

Opening up Scotland's scaleup conversation

Are we putting the needs of Scotland's scaling companies at the centre of their support ecosystem?

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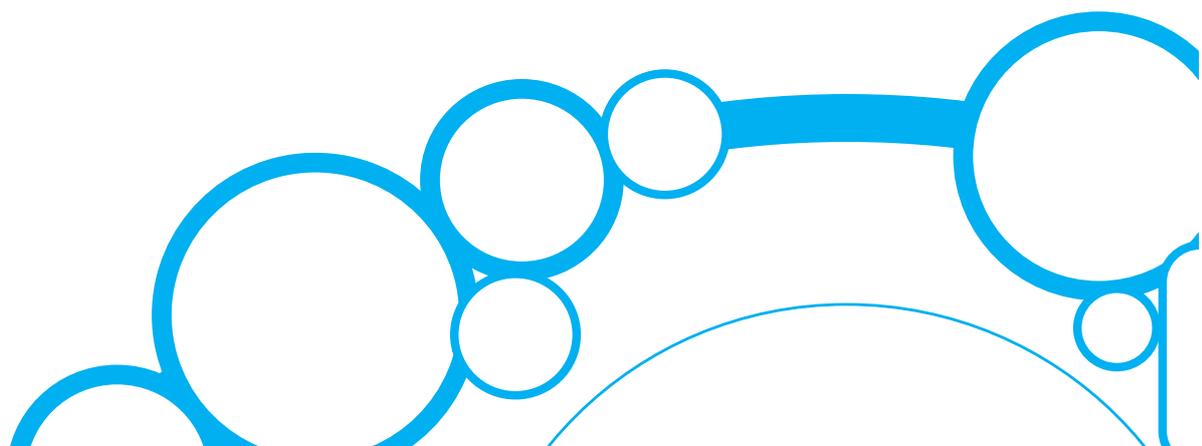
If you empty a big box of lego onto the floor and then tidy it, you will quickly develop your own approach for clustering pieces with similar characteristics, you might sort by colour or by shape, you will probably adopt an approach that suits the way you want to build your lego models.

If you try to sort the Scottish economy into companies with shared characteristics you will find there are a myriad of ways to cluster activity to promote economic growth.

Grouping by sector is very popular; reports tell us about the importance of the tech sector, life sciences, the creative industries, oil and gas, food and drink etc. Like a game of top trumps each sector promotes its significance by outplaying other sectors on one or more attributes of economic performance. Clustering by sector can be useful in identifying directed interventions that will help one or more subgroups within the economy.

This review makes the case for clustering companies into three categories that cut across these established groupings.

1. There are the startups, these are significant, they represent the buds of entrepreneurship in all parts of the economy. Although there is always room for improvement, this report suggests this group of companies is already well provided for by Scotland's ecosystem of business support, their future needs are not considered in detail in this review.
2. There are then the companies that don't scale significantly but play a key role in underpinning local communities and the regions of Scotland. The contribution and needs of these businesses are not explored in this review.
3. Finally, there are the scaleups, these are the most economically significant companies, they exist in all sectors of the Scottish economy, they drive innovation and will be key if Scotland's really wants to deliver on shared challenges such as climate change and social justice. To succeed they need an ecosystem that is highly attuned to their scaling needs. This review suggests there is a great deal that Scotland can do to improve the way it supports scaling firms. Regardless of sector this group of companies have many shared needs that are currently not being supported as effectively in Scotland as they are in other regions of the UK and the world.



Executive Summary

As Scotland develops its 10-year National Strategy for Economic Transformation it is an important moment to consider new ways of energising the economy for the benefit of all: people, planet, communities and the future of Scotland. We know that to be successful in this journey one group of companies is going to be critically important, these are Scotland's scaleups. Using the definition of *Tech Nation*¹ these are the firms that *'are at a distinct phase of company growth, the ones that have achieved a lot, had some impressive success and are ready to take it to the next level'*. Research shows; they are the job and GDP creators, they are the innovators and exporters, they are the most productive firms and the good corporate citizens, they are the optimists.

We have discovered that despite their significance the Scottish support ecosystem is still driven by many myths that take the focus away from scaleups. The Scottish ecosystem focuses on increasing the number of startups, when this does not directly increase the number of scaling companies. The ecosystem tends to focus on a small number of specific sectors, when Scotland's scaleups operate in every sector of the economy (often across sectors). The Scottish ecosystem directs support through institutions that don't often innovate very quickly themselves and are not putting the needs of scaling firms at the centre.

This review challenges this position through the voice of founders, leaders and actors within Scotland's scaleup support ecosystem. Their message confirms the five core needs of scaleups; prioritisation of scaleups in the economic transformation agenda, access to markets, access to talent, access to know-how and access to investment. These voices question whether Scottish scaleup support system delivers on these requirements? Does everybody in the ecosystem play to their strengths to offer a seamless and integrated approach to support?

Rewiring an ecosystem is a complex challenge, it starts with influencing the mindset out of which the ecosystem has emerged. It requires a clear ambition shared by all and the system itself must be empowered to innovate and improve, this requires careful use of resources and ensuring the ecosystem has the skills and insights needed to reimagine itself. For a country the size of Scotland this is achievable. Five missing elements within Scotland's existing ecosystem are outlined.

The next steps are:

- Shifting the mindset of Scotland's scaleup support ecosystem by putting scaleups and their needs at the centre.
- Co-creating a shared and distinctive ambition for Scotland's scaleup support ecosystem.
- Encouraging innovation in the ecosystem. This will happen when the system looks up, identifies its strengths and weaknesses, sees what global best practice looks like and reimagines itself. It will need to work in new ways, always in collaboration, always co-designing solutions, always with the needs of scaleups at the centre.

Reference

1. Tech Nation (2019) What is a Scaleup? [online]

The five needs of scaling firms in Scotland.

This review captures the voice of scaleup founders, leaders and actors within Scotland's scaleup support ecosystem suggesting five core scaleup needs. (More details are listed in Appendix A):

1. The scaleup agenda needs to be prioritised in Scotland.

- Scotland must recognise the critical role that scaleups play in developing the economy, society and a net zero future.
- Scotland must mobilise leadership for its scaleup ambitions.
- Scotland must empower redesign of its scaleup support ecosystem.
- Scotland must ensure its scaleup support ecosystem delivers on the real needs of business.

2. Improved access to talent is needed

- Scotland must tackle scaleup skills shortages in key areas.
- New talent needs to be attracted to Scottish scaleups.
- Talent needs to be retained in Scotland's scaleups.
- Scaling firms in Scotland need to embrace new ways of working to attract global talent

3. Improved access to markets is needed

- Scaleups would benefit from more innovation in Scottish public procurement.
- International markets needs to be opened-up for Scottish scaleups.
- The role of corporates in the Scottish scaleup ecosystem needs to be developed.
- Scottish scaleups need to develop online marketing skill sets.

4. Improved access to investment is needed

- Scotland needs to address gaps in series A and B funding for scaleups.
- The limitations of angel funding need to be recognised.
- The role of Scottish co-investment funds needs to be more clearly understood.
- Flows of investment within the Scottish ecosystem need to be optimised.

5. Improved access to know-how is needed

- The learning offer and modes of learning delivery in Scotland need to change.
- Scotland needs to scale access to Peer-to-Peer and Peer-to-Near learning for all scaleups.
- Scotland's R&D and technology base needs to be more accessible to scaling firms.
- Scotland needs better signposting to best-in-class specialist advice.

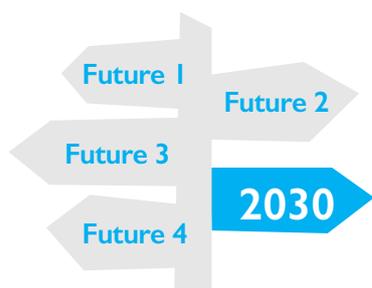
Five ways to rewire Scotland's scaleup support ecosystem to deliver on these needs.

This review suggests that to deliver on these five needs, five missing pieces in the ecosystem need to be put in place. (More details are listed in the Appendix B)

1. The current ecosystem needs to be mapped from the perspective of talent access, market access, investment access and know-how access. Once mapped the strengths and weaknesses of current provision can be established to inform improvements and redesign.
2. In parallel a shared ambition and identity needs to be developed for Scotland's scaleup ecosystem.
3. To inform and track developments in the ecosystem Scottish scaleup performance data and the needs of scale-ups must be collated and published on an annual basis
4. Best practice networks need to be created across the ecosystem to support collaboration, enable redesign and break down silos across the ecosystem.
5. All developments must be supported by strong leadership, resources and a commitment to continuous improvement.

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What we know: the evidence base

The tectonic plates of our economy and society are moving. The impacts of digitalisation, Covid, climate change and shifting trade relations are profound. Scotland's commitment to a just transition and inclusive growth bring even greater change.

Amidst this sea of disruption opportunities do abound. Startups will conceive new solutions through experimentation. Corporates will adapt and innovate or fade away. The public sector will need to reimagine itself or become irrelevant. The Austrian economist, Joseph Schumpeter recognised that economies and societies continuously evolve and are always in some form of dynamic flux, subject to the *"perennial gale of creative destruction"*.¹ Importantly, however, it is scaling firms who are, by definition, at the epicentre of this creative destruction, they play a key role in causing and accelerating it.

Scaling firms are the ones who have market traction, with the agility and the ability to gather the resources required to deliver significant impact. Scaling companies are where most future economic and societal value will be realised. It is not, however, all about scaling firms, other actors in the ecosystem have a vital role to play: investors, start-ups, corporates, academia, the public sector and entrepreneurial support organisations. They are all part of an interconnected ecosystem without which scaling firms are unlikely to succeed.

Nevertheless, it is the scaling companies who embody the creative element of Schumpeterian creative destruction. Without this, we are left with just destruction.

What is a scaleup?

The Organisation for Economic Co-operation and Development OECD defines a scaling company as one that has achieved growth of 20% or more in either employment or turnover year on year for at least two years and has a minimum employee count of 10 at the start of the observation period². Although a useful start this mechanistic definition can lead to distortions. Company growth is complex: they grow in fits and starts (non-linear), they can be affected by one-off events (major new contract or acquisition).

