



techscaler

CODEBASE

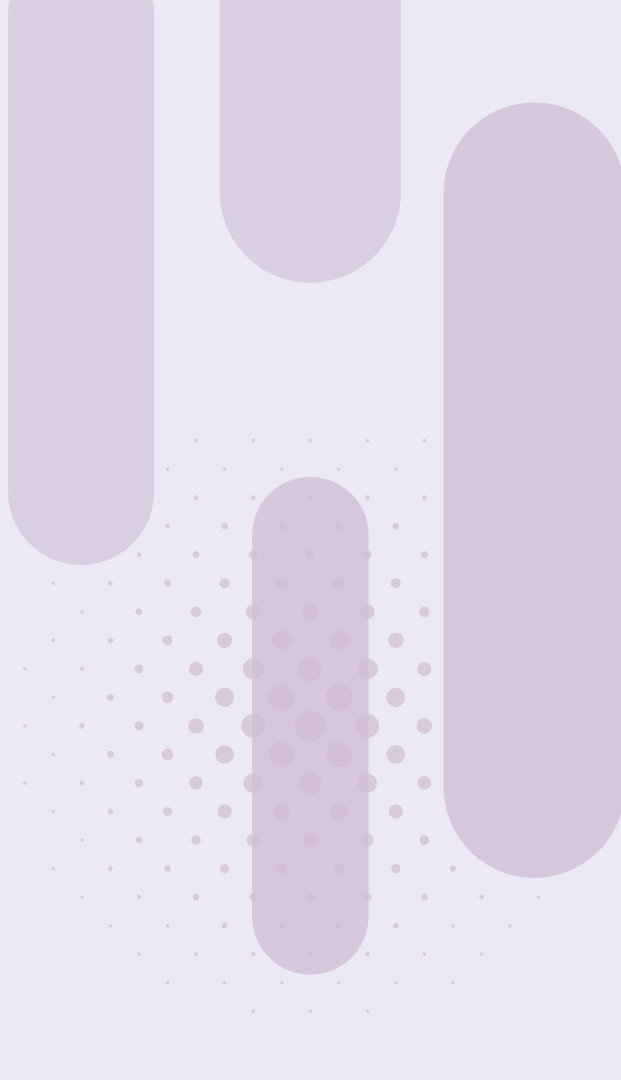
Techscaler annual report

2023

 Beauhurst

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Techscaler is building the startup infrastructure for Scotland

Launched in November 2022, Techscaler arose from the key recommendations of the Scottish Technology Ecosystem Review (STER), written by Mark Logan, Chief Entrepreneurial Advisor to the Scottish Government.

Techscaler is a nationwide programme to enhance the Scottish tech ecosystem, focusing on the core pillars of startup education, community, mentorship, workspace, and a network of ecosystem partnerships.

CodeBase is the Scottish Government's delivery partner for Techscaler.

643

Individual members

369

Members enrolled in education programmes

517

Startup and scaleup companies

56

Formal Techscaler partners

£52.12m

Capital raised since joining Techscaler

11

Techscaler hubs launched

£301.13m

Total lifetime capital raised by Techscaler startup companies

9,696

Techscaler event attendees

304

Members mentored

2,403

Techscaler digital community members

All data to December 2023; Source: Techscaler Applications Database and Live Techscaler Data Tracker

Foreword



“The Techscaler concept stands at the intersection of everything that’s essential to creating a thriving entrepreneurial ecosystem in Scotland. It provides, on a nationwide basis, the physical and social infrastructure where people can build great startups. It equips founding teams with the deep expertise needed to successfully grow those businesses. It is a concentration point of talent and potential, enabling investors to access and explore opportunities, and helping founders build valuable peer support networks more easily. And it establishes a platform upon which the country can further build, creating an ever-stronger support ecosystem over time.”

Mark Logan OBE FRSE
Chief Entrepreneurial Advisor
for the Scottish Government

Of course, this concept is meaningful only when partnered with world-class execution in its fulfilment. In this respect, Techscaler, in its first year of operation, has already established itself as a vital part of Scotland’s entrepreneurial support infrastructure. A network of approximately 2,500 members, 500 startups and over 100 mentors has already been established. World-class formal startup training programmes have been delivered to 369 member companies (not including the wider Startup Basics programme delivered in parallel to community members). Over 500 tech meetup events have been hosted, reaching a total audience of almost 10,000 people. Since joining Techscaler, member companies have so far raised over £50m in investment.

Techscaler has also partnered with many of Scotland’s key entrepreneurial ecosystem assets to form a support network that is greater than the sum of its parts, providing the capabilities of each partner to the member startups of the other. Partners include NHS Innovation Hubs, the Filament STAC IoT Accelerator, CivTech, Accelerate HER, Scottish EDGE and Barclays Eagle Labs, to name just a few.

Imagine, for a moment, that there were two Scotlands in existence, alike in all respects, except that one had taken the decision to implement Techscaler, with all of the above activity, training, support and ecosystem stimulation that follows from that decision, while the other had chosen not to do so. Which of these two versions of Scotland would be more likely to bring about a thriving, world-class startup and scaleup ecosystem?

This is only the beginning. Expect major developments in 2024, as the Techscaler platform continues to consolidate, integrate and evolve. In the meantime, I commend the CodeBase team, which operates Techscaler on behalf of the Scottish Government, for its outstanding progress in Techscaler’s first year of operation.

Mark Logan OBE FRSE

Author, The Scottish Technology Ecosystem Review; Chief Entrepreneurial Advisor for the Scottish Government; Professor of Computing Science, University of Glasgow; Senior Enterprise Fellow, University of Strathclyde.

Foreword



“Do we stagnate, list the reasons why it is too difficult to change, and be closed minded? No, we innovate! Scotland has always been a country of innovators, especially in healthcare. But this is a pivotal moment, things need to be done differently, to be transformative for patients, for communities and the NHS. Techscaler is a key to this transformation.”

Dame Anna Dominiczak
DBE MD FRCP FAHA FRSE FMedSci
Chief Scientist (Health), for the Scottish Government. Leading a key strategic partnership for the Techscaler programme.

We need clinicians, academics and all those that work in the NHS, to continue with improvements but we also need now to be truly entrepreneurial. By growing this ecosystem of innovators we can

tip the balance and cascade change into all aspects of the NHS. We need to adopt a startup mindset in every role, from warehouse operatives to decision makers, from nurses to administration, clinicians, innovation and procurement teams. Be bold, test something new, learn, iterate, and roll out rapidly for wider impact.

Health innovation needs a strong base in research evidence. There are extreme difficulties with budgets, time, ethics, MHRAs, restrictive frameworks and complex regulation. But I'm confident that colleagues working with their sleeves rolled up within this complex system can be the entrepreneurs of tomorrow themselves! With the opportunity to work closely with Techscaler members we can co-design solutions that will overcome daily challenges and ultimately will result in better patient outcomes.

A triple helix approach between the NHS, industry and academia will turn collaborations into action and initiate the faster adoption of life-changing research-driven innovations. Our Partnership between the Chief Scientist Office and Techscaler is integral in this. The three CSO-funded Regional Innovation Hubs are ideally placed to bring clinicians together with startups. They offer a place to piece the innovation puzzle together and work towards a common goal, tackling barriers in unison to solve the biggest health challenges. The story of end-to-end innovation is based

on research that starts as discovery science at university or medical school, and then needs to shift quickly through translation to adoption into the NHS. We need to speed up this process to reduce waiting lists, to deliver better services to patients and communities, and to deliver early diagnoses and better disease prevention.

Those seeking allies and like-minded individuals to disrupt the status quo, can be matched up to Techscaler education, mentorship and a growing community of startups. They can learn from peers, find partners to co-design projects, while at the same time receiving support from the NHS Regional Innovation Hubs and Techscaler teams.

Building this community together between Techscaler and the CSO-funded Regional Innovation Hubs will make the transformative difference that Scotland and the world needs. I look forward to seeing a revival phase in our country's history - with technological advances and entrepreneurial mindset creating economic growth, an explosion of life-science research and new companies in Scotland, to improve our NHS and to be sold all over the world.

Professor Dame Anna Dominiczak
DBE MD FRCP FAHA FRSE FMedSci

Regius Professor of Medicine, University of Glasgow
Chief Scientist (Health), Scottish Government

Building the foundational layer for the five years ahead



“Techscaler aims to make Scotland the best place in the world for founders to launch and grow a tech startup.”

Stephen Coleman OBE, Chief Executive Officer, CodeBase

At its heart, Techscaler aims to make Scotland the best place in the world for founders to launch and grow a tech startup. At CodeBase, we’ve been privileged to propel this groundbreaking ecosystem-building programme into existence for the Scottish Government.

CodeBase has been working as an ecosystem builder in Scotland, the UK and internationally since 2014. Over the last year, we’ve designed and developed the essential infrastructure around the Techscaler platform across six key workstreams: education programmes, mentoring, fundraising, partnerships, a hub network, and community.

You can find out more about these six areas over the next two pages.

Through this foundational layer, and in particular our vital network of ecosystem partnerships, Techscaler is setting a course to inspire, strengthen and lead Scotland through a new entrepreneurial era—one in which skills development, inward investment, diversity, and economic growth are central to the nation’s story.

We’re now a year into this transformational five-year programme, and we can’t wait to build on this foundation in year two.

Techscaler is developing the skills for an entrepreneurial nation

Techscaler improves access to entrepreneurial skills for all and creates a supportive environment where founders and their teams can build better startups faster.

Education

Building startups is teachable.

Techscaler education courses have significantly contributed to driving new memberships—they are one of the most effective methods for developing regional and interregional connectivity among founders.

369 (57%)

Founders enrolled in education programmes

6

Education programmes have launched

36%

Of Techscaler founders identify as female, higher than the c.20% industry average

Mentoring

Mentorship gives people access to industry and technical expertise.

It is the most frequent reason founders apply to Techscaler, and it has the highest feedback score in the programme, with a net promoter score (NPS) of +89.

304 (47%)

Founders mentored

100+

Specialist mentors with wide industry expertise

23%

Of current mentors identify as female; increasing this in 2024 is a priority

Fundraising

Raising capital is a fundamental requirement for many startups and is notoriously hard.

Techscaler supports startups by developing skills and connections necessary for fundraising, partnering with organisations including Scottish Enterprise and Panache Ventures.

£52.12m

Raised via 45 deals by Techscaler members in year one

£205k

Awarded through Techscaler MVP (minimum viable product) Grant in partnership with Scottish Enterprise

23

International investors hosted via two inbound tours

All data to December 2023; Source: Techscaler Applications Database and Live Techscaler Data Tracker

Techscaler is partnering to support startups across Scotland

Techscaler is working regionally and internationally to connect founders with relevant opportunities, remove access barriers, and build the social infrastructure needed to make it easier to connect with others and build better startups.

Partnerships

Partnerships allow founders to connect with opportunities and expertise across Scotland.

Techscaler connects founders with regional and domain expertise and maximises accessibility to reach a broad and diverse audience. Strategic partnerships have been established with universities, local authorities, public bodies, development agencies, enterprise agencies, and other corporations.

56

Formal Techscaler partners

8

Established relationships with other global ecosystem builders (US, Belgium, Finland, France, Germany, China, Singapore, and Japan)

Hub Network

Hubs are at the heart of Techscaler delivery and are a key part of founder engagement.

Founders can work with peers, mentors, and experts in 11 physical spaces across Scotland's seven regions. Ecosystem teams host events and workshops and provide regional member cohorts.

11

Techscaler hubs launched

7

Regions with physical hubs

176

Co-located startups

Community

Being a founder can be lonely; Techscaler provides a community to connect, learn, and grow with.

Techscaler events aim to provide the necessary social infrastructure for startups to learn, network, and grow. Over 2,400 members build their national network on the online community platform.

