



Fast Growth Secrets

Part 2

The Oxford and Cambridge experience:
revealing the fast growth secrets of
technology businesses

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Law firm Mills & Reeve and Richardsons accountants held a roundtable discussion to explore the fast growth secrets of technology businesses, comparing the experiences of those based in Oxford and Cambridge.

It came at a time when our relationship with science and technology was under intense scrutiny. The government was setting out its agenda to become a 'science superpower' and challenging debate over the regulation of social media and AI businesses, and there had been recent international recognition for the creation of the AstraZeneca Covid vaccine programme.

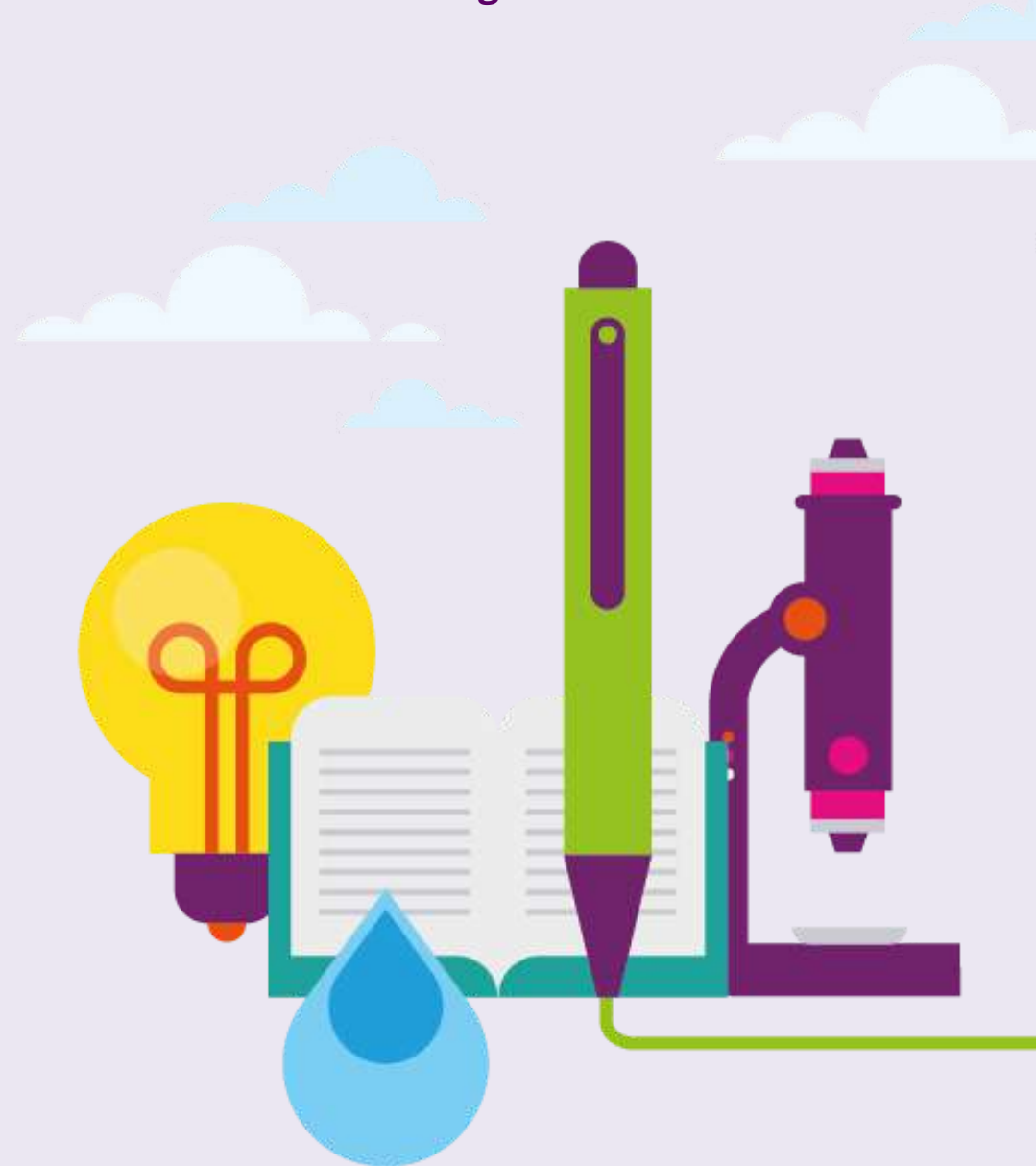
Government support, education and, of course, funding are often at the heart of these discussions and will undoubtedly remain so for many years to come.