The actual term *'scaleup'* is relatively new, although companies with these characteristics have been the focus of research for decades. For example, Birch (1981) identified "gazelles" forty years ago³. Similarly, NESTA, ERC and others have been heralding the "vital 6%" for years. In 2009, a NESTA report indicated 6% of fast-growing UK businesses generated the lion's share of employment growth (>50%) in the UK between 2002 and 2008.⁴ We prefer the broader, Tech Nation definition⁵, *"put simply, scaleup is a distinct phase of company growth. It's a company that has achieved a lot, had some impressive success and is ready to take it to the next level."*

References

1. Schumpeter quote from para 2 - Capitalism, socialism and democracy (1942) Schumpeter, New York: Harper & Bros.
2. OECD. (n.d.). Eurostat-OECD Manual on Business Demography Statistics - OECD. [online]
3. Birch D.L (1981). Who creates jobs? [online]
4. NESTA (2009) The vital 6 per cent How high-growth innovative businesses generate prosperity and jobs.
5. Tech Nation (2019) What is a Scaleup? [online]

Why do scaleups matter

The importance of scaleups is recognised globally, from Colombia to Estonia from Milwaukee to Singapore.

- **They are the job creators.** Research has strongly corroborated the role High Growth Firms as job creators. (albeit there is ambiguity of the net job creation impact where a firm grows by acquisition rather than organically).¹
- **They generate GDP.** They deliver £1.1trn of UK turnover, representing 50% of the total SME turnover output despite making up less than 1% of the SME population.²
- **They are the innovators.** They introduce innovation at twice the rate of large firms.³
- **They are the exporters.** 6 in 10 are involved in international trade and looking to expand further.⁴
- **They are highly productive.** On average scaleups generate £338,000 turnover per employee, more than double the national average.⁵
- **They are good corporate citizens.** Over half of the UK's scaleups describe themselves as a social business, operating in the green economy or meeting ESG goals.⁶
- **They see more opportunity ahead.** 9 out of 10 scaleups expect to grow again in 2022.⁷

Scotland's scaleup performance

Despite the significance of scaleups we can see that Scotland's scaleup sector has been highlighted for improvement and has been acknowledged as underperforming compared to other parts of the UK.

- In Scotland, scaling firms have been identified as fundamental to different parts of the economy: The Scottish Technology Ecosystem Review (2020)⁸ recommended that the aim of the technology ecosystem should be to enable a stream of technology companies to “reach sustained profitability, including a significant proportion that do so at scale”.
- The Oxford Economics Report (2021)⁹ identified Scotland's relative underperformance in scaleups as a fundamental issue in Scotland's overall economic performance.
- The Reform Scotland Paper, “The Next StartUp Nation?” by Professor Ross Brown (2021)¹⁰ recognised that in Scotland scale-ups are “the main engines of job creation and economic dynamism”.
- The 2021 ScaleUp Institute Report¹¹ showed that Scotland is in the bottom quartile of UK regions/nations for the number of scaleups per head of population (33rd out of 41 (2019 data)) with 40.2 scale-ups per 100,000 population, half of the number in London at 81.3.

References

1. Brown, R., Mawson, S. and Mason, C. (2017). Myth-busting and entrepreneurship policy: the case of high growth firms. *Entrepreneurship & Regional Development*, 29(5-6), pp.414–443.
- 2,3,4,5,6 and 7. Scaleup Institute (2021) Scaleups: Energising the Economy Scaleup Annual Review
8. Scottish Government, Logan, M. (2020). Scottish technology ecosystem: review - gov.scot.
9. The Hunter Foundation, Oxford Economics (2021). Raising Scotland's Economic Growth Rate.
10. Brown, R. (2021). The Next Start-up Nation? - Reform Scotland.
11. ScaleUp Institute (2021). Scaleup indicators from a national and local perspective at Local Analysis of Scaleup Populations and Growth Rates.

Paradigms & myths

There are many myths and paradigms that distort our perception of the scaleup ecosystem. Forrester and Meadows ¹ point out that “*paradigms are the source of systems. From them, from shared social agreements about the nature of reality, come system goals and information flows, feedbacks, stocks, flows and everything else about systems.*” What then does the literature suggest are some of the paradigms and frequently shared myths surrounding scaleups?

- Increasing the number of startups **does not** directly increase the number of scaleups. There is no clear relationship between the density of startups or startup survival rates and scaleup density growth. This means policies focused just on startup birth rates will not be enough. ²
- High skills density in a region **is** a driver of scaleup growth. High population density is not enough there needs to be high density of skills in a region. ³
- Scaling firms **are not** all young and small. Many scaling firms are much older than commonly thought and of different sizes eg US (average 25 years old), 70% of UK scaling firms >5 years old, in Scotland some scaling firms are over 25 years old. Similarly, the entrepreneurs tend to be older (>40 years old) having built up the insight, networks and experience to enable them to scale. ⁴
- Scaling companies **operate in all sectors** not just high-tech. High-tech should not be conflated with being innovative. We cannot ignore the high potential scale-ups who do not fit the pure technology mould. ⁵
- **Universities are not** a major source of scaling firms. Despite significant focus, funding and administrative capacity, researchers concluded that “*very few university spin-offs become high growth firms*” and that they can resemble “*science projects*”. It must be noted again this is not to say Universities are not important, especially where they are located in dynamic entrepreneurial ecosystems like Cambridge or Boston. ⁶
- The growth of scaleup firms **is not** linear. Often, scaleup growth life cycle models indicate a smooth linear growth, and scaleup definitions like the OECD look for it. The reality is that growth is unique and firm specific and tends to be spiky, coming in “*periods of growth, plateaus, backslides and changes ... distinctive to each enterprise*”. Similarly, high growth firms do not all grow organically. Many firms, being entrepreneurial, look to opportunities outside the organisation be it through acquisition or alliances (with a dominant customer or in new international markets). ⁷
- **Equity finance is a driver of scaleup growth**, whilst debt is not. Areas with access to larger amounts of equity finance tend to have faster growth in the number of scaleups, even after controlling for other variables. “*There is a gap in the ability of companies outside of London and the south east in accessing equity finance. Closing this will be vital to increasing scaleup growth across the [UK].*” ⁸
- **Clustering matters up to a point** - globally high growth firms are found in geographic clusters, yet there is little geographic customisation of initiatives. The Scaleup Institute (2020) sees a positive correlation between place (clustering) and scale-up growth, however only up to a certain point (c20-25% saturation) thereafter it has a negative effect. The data suggests there needs to be a balanced approach to clustering and sectoral specialisation. ⁹

References:

1. Meadows, D.H. (2008). Thinking in systems: A primer. White River Junction, Vermont: Chelsea Green Publishing.
- 2 & 3. Scaleup Institute (2020). Drivers of scaleup growth.
4. Brown, R., Mawson, S. and Mason, C. (2017). Myth-busting and entrepreneurship policy: the case of high growth firms. Entrepreneurship & Regional Development, 29(5-6), pp.414–443.
5. Scaleup Institute (2021) Scaleup indicators from a national and local perspective.
- 6 & 7. Brown, R., Mawson, S. and Mason, C. (2017). Myth-busting and entrepreneurship policy: the case of high growth firms. Entrepreneurship & Regional Development, 29(5-6), pp.414–443.
- 8 & 9.. ScaleUp Institute (2020). Drivers of scaleup growth.

This review

Over the last 30 years the dynamics of scaling companies have been explored from many perspectives; establishing their contribution to the economy and society, unpacking their characteristics and their needs and speculating on future trends. Organisations like the Scale-Up Institute now gather data and insights from scale-ups operating in all parts of the UK.

The aim of this review was to contribute to this existing knowledge base by:

- Capturing the voice of scaling company founders and leaders and other key stakeholders in Scotland. As engines of innovation within the economy, scaleups have pivotal roles to play in the future development of Scotland. As Scotland launches its 10-year National Strategy for Economic Transformation it is very important to remember that the needs of their founders and leaders are critically important.
- Reflecting on Scotland's ecosystem of support for scaling companies and speculating on how it might be enhanced to unlock the full potential of scaling firms.

The review captured these voices through a series of six themed workshops involving over 50 key actors from Scotland's scaling ecosystem including founders & leaders (pre, current and post scaling), investors, support organisations, policymakers and researchers.

The workshops, held in May, June and July 2021, explored Education & Learning, Talent for Growth, Market Access, Funding Ambition, Place & Infrastructure and Culture & Connections. Each of these sessions explored:

- What aspects of Scotland's scaleup ecosystem should we be celebrating, what works well?
- What are the most pressing deficits and challenges?
- What are the big ideas that should be informing the development of this ecosystem?
- If implemented well, what impact could they have?
- What are the shared questions that need answering?
- Where should Scotland go for scaleup inspiration?
- Are we being sufficiently imaginative about how Scotland's scaleup ecosystem is configured?

Scotland's scaleup ecosystem

*'We can't impose our will on a system. We can listen to what the system tells us and discover how its properties and our values can work together.'*¹

¹ Meadows, D.H. (2008). Thinking in systems: A primer. White River Junction, Vermont: Chelsea Green Publishing.

Meadows, pioneered the study of complex systems and suggested that shifting mindset, aligning around shared ambition and empowering the system were the 3 most significant ways of influencing improvement.

The word ecosystem is used in many different ways, particularly when describing systems of entrepreneurship and business support. The term is used to put boundaries around something which is complex, that we are keen to influence and improve, it implies that there are many actors at play, that relationships are critically important and that there are subtle but significant positive and negative feedback loops. In this review we have applied the concept of ecosystems and systems thinking to describe the world of scaleups in Scotland. The scaling companies themselves, their founders, leaders, executive teams & staff are the key actors within the ecosystem, they are supported by a wide range of agencies, support organisations, colleges, universities, policy makers and government bodies. These scaling firms need access to markets, pipelines of talent and different forms of investment to support their growth, to succeed they must constantly innovate. Systems theorists present many ways to intervene in complex ecosystems. For this review three forms of intervention are suggested in order of descending influence:

Changing mindsets

This is an interesting challenge for Scotland's ecosystem of scaling firms. The mindset from which it has evolved is bound up in long established attitudes towards entrepreneurship and risk taking in Scotland, in society's perceptions of the role of business, in educational paradigms at all levels (schools, colleges & universities), the extent to which scaling firms are seen for what they could be; an innovation engine for Scotland that delivers economic growth, social change and climate targets. Changing the mindset towards scaling firms would influence everything in the ecosystem, this cannot, however, be achieved by the actions of one person or organisation, it's the responsibility of everybody.

'Shifting Scotland's mindset towards scaleups is a decade long project, but one that has to start now.'

'How do you measure some of the critically important intangible things associated with Scotland's scaleup mindset?'

Aligning around a shared ambition

'What is the goal of our scaleup ecosystem in Scotland, how will we measure its success?'

'We don't have a clear story of what we want from scaleups in Scotland – we don't have a consistent ambition shared across all stakeholders ... for me it is about scaling across the triple bottom line.'

'To deliver on Scotland's up potential the entire scaleup ecosystem needs to innovate and support scale-ups in new ways.'

'Despite the fact that we are a small country the ecosystem for entrepreneurship and scaling is not joined up.'