499

Total events in year one (45% in partnership, 19% with DE&I focus)

9,696

Total event attendees

2,403

Online community members

All data to December 2023; Source: Techscaler Applications Database and Live Techscaler Data Tracker

Techscaler is a timely micro intervention by the government



“Without entrepreneurship and innovation, economies will continue at a standstill and will struggle to adapt to an ever-more rapidly changing world.”

Steven Drost, Chief Strategy Officer, CodeBase

It's been a tough decade for old-world economies. After a prolonged period of disruption and stagnation, established global economies have stepped up their search for economic growth and have come to the conclusion that the way out is to cultivate entrepreneurship skills and innovation at scale.

At CodeBase, laying down the building blocks for an entrepreneurial ecosystem is our bread and butter. Through our dialogues with international partners, we've seen that across Europe, Asia, North and South America, and Africa, ecosystem building is increasingly seen as the main way to foster

growth. In this context, by launching the Techscaler programme, the Scottish Government joins a growing cohort of global governments who are seeking to light a fire under the startup ecosystem to drive prosperity in modern economies.

We see the same ecosystem building blocks in every continent: startups, government agencies, human talent, academia, investors, incumbent corporations, city planners and developers. Ecosystem builders like CodeBase help bring these building blocks together, creating network effects and capitalising on government investments in order to generate impact that is disproportionately greater than what's put in.

The older an economy is, the harder it is to deploy fresh thinking. This is a new version of what is called the “innovator's dilemma”: what has made you successful also makes you liable to be disrupted and fail. Normally, this paradigm is applied to companies, but we see that it also applies to economies and countries.

That's why ecosystem-building programmes like Techscaler are not just a pathway to build the new; they are also an invitation to transform the existing. Established local industries have the ability to learn new ways, incorporate new technologies, and attract new groups of customers, employees and advocates.

Whether social impact-focused startups, aspiring unicorns or transformed existing businesses, the language of ecosystem building will invite everyone—truly everyone—to contribute and build the foundations of a new chapter of economic growth.

Ultimately, we believe that the aim of creating wealth and jobs in a modern, progressive country is backed by many in Scotland, no matter their politics.

Initiatives like Techscaler are about building a Scotland that is part of a global community seeking to create new models of sustainable and significant economic growth with entrepreneurship at their core.

Key learnings and insights



“As the Scottish Government’s delivery partner, CodeBase are proud to lead on Techscaler. As we continue to improve how we build a better tech ecosystem for Scotland, we have discovered six key themes that we will build on in year two of the programme.”

Yasmin Sulaiman, SVP Ecosystems, CodeBase

Valuing regional differences

Techscaler recognises the value of regional diversity; as an ecosystem builder, we aim to explore how Scotland’s regions can work in complementary ways to amplify the country’s potential.

Strong, mutually beneficial partnerships are key to leveraging this diversity, ensuring that we can

connect founders to the support and expertise they need at the right time, cross-referring between different programmes across the ecosystem.

Experience has taught us that the more mature an ecosystem is, the greater its range of programmes and that a truly excellent ecosystem recognises its limitations and can connect startups with other ecosystems that specialise in particular playbooks.

Techscaler will focus on cross-ecosystem connectivity, promoting increased flow of referrals into and out of Techscaler.

Hybridity is key to maximising reach

Scotland’s workspaces continue to evolve post-Covid. “Hybridity” is particularly vital for running a successful education programme. By blending in-person lessons at regional hubs with online teaching that reaches areas of lower startup density, we can build a hybrid nationwide cohort of founders at similar stages who can learn from and support one another.

Partnering with more organisations that host startups (there are around 105 in Scotland) can expand our physical delivery, effectively creating distribution hubs for Techscaler. This provides additional value to those hubs and their existing tenants whilst maximising Techscaler’s online and offline reach.

Techscaler will continue to focus on hybrid delivery methods whilst also increasing the number of partnerships with physical Scottish workspaces that can distribute Techscaler support.

Techscaler is for businesses at all stages

We have observed that many Scottish scaleups assume that Techscaler is just for early-stage businesses. However, when scaleup founders join Techscaler to participate in the growth education platform Reforge, they recognise the value of the programme to build peer networks (in what can be an isolating stage of their startup journey) and provide advanced support. Scaleups who have participated in Reforge typically want to engage

Key learnings and insights

with and support other startups, representing a new stream of potential Techscaler mentors.

Track the highest potential startups and scaleups so as to provide enhanced levels of support, including Reforge and connectivity into international ecosystems.

AI and deeptech growth opportunities for Scotland

The rise of AI is causing a seismic shift in startups and investment globally. This is a particularly exciting development for Scotland because it capitalises on the world leading academic work that Scottish universities have already been doing in this space. We are already iterating our approach to ensure that Techscaler and the Scottish ecosystem can mitigate the risks of AI and deeptech and make the most of its opportunities.

Create a deeptech-focused Techscaler programme, including domain-specific playbook content as well as connectivity to industry investors and international ecosystems.

Developing investment skills for Scottish startups

We understand that first-time founders often lack experience raising capital. We have also learned that some of our members require additional support in navigating an increasingly difficult investment landscape and investors with differing levels of experience.

Capital scarcity makes the support Techscaler can provide even more important, specifically in getting founders investment-ready and then connecting them to suitable investors in Scotland, London, Europe, the US, and APAC.

We have an imperative to improve our understanding of investment within the Techscaler membership.

Techscaler will amplify its focus on funding readiness support for founders and connections to sophisticated investor networks.

Closing Scotland's skills gaps

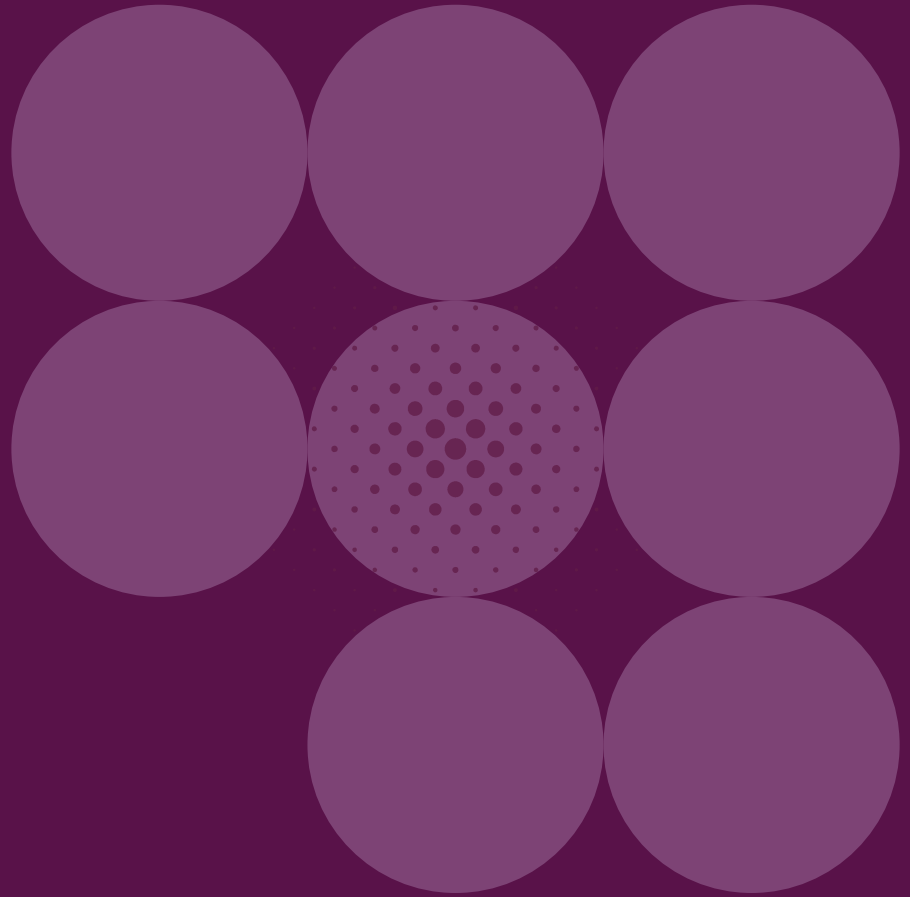
We recognise that there is currently a limited flow of technical and leadership skills into the tech ecosystem via the further education pathway. This limitation is affecting startups looking to attract capital and scaleups seeking to fulfil their growth potential more quickly.

There is an opportunity to help close this gap by delivering targeted skills training and more generally, by increasing entrepreneurial thinking across Scotland's incumbent businesses and institutions.

Techscaler to partner with new CodeClan organisation to increase the flow of human capital with the right skills into the tech ecosystem.

Chapter 1

Techscaler background



Introduction

Techscaler is Scotland's startup support programme, enhancing the infrastructure that enables high quality tech startup growth.

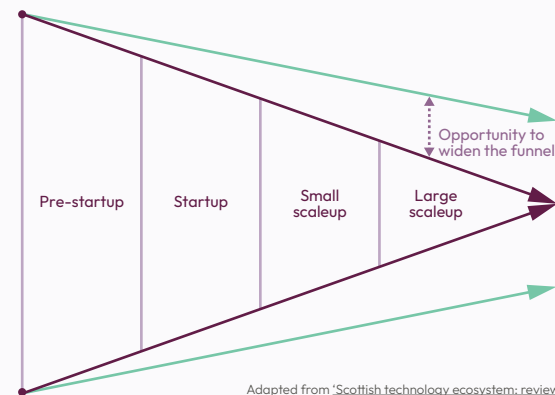


In this report we look back at the achievements of the programme in its first year, and look forward to the next steps in developing Scotland's startups in order to support economic development by attracting inward investment, providing the necessary capital required to grow and scale.

Techscaler was launched in November 2022, in furtherance of key recommendations in the Scottish Technology Ecosystem Review (STER) report and, thereafter, priority actions set out in Scotland's National Strategy for Economic Transformation, to strengthen the country's tech sector and encourage entrepreneurship, through the creation and centralisation of a national backbone network of hubs whose capabilities build upon and surpass traditional incubation programmes.

Funded by the Scottish Government and delivered by CodeBase, Techscaler serves the people, communities, and organisations of the Scottish tech ecosystem, and exists to increase the average likelihood of startup success, increase inward investment and serve the Scottish economy, and to establish Scotland as a leading tech ecosystem.