In this thought leadership report we look to address some of these challenges and opportunities across three broad areas:

1. The Oxford and Cambridge experience
2. The national ecosystem
3. How we inspire the next generation of tech entrepreneurs

We also offer our thoughts on the steps that might be taken to improve the standing of science and technology businesses, not only in Oxford and Cambridge but across the entire UK.

We'd welcome your thoughts and you can join the discussion on LinkedIn with the hashtag [#FastGrowthSecrets](#).



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The Oxford and Cambridge experience

Oxford and Cambridge bring together an almost unique combination of engaged local government, world-class academia and a vibrant advisory community, creating a “golden triangle” of support that nurtures technology entrepreneurs and the businesses they build. But comparing Oxford against Cambridge has long been “a favourite sport”.

Cambridge, participants in our roundtable agreed, has a more mature ecosystem, benefitting from the early “recycling of capital”. “Early big wins in terms of spinouts” has seen money return to the city’s ecosystem which has further entrenched its standing in the UK and the world stage. It’s easy, one participant said, to forget “just how mature the Cambridge ecosystem is in recycling capital and expertise”. And that shows in the infrastructure available to early-stage businesses in the city.

Collaboration too has been part of its success, buoyed by the recent creation of Innovate Cambridge. “The direction and intention are there” with an engaged local authority working closely with academia. Business has responded with Apple, Microsoft and Amazon, among others, choosing sites in the city.

Oxford is fighting back, with early-stage biotech businesses moving towards the city tempted by high-quality lab space and the opportunity to work alongside like-minded businesses. The availability of good quality lab space remains an issue, despite significant investment on the city’s outskirts.

The role the universities play, particularly in Oxford over the past 15 years, can’t be underestimated. “They are more outward looking and that has made a substantial and positive impact.” They are, participants agreed, “important to innovation in science and technology” and are an “integral part of the ecosystem” - and that impacts entrepreneurialism and commercialisation.

Now, however, isn’t the time for complacency. There’s a need to “make sure that those coming through the universities continue to have that aspect.” It’s not automatically guaranteed.



The technology transfer office in Cambridge is widely viewed as “impressive” and has the edge over its Oxford counterpart. The university in Oxford, however, does play an incredibly important role as an anchor institution. Its role as an engine for delivering talent is second to none. Its role too as a major landowner and its approach to “placemaking and collaboration” cannot be underestimated. Both can learn from each other.

Brookfield Asset Management’s investment into Harwell is a terrific placemaking example that is “very exciting to see, taking Harwell to a whole new level”. Universities need to work alongside research institutes and private sector investment to create powerful transformation.

What both cities have in common is their world-class ability to create early-stage spinout companies, offering “good environments to foster entrepreneurialism” supported by strong funding communities.