Having a clearly articulated ambition for the place of scaleups in Scotland is a very timely ask. Scotland is currently defining its 10-year National Strategy for Economic Transformation. There is widescale recognition that whilst economic growth and productivity are important it is not at the expense of social justice and a commitment to addressing climate change. Cynics might say that scaleups are simply interested in profit. At every workshop in this series, however, there was genuine recognition and commitment to a triple bottom line approach. There was also much discussion about how Scotland could carve out international recognition for setting an ambition for its ecosystem of scaling firms in a new way. Having this ambition clearly articulated would create a virtuous circle, establishing a distinctive brand position for Scotland globally, in turn attracting talent and new forms of investment, whilst delivering on Scotland's need for change.

Empower the ecosystem to innovate

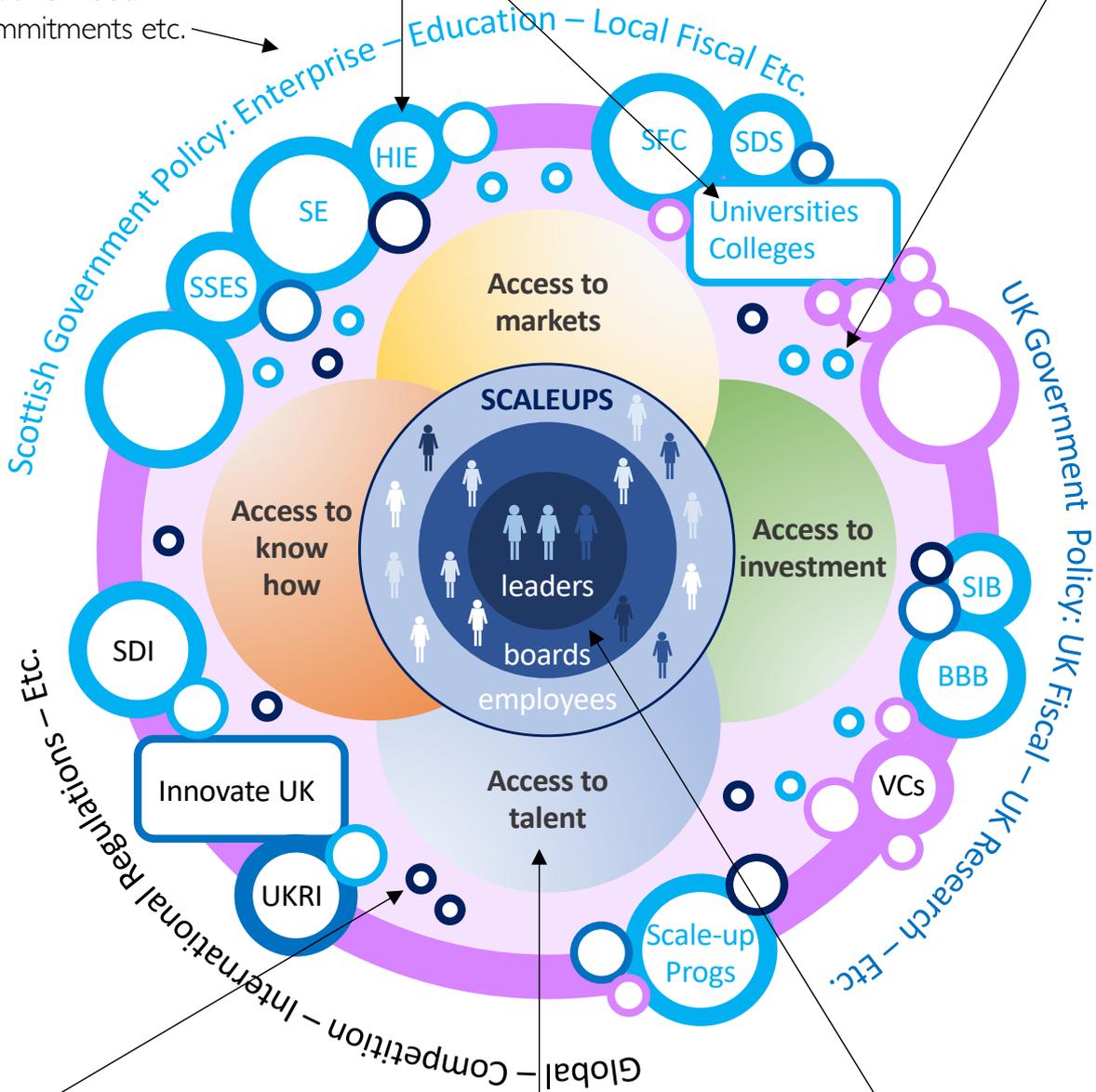
So many reports like this conclude with list of recommendations, usually actions that need to be taken by particular organisations to drive a change agenda. This review takes a different approach, the ecosystem of scaling firms in Scotland is complex and dynamic, none of us know what the unintended consequences of a tightly defined intervention might be. Systems theory suggested that the system itself should be empowered to enact change, this means equipping actors with the ability to identify opportunities and the skills, data and resources needed to self initiate change and track impact. This review contributes to this process by systematically reporting on participant's views of different aspects of Scotland's scaling ecosystem. Within each area co-design challenges are described to prompt reimagining and new approaches to be taken forward by relevant ecosystem actors working in collaboration.

Elements within Scotland's scaleup ecosystem

The policy environment (Scottish, UK & International dimensions) this influences: Taxation, Education, Research, Regulations, Immigration, Employment, Infrastructure, Climate Targets, Health & Social Commitments etc.

Established agencies, institutions, organisations, researchers & schemes that support the scaleup ecosystem in Scotland.

The growing number of independent & not-for-profit initiatives supporting scaleups



Key private sector ecosystem actors, investors, recruitment agencies, consultancies, researchers who support the ecosystem

The four most cited needs of scaleups.

- Access to markets
- Access to investment
- Access to talent
- Access to know-how

The scaleups themselves, their founders & leaders, staff teams and Boards.

Reflections on Scotland's scaleup ecosystem that emerged from the workshops

'Scotland's scaleup ecosystem is a product of its history, geography and Scottish society's attitude & mindset towards risk, business & entrepreneurship.'

'There is a timely opportunity to build a shared ambition for Scotland's scaleup ecosystem. Scaleups are Scotland's engine of innovation & change.'

'There is a widely shared feeling that Scotland's ecosystem of support is cluttered & overfocused on start-ups. Scaleups are craving tailored access to markets, know-how, investment & talent.'

'How do we build a support ecosystem for scale-ups that has greater diversity?'

'Scotland's scaleup ecosystem is underperforming compared to UK and International benchmarks. How can these trends be reversed?'

'Data & information tracking different aspects of scaleup performance is lacking in Scotland. The allocation of resources needs to be driven by an evidence base.'

'The scaleup ecosystem needs to look more beyond the borders of Scotland for talent, markets, investment and to learn from best practice.'

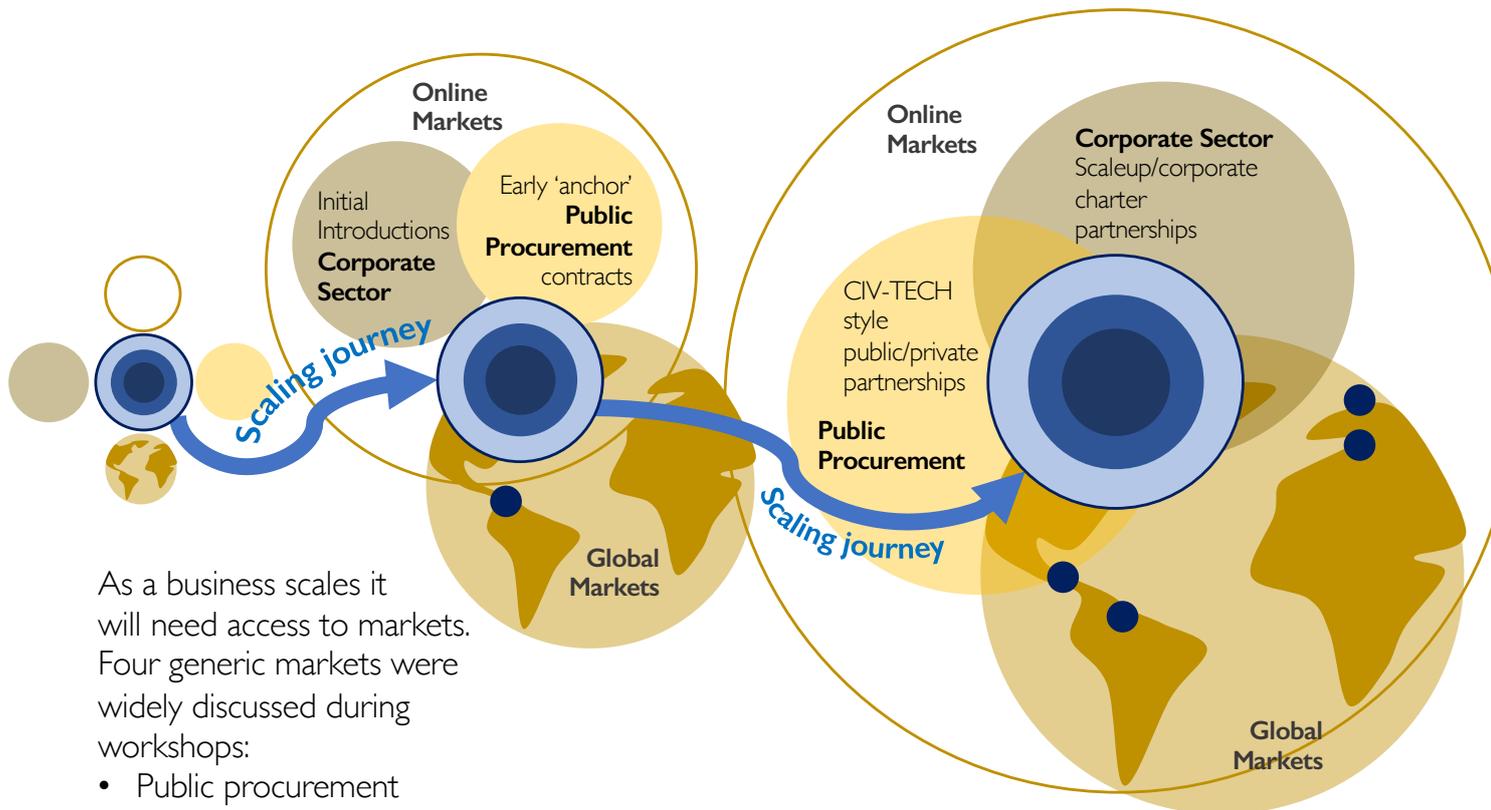
'COVID has changed things, people are now looking to move to Scotland, COVID has opened a new talent tap.'

