff who fail to meet the expected standards of behaviour, particularly in relation to discrimination, harassment, bullying, and research misconduct.		
1.5 Consider opportunities to contribute to policy development aimed at creating a more positive research environment and culture within their institution.		
PRINCIPLE 2 EMPLOYMENT		
2.1 Ensure that they work in accordance with institutional policies, procedures and employment legislation, as well as the requirements of their funder.		
2.2 Understand their reporting obligations and responsibilities.		
2.3 Positively engage with performance management discussions and reviews with their managers.		
2.4 Recognise and act on their role as key stakeholders within their institution and the wider academic community.		

Researchers must:

Where are you now?	Note your priorities and next steps
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PRINCIPLE 3 PROFESSIONAL AND CAREER DEVELOPMENT

<p>3.1 Take ownership of their career, identifying opportunities to work towards career goals, including engaging in a minimum of 10 days professional development pro rata per year.</p>		
<p>3.2 Explore and prepare for a range of employment options across different sectors, such as by making use of mentors, careers professionals, training and secondments.</p>		
<p>3.3 Maintain an up-to-date professional career development plan and build a portfolio of evidence demonstrating their experience that can be used to support job applications.</p>		
<p>3.4 Positively engage in career development reviews with their managers.</p>		
<p>3.5 Seek out, and engage with, opportunities to develop their research identity and broader leadership skills.</p>		
<p>3.6 Consider opportunities to develop their awareness and experience of the wider research system through, for example, knowledge exchange, policy development, public engagement and commercialisation.</p>		