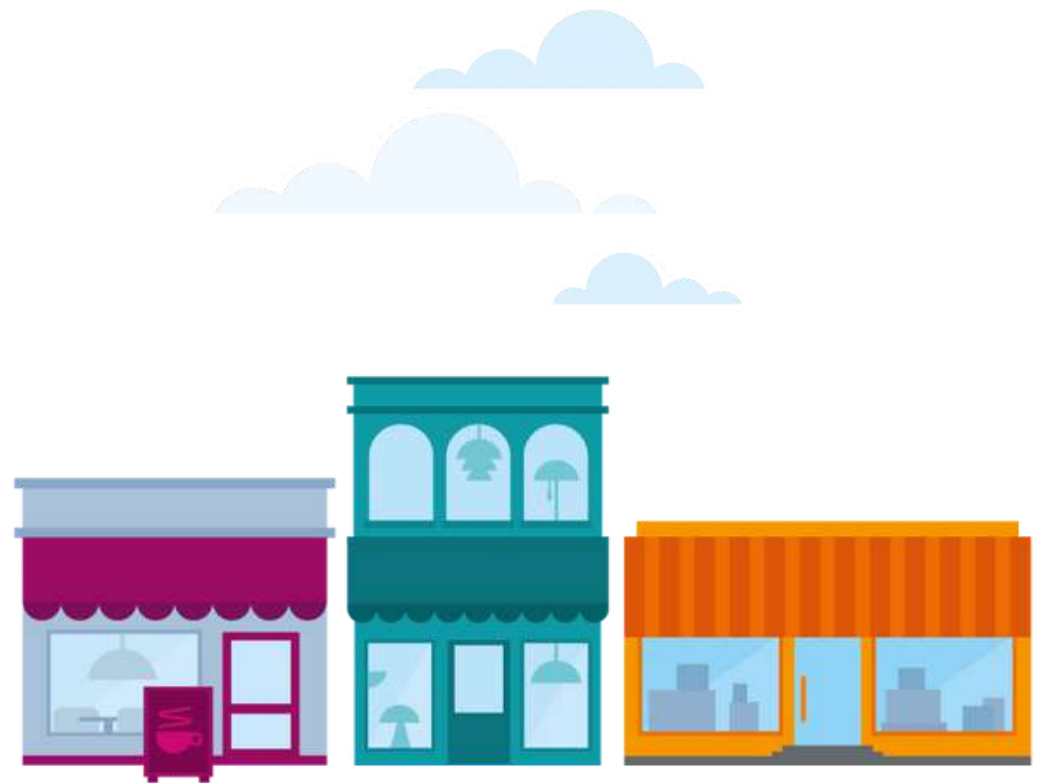
But when looking to raise serious money, the question is always “where do they go?” Scaling up those entrepreneurial businesses remains the challenge – a problem that is far from unique to Oxford and Cambridge and is echoed across the UK.

The answer is all too often the US. The powerful lure of the US often sees UK scale-ups choosing to relocate their business. The recent ARM listing on the Nasdaq stock exchange was the biggest US share listing of the year. But that isn’t without its challenges; while a business may be happy to relocate, the talent behind them is often reluctant. Oxford and Cambridge remain attractive destinations for top talent and they choose to stay.

Both cities also share constraints on housing and infrastructure. Residential development of any kind “remains unpopular”, and travel between the two cities is “slow and expensive”.

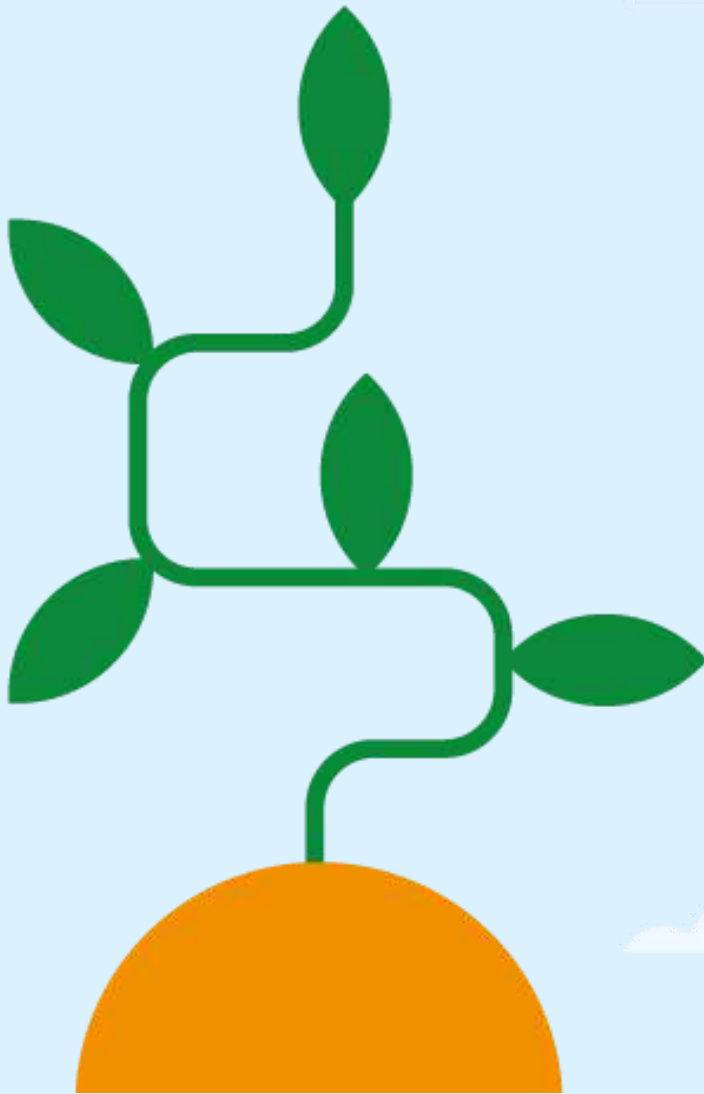
The Oxford and Cambridge link is desperately needed, but “forget road, it’s rail that has the power to transform”.