'Scotland has agencies, organisations & institutions that have enormous influence on economic development, are they being imaginative enough? Is the status quo being challenged? There are also an increasing number of agile 'bottom-up' initiatives and activities driven by the private sector, not-for-profits etc. Is there join-up?'

'Scaleups drive economic development, creating high quality jobs. They could also help Scotland deliver on core challenges such as social inequality & climate change.'

'We don't want to be spoon fed, scaleup founders don't like a paternalistic approach – but they do like opportunities and patterns they can follow.'

Improving access to markets



As a business scales it will need access to markets. Four generic markets were widely discussed during workshops:

- Public procurement
- Global markets
- Corporate sector
- Online markets

2021 ScaleUp Institute research, across the UK shows:

Since 2019, access to markets has been the the number one factor for scaleup growth.

The top barriers to working with corporates & government persist. Complexity in procurement processes, time taken to win contracts and sourcing bidding opportunities.

Going forward 70% of scaleups are seeking to engage in international trade, 62% aspire to export more to countries outside the EU.

Market access was discussed at every workshop session. Without growing market access scaleup growth is stifled. At every stage of scaleup growth the dynamics of market access are different. Interestingly many of these relationships are two-way, scaleups clearly need markets to generate revenue, equally markets can benefit from the considerable innovation potential that the new thinking from scaleups can bring.

Public Procurement

More attention must be given to the the public sector could play in Scotland as both a market and partner for scaling firms.

- Purchasing by the public sector is often critical in signalling confidence in a scaling firm, encouraging other customers. Procurement by government as first anchor client is done well in the US. The public sector in Scotland needs to work in new ways to support scaleups.
- Scotland has developed some valuable initiatives like CIV-TECH which bring private sector innovation capability into public sector thinking, but these are only small pockets of procurement, and are certainly not the norm across the public sector. These initiatives need to be scaled. The public sector needs to partner with scaleups to drive innovation.

'We are not thinking about how we can use our procurement processes to help businesses scale.'

'Government could do far more opening up access to data – this provides startups and scaleups with material to develop new innovative services.'

'There is limited online brand building expertise in Scotland'.

'Our ecommerce Director has a six-figure salary, we have had to hire internationally for these roles.'

International Markets

Access to international markets was widely seen as being key to scaleups. Government has a role in supporting this, through its connections and convening power:

- This could be made easier through a single point of contact for accessing & navigating networks of international expertise. It was suggested that with Zoom & Teams becoming much more widespread new forms of international connection can now be made. Geographies are now rewired and distances erased. Initiatives like the Global Scots network need to be used in completely new ways for international market development, creating a clear brand position for Scottish scaling firms.
- International regulatory regimes were cited as a challenge, this had been particularly acute in EU markets since BREXIT. Participants highlighted difficulty finding the right people to advise on regulatory requirements because by definition as a scaleups you are coming into a market with a new product.
- There was great interest in developing more proactive approach to international trade missions, and more structured introductions to overseas partners and buyers, tailored to the needs of scaleups.

Online markets

Workshops highlighted the significance of online markets.

- Scaleups operating in B-to-C markets (approximately 20% of UK scaleups) highlighted the challenge of accessing expertise and talent in ecommerce, this expertise seems to be lacking in Scotland. Unlike London and the Southeast and other regions of the world there is a weak support economy that has sprung up within the ecosystem in this area. Case study work could explore how this part of scaleups capability evolves, having exemplars from both within and outside Scotland could help build understanding of this critical form of scaleup marketing.
- For all scaling companies, including B-to-B, online brand development was seen as being critically important, Scotland has some great examples of building successful online brand stories, in a number of sectors. Scaleups in Scotland need more exposure to this type of skillset. Founders and leaders described the key role played in peer-to-peer learning. This would be a logical part of the peer-to-peer learning content of new forms of scale-up learning in Scotland.
- Many examples were cited of recruiting online marketing and sales talent internationally. This is an area where Scotland's educational pipeline seems to be lacking.

'We are not thinking about how we can use our procurement processes to help businesses scale.'

'Government could do far more opening up access to data – this provides startups and scaleups with material to develop new innovative services.'

'Businesses see huge opportunities online, but don't know who in the market can advise them, there are relatively few people you can turn to.'

'There are some extremely interesting companies out there that have captured the essence of Scotland in new dynamic contemporary ways – the whole scaleup sector could do with some of these branding insights.'

Corporate Markets

The challenges of accessing corporate markets was explored from different perspectives.

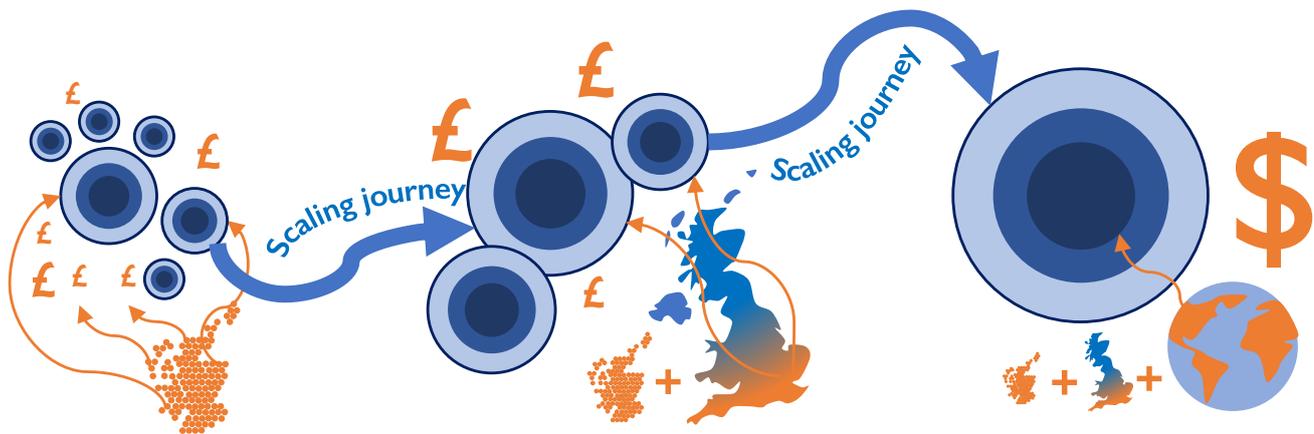
- Approaching corporate clients can be intimidating for the scaling business. Relative to other parts of the UK there are fewer large corporates based in Scotland. This is an area in which peer-to-peer learning and mentoring could pay dividends, learning how to prepare and how to gain access to corporates both in Scotland and beyond.
- The dynamics of different corporate sectors associated with Scotland was widely discussed. There was discussion about the development of charters for engaging with corporates. By creating an appropriate operating model, large corporates would be better placed for working with scale-ups. This would give them access to innovative ideas (making 20 investments and accepting that 5 might succeed), Corporates could act as investors and customers of scaleups. Scotland should introduce best practice from other regions of the world, examples of this are provided in the International section of this report.

Reimagining access to markets in Scotland: A co-design challenge:

By 2030, if Scotland wants to be recognised as a global leader in offering access to markets to scaling firms it must answer these questions:

- What are the market access needs of Scottish scaling firms going to be by 2030?
- What is the true current state of market access?
- Which regions and countries are currently leading the way?
- How are they doing this?
- If you were starting with a blank sheet what would Scotland's 2030 approach to providing access to markets look like?
- What is the gap between current practice and the ideal?
- What initiatives need to be put in place to improve market access?
- How could change be initiated? What needs to happen? What would the impact be? How could this be resourced? How would different actors in the ecosystem need to work together?

Improving access to investment



Angel Funding:

- Angel network now well established in Scotland.

2021 ScaleUp Institute research, across the UK shows:

In 2021 82% of scaleups have used external finance. 41% of scaling companies in other regions of the UK feel that a majority of funding resides in London & the South-East..

'Perhaps too many Scottish companies are eeking out an existence on angel cash – they would be better off folding sooner and then getting on with the next proposition'.

Mid-stage funding

- Series A funding, acknowledged to be a real gap in Scotland.
- Funds tend to be London & SE focused,. Investors like to fund locally, basing decisions on tacit knowledge and assessing the leadership team and their capability, this makes geography a challenge.
- Evidence that Scottish firms can be under valued, due to distance and lack of experience and the right advice.

At all workshops the investment journey was widely discussed. This clearly has many stages. As companies scale they have to navigate many different forms of funding, negotiating this journey from Scotland has some particular challenges.

Angel Funding

Evidence suggests that Scotland currently has one of the best angel funding ecosystem in the UK. This wasn't the case 15-20 years ago. Workshop participants said this achievement should be celebrated, but it might however have unintended consequences:

Later stage funding

- This generally means accessing international funds.
- Scottish scale-ups need to understand the implications of taking this investment, they will need to perform against international expectations & benchmarks.
- As Scotland builds scale-up critical mass it will develop higher levels of interest in the international investment community. This collective story needs to be built.

'We don't want to be spoon fed ... founders don't like a paternalistic approach ... but they do like opportunities and patterns they can follow, We need to learn from the investment journeys of others as they have scaled. We need to understand their generic investment journey but also how this worked as a journey starting in Scotland.'

'There is investment knowledge available at the end of a Zoom call, perhaps we should think about geography in a different way now?'

'There is a funding gap in Scotland if you compare it to London or the US, but not if you compare it to Belgium or the North of England, there are plenty of other regions and countries facing the same challenge ... what solutions are they adopting?'

- A great emphasis has been put on early-stage pitching, with this now being done so well, syndicates may well be investing ideas with limited viability. Perhaps, limited resources are now not being deployed in the most optimal way?
- There is now a strong angel community in Scotland, but it might not have the same levels of sector expertise as more specialist angel funders in other regions. Taking Scottish angel funding might be reducing opportunities for scaling firms in Scotland to benefit from investment expertise available elsewhere.
- At the workshops participants shared their stories of securing investment funding. It was suggested that the support landscape in this area needed better signposting. Access to advice was easier in some regions of Scotland than others, available advice didn't always cover the full bandwidth of investment mechanisms.
- Some angel funding dilutes founders too early and stifles future funding rounds.

Series A funding

There is a gap in series A funding in Scotland. Scaling companies shared experiences of approaching investors in this investment space:

- With fewer precedents in Scotland for raising series A funding local opportunities for peer-to-peer learning were limited.
- It was considered critically important to both understand the nuts and bolts of the A round process but also understand how to set the right ambition.
- Scaling firms were approaching investors in London who tended to be orientated to the south east of England. It requires stepping out of the comfort zone of Scotland.
- Having the right board in place to support this stage was also highlighted. Having a chair with experience was invaluable, examples were described where new Board expertise had been bought in from outside Scotland to support this stage.
- Across all stages of securing investment the extra pressure on founders and leaders was emphasised, the business still had to be run and successfully grow whilst simultaneously time and resources was put into securing investment.