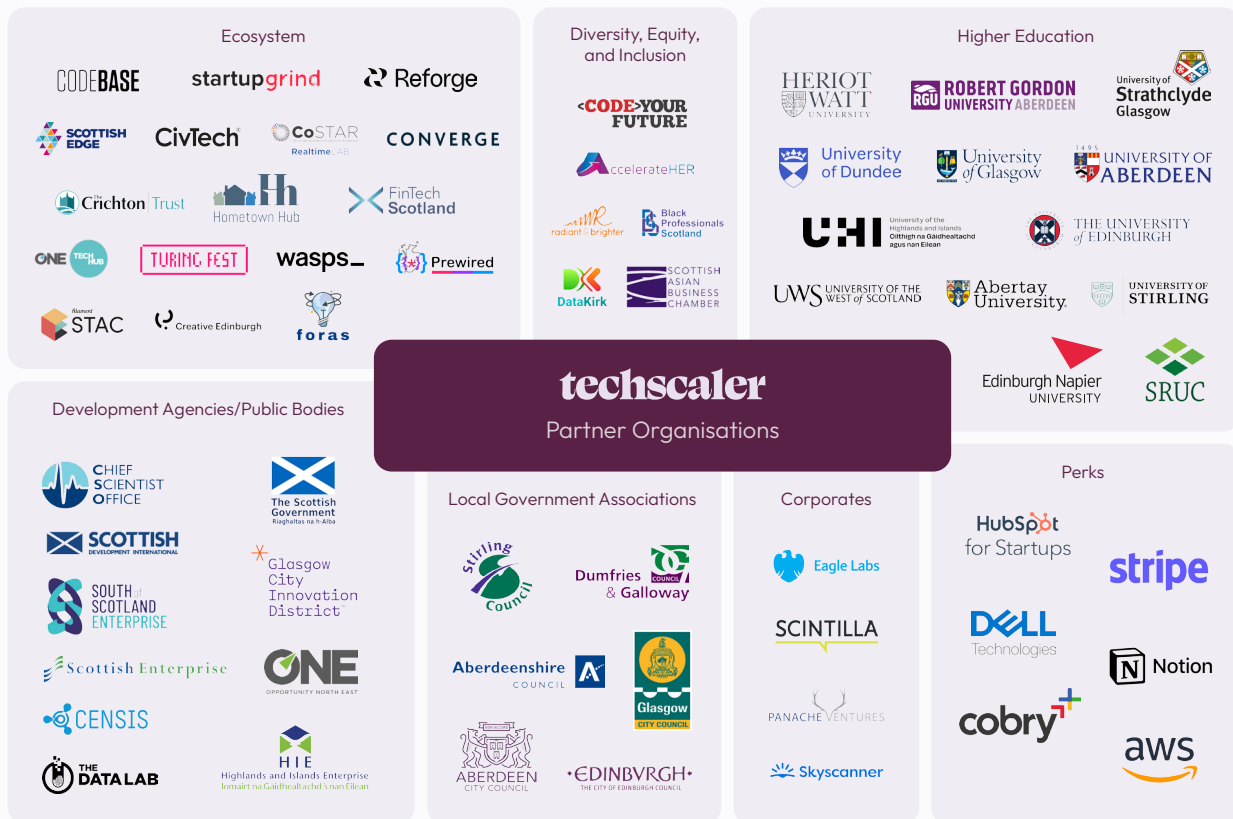
Techscaler is about widening the funnel of talent, founders and startups in Scotland. Announcing the launch of Techscaler, then-First Minister, Nicola Sturgeon MSP said, "Tech startups right across Scotland will have access to world-class education and mentoring and opportunities for peer learning and networking through Techscaler. For new companies at all stages of their development, Scotland will provide one of the most supportive environments in Europe".



Scotland's network of support

To forge partnerships and facilitate interconnectivity among the diverse entities comprising Scotland's entrepreneurial ecosystem is a key role for Techscaler.

Currently, Techscaler collaborates with over 60 varied organisations across multiple sectors, aiming to guarantee that companies can readily identify and access the tailored support essential for scaling.



Techscaler programme overview

Techscaler is a free programme accessed via a membership application process, which enables support to be tailored to the development stage, helping founders and their teams from ideation, to early stage, growth stage, scaling, and beyond.

The programme delivers these outcomes by combining the ecosystem building blocks of startup skills development, regional ecosystem engagement, and collaborative partnership connections.

STARTUP SKILLS DEVELOPMENT

Giving startups the tools needed to communicate and build their ideas better and faster.

Education

Self-paced, cohort style, online and in-person courses, resources and accelerators following best practice startup building playbooks.

Mentorship

Guidance and support from experts, including industry operators, educators, founders and investors.

Fundraising

Funding readiness skills and connectivity into local and international opportunities—delivered in our education and community content alongside partnership activity with Scottish Enterprise and Scottish Development International.

REGIONAL ECOSYSTEM ENGAGEMENT

Creating a democratised and integrated startup landscape, addressing barriers to access and opportunity in order to build a truly entrepreneurial Scotland.

Community

Shared spaces, events, gatherings and a peer-led community allowing founders and staff to connect with a wider group of peers, helping them through challenges.

Workspace

Flexible and affordable incubation space through hotdesking, shared workspace and office space, across a network of hub locations across Scotland.

Partners

Partnering with organisations across the tech ecosystem to foster an environment in which startups can thrive, including developing connectivity into local and international funding opportunities.

Understanding Techscaler applicants

The first year of delivery gives Techscaler a clear view of the businesses engaging in the programme. Understanding the current membership base and gaps within will inform Techscaler's regional engagement and service delivery strategies to ensure that companies of all sizes can engage and have relevant content to consume in the programme.

- 60% of businesses are self-funded, indicating the earlier stage of businesses in the Scottish ecosystem
- 50% of applicants are revenue generating, the majority are early revenue, but around 10% generate over £1m in annual revenue
- Applicants joining are most focused on challenges in product development, marketing and fundraising
- Applicants are least interested in accessing workspace, understandable given the trend for distributed teams

Funding source

Self-funded	46.6%
Grant	23.6%
None	16.2%
Debt	5.1%
Undeclared	3.8%
Other	3.5%
Venture Capital	1.4%

Revenue generated

Less than £50k ARR	50.2%
£50k - £150k ARR	17.3%
£150k - £500k ARR	16.3%
£500k - £1m ARR	6.6%
£1m - £5m ARR	7.3%
More than £5m ARR	2.5%

Techscaler founders' focus at point of application

Product / Development	65%
Marketing / Customers	54%
Fundraising / Investment	46%
Engineering / Build	43%
Idea / Exploration	40%
Growth / Scaling Up	39%
Strategy / Partnership	37%
Operations / Hiring	19%

Founder interests in Techscaler features

Mentorship	84.8%
Ecosystem connections	76.5%
Community	76.5%
Events	67.1%
Education programmes	66.4%
Coworking	32.6%
Hotdesking	25.9%
Dedicated office space	23.1%

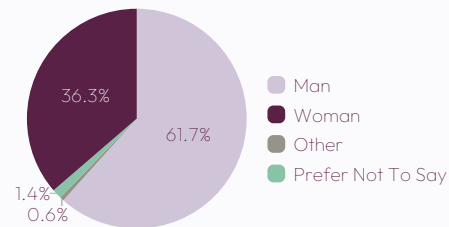
All data to December 2023; Source: Techscaler Applications Database and Live Techscaler Data Tracker

Techscaler is building a diverse ecosystem

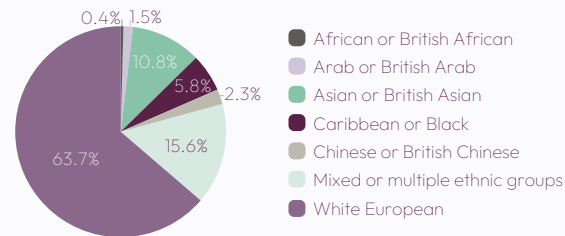
Despite the relatively positive comparative statistics, improving accessibility to people from all parts of Scotland's society is a key goal of Techscaler and we aim to increase the number of founders and mentors who are female or from ethnic minority backgrounds through collaboration with our partners: AccelerateHER, Radiant & Brighter, DataKirk and Prewired.

- 36% of Techscaler Founder applicants identify as female, above the c.20% Scottish average identified by 'Pathways: A New Approach for Women in Entrepreneurship (2023)'.¹
- 36.3% of Techscaler applicants identify as non-White European, comparing favourably with the Scottish population, which has around 4.5% ethnic minorities.²
- Over 44% of members live outside of Scotland's Central Belt.

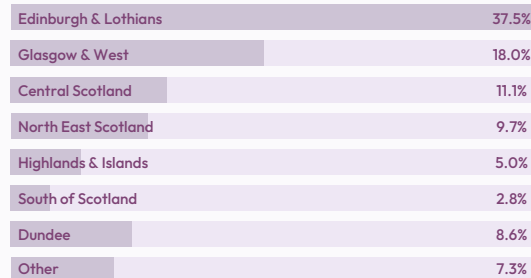
Techscaler applicants gender



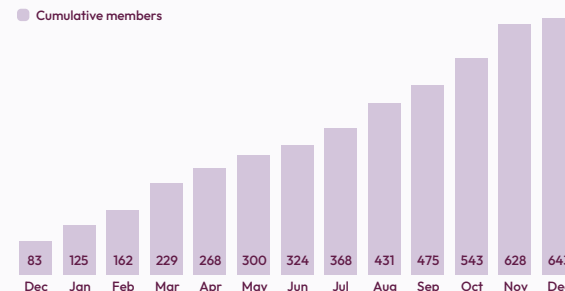
Techscaler applicants ethnicity



Regional membership



Techscaler membership

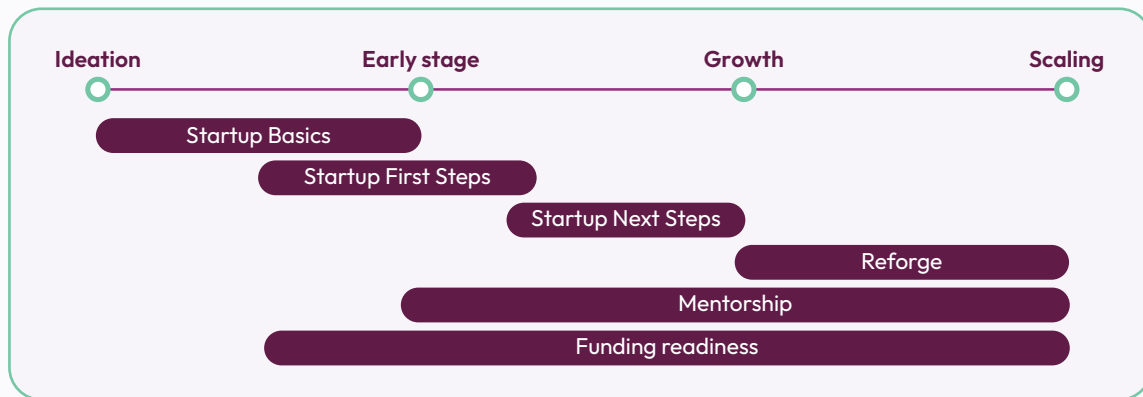


¹ <https://www.gov.scot/publications/pathways-new-approach-women-entrepreneurship/pages/2/>

² https://www.audit-scotland.gov.uk/uploads/docs/report/2022/as_diversity_2022.pdf

All data to December 2023; Source: Techscaler Applications Database and Live Techscaler Data Tracker

Startup skills development



Building startups is teachable. For founders and their teams, being playbook-literate helps communicate and build ideas better, and faster. Techscaler education courses, delivered by experienced founders and expert industry operators, are tailored for current and future founders and their teams, from developing an idea to launch, growing your startup, to scaling globally.

Techscaler provides free mentorship, giving tech startup founders an opportunity to seek

personalised guidance and support from experienced startup founders and operators, to further optimise for startup success.

Members access self-paced or cohort-based courses, workshops, and one-to-one mentorship to learn the skills needed to build, grow and scale their startup. Techscaler has launched or collaborated to deliver the following courses and services in year one:

- Startup Basics
- Startup First Steps
- Startup Next Steps
- Reforge
- Mentorship

The graphic above represents where on a company's growth journey each Techscaler course would be applicable.

Startup Basics

This course is aimed at those considering or committing to building a startup.

193

Participants in Startup Basics

An online, self-paced course available to everyone via Techscaler's online community. Designed to demystify startups for those exploring careers as startup founders or employees, Startup Basics is a programme for anyone with an idea or interest in startups but who's not sure how best to get started. Startup Basics has five modules and a version 2—updated to include more content and insight—is underway.

Ideation

Early stage

Growth

Scaling

Startup Basics

The Startup Basics course guides participants in developing startups, instilling industry language and transitioning their mindsets from employee to founder. It addresses common doubts in prospective founders about idea viability and development. In year two, the course will expand to offer extra resources for idea exploration and fostering regional community engagement.



"There was some material early on that showcased the kind of mentality it is useful to have when starting a startup. This was in the first module and the thinking expressed here is the way I like to think about business, even outside of a startup. This was refreshing to hear and gave me confidence that a startup would be a good approach for me."

Anonymous - Startup Basics survey, Nov. '23



"I just finished the last module and learnt so much! I'm so grateful for having this course and the community available to all of us all! Thank you."

Anonymous - Startup Basics survey, Nov. '23

All data to December 2023; Source: Techscaler Applications Database and Live Techscaler Data Tracker

Startup First Steps

Startup First Steps is a 12-week course for founders looking to develop an idea to launch, get a first version of their product into market, and start acquiring customers.

210

Participants enrolled in Startup First Steps



Startup First Steps aims to help founders fail less at the early hurdles, and set a strong foundation upon which to build and grow a tech startup and support the widening of the funnel later on. This includes building a strong problem area, customer and market understanding, before undertaking solution experimentation, MVP building and launch tactics. This is underpinned with operational fundamentals for the business of a tech product, including business model innovation, funding, pitching and business obligations.



“Techscaler Startup First Steps course is a perfect match for tech startups. The great thing is that it’s not only for tech-minded business owners but also for entrepreneurs from non-tech backgrounds looking to start tech companies. Of course, there are many amazing programmes supporting startups in Scotland but this one is tailored for tech startups. I am so happy to be one of the lucky participants of this course.”

Aleksandra Czech-Seklecka, Startup First Steps cohort 2 participant



“The impact the course has had on me personally, I think in general, and I’m probably speaking for everyone here, it’s given everyone a lot more confidence with what they’re working on. It’s like it’s given them the confidence to either reach out to someone or speak about their business with maybe a little bit more authority or their idea that they’re working on, as opposed to sitting back and waiting.”

Daniel Hespe, Co-Founder, OnYa

All data to December 2023; Source: Techscaler Applications Database and Live Techscaler Data Tracker

Startup Next Steps

Startup Next Steps is a practical course, designed for founders and senior team members looking to scale their product which is already live in the market, with active users.

66

Enrolled in Startup Next Steps



The lack of clear understanding within the Scottish ecosystem about achieving Product/Market Fit is a significant contributor to startup failure. Startup Next Steps addresses this by focusing on product development, business planning, growth strategies, sales, team building, funding, and pivoting in response to market signals. In 2024, we will continue to expand our support for founders on the often ambiguous path to scaling a business.



"I found it absolutely brilliant. It came at a perfect time for our company when we are just in our growth phase so I found that every single one of the sessions were really key to what we were doing and really helped with a lot of the decision making that we did within our team."

Dan Marrable, Founder, Forum



"The experience with Techscaler has been brilliant so far. It's been fun, really useful, and interesting to hear from so many people that have real experience of the challenges we face. It's also given us a lot to do in terms of next steps, so there's a lot we can go away and work on immediately."

Antonia Lee-Bapty, CEO, Evan's Guide

All data to December 2023; Source: Techscaler Applications Database and Live Techscaler Data Tracker

Reforge

To support growth beyond product/market fit, Techscaler has launched a programme in partnership with global scaleup education platform Reforge, which incorporates advanced scaleup training into the Techscaler education pathway.

93

Participants in Reforge

Reforge membership for founders and senior startup teams combines participation in cohort-based programmes with on-demand access to content and community, giving founders and their teams the tools to scale up software product businesses.

Ideation

Early stage

Growth

Scaling

Reforge

Reforge courses target senior specialists within an organisation who are typically time poor. We have seen a tendency for businesses initially passing up on membership, but then returning after reflection, and subsequently giving positive feedback. In 2024, we will enhance regional outreach to more effectively promote and explain the benefits to eligible businesses.



"I've recently wrapped up a foundational course in Product Management. As someone who has always had a keen interest in the cross-over of engineering and product development, this course has been an awesome journey into the nuances of product strategy, lifecycle management, and user-centric design. I am looking forward to bringing some of this knowledge to our API team and hopefully bridging the gap between product vision and technical execution more effectively."

Thomas Metcalfe, Software Engineering Manager



"I've had a ball completing Reforge's 2023 Growth series over the last few months. I have learned so much about how to build growth models, growth loops, monetisation strategies, user psychology and product experimentation to drive activation and retention. Can't wait to get stuck into utilising some of these frameworks for Phlo and sharing my learnings with the team."

Mairead Quigley, Head of Product Marketing

All data to December 2023; Source: Techscaler Applications Database and Live Techscaler Data Tracker

Mentorship

Techscaler offers mentorship for founders and senior team members, linking them with relevant mentors for advice. The programme features over 100 mentors including experienced startup founders and active business operators, aiming to support both business and personal growth.

276

Companies mentored

The mentorship process is tailored to align with each founder's unique background, expertise, and immediate needs. As part of the programme, new Techscaler members engage in an initial mentoring session to evaluate their current status and formulate a strategic growth plan tailored to their needs.

Ideation

Early stage

Growth

Scaling

Mentorship

Mentorship is the most attractive offering to founders at all stages in Techscaler. The guidance, frameworks, and critical insights shared by experts who have real-life experience of the challenges Techscaler members face is only going to grow in popularity in 2024.



"As a Mentor, building trusted relationships with the companies supported by Techscaler is a deeply rewarding and interesting process. On a daily basis, I am surrounded by the optimism and drive of ambitious people building interesting and important companies that solve real problems in the world. I feel very fortunate to be part of their journey in a way that can help them to unblock challenges and make progress towards their goals."

Callum Stuart, Mentor



"Techscaler mentorship sessions have been incredibly valuable to the development of my project. I have been paired with fantastic mentors who have helped me build my team, learn about the investment world and become investor-ready. They have even shared their own startup experiences - including lessons learned!"

Janis Roddie, Director, Everyday People Ltd

All data to December 2023; Source: Techscaler Applications Database and Live Techscaler Data Tracker

Mentor insights



Robin Knox
Co-founder of intelligentpos,
startup investor



Tadas Labudis
Founder of Prodsight, startup
advisor



Julie Grieve
Founder of Criton, business advisor



Callum Stuart
COO and co-founder of Mallzee



David Stewart
Deeptech specialist, co-founder of
Approov Mobile Security

In recent years, the Scottish startup landscape has undergone significant transformation. A roundtable discussion with a group of mentors from the Techscaler programme provided a platform for these experienced founders and leaders to offer their perspectives on the evolving challenges and opportunities within the Scottish tech sector. The discussion shed light on the dynamic nature of Scotland's tech sector and the strategies necessary for companies to thrive.

A recurring theme in the conversation was the disconnect between founders' expectations and the harsh realities of fundraising. Julie Grieve pointed out a common misconception among founders, remarking, "Founders have unrealistic ideas about their ability to raise funds and the gates they might have to go through." This perspective underscores a fundamental gap in founders' understanding of the investment landscape, often leading to miscalculated funding strategies. Tadas Labudis attributes this to the unique challenge in Scotland, where, in contrast to London, many founders lack experience in high-growth startups, leading to unpreparedness. He noted, "A lot of people come from unrelated industries and go into software, solving a problem with no experience, leading to a deer in headlights kind of situation." He also

pointed out a common error among new founders: attempting to manage multiple business activities simultaneously. Callum Stuart highlighted the prevalence of early-stage entrepreneurs with side jobs. "Eventually, they must make the jump," he stated. "No one's going to invest until you're doing it full-time."

Regarding product development, the mentors emphasised the struggle founders face in balancing expectations and scope, especially in understanding product positioning. Grieve discussed the challenges in responding to customer without deviating from the product's core vision. Callum Stuart stressed the importance of discussing product scope with mentees, noting that such discussions are often more fruitful with second-time founders. David Stewart corroborated this, stating, "First-time founders have much more difficulty focusing on the big picture," emphasising the necessity for founders to consider different data points to determine their company's trajectory.

A common observation was startups' inclination to target a broad audience rather than a specific niche. Labudis critiqued the misconception surrounding the use of no-code solutions for rapidly creating minimum viable products (MVPs). "The

premise of no-code creates this impression that it's easy to create a useful product when in reality, a certain mindset is still essential," he explained. "You may be taking the code away, but some of the mechanics need to still be there."

Hiring the right talent poses a significant challenge for many startups. Labudis mentioned founders' reluctance to hire, often due to budget constraints or fear of failure. Stuart advised that founders should continuously seek potential hires, emphasising the importance of cultivating long-term connections. He noted that founders, particularly those from technical backgrounds, often find it difficult to step outside their comfort zones for sales and recruitment. "It's a bit of a cliché, but the great stuff happens outside of your comfort zone," Stuart remarked. "We encourage founders to venture beyond their comfort zones." Grieve emphasised the critical role of founders in early sales processes, given their deep product knowledge. "Developing a product is challenging, but selling it and retaining customers is even more so," she asserted.

The Scottish tech ecosystem faces unique challenges, particularly regarding funding opportunities. Robin Knox described the current environment as somewhat challenging, with

"Developing a product is challenging, but selling it and retaining customers is even more so."

Julie Grieve

London often being the preferred location for founders seeking fair valuations. Despite the advantages of being based in Scotland, with its exceptional engineering talent, limitations exist. "We need to encourage people to think globally," Stewart suggested. "Although starting with a local focus is acceptable, we as mentors have to help them think about a wider scale." Despite the challenges, Scotland has the potential to carve out its own path, albeit with a learning curve influenced by more established ecosystems like Silicon Valley.

"The landscape is more evolved now and there are more options for founders and investors than there ever have been before. Now is the best time ever to start a startup in Scotland because of the support available," said Stuart. As a result, a primary focus of the Techscaler program is making technology more accessible nationwide. Grieve highlighted the number of initiatives offering tech pathways to underrepresented groups. "I think it's vital to ensure that anyone potentially starting a

business feels represented," she stated. Initiatives like AccelerateHER and Barclays Eagle Labs are striving to make the tech startup environment more inclusive, aiming for a Scottish tech sector that reflects diverse voices. Labudis emphasised the need to understand barriers faced by entrepreneurs from a variety of backgrounds: "In order to see more diverse entrepreneurs, we need to go five, 10 years back into their lives and see what challenges might be preventing them from accessing this level of support."

Overall, the insights from Techscaler's mentors offer a comprehensive view of the Scottish tech ecosystem, highlighting the need for realistic approaches to funding, targeted product development, and effective mentorship. The Scottish tech scene is evolving with distinctive challenges and opportunities, and these mentors are instrumental in guiding the next generation of tech entrepreneurs towards success in a global landscape.

"We need to encourage people to think globally. Although starting with a local focus is acceptable, we as mentors have to help them think about a wider scale."

David Stewart

Regional ecosystem engagement



Scotland's entrepreneurial strength, and its potential to become a leading tech nation, rely on the brilliance, value and talent of businesses, community innovators and future entrepreneurs across the length and breadth of the country.

Scotland has a wide range of business and sectoral interests within a comparatively small geographic area, meaning it is uniquely positioned to capitalise on historic diversity and regional strengths as part of an expanding, national network.



Workspace

Eleven regional locations nationwide offer flexible and affordable incubation space, in collaboration with our partners. Addressing barriers to access and opportunity, supports the development of regional market square (social infrastructure) and a more integrated startup landscape.



Community

Across the country, in-person and online events, meetups, and gatherings give founders and their teams the opportunity to expand their peer networks and participate in regional cohorts. Our online community platform enables them to build peer networks beyond regional borders and find support from the experiences of a global peer network.



Partnerships

Across Scotland there are estimated to be 299 entrepreneurial support organisations including incubators and coworking spaces to support founders and startup teams.¹ Techscaler aims to integrate with this network to maximise the access founders have to programmatic support including education, mentoring, and community.

¹ Scottish Enterprise. "Scottish Entrepreneurial Ecosystem Guide (2023-2024)." High Growth Entrepreneurship. Accessed January 22, 2024. <https://unlockingambition.scot/wp-content/uploads/2023/04/Scottish-Entrepreneurial-Ecosystem-Guide-April-2023.pdf>.