Later stage funding

'To attract investment to Scotland we have to tell an inspiring story about what is happening in Scotland. What's our scaleup story? What is it that we are doing that differentiates us from others? Why would this appeal to investors? Who is responsible for narrating this story?'

'It can be threatening when you have to compare yourself to the global benchmark in order to secure the investment that you need.'

'We need to look at how we can bring in more players who can offer the funding to the Scottish ecosystem.'

Many aspects of later stage funding were discussed: To secure later stage funding it was acknowledged that often international investment needed to be secured. Bringing international interest to Scotland, currently meant flying interested parties in via London, the importance of transport links was emphasised. If Scotland was going to be brave and fly interested investors in, it has to set the highest possible bar for the quality of opportunities in the shop window, sometimes it was felt the investment opportunities being presented were not as strong as they needed to be. Leverage and support from local funds such as the Scottish Investment Bank, could be critically important in this space. If Scotland PLC was seeking international investment for its scaling firms it needed to accept the macro-level impact on long term company ownership. To retain firms and talent in Scotland it requires a world class scaling ecosystem.

Reimagining access to investment in Scotland: A co-design challenge:

By 2030 if Scotland wanted to be recognised as the global leader in seamless access to investment for scaling firms what would it need to do?

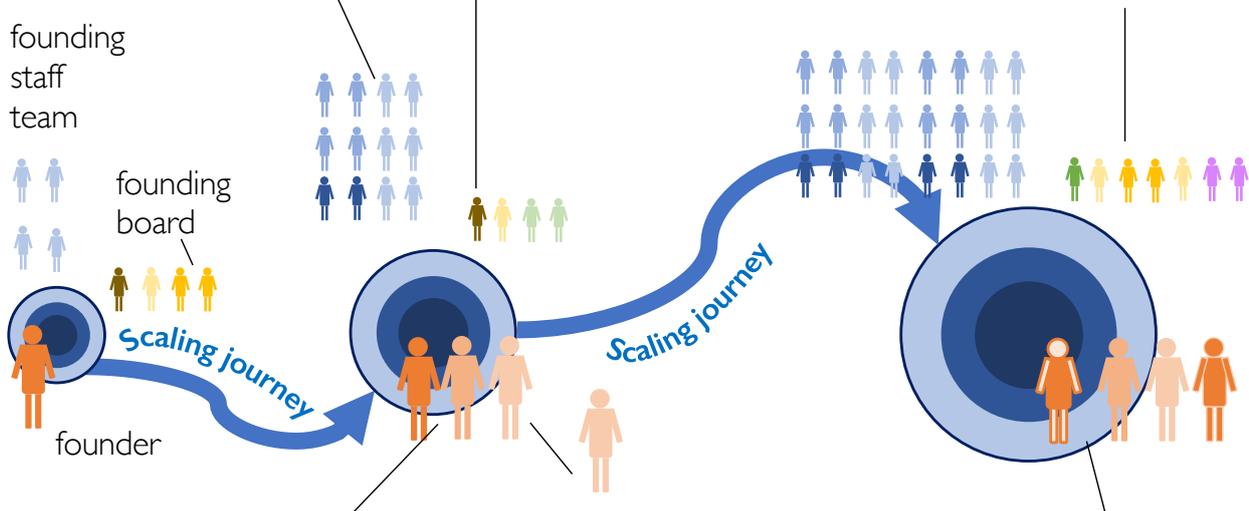
- What are the investment needs of Scottish scaling firms going to be by 2030?
- What is the current state of investment access?
- Which regions and countries are currently leading the way in organising their investment landscape? How are they doing this?
- If you were starting with a blank sheet what would Scotland's 2030 approach to investment access look like?
- What is the gap between current investment practice and the ideal?
- How could change be initiated? What needs to happen? What would the impact be? How could this be resourced? How would different actors in the ecosystem need to work together?

Improving access to talent

As the company scales new staff will need to be recruited with new skill sets.

As the business scales, new board talent may be needed, bringing in market & investment experience etc.

Later stage funding may influence board membership, a chair with new skills & experience maybe required.



As the business scales senior leaders will need to be recruited

Some of the team may no longer have the rights skills.

Ultimately the founder may not be the most appropriate CEO as skills needs develop

2021 ScaleUp Institute research, across the UK shows:

66% of scaleups are saying that access to talent is vital, or very important, to the continued scaling of their business.

75% rank social skills in their top 3 essential needs, whilst 66% select technical skills. Just behind are management skills (60%) and business skills (58%).

Just over 55% of scaling businesses have a Board, a further 12% plan to establish one.

Scaling companies are talent hungry and as they grow their talent needs change. During the workshops the following insights into accessing talent were shared.

The founder

Sometimes the founder, and sometimes other senior staff who might have had a technical or creative specialism might not be the best person to lead the company as it scales, this was seen as a particular challenge that could be resolved through careful planning. The skills required of a founder during the startup phase are very different to the skills required in scaleup. Participants suggested Scotland is weak in supporting the development of these skills.

Executive talent

There was much discussion about the challenges of recruiting executive talent in Scotland. In some areas experience and skills were at a real premium, often many impressive scaleups were recruiting from the same talent pool. Scotland offers a quality of life that could be appealing to prospective candidates, looking to relocate, it was suggested that interest in Scotland as a place to work had increased since the pandemic.

'Because scale-ups are innovating fast in new areas the talent they need, by definition is scarce.'

'People are beginning to move out of London – with Zoom you can do dynamic jobs wherever you are.'

'Company culture is actually the key driver of growth within a scaling company ... this is an area where there could be more training, peer-to-peer learning, perhaps more case studies.'

'The scaling mindset is not just a bullet point on a job description it is an approach to everything you do.'

'Hiring remotely and onboarding can be particularly challenging ... another area where we need to be sharing best practice across our peer-to-peer networks.'

In parallel some scale-ups shared experiences of recruiting international talent now working at a distance online. Some of the challenges of relocation were also discussed. It was suggested that there was still not enough critical mass of career opportunities within scaling firms in Scotland to recruit some candidates.

Board level talent

The importance of having a high-quality board was mentioned repeatedly throughout the workshop series. In particular board members with recent scaling experience, specific technology expertise, relevant investment knowledge and the network to unlock markets were all sought after. Again, as the needs of the scaling company evolve, it was widely recognised that board membership might need to change. Nurturing board talent and reaching out internationally were seen as priorities for the Scottish scale-up sector.

General talent

All participants highlighted what they were looking for when recruiting staff teams.

- The right attitude was mentioned many times. It was important that prospective candidates connected with the working culture of the scaling firm, it was suggested that to recruit successfully scale-ups needed to be able to communicate their values and brand position very clearly. It was these elements of scale-ups that made them particularly attractive future employees.
- The most mentioned aspects of attitude were, a can-do approach, flexibility and resilience.
- In terms of skills; scale-ups were looking for problem solving, good people skills, critical thinking and the ability to really understand users and consumers and their needs.
- There was a lot of discussion about particular skills gaps. Sales expertise was mentioned, it was noted that no Scottish University has a Professor of Sales, yet this lies at the heart of the talent needs of the scaling firm. In the US this is not the case. It was suggested that sales could be taught far more at many levels, with technical sales for engineers and scientists and specialist programmes looking at online sales.
- Digital skills were widely mentioned as being in short supply. This was about far more than the ability to programme and write code, all aspects of the contemporary scale-up were now about data, digital systems and digital enablement, skill sets that were often very lacking in current school leavers and graduates in Scotland.

'Do we celebrate success enough in Scotland? Is there a culture here of not getting ahead of yourself?'

'We end up with people on boards who have never started their own business (accountants and lawyers).'

'Boards are not diverse in Scotland, in London it's perfectly normal to have a 20-year old on the board – this could be who you are selling too.'

'In Scotland the pool of board members is limited – this creates a very closed network of people.'

'People won't leave a job just because your scale-up has raised money and is offering a good package, people go where other people go.'

'we need to bring talent into Scotland, are we explaining the quality of life you can have here?'

Recruitment practices were widely discussed, with interesting examples of particular strategies scaleups had used to find specific expertise through networks like LinkedIn. Likewise the important roles played by specialist recruitment firms was also shared. The challenges of bringing EU staff into roles in the post Brexit was mentioned, clearly many scaleups in Scotland were relying on the international talent pool in key posts (particularly specialist digital roles).

It was suggested that far more could be done to work with Colleges & Universities to promote scaleups as exciting and rewarding places to begin a career; it was suggested that the contemporary 'milk round' was still very biased towards employment in big corporates. This rewiring of attitudes in the educational system in Scotland could also be taken into schools. Perhaps opportunities now exist to actually revisit what sits in the SQA curriculum and whether it is helping to develop the skill sets in demand in Scottish scaleups.

In parallel with reflection around recruitment participants also shared the pain experienced when letting staff go, something that is a real challenge in scaling firms when role expectations can change very quickly. This was an area where specialist external advice and the insights of peers could really add value.

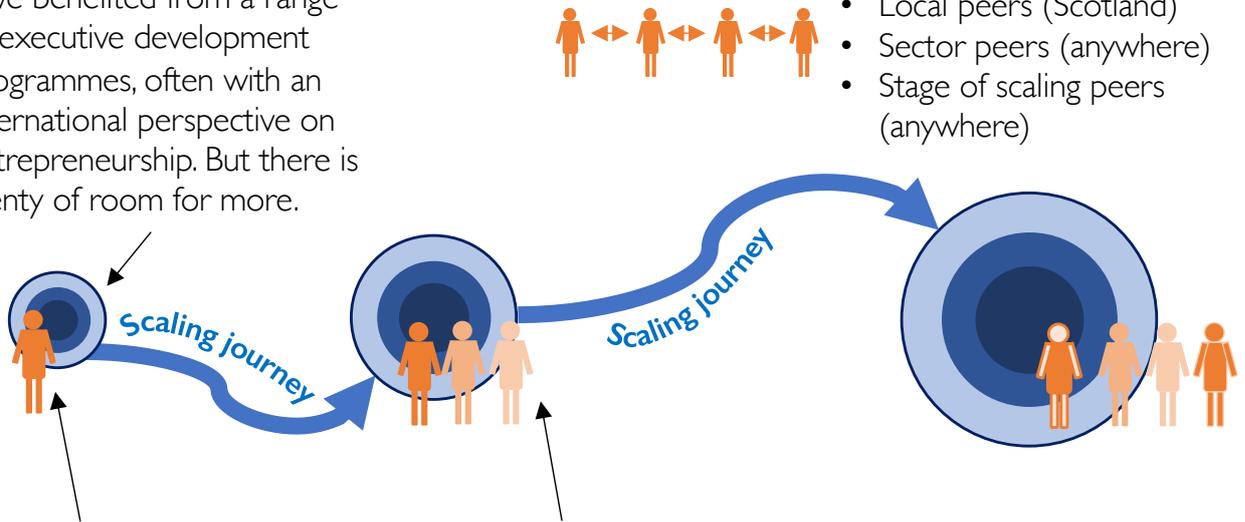
Reimagining access to talent in Scotland: A co-design challenge:

By 2030 if Scotland wanted be recognised as the global leader in having access to the talent needed by scaling firms, what would it need to do?

- What are the talent needs of Scottish scaling firms going to be by 2030?
- What is the current state of talent access?
- Which regions and countries are currently leading the way in building access to talent? How are they doing this?
- If you were starting with a blank sheet what would Scotland's 2030 approach to talent access look like?
- What is the gap between current practice and the ideal?
- How could change be initiated? What needs to happen? What would the impact be? How could this be resourced? How would different actors in the ecosystem need to work together?

Improving access to know-how

Scaleup leaders in Scotland have benefited from a range of executive development programmes, often with an international perspective on entrepreneurship. But there is plenty of room for more.



From day 1 the founder will need new knowledge, usually with a preference to learn from others who are on the same journey or have done it before: 'peer-to-peer' learning.

As other leaders come on stream they will also benefit from peer-to-peer learning. Many more peer networks could be developed, for example, around roles. (for CMOs, CFOs, CTOs etc)

Scaling firms are also looking for technical / R&D know-how to help scale their business. Companies are often launched on the back of a new technology, there are then significant technical challenges associated with scaling. Access to technical expertise is key

2021 ScaleUp Institute research, across the UK shows:

Scaleup leaders consistently recognise the need to build leadership and management capability. There is clear demand for skills around strategic and business development and a commitment to training. The local support offered by networks of peers, mentors and non-Exec Directors remains key.

Scaling companies are hungry for know-how: knowledge on how to lead, to develop staff as their roles evolve and for new technical knowledge to innovate new products and services. During workshops the following aspects of accessing know-how were discussed

Leadership skills and mindset

- In Scotland entrepreneurial training and executive programmes, particularly those engaging with international best practice (notably from the US) were widely praised (like the Saltire Fellowship Programme) both for content but also the value derived from the peer groups that were formed. Again, with rapid development of online learning there now new opportunities to connect Scotland's scaling learners to global best practice.

'MIT training & the growth advantage programme were very helpful. The Scale-up Scotland programme has taken this to another level.'

'Are Scottish peer-to-peer networks diverse enough?'

'We are a small country, yet the educational ecosystem for entrepreneurship is very fragmented.'

'Sales is not taught in UK business schools .. Sales as a subject is just not seen as being academically respectable.'

'In the US there is much more fluidity with academics moving between academia and industry.'

'I have benefited from having a friendship group of business leaders sharing insights and experiences .. peer-to-peer and peer-to-learn learning is key.'

- In Scotland support and education for those considering entrepreneurship has grown considerably, Particularly through regional, sector-based, shared-interest and University & College start-up and spin-out initiatives. However, when an entrepreneur finds themselves running a rapidly scaling business, many new skills are needed very quickly. Mentoring and peer-to-peer learning is critically important in developing these skills, Scotland needs to ask whether it has the right networks in place to provide this support to the scaling firm. Initiatives like the Hunter Foundation's Scale-up Scotland programme need to be extended. These programmes could be based on both Scottish and UK cohorts. They should take advantage of new ways of working and connect cohorts across geographical boundaries, forming peer groups focused on sectors, the needs of special interest groups and around a particular stage of scaling.

Accessing university expertise

- Scotland has a world leading university sector, but some participants were critical about how well this knowledge base was currently supporting Scottish scaling firms. Research suggests few scaleups are based on technologies and science that has evolved directly from the Scottish university base. There are pockets of excellence but in general, uptake of Innovate UK funding to support university industry collaborations in Scotland is running below the UK average.
- The bureaucracy and signposting challenges of engaging with Universities was discussed. Participants suggested that sometimes local universities appeared to focus on competing with each other, rather than collaborating to offer scaleups seamless access to knowledge.
- Universities were perceived to push what they wanted (PhDs etc) rather than focusing on the needs of scaleups.
- The SFC's Innovation Centres (IC) were mentioned, these were deemed to be helpful if your innovation need fitted with the sectors supported through the IC programme. This approach did raise questions about missed opportunities for supporting innovation in non-represented sectors and most importantly in the increasingly important space between and across sectors.

'Local leadership is key. At the moment scaling companies are not benefiting as much as they should from investment like the city deal.'

'More funds will be coming through to 'level-up'. How can these be deployed for the benefit of scaleups, it will be scaleups that will deliver the economic growth that will transform Scotland's regions?'

'This is about an integrated approach to investment, yes we need infrastructure but alongside delivery on scaleup's four key needs, investment, talent, know-how & market access.'

'Universities should be making links with companies part of the development plan of staff.'

'One of the performance indicators of universities is employability and starting salary – this kpi goes against entrepreneurship.'

Reimagining access to know-how (peer-to-peer): A co-design challenge:

By 2030 if Scotland wanted to be recognised as a world leader for scaleup peer-to-peer learning, what would this look like? How could this position be developed?

- What are the peer-to-peer learning needs of scaleups, how are these changing?
- Which regions and countries are currently leading the way?
- How are they doing this?
- If you were starting with a blank sheet what would Scotland's 2030 peer-to-peer learning approach look like?
- What is the gap between current practice and the ideal?
- How could change be initiated?
- What needs to happen? What would the impact be? How could this be resourced? How would different actors in the ecosystem need to work together?

Reimagining access to know-how (College & University Support): A co-design challenge:

By 2030 if Scotland wanted to have a College and University sector that was a global leader in supporting scaleups what would this look like? How could this position be developed?

- What are the needs of scaleups? How are these needs changing? Do Colleges & Universities really understand these and put them at the centre when developing access to know-how?
- What College & University support for scaleups currently works well?
- What is currently challenging?
- Which of these needs could be supported through collaboration with Colleges & Universities, which could be supported through other mechanisms?
- Which regions and countries are currently leading the way?
- How are they doing this?
- If you were starting with a blank sheet what would this support look like in 2030?
- What is the gap between current practice and the ideal?
- How could change be initiated?
- What needs to happen? What would the impact be? How could this be resourced? How would different actors in the ecosystem need to work together?

International comparisons

'Scotland is not going to be Silicon Valley, so what does it want to be instead?'

'Many try to copy the US, if we try to copy we will be pale imitations.'

'What's Scotland's scaleup brand identity going to be?'

'The Visit Scotland Year-Of have been interesting mobilisers, could we have a year of entrepreneurship.'

'We don't just need to connect to the Scottish diaspora, we should be talking to anybody of interest.'

'There is massive underutilisation of global best practice ... the answers for scaleups are all out there.'

'Let's be ambitious about how we engage globally & connect to a global ecosystem of scaleups.'

Throughout the workshop series participants drew on their knowledge and experience of scaleup support in other parts of the world. All agreed that the characteristics of other countries and regions would always be different to Scotland, even places of a similar size. It was suggested, however, that a range of best practices could be drawn by looking at scaling ecosystems in other parts of the world. Interesting examples cited in discussions included:

Netherlands, where the Netherlands Foreign Investment Agency (NFIA) genuinely works like a one-stop shop. If you are looking to scale your business they will take you by the hand and walk you through the entire process of setting up a business in the Netherlands. Does Scotland take this one-stop shop approach? Has the Scottish ecosystem ever mapped out how the support journey works and feels like from a scaling business perspective, looking at journey steps, interactions, touchpoints, to systematically work out areas for improvement?

Singapore, where private sector, the regulator, education and government have all been aligned to support high growth sectors like Fintech. Here government makes a bigger bet on a smaller number of sectors. Has Scotland used opportunities to convene stakeholders and align areas of policy to support scaling businesses?

Canada, which has been proactive in aligning start-ups, corporates and Higher Education. Waterloo University is nurturing a Fintech sector with Royal Bank of Canada on campus. University of Toronto's biotech cluster is being enabled by bringing Johnson & Johnson onto campus. Are opportunities being missed in Scotland, Barclays has just opened its new campus in Glasgow but outside the University led innovation districts being established in the city. Do initiatives need to be aligned to build real global critical mass for Scotland?

Estonia was noted to have a vibrant culture of investment at all levels. It has built itself a reputation for bringing on stream innovative and fundable scaling business propositions, this clear brand position has bought international investment interest. All nation states have an opportunity to build a reputation-based brand position. What messages does Scotland want to project to the international investment community?

International comparisons

'Confidence and ambition of founders is key, but this is so linked to the confidence of the place!'

'We need a more open ecosystem across all parts of the UK. Many high quality scale-up initiatives and programmes available in other parts cannot be accessed by scaling firms in Scotland.'

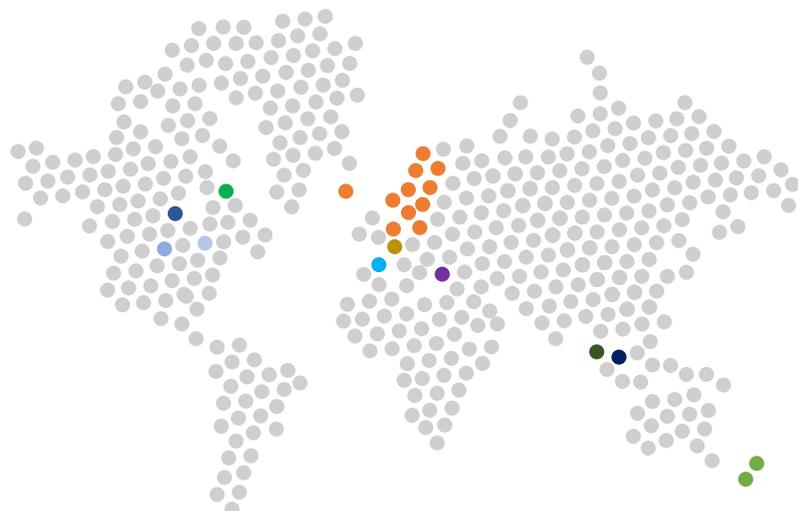
'Can we encourage scaling companies to locate into Scotland and stay in Scotland.'

'Scotland's scaleups need porous borders to allow free flow of talent, learning, investment and access to markets.'

The **Skåne region of Sweden** where innovation agency Vinnova has played a proactive role in stimulating cross sector innovation and using the region as a prototyping hub for global corporates operating in all sectors. Scotland has been pursuing a sector-based approach to economic development, yet the scaling (and by default the most innovative businesses) operate in all sectors, is the Scottish support system missing an opportunity to stimulate innovation in new ways across these silos?