Spaces for founders to work

Techscaler operates out of eleven regional hubs nationwide and engages potential founders, founders, and their teams throughout the country. Broad and continuously expanding regional presence helps break down access barriers and nurtures a more equitable startup environment. Members can take advantage of flexible, affordable hotdesking, coworking, and private offices in these regional hubs, alongside spaces for community building activities and the further development of market square.

Scotland's diverse business sectors and small geographic size create unique opportunities for leveraging regional strengths within a national network. Techscaler's national expansion utilises each region's existing networks, local strengths, talent pools, and interests, supporting hundreds of high-growth startups and creating local jobs.

There are an estimated 299 entrepreneurial support organisations across Scotland.¹

¹ Scottish Enterprise. "Scottish Entrepreneurial Ecosystem Guide (2023-2024)." High Growth Entrepreneurship. Accessed January 22, 2024. <https://unlockingambition.scot/wp-content/uploads/2023/04/Scottish-Entrepreneurial-Ecosystem-Guide-April-2023.pdf>.

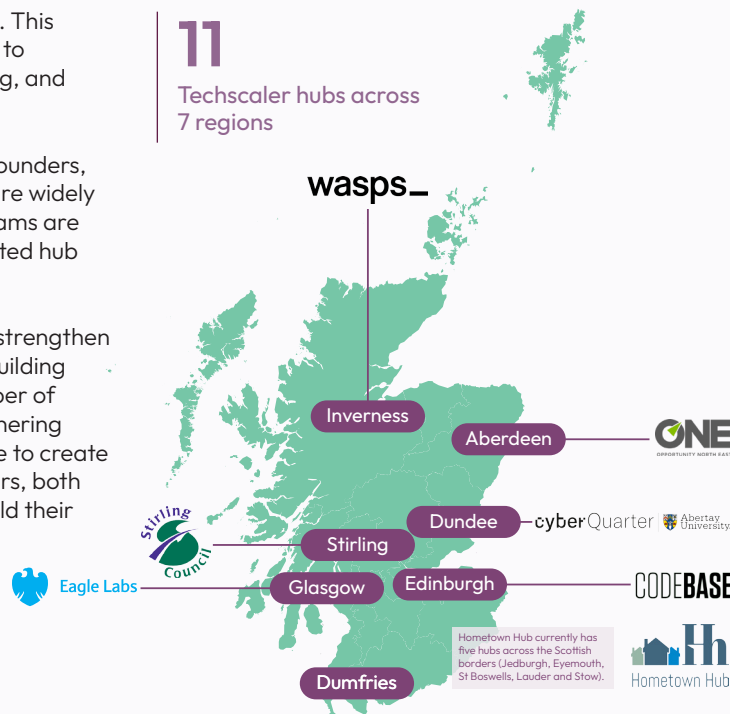
Techscaler integrates into this network. This integration enhances founders' access to support, including education, mentoring, and community building.

In year one, we have discovered that founders, even in our most established regions, are widely distributed within regions, and their teams are spread internationally. A centrally located hub doesn't sufficiently meet their needs.

In our second year, we will continue to strengthen regional cohorts through community building activities and further expand the number of physical nodes in our network. By partnering with likeminded organisations, we hope to create more opportunities for Scottish founders, both domestically and internationally, to build their social infrastructure.

11

Techscaler hubs across 7 regions



Diverse and interconnected communities

Techscaler's community, through both online platforms and in-person or hybrid events, fosters networking, collaboration, and knowledge-sharing. This integrated approach, combining online spaces with physical hubs, empowers founders and staff to connect, learn, and succeed, thereby reinforcing Scotland's startup ecosystem.

18%

Events with DE&I focus of
499 total events (91)

mighty networks

Mighty Networks: Techscaler's online community with more than 2,350 members.

unfiltered

Techscaler Unfiltered: Monthly networking events for the tech ecosystem.

unplugged

Techscaler Unplugged: Regional networking for founders and tech enthusiasts.

DIGITAL SKILLS 4 GIRLS

Digital Skills 4 Girls: Monthly workshops by CodeBase for girls and non-binary young people.

Neurodiversity Meetup

Neurodiversity Meetups: Regular meetups for neurodivergent individuals in startups.

LGBTQ+ Meetup

LGBTQ+ Meetups: Support for LGBTQ+ issues and helping create queer-inclusive spaces in tech.

NoCode Scotland

No-code meetups: Monthly gatherings for no-code software enthusiasts and beginners.

Prewired

Prewired: Under-19 coding club to nurture young coding talent.

accelerateHER

AccelerateHER: Meetups, hackathons, and workshops for women and non-binary tech founders and leaders.

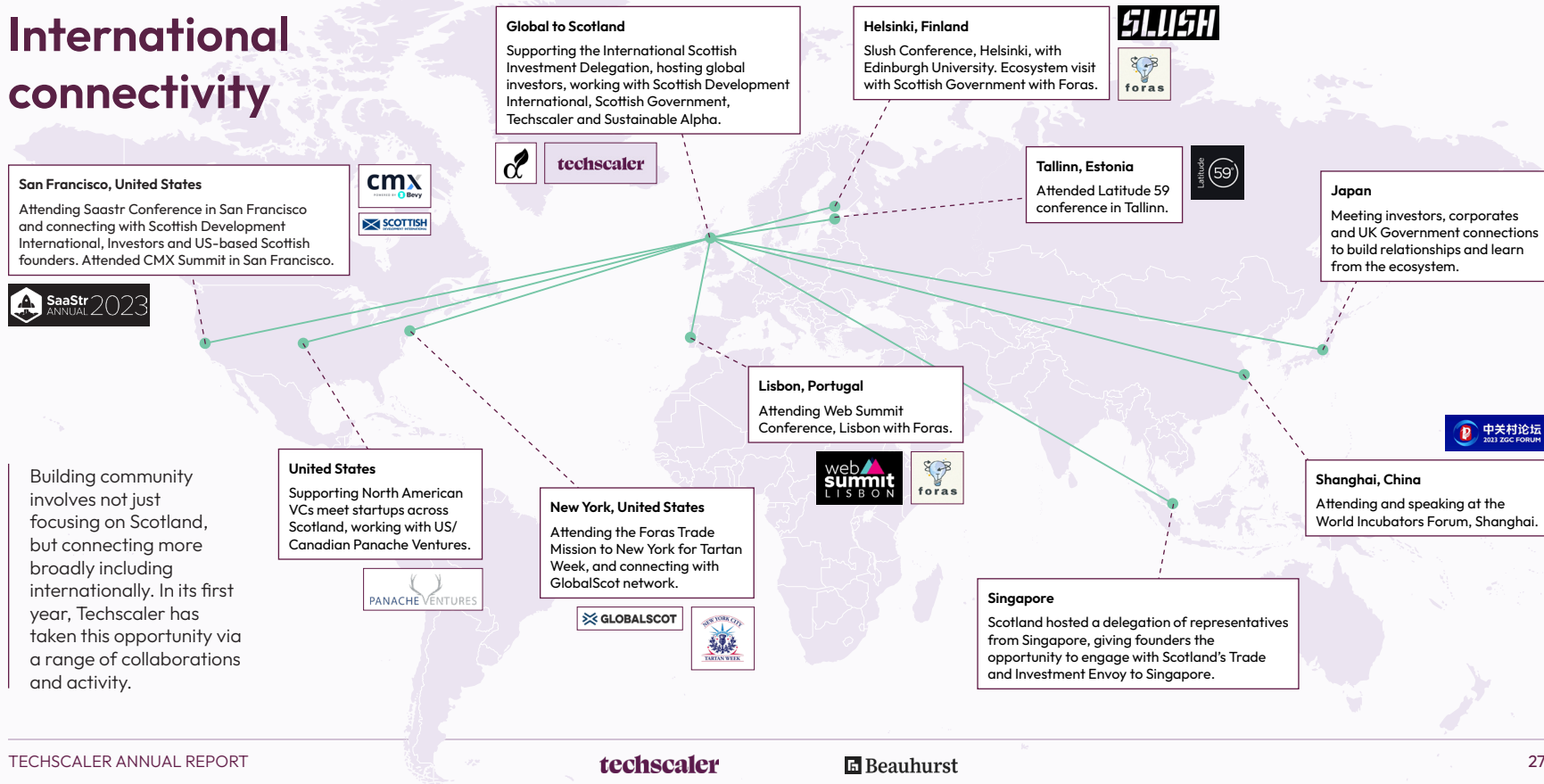
DataKirk

DataKirk: Social enterprise aimed at closing the data divide and attainment gap in Scotland.

radiant & brighter

Radiant & Brighter: Empowering racialised communities and "New Scots" for better economic and social contributions.

International connectivity



Example partnerships



Our partnership supports healthtech entities across Scotland with access to Techscaler support and programmes, and innovation support through the CSO and NHS Innovation Hubs.



Working with the UK R&D network for creative industries, CoSTAR, we support entrepreneurs developing new live production technologies.



We've launched a pilot with Scottish development agencies, connecting Techscaler founders to MVP grant funding, with £204k awarded.



This biannual funding competition has distributed £25m in funding to 569 early-stage Scottish businesses since 2013. It offers diverse categories for funding, aiming to discover and support innovative entrepreneurs.



We extend support to govtech startups and CivTech alumni, and connect the Techscaler community to funding and opportunities through CivTech's challenges.



Our partnership with Filament STAC aims to integrate hardware and software development for successful tech products.



We collaborate with the female founders' network for regular events, supporting women and non-binary founders in an inclusive, innovative environment.



Our Energy Tech Bridge Programme, in partnership with Barclays Eagle Labs and Opportunity North East, connects startups working towards net zero with incumbents in the energy industry.



Our partnership focuses on understanding and overcoming challenges faced by Black tech founders, enhancing access to Techscaler through collaborative events and content.



Creative Edinburgh

Supporting Scotland's creative industries, we encourage non-tech founders to develop ideas through our partnership with Creative Edinburgh.



Offers global exposure to Scottish startups, facilitating international connections and opportunities, including 2023 trips to New York and Lisbon.

All data to December 2023; Source: Techscaler Applications Database and Live Techscaler Data Tracker

Techscaler: ones to watch

Across Scotland, startups are flourishing thanks to the ingenuity of founders and the support of a fast evolving ecosystem. Scottish businesses are delivering world leading innovation in a wide range of industry sectors and many have demonstrated the potential for quick growth. Here is just a snapshot of some of Scotland's most exciting companies who are part of Techscaler.



Desana develops a mobile app that allows users to find and book flexible co-working spaces across a global network for a monthly fee. The Edinburgh-based company also offers tools for booking resources within a company's own buildings and delivers detailed data analytics to inform future workplace strategies. Since its establishment in 2016 by co-founders Michael Cockburn and Steven Jeans, it has raised £9.57m of equity funding via three rounds. In March 2023, Desana raised £6.15m from investors including BGF. Desana has also received two innovation grants totalling £237k, both from Innovate UK.



Pasabi offers a system designed to protect online platforms from counterfeit products, fake accounts, scams, and fake reviews. This Edinburgh-based company uses machine learning, behavioural analytics, and clustering; it identifies risky behaviours and networks of bad actors to enhance platform security. Since its launch in 2013 by co-founders Christopher Downie and Martin Spinks, it has raised £2.77m in equity funding via five rounds. In its most recent round in June 2023, it raised £2.40m from VeUP. Pasabi has also secured a total of £183k of innovation funding via two grants.



Rooser is an online marketplace designed to simplify the seafood trading process, making it easier for buyers and sellers to conduct transactions. The Edinburgh-based platform performs quality control on a wide range of seafood products while allowing users to create orders without minimum quantity requirements. Founded by Nicolas Desormeaux, Joel Watt, and Erez Mathan in 2019, it has raised £20.3m of equity funding via three rounds. In April 2022, Rooser raised £18.1m from notable international investors such as Google Ventures.