Global benchmarks

Inspired by discussion about lessons that Scotland's existing ecosystem could learn from international benchmarks, a series of regional and national scaling ecosystems were explored in more detail. Around the world different regions and nations are acknowledging the significance of scaling firms to their economies and broader issues such as climate change and social equality. These initiatives are often branded and communicated in a way that captures a regional or national commitment to supporting scale-ups. Some of these are broad, covering all sectors of the economy (Nordic Scalars), others focus very specifically on the tech sector (Scaleup Velocity, Israel). The emphasis of that support varies according to local priorities, some focus on signposting (Scaleup NZ), others on programmes (Scaleup Milwaukee). Likewise different forms of public and partnership sit behind each initiatives, with enterprise agencies taking the lead (Scale-up SG) and private sector investors (Scale-up Malaysia).



Nordic Scalars •
Operated by Nordic Innovation

This is a 5-year initiative that aims to position the Nordic Region (Norway, Finland, Sweden, Iceland & Denmark) as a place not only for starting up, but also for scaling up. Like Scotland even though the Nordic countries are above the OECD average for startups, the challenge is that they seldom grow to scale. The initiative supports peer-to-peer learning, cross-sector workshops and studies into the issues facing scaling Nordic firms.

ScaleUpNation, located in Amsterdam •

This is an initiative that aims to significantly increase the number of impact-orientated scaleups (in the world), with a particular focus on enterprises that deliver innovative products and services that deliver for planet, people and profit.

Scale-Up Europe •

This European initiative is made up of more than 200 ecosystem members (start-up CEOs, researchers, investors and corporations). The goal of the group is to accelerate the rise of global tech leaders born in Europe, in the service of both progress and technological sovereignty. The focus is on talent, investment, startup collaboration and deep tech. The initiative runs workshops, commissions reports and organises events.

**Scaleup West Virginia
Scaleup Kansas City
Scaleup Milwaukee
USA •**

These are all example of Regionally based Scaleup initiatives in different parts of the USA. With different models of membership and support each offers access to training programmes and specialist knowledge for scaling firms.

Scale-Up NZ •
New Zealand (operated by Callaghan Innovation)

The Scale-Up NZ hub is an online portal that maps out New Zealand's scaleup innovation system, it aims to make it faster and easier for ambitious business to find and connect with the people, capital and other help they need to innovate and grow. It also creates opportunities for investors, incubators, multinationals and other collaborators to connect with innovative businesses.

Scale-up SG •
Operated by Enterprise Singapore

This a 12-18 month development programme that helps selected high-growth potential local companies scale effectively, become leaders in their fields and be groomed into future global champions. The programme aims to accelerate the companies' growth so that they contribute significantly to Singapore's economy and create good jobs for Singaporeans.

Scale-up Malaysia •

Initiated in 2019 this is an accelerator programme supported by a number of private sector partners that aims to help start-ups move beyond ideation and initial product market fit to the next stage of growth.

**Scaleup
Operated by Invest
Ottawa**

An initiative focused on leading tech companies that provides access to advisors, a network of peers, talent, new markets and other growth resources

**Scale-Up Institute
Toronto •**

Operated by Toronto Region Board of Trade
Building on the findings of the Toronto Region Board of Trade *Defying Gravity* report this initiative provides a series of curated programmes to help high-growth firms overcome barriers to continued growth. The offer supports both tech and non-tech sectors and includes mentoring and access to peer-to-peer networks.

Scale-up velocity Israel •

This is an initiative that builds partnerships with leading high-tech companies, academic and training institutions, government agencies, non-profits, and philanthropists to build programs to increase and improve the supply of talent to Israel's tech sector.

Conclusions

There are a number of conclusions from this review.

For everybody with an interest in Scotland's economy who wants to see economic uplift (and ultimately delivery on broader challenges like climate change and social equality), we know scaling firms will be a key driver of change and their needs must be a strategic priority. This means the ecosystem that supports them must engage with the needs of the teams who lead these companies. This report gives an insight into what these needs are and suggests that they have not always been prioritised as Scotland's support ecosystem is shaped. Scotland needs to start with changing mindsets. This is a responsibility of everybody. All voices need to emphasise the significance of entrepreneurship and the critically important task of facilitating the scaling of companies in Scotland.

The review suggests that actors within this ecosystem of scaleup support need to work in new ways, to deliver on these needs. Scotland must co-create a shared ambition for its ecosystem of scaling firms, there needs to be a clear vision for all audiences. A variety of themes have emerged in this review which could help frame this ambition, workshop participants have suggested:

- A statement that communicates the central role played by scaleups in driving economic performance, but also in driving innovation more widely within the economy and society. Looking forward scaleups will play a key role in delivering on climate change targets and reducing inequalities.
- The need to communicate Scotland's distinctive ambition and quality of its scaleup ecosystem to global audiences, this is key to accessing international talent, investment, know-how and markets.
- The need to embed this ambition in the aims of all actors within the scaleup ecosystem.

There will then be many actions that can be taken by all actors within the scaleup support ecosystem, these need to be taken in collaboration and partnership; most importantly every initiative must link back to the future needs of scaleup founders, leaders, boards and staff teams, these are the people who will be delivering the economic and innovation uplift through their entrepreneurial actions. New initiatives need to be put in place but equally existing activities that are repetitious, add little value and are unaligned with the needs of scaling firms need to be stood down. Rather than listing in great detail a set of actions that should be taken by actors within the ecosystem this review suggests a series of co-design challenges, these are a way of setting a vision for different facets of the scaling ecosystem and then using the expertise in the system to craft solutions. The ecosystem should be empowered to co-design new ways of working against these briefs.

Finally, the last thing Scotland needs is another organisation/agency within its already cluttered ecosystem of business support. There is, however, a need to give direction to, co-ordinate, evaluate, report and lobby on behalf of the critically important scale-up ecosystem. By adopting a Collective Impact approach¹, this role could be performed by a light-touch 'backbone' team. The team would be charged with ensuring that:

- Scotland's has a clearly stated strategic ambition for scaleups that was being being adopted by all actors in the scale-up ecosystem.
- There was a clear identity for Scotland's scaleup landscape and ambitions with stories of scale-up success were being widely shared.
- There was active dialogue and engagement with scaleups to establish priorities and needs.
- There was collective measurement of impact across the ecosystem and that a strategically useful portfolio of performance data was being gathered to help track scale-up performance & trends in Scotland.
- Through collaborative approaches, best practice solutions to challenges and opportunities were being developed and widely shared across the ecosystem. Key stakeholders could be brought together to work through the co-design challenges outlined in this report.
- The ecosystem was hardwired into global best practice.

This team would need to be humble, putting the achievement of scaling companies in the ecosystem in the foreground it would have to be agile, politically adept, have excellent people skills and the networks to act as an advocate for Scotland's scale-up ecosystem. Currently, this prioritisation of the scale-up agenda and oversight of its development does not exist in Scotland.

Appendix A

The five needs of scaling firms in Scotland.

This review captures the voice of scaleup founders, leaders and actors within Scotland's scaleup support ecosystem suggesting five core scaleup needs.

1. The scaleup agenda needs to be prioritised in Scotland.

- I. Scotland must recognise the critical role that scaleups play in developing the economy, society and a net zero future.*
 - o Prioritising scaleups will give maximum uplift to Scotland's economic transformation ambitions.
 - o Having a clearly focused scaleup agenda does not preclude other priorities, it will deliver on Scotland's across other economic agendas (for example, regional economic development, inequalities and net zero targets).

- II. Scotland must mobilise leadership for its scaleup ambitions.*
 - o Leadership with the authority to act at pace, that is respected by stakeholders and ecosystem actors and with the political adeptness to influence.

- III. Scotland must empower redesign of its scaleup ecosystem.*
 - o Challenges needs to defined and clearly communicated.
 - o Redesign must be informed by up-to-date and future-proofed understanding of scaleup needs and the strengths and weaknesses of the scaleup ecosystem.
 - o Actors in the ecosystem need to be upskilled so that they can change their role and redesign their offer.
 - o Silos within the ecosystem need to be broken down and knowledge shared.

- IV. Scotland must ensure its scaleup support ecosystem delivers on the real needs of business.*
 - o Challenges needs to defined and clearly communicated.
 - o Redesign must be informed by up-to-date and future-proofed understanding of scaleup needs and the strengths and weaknesses of the scaleup ecosystem.
 - o Actors in the ecosystem need to be upskilled so that they can change their role and redesign their offer.
 - o Silos within the ecosystem need to be broken down and knowledge shared.

2. Improved access to talent is needed

- I. Particular skillsets are in short supply.*
 - o There are missing workforce skills, particularly in sales and all aspects of digital business.
 - o More board members are needed who have scaleup experience & access to networks beyond Scotland.
 - o Leadership skills need to be developed, particularly 'leading through uncertainty' and the 'challenges of scaling'.
 - o Across all roles, scaling companies are finding important soft skills are in short supply.

- II. *New talent needs to be attracted to Scottish scaleups.*
 - o From outside Scotland – This requires brand and narrative development to communicate the quality of life and quality of career opportunities in Scotland, to prospective candidates.
 - o From inside Scotland – This requires shifts in the way prospective employees perceive scaling firms. Does the university 'milk round' encourage scaleup careers?
- III. *Talent needs to be retained in Scotland.*
 - o When companies fail or indeed scale and sell, talent is often released, the Scottish scaling ecosystem needs to retain this talent.
- IV. *Scaling firms in Scotland need to embrace new ways of working to attract global talent.*
 - o Scottish scaling companies need to embrace new modes of remote working, particularly recruitment, onboarding & team working.

3. Improved access to markets is needed

- I. *Scaleups would benefit from more innovation in Scottish public procurement.*
 - o Public sector markets should be more accessible to scaling firms, for the mutual benefit of scaleups (giving them anchor customers) and the public sector (driving innovation).
- II. *International markets need to be opened up for Scottish scaleups*
 - o Scaling companies seek support, on a sector-by-sector basis, to access international markets.
 - o There is an opportunity to recast the role of the Scottish Governments and its agencies as both ambassador and door opener for Scotland's scaling firms internationally.
- III. *The role of corporates in the Scottish scaleup ecosystem needs to be developed.*
 - o New partnerships need to be developed between Scottish scaleups and corporates, for mutual benefit of both. Models of corporate partnership are evolving in other parts of the world.
- IV. *Scottish scaleups need to develop online marketing skill sets.*
 - o All skills sets in this area are in short supply, in both B-to-C and B-to-B markets (for example, ecommerce and digital branding).

4. Improving access to investment

- I. *Scotland needs to address gaps in series A and B funding*
 - o Scaling companies need more access and support for funding from beyond Scotland.
 - o Scaleups need to be prepared for investment, with greater understanding of funding opportunities and how to set ambition & narrative. Access to peer-to-peer experience will be key.

- II. *Recognise limitations of angel funding*
 - o There needs to be broader acknowledgement of how Scottish angel funding can limit the growth of scaling firms, especially if this locks scaleups into parochial or risk averse thinking.
- III. *Leverage role of Scottish co-investment funds*
 - o The full potential of co-investment funds needs to be unlocked
- IV. *Flows of investment within the Scottish ecosystem need to be optimised.*
 - o Scotland needs to build a culture of recycling investment from scaleup successes, ensuring revenues stay in the Scottish ecosystem.

5. Improving access to know-how

- I. *The learning offer and modes of learning delivery in Scotland need to change.*
 - o Scottish learning providers need to deliver on learning needs being articulated by scaleups.
 - o Delivery modes need to be redesigned to fit scaleup timetabling and learning style needs.
 - o A step change in quality and quantity of teaching is needed, based on global best in class.
- II. *Scotland needs to scale access to Peer-to-Peer and Peer-to-Near learning for all scaleups.*
 - o By Sector (who in my industry (globally) has done this before?).
 - o By Stage of Scaling (who in any industry has tackled the challenge of this stage?).
 - o By Geography within Scotland (who is in my peer group locally, how can we learn together?)
 - o By role, CEO, CMO, CFO (how do others with the same role tackle this challenge?).
- III. *Scotland's R&D and technology base needs to be made more accessible to scaling firms.*
 - o Access to specialist R&D (patents and technology) needs to be made easier for scaling firms.
 - o There needs to be a greater focus on specialist advice on scaling processes.
- IV. *Scotland needs better signposting to best-in-class specialist advice*
 - o There needs to be better signposting and the resource to access the best-in-class specialist advice. This could be in the private sector; maintaining public sector support could be stifling a more agile and responsive private sector offer.

Appendix B

Five ways to rewire Scotland's scaleup support ecosystem to deliver on these needs.

This review suggests that to deliver on the five needs of scaleups, five missing pieces in the ecosystem need to be put in place.

- 1. The current ecosystem needs to be mapped from the perspective of talent access, market access, investment access and know-how access. Once mapped the strengths and weaknesses of current provision can be established to inform improvements and redesign.**
- 2. In parallel a shared ambition and identity needs to be developed for Scotland's scaleup ecosystem.**
 - A statement of ambition needs to be developed for Scotland's scaleup ecosystem, communicating an aspiration to be a global leader in scaleup support.
 - Scotland needs to establish an identity for its scaleup ambition. Stories of scaleup success need to be collected and widely shared, to encourage best practice and to communicate Scotland's ambition to key external stakeholders.
- 3. To inform and track developments in the ecosystem Scottish scaleup performance data and the needs of scale-ups must be collated and published on an annual basis**
 - The performance of Scotland's scaleup ecosystem should be measured annually, linking into ScaleUp Institute data, but with greater granularity to allow Scotland to assess the performance of its regions, sectors and ecosystem actors towards its shared ambition. This data should be used to track the value of investment into the scaleup ecosystem.
 - The needs of Scottish scaleups (founders, leaders and staff teams) should be informing strategic actions of actors within the support ecosystem (agencies, specialists, universities, colleges etc). Insights could be gathered and published on an annual basis to define their objectives and activities based on real needs.
- 4. Best practice networks need to be created across the ecosystem to support collaboration, enable redesign and break down silos across the ecosystem.**
 - Collaborative co-design workshops¹ should be regularly convened with participants from across the support ecosystem. These would explore shared challenges & opportunities and develop solutions that cut across existing silos. These groups could explore the shared challenges described in this report and other opportunities as they arise.
- 5. All developments must be supported by strong leadership, resources and a commitment to continuous improvement.**
 - Committed leadership is required from across the scaleup ecosystem. From scaleups themselves, government, agencies, specialists, researchers, networks, investors & support organisations.

Footnote

1. Facilitated co-design workshops involving stakeholders from across the scaleup ecosystem would provide a platform for sharing ideas, defining opportunities and developing new approaches to scaleup support. These sessions would explore challenges, opportunities and drivers of change, define actions that need to be taken and initiate the development of new approaches.

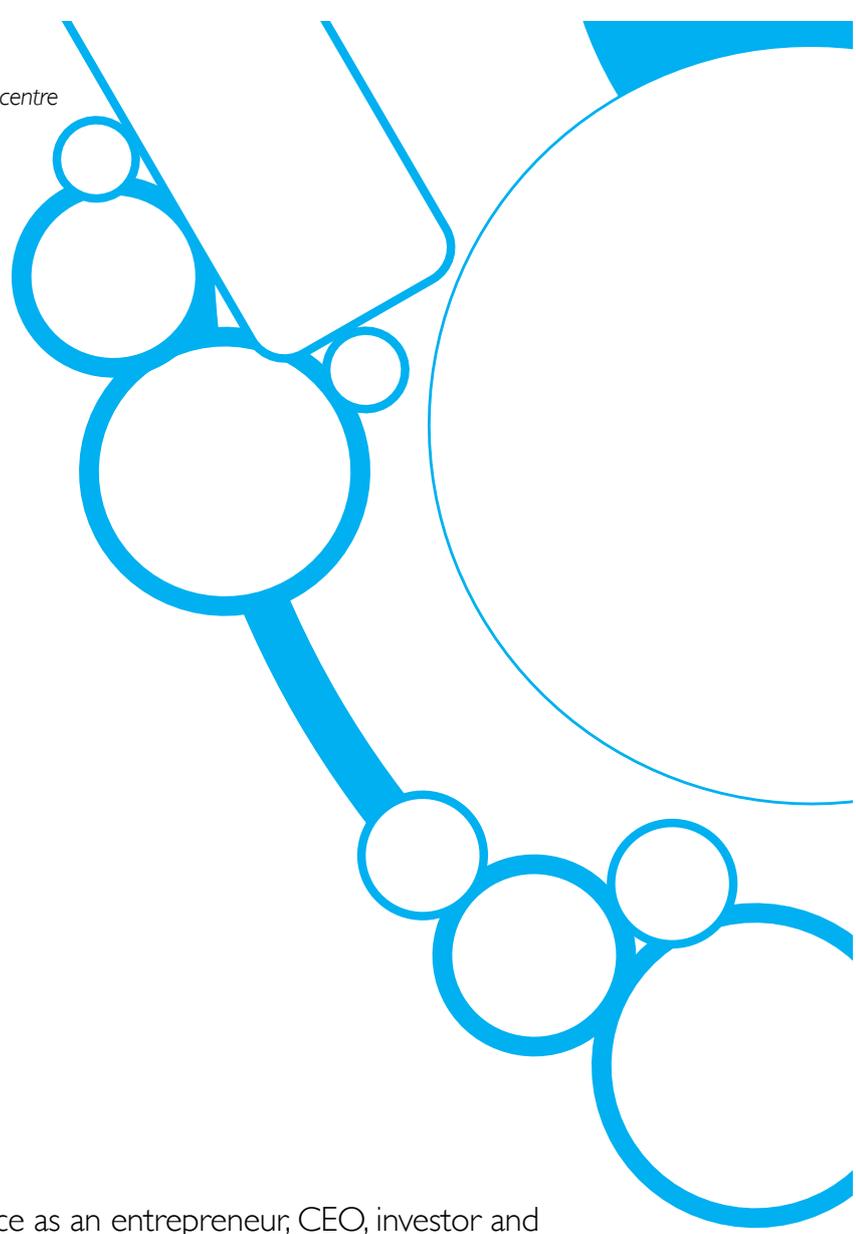
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About the authors

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Tom Inns has 25 years experience as an educational leader, researcher and design facilitator. He is founder of cofink a consultancy that helps scaling organisations build a collective understanding of challenges & opportunities, co-design solutions and co-deliver change. Tom is a visiting professor at DMEM, University of Strathclyde where he is Principal Investigator on research developing ecosystem mapping tools. He has been Director (CEO) of the Glasgow School of Art, Dean of DJCAD, University of Dundee & Director of the EPSRC/AHRC UK-wide Designing for the 21st Century Initiative. Tom studied engineering and design, he has a PHD in design-led innovation in small firms.

Putting the needs of Scotland's scaling companies at the centre

'The people doing best practice in scaling are almost never your immediate neighbours'

'There is massive underutilisation of global best practice ... the answers for scale-ups are all out there'

'we need to bring talent into Scotland, are we explaining the quality of life you can have here?'

'There is talent in Scotland, but some very impressive scale-ups are all looking in the same pool.'

'Let's be ambitious about how we engage globally & connect to a global ecosystem of scale-ups.'

'As your business scales – the scale of its impact on the planet probably also grows.'

'Successful entrepreneurs recognise that they cannot do it all on their own.'

'Most people are really scared about the decisions that they have to make when scaling a business.'

'When you are running a scale-up sometimes it's not about being more imaginative, it's about being bolder, surrounding yourself with like minded peers makes you bold, Scotland needs to be bold.'

'How do we build peer networks for scale-ups that have greater diversity?'

'Is geography dead now ... there is talent and knowledge at the end of a Zoom call ... should we look at things differently now?'

'Scotland is doing a lot of things right for scale-ups, they are just not joined up'

'We have always defined scale-ups by an increase in turnover ... for me it is about scaling across the triple bottom line.'

'In the last 12 months we have realised that we can access talent from anywhere, we now employ online staff located across the world'

'Despite the fact that we are a small country the educational ecosystem for entrepreneurship and scaling is not joined up'

'A great deal of Scotland's scale-up activity still seems to be in the central belt.'

'In Scotland people will always be willing to meet another scale-up CEO, on a good day Scotland is the best collaborative working place'

'As an entrepreneur scaling a business you are always going to be hitting challenges, you will constantly have to try new things'

'What is the goal of our scale-up ecosystem in Scotland?'

'If you are building a scale-up you want to recruit people with the right attitude'

'COVID has changed things, people are now looking to move to Scotland, COVID has opened a new talent tap'

'How a scale-up is talking about itself and attracting people to work is key'

'I have benefited from having a friendship group of business leaders sharing insights and experiences .. peer-to-peer and peer-to-learn learning is key.'

'Effective use of digital is a critical issue for all scaling businesses.'

'People won't leave a job just because your scale-up has raised money and is offering a good package, people go where other people go'

'The role scale-ups could play in pushing innovation in the public sector could be explored much more.'

'It is so important to have the right Board ... needs will change as the business scales ... do we have the right skill sets in Scotland?'

'Currently we don't have a clear story of what we want from scale-ups in Scotland – we don't have a consistent ambition shared across all stakeholders'

'Having start-up density doesn't drive a scale-up economy'

'We don't want to be spoon fed, scale-up founders don't like a paternalistic approach – but they do like opportunities and patterns they can follow.'