LOVAT creates software to help companies manage sales tax outside their home geography. Its software includes features such as automatic tax report filing and precise VAT and sales tax calculations to prevent overpayment. Founder and CEO Olga Maksimova launched the company in 2018 and has grown the business by creating integrations for marketplaces such as Amazon, eBay, and Shopify. From offices in Edinburgh and Riga, LOVAT now helps customers in 47 countries manage their tax calculations.

Chapter 2

State of the Scottish ecosystem

UK ecosystem comparison

Compared with Wales and Northern Ireland, the Scottish tech ecosystem is already making significant progress in supporting tech entrepreneurship. With the implementation of Techscaler, there is potential for even greater success and a chance to narrow the gap with England.

Scotland	England	Wales	Northern Ireland
			
Tech companies 876	Tech companies 13,519	Tech companies 380	Tech companies 268
Tech employees 20,932	Tech employees 387,735	Tech employees 5,831	Tech employees 10,514
Investment into tech firms in 2022 £690m	Investment into tech firms in 2022 £19.9b	Investment into tech firms in 2022 £102m	Investment into tech firms in 2022 £108m
Universities 17	Universities 126	Universities 9	Universities 3
Spinouts from Scottish universities 232	Spinouts from English universities 1,049	Spinouts from Welsh universities 57	Spinouts from Northern Irish universities 48

Equity investment figures are from 2022; all other figures are from 2011 to December 2023; Source: Beauhurst.

International ecosystem comparison

Countries have used varied strategies like low corporate taxes and government grants to boost their tech ecosystems. Building on recent startup success in Scotland, the government-backed Techscaler program provides free support to more companies and will narrow the gap with leading international ecosystems.

Scotland 	
Tech companies	876
Tech employees	20,932
Investment into tech firms in 2022	€814m
Number of domestic VC	22
Universities	17
Spinouts from Scottish universities	232

Republic of Ireland 	
Tech companies	3,078 ¹
Employees of Rol-owned ICT enterprises	40,746 ²
VC investment into Rol tech firms and SMEs in 2022	€1.33b ³
Full members in the Rol Venture Capital Association (IVCA)	24 ⁴
Universities	8 ⁵
Spinouts from Rol universities	152 ⁶

Estonia 	
Tech companies	1,345 ⁷
Employees in Estonian startups	25,900 ⁸
Investment into Estonian startups in 2022	€1.30b ⁹
Full members in the Estonian PE and VC Association	30 ¹⁰
Universities	7 ¹¹
Spinouts from Estonian universities	67 ¹²

Finland 	
Tech companies	4,007 ¹³
Tech employees	23,970 ¹⁴
Investment into Finnish startups in 2022	€1.50b ¹⁵
Full members in the Finnish VC Association	99 ¹⁶
Universities	13 ¹⁷
Spinouts from Finnish universities	54 ¹⁸

All data from 2011 to December 2023; Source: Beauhurst.

Business demography

291,946

All active companies

3,111

Active high-growth companies

Techscaler is widening the funnel of early-stage companies entering the Scottish tech economy. Some companies will grow to become high-growth companies—those with the potential to be significant employers and revenue drivers in the Scottish economy. While some graduates from the Techscaler programme may not initially meet high-growth status, the impact of Techscaler should be evaluated in the context of the broader tech and high-growth ecosystem. A number of Techscaler companies are likely to raise equity investment or secure innovation grants, thereby joining the ranks of Scotland's high-growth companies.

876

Active high-growth tech companies

517

Techscaler companies
(not all are at high-growth stage)

Scotland is home to 6.49% of the UK's 48k high-growth companies, a total of 3,111 firms. In this context, "high-growth" is defined as companies meeting at least one of the growth tracking triggers, such as raising equity investment or achieving scaleup status. Edinburgh and Lothians is the top location for high-growth tech companies in Scotland, with 350 companies headquartered in the region. Edinburgh is acclaimed for its comprehensive business support ecosystem and the presence of esteemed academic institutions like the University of Edinburgh and Heriot-Watt University. Next up is Glasgow and West, with 260 high-growth tech companies, reflecting the population density and talent available in Scotland's largest city.

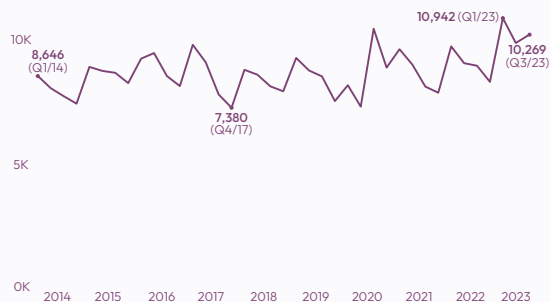


Growth and employment

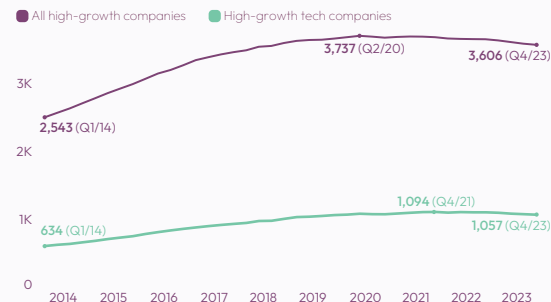
Over the past decade, Scotland's business environment has been on an upward trend. Scottish company incorporations peaked in Q1 2023, reaching 10,942 new companies, a 26.5% increase from a decade earlier. High-growth companies rose from 2,543 in Q1 2014 to 3,606 in Q4 2023, a 41.8% increase. The high-growth tech sector saw a more significant 66.7% growth, but its expansion began to plateau from 2018, indicating stabilisation.

Employment in the high-growth tech sector surged from 2014 to 2018, reflecting rapid expansion. However, post-2018, employment figures varied, with noticeable declines in 2020 and 2022. These workforce reductions are likely due to wider economic challenges, implying that external pressures led to strategic employment adjustments.

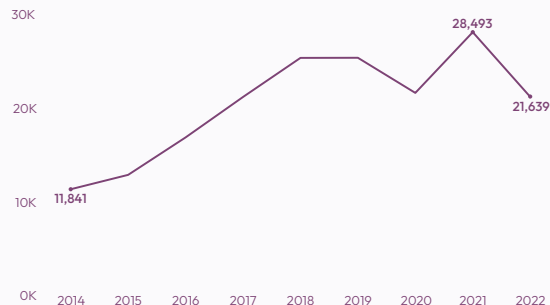
Number of company incorporations in Scotland (2014–2023)



Number of high-growth companies in Scotland (2014–2023)



Number of employees at high-growth technology companies in Scotland (2014–2022)



“Skills development and attracting new capital are critical components to enable job creation and growth. Techscaler is focused on both of these through our educational programmes, mentors and connections to investor networks.”

Yasmin Sulaiman, SVP Ecosystems

Sectors

The leading sector in Scotland's high-growth tech landscape is software-as-a-service (SaaS), which boasts 173 companies. The mobile app sector, with 136 companies, also holds a significant position, reflecting its interconnectedness with the other digital sectors. Companies in this area capitalise on the widespread use of smartphones for consumer and business software.

Companies in the pharmaceuticals sector have secured the most equity investment (£487m) despite ranking lower in terms of numbers compared to the digital sectors such as SaaS. The significant investment reflects the intensive capital requirements and high-value potential inherent to life science companies. In contrast, the clean energy generation field, despite its growing number of enterprises driven by environmental advocacy and policy incentives, has not climbed to the top tiers of the investment rankings. This nascent sector's investment levels are yet to parallel those observed in other more established and less capital-intensive segments of Scotland's tech ecosystem.

Top sectors for high-growth tech companies in Scotland (2023)

Software-as-a-service (SaaS)	173
Analytics, insight, tools	154
Mobile apps	136
Internet platform	132
Clean energy generation	65
Pharmaceuticals	59
Research tools/reagents	49
Medical devices	38
Security services (physical and virtual)	35
Desktop software	33

Top high-growth tech sectors by equity investment (2021-2023)

Pharmaceuticals	£487m
Research tools/reagents	£297m
Security services (physical and virtual)	£216m
Analytics, insight, tools	£216m
Software-as-a-service (SaaS)	£195m
Mobile apps	£192m
Internet and networking hardware	£183m
Food and drink processors (including quality control)	£166m
Internet platform	£148m
Online games publishing	£113m

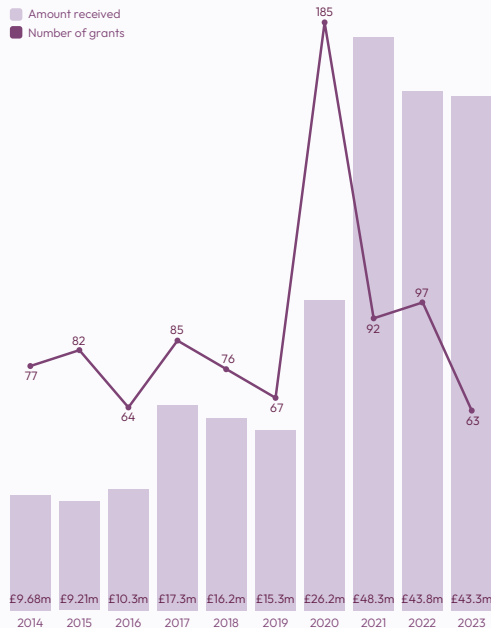
Innovation

The volume of Innovate UK grants to Scotland's high-growth tech businesses has grown significantly.

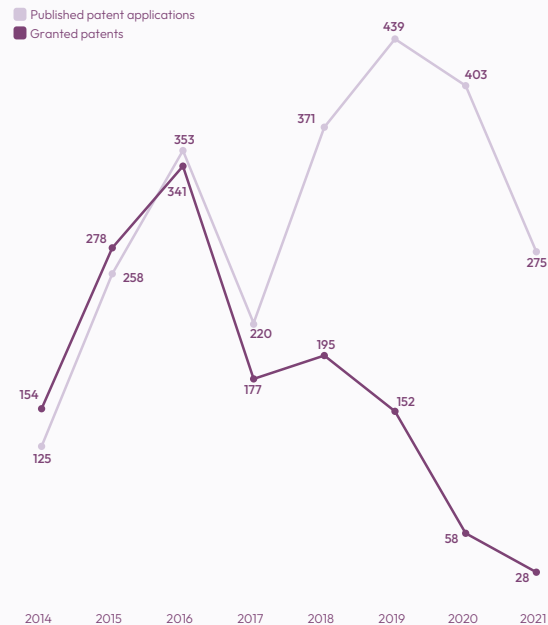
In 2020, 185 grants worth £26.2m were awarded, a spike likely due to extra government support during the COVID-19 pandemic. While grant numbers have since returned to pre-pandemic levels, the overall volume allocated to Scottish companies remains high which indicates a steadily growing pipeline of Scottish startups securing highly competitive innovation funding. Over the next three years, the ecosystem will benefit from more companies, founders, and employees following this pathway. They will either establish a high-growth potential company or contribute their experience back into the ecosystem.

In Scotland, patenting by high-growth tech companies has risen. Published patent applications increased from 125 in 2014 to 439 in 2019, reflecting sector growth and higher investment. The decline in granted patents in recent years likely reflects the typical multi-year delay in the patenting process.

Innovate UK grants received by high-growth tech companies in Scotland (2014–2023)



Patent activity by high-growth tech companies in Scotland (2014–2023)

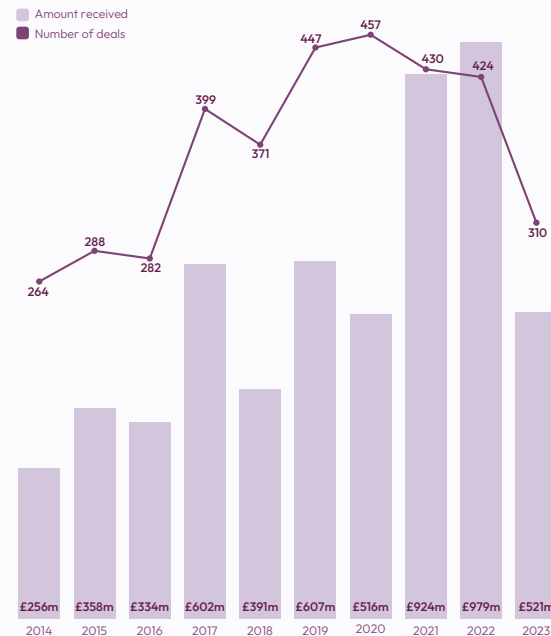


Investment

Scottish high-growth companies secured £5.49b in equity investment between 2014 and 2023. The annual value of equity investment secured by high-growth companies in Scotland reached an all-time high of £979m in 2022, with a total of 424 deals. The higher concentration of equity deals in 2021 and 2022 may have been affected by government stimulus, lower interest rates, and increased activity in the tech sector during and after the COVID-19 pandemic.

Scottish Enterprise completed the highest number of deals with high-growth businesses in Scotland, with a total of 304 deals between 2021 and 2023. The fund contributed to top fundraisings such as Current Health's £31.4m equity funding round in April 2021 and ENOUGH's £34.3m round in August 2023. Another prominent investor was Equity Gap, with 61 deals, and Par Equity, with 55.

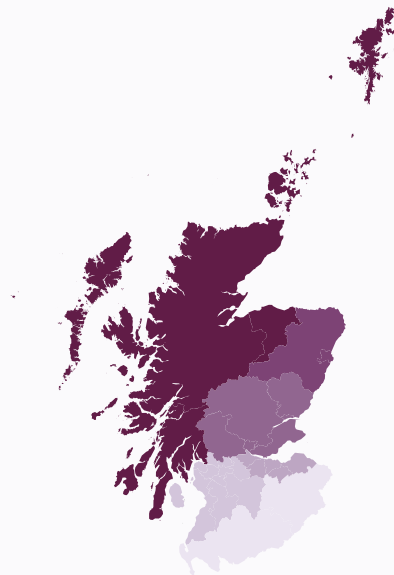
Equity investment into high-growth companies in Scotland (2014-2023)



Top fund managers by number of deals into high-growth companies in Scotland (2021-2023)

Scottish Enterprise	304
Equity Gap	61
Par Equity	55
Kelvin Capital	36
University of Edinburgh	35
Archangels	33
Gabriel Investments Syndicate	26
TRI CAP	25
Techstart Ventures	24
Crowdcube	24
Social Investment Scotland (SIS)	20
Seedrs	20
Scottish Government	19
London & Scottish Investment Partners	18
Eos Advisory	17

Scottish regional summary



Highlands and Islands

Active high-growth tech companies (% of active high-growth companies)	32 (13.2%)
Active high-growth companies (% of all active companies)	242 (1.10%)
All active companies	21,979

North East Scotland

Active high-growth tech companies (% of active high-growth companies)	87 (24.90%)
Active high-growth companies (% of all active companies)	349 (1.33%)
All active companies	26,263

Central Scotland

Active high-growth tech companies (% of active high-growth companies)	75 (27.70%)
Active high-growth companies (% of all active companies)	271 (0.85%)
All active companies	31,865

Dundee and Tayside

Active high-growth tech companies (% of active high-growth companies)	48 (23.40%)
Active high-growth companies (% of all active companies)	205 (1.03%)
All active companies	19,857

Glasgow and West

Active high-growth tech companies (% of active high-growth companies)	260 (25.90%)
Active high-growth companies (% of all active companies)	1,005 (0.95%)
All active companies	106,075

South of Scotland

Active high-growth tech companies (% of active high-growth companies)	24 (17.10%)
Active high-growth companies (% of all active companies)	140 (0.95%)
All active companies	14,690

Edinburgh and Lothians

Active high-growth tech companies (% of active high-growth companies)	350 (38.90%)
Active high-growth companies (% of all active companies)	899 (1.23%)
All active companies	73,375

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¹⁸"Finnish Spinout Companies," Dealroom.co, <https://finland.dealroom.co/companies.startups/f/>

Chapter 3

Views of the ecosystem

Interview with DataKirk



DataKirk is an Edinburgh-based social enterprise aiming to bridge the data skills gap in Scotland's rapidly growing data economy. With a focus on underrepresented founders, DataKirk is at the forefront of diversifying the tech ecosystem through a focus on data literacy and entrepreneurship among Black communities.

"The community I represent is underrepresented in the data sector in Scotland," says Fash Fasoro, Chief Executive at DataKirk. "The need for data professionals is growing, but we are not able to find the right talent here in Scotland". He underscores the government's support in nurturing local talent and the imperative to harness the "unbelievable amount of transferable skills from abroad that are not being utilised effectively". DataKirk's methodology is tailored to the

emergent needs of 'Future Scots'—a term Fasoro coins for the next wave of adaptable entrepreneurs able to navigate the fluid tech landscape. He remarks, "What we know yesterday is not fit for today, and what we know today may not be relevant for tomorrow".

However, the organisation faces some unique challenges, notably in the advisory domain. Techscaler's alliance has been instrumental, as Fasoro notes: "As a small organisation, we do not have many advisors to open doors for us. With Techscaler as our official partner, we were able to host the successful Scottish Black Talent Summit, which 268 participants attended."

Beyond acceleration, DataKirk's data and analytics training programme is supported by Techscaler's wealth of resources. "We use their training material, and bring some of their key contacts to support our training", he explains. DataKirk aims to do more than just skill-building; it also wants to nurture confidence and belonging.

"We're able to support them, nurture them, and help them build confidence," Fasoro explains. "We focus on community-oriented goals, not just profit."



"With Techscaler as our official partner, we were able to host the successful Scottish Black Talent summit, which 268 participants attended."

Fash Fasoro, Chief Executive at DataKirk

Furthermore, Fasoro shines a light on the synergy between DataKirk and Techscaler, illustrated by success stories like Lawal Olaotan, a DataKirk ambassador and founding member of Econome, who has seamlessly transitioned into Techscaler's programme.

Looking ahead, DataKirk aims to broaden its focus from the black community to all ethnic minorities in Scotland, with plans to initiate 'data gym' sessions to increase data literacy. Techscaler's role in this expansion will be pivotal, offering a shared space for workshops and access to a wider community network.

Interview with Investing Women



“Just this year, we’ve channelled 321 female founders into Techscaler. We’re really starting to have an impact now.”

Jackie Waring, founder at Investing Women

Investing Women Angels is a female-led angel investing network. Founded in 2013, the organisation actively invests in high-growth female-led businesses, particularly those that challenge the traditional norms of the tech sector. It has been investing since 2015, with more than 90% of funds going to innovative female-founded companies. To date, Investing Women’s sister organisation AccelerateHER

has supported over 7,000 female and non-binary founders with trade missions, mentorships, accelerators, and workshops, among other services.

The number of high-growth tech companies with an all-female founding team increased by 200% between 2014 and 2023, rising from 21 to 63. Jackie Waring, founder of Investing Women and sister company AccelerateHER, recognises this increase. “We’re seeing growth in the number of tech-based companies founded by female founders. It has been an area of underrepresentation in the past, and it’s been a key objective of ours to try to help stimulate that increase.”

Waring attributes this growth to the enhanced visibility of female founders: “It’s all about inspiring other women to really think they can go there.” She adds: “We’re really going out into the community to do these events—not just cities in Scotland, but also into the Highlands. Just this year, we’ve channelled 321 female founders into Techscaler. We’re really starting to have an impact now.”

AccelerateHER is dedicated to helping female founders looking to scale, secure funding, and go global. The organisation has run several hackathons in partnership with Techscaler, looking to tackle

the challenges faced by women entrepreneurs. Participants included Aleksandra Czech-Seklecka, founder of VanFill—which aims to reduce carbon emissions by optimising the number of half-empty transport providers—and Danae Shell, co-founder and CEO of legal support platform Valla.

Waring notes that access to finance remains a significant challenge for female founders. “Angel investment is definitely improving, but when we first set up Investing Women 10 years ago, we struggled to name more than a couple of female founders that had had investment.” In 2022, angel investment in Scotland totalled £120m, secured by 62 companies—11.3% of which had female founding teams. This is an improvement from 2013, when only one female-founded company received angel investment.

Waring also emphasises the importance of a global outlook for UK-based tech companies. “We’re an island nation, and we have to think globally from day one. There is the danger of not seeing who else is out there in this space, therefore underestimating competitive challenges.” Investing Women actively engages internationally through collaborations with organisations like Golden Seeds and the Angel Capital Association and via internal missions to countries like the US and Germany.

Interview with the Chief Scientist Office



“Scotland’s life sciences sector is one of the key sectors for transformative economic growth”, says David Lowe, Clinical Director of Innovation at the Chief Scientist Office (CSO). “However, for companies, it can be a challenge to get access to clinical experts and understand care pathways.”

The Chief Scientist Office plays a vital role in Scotland’s healthcare, with a focus on advancing health research and innovation. It provides the infrastructure for health, research, and innovation, and supports collaboration across the triple helix of NHS, industry, and academia.

The partnership with Techscaler is designed to enhance these collaborations and support the growth of innovative health solutions for the benefit of NHS and the economy.



“Through Techscaler we will be able to support companies with the infrastructure and expertise to validate their technology.”

David Lowe, Clinical Director of Innovation at the Chief Scientist Office (CSO)

“CSO recognises the opportunity specifically in life sciences within the NHS”, says Lowe. “And the Techscaler collaboration paves the way for companies to pilot new health products and technologies in clinical settings throughout Scotland.”

Lowe illustrates this: “A company has a solution for managing frail people in the home. The relationship with NHS Scotland will give them appropriate access to secure anonymised data, validation, and evidence of clinical effectiveness.” As a result, the partnership will accelerate the development of transformative innovations for the NHS within a supportive framework.

Entrepreneurial training is also a focus, as Lowe notes the significance of leveraging NHS Scotland’s position as the largest employer in the country with a hugely knowledgeable, diverse, and passionate workforce. The collaboration between CSO and Techscaler will not only enhance companies’ understanding of their business models, and augment their expertise, it will also benefit patients and medical staff as they develop new products and technologies for use across NHS and gain new entrepreneurial skills. The intersection of NHS and Techscaler involves participation in events, community engagement, and mentorship provision.

Looking ahead, Lowe states that unlocking the full potential of the life science sector means providing appropriate support at all stages. “Health tech is a booming area, so organisations need to be clear on what their value proposition is, especially in such a competitive landscape.” Businesses going through these programmes also gain exposure to venture capital firms to access funding as a startup and to ensure their sustained presence and growth. It is all part of ensuring Scotland is the best location for life science companies.

Interview with Scottish Enterprise



Over the last few years, Scotland's entrepreneurial landscape has evolved into a dynamic and vibrant ecosystem. Leah Pape, head of High-Growth Services at Scottish Enterprise, highlights the diverse array of business support available across the public and private sectors. As a national economic development agency, Scottish Enterprise plays a pivotal role in helping Scottish businesses innovate and scale. SE's High Growth Services team focuses on three key areas: managing spinout activity, supporting a portfolio of high-growth startups and scaleups, and supporting a range of high-growth entrepreneurship projects.

Pape notes the ecosystem's complexity and fragmentation, acknowledging the challenges these pose for businesses. She notes, "It can be difficult for businesses to navigate, to understand what's available and how you access it". Despite these hurdles, there has been significant investment into business support across Scotland. "There's a partnership across the agencies to try and streamline alignment, to make

sure we're not duplicating or competing, but rather raising the awareness of support and making it easier to access".

Scottish innovation is driven by key policies, such as the Scottish Technology Ecosystem Review and Innovation Strategy. This has led to the creation of programs like Techscaler. Pape elaborates on the significance of such initiatives, stating, "We've seen some big key pieces of work over the last couple of years, and that is really setting the direction. It really helps to have those key recommendations and actions, which enable public sector entities like Scottish Enterprise to prioritise activities to help drive change". As part of their partnership, Techscaler and Scottish Enterprise have been working together to ensure those high-growth potential startups are able to access the relevant business support and advice they need. As part of this, SE has provided a range of support, including around £250k of targeted innovation grant funding approved to help 14 companies develop their MVPs.

Acknowledging the funding pressures across public sector budgets, Pape underscores the potential within these constraints to innovate and prioritise collective resources. "There's more competition, and everybody is feeling the pinch in terms of funding and resources that we've got available. As with everything, when there are pain points, it brings the opportunity to think



"There's a partnership across the agencies to try and streamline alignment, to make sure we're not duplicating or competing, but rather raising the profile of support."

Leah Pape, Head of High-Growth Services at Scottish Enterprise

about how to do things differently and really focus our priorities on areas which will be transformational for the economy."

As Scottish Enterprise sets its sights on the next stages of development, Pape emphasises the importance of exploring new, efficient support delivery methods. She envisions a Techscaler model where specialist advice is easily accessible for direct engagement. Pape's focus is on ensuring startups progress meaningfully. "We need to make sure they're progressing on their scale-up journey and they're delivering the outcomes and the impacts that we're collectively looking for," she says. Working closely with partners like CodeBase and other regional counterparts, there is a strong commitment to cultivating an integrated, innovative, and regionally balanced entrepreneurial landscape in Scotland.

Interview with South of Scotland Enterprise



South of Scotland Enterprise (SOSE) is the enterprise agency for businesses and communities across Dumfries and Galloway, and the Scottish Borders. It supports businesses in the region at every stage of their enterprise journey from pre-start/business start-up through to scale-deep via a team of business advisers, specialists, and coaches, as well as funding in the form of grants and loans. Susan Harkins, Head of Innovation and Entrepreneurship at SOSE, highlights the significant changes that have occurred since SOSE's inception in 2020, particularly in the rural regions she engages in. She notes, "These are areas which have historically been underserved by support, either public or private, particularly around tech."

Harkins points out how the tech ecosystem has been shaped by initiatives like Techscaler. "While these are all exciting opportunities, there's still a bit of work to do in terms of getting it right for a rural region," she observes, acknowledging the mismatch that sometimes occurs between private and public sector entities.



"We're trying to inspire people to look at entrepreneurship, understand it, be curious about it."

Susan Harkins, Head of Innovation and Entrepreneurship at SOSE

At the heart of the challenge lies the "client journey", a critical aspect ensuring that businesses benefit from the ecosystem's resources. Harkins assesses the current landscape: "For a business, it can be overwhelming with the amount of support on offer." She notes the fragmentation in the ecosystem, which requires enhancing its value without

duplicating what already exists. Harkins envisions an environment characterised by "collaboration and boldness with clear shared goals and a clear and flexible journey."

Despite the broad spectrum of support available, Harkins recognises a disproportionate emphasis on early-stage ventures. Pointing out the persisting gaps in scaleup expertise, she underscores the need to tailor support to businesses at different stages of development.

Despite the challenge, Harkins remains optimistic. She draws attention to ongoing collaborations with Techscaler to improve the efficiency of support. "We're trying to inspire people to look at entrepreneurship, understand it, be curious about it," she states, highlighting efforts to promote entrepreneurship in rural areas, notably through initiatives like the Women's Enterprise Programme. Harkins emphasises the significant role of the collaboration with Techscaler in advancing youth entrepreneurship across colleges in the South of Scotland. As SOSE continues to grow, it does so with a clear commitment to supporting businesses, aiming to foster growth within the South of Scotland.

Interview with Highlands and Islands Enterprise



“Rural regions like the Highlands and Islands are every bit as ambitious and innovative as other areas of Scotland.”

Theresa Swayne, HIE's senior development manager for technology and digital adoption

Highlands and Islands Enterprise (HIE), the economic and community development agency for the Highlands and Islands of Scotland, has been fostering business growth for over five

decades. It offers specialist advice, access to property, and diverse funding options, including equity, loans, and grants. From 2013 to 2024, there was a 50% increase in high-growth technology companies, mirroring a broader trend in the wider Scottish tech ecosystem, which grew by 71.8% in the same period.

Theresa Swayne, HIE's senior development manager for technology and digital adoption, underscores the significance of these initiatives. “Digital tech is a cross-cutting theme that can benefit all sectors and help us to solve some of the region's grand challenges, including attracting talented people and transitioning to net zero.” She identifies resource availability as the primary challenge in supporting business growth in the vast region, which covers half of Scotland and is larger in land mass than Belgium. HIE addresses this through its eight locally based area teams, offering tailored support. Swayne notes the support programmes like Techscaler offer to early-stage tech startups, particularly in rural areas. However, she argues more could be done to streamline processes. “People still need guidance to navigate the business support that will benefit them the most and that's where our area teams and sector

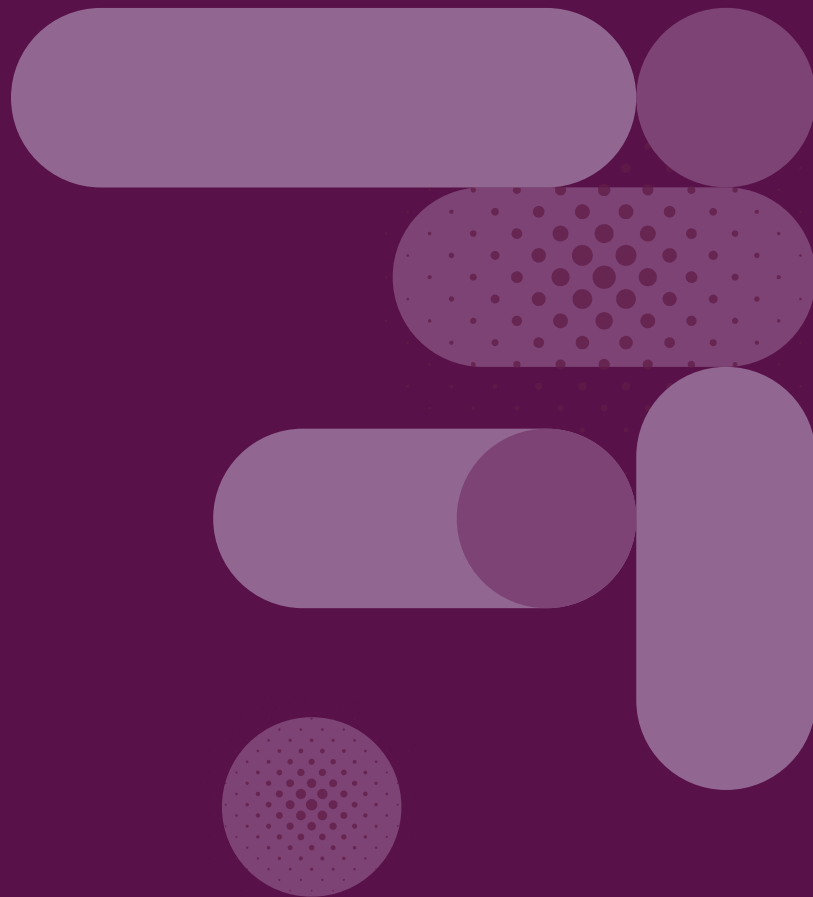
specialists play a vital role,” she says.

“Rural regions like the Highlands and Islands are every bit as ambitious and innovative as other areas of Scotland,” says Swayne. “We'd like to see a lot more happening here.” She highlights significant projects like the upcoming satellite launch sites in Shetland and Sutherland or the Cromarty Firth Green Freeport and the increase in government funding as indicators of great entrepreneurial opportunities, particularly in tech and digital adoption. “Especially post-pandemic, it's even more appealing to live in an area like the Highlands and Islands.”

As HIE looks to the future, Swayne emphasises the importance of working alongside the ecosystem partners to ensure Techscaler successfully benefits people in every region. “We've got three and a half years to go [as Techscaler's partner], which isn't a long time,” she notes. As the tech ecosystem grows, HIE is poised to leverage local opportunities, aiming to maintain the region's competitiveness on national and international stages. The opportunities from the digital and tech revolution are huge and we want to ensure that the Highlands and Islands is best placed to exploit them.

Chapter 4

About



About CodeBase

CODEBASE

CodeBase is an Ecosystem Builder delivering full stack economic development for the Tech Startup Ecosystem. Our programmes leverage existing networks, helping to build, grow and scale more successful startups, benefitting the ecosystem that supported them.

950+

Startups supported since 2014

\$4.8bn

Capital raised by CodeBase tenant, alumni, or participant companies since 2014.

3,000+

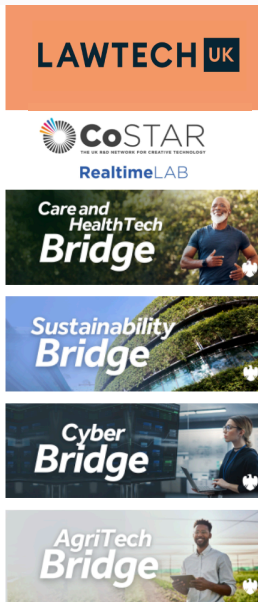
Jobs created by CodeBase tenant, alumni, or participant companies since 2014.

Our 2023 programmes

Scotland



UK



Our programme partners



Our services

- Startup education
- Mentoring
- Innovation programmes
- Community and events
- International and investor connectivity
- Workspace (incubators)
- Digital skills (including coding)

All data to December 2023; Source: Techscaler Applications Database and Live Techscaler Data Tracker

CodeClan 2024: the second generation

In August 2023 CodeBase acquired the assets to CodeClan following its liquidation.

Between then and the end of the year, CodeBase supported a group of committed CodeClan trainers and colleagues to complete the remaining eight programmes.

The 1st generation of CodeClan achieved a lot and should be celebrated:

1,815

Students supported since 2015

1,360

Hired into Technical Roles

470

Companies recruiting CodeClan students

CodeClan 2.0 will introduce a new business model, collaborating with a leading US platform and local colleges and employers. Our focus will be on supporting the training and retraining of students and employees. This approach aims to quickly expand the number of people in the digital economy and ensure that the tech ecosystem, from startups and SMEs to large corporations, can access the best and most relevant talent.

CODEBASE techscaler

CodeBase leading programme coordination, community development and connectivity to potential employers and Techscaler programme.



Courses available include:

- Full Stack Development
- Data Science
- AI/Machine Learning
- Software Engineering
- DevOps/Cloud Engineering

Technical/software engineering course delivered online via a leading US platform.



Delivered in partnership with colleges for in-person support.



No-code for non-tech founders and early stage employees.

All data to December 2023; Source: Techscaler Applications Database and Live Techscaler Data Tracker

About Beauhurst



4th Floor, Brixton House
385 Coldharbour Lane
London
SW9 8GL

www.beauhurst.com
+44 (0)20 7062 0060
consultancy@beauhurst.com

Beauhurst is a searchable database of the UK's high-growth companies.

Our platform is trusted by thousands of business professionals to help them find, research and monitor the most ambitious businesses in the UK. We collect data on every company that meets our unique criteria of high-growth; from equity-backed startups to accelerator attendees, academic spinouts and fast-growing scaleups.

Our data is also used by journalists and researchers who seek to understand the high-growth economy, and powering studies by major organisations—including the British Business Bank, HM Treasury and Innovate UK—to help them develop effective policy.

For more information and a free demonstration, visit beauhurst.com

techscaler

CODEBASE