It is, of course, somewhat artificial to compare Oxford and Cambridge. They should be seen more as a powerful partnership that benefits businesses, academia and the local communities. And that, in turn, is good for UK plc.



Key takeaways

- Oxford and Cambridge, while very different to each other, have much in common. Access to laboratory space and talent are shared challenges, and are unlikely to be resolved by each city on its own.
- The universities are undoubtedly the anchors for both cities. Levels of engagement with business and the advisory community is always improving, but there's still much more they could do.
- Recent government announcements have signalled their commitment and renewed interest in the ARC region.
- Getting the private, public, third and R&D sectors to pull together with a view to attracting investment at scale is vital.
- We now have the new pan-regional Oxford to Cambridge Partnership and the Supercluster Board. Hopefully these new structures will mean that there will be more cohesion.





"Don't underestimate the contribution the advisory community can bring to these relationships. Your accountant and lawyer bring both technical expertise and their collective experience of multiple businesses across the country. Involve them early and tap into their extensive connections."

Mark Pearce

Commercial & intellectual property partner,
Mills & Reeve

The national picture

Oxford and Cambridge don't exist in isolation. The UK has a terrific reputation for creating early-stage businesses, leading our European neighbours by quite some way, sitting just behind the US and China in the number of start-ups created.

UK entrepreneurs have built 144 unicorns, defined as having a value of US\$1 billion and yet to list, but lag a long way behind the US, where 712 unicorns have been created.

It raises two important questions: Is capital available for businesses to scale up in the UK? And if not, what is needed to grow and scale up the investment community to meet that challenge?

It's widely accepted that there is plenty of capital for early-stage businesses, with relatively easy access to seed and Series A funding. "The issue is when you want to raise £25 - 50 million." Here, funding options are tight.

There are encouraging signs of change with capital beginning to filter through, albeit on a small scale. Innovate UK, a government agency, is receiving more capital to support later-stage research and development.

British Patient Capital, a venture capital investor and fund of funds, is also making a focused push on later-stage businesses with £2.5 billion to invest over 10 years in venture and venture growth capital looking to unlock an additional £5 billion of private capital to support UK companies with high growth potential. They're not alone.



US competition

The US, however, proves a strong financial pull for UK businesses looking for scale-up funding. It's a markedly different market, providing opportunities that are simply not available in the UK.

Take the example of drug discovery. Medicines that make it to market are "listed at much higher prices, driven by its insurance market". Drugs that "sell for €3,000 in Germany or France can sell for US\$35,000 in the US". It has created "a lucrative market with US capital attracting businesses that want scale-up investment". Pressure on companies to move to the US, participants agreed, is high.

It has been suggested that more, and easier, access to funding would keep UK scale-up businesses here, dissuading them from a transatlantic move. Our roundtable participants were unsure. For many businesses looking to operate on a global scale, the US market, being English language speaking and so much larger than that of the UK, is a natural territory for them to look to scale. The pulls are broader than simply access to capital.

A tight funding landscape does, however, "see UK entrepreneurs often able to do much more for less", meaning that they "don't need to raise the same levels of capital". A US start-up needing early-stage funding is likely to look for "anywhere between £10-30 million in seed funding", and that "looks high" when compared to UK businesses at a similar growth stage.

That, participants agreed, can be a "considerable competitive advantage" when looking for investors. Investors too appreciate the UK culture of collaboration, with co-investors and management teams more likely to work together rather than, at times, "at each other's throats".



Institutional funding

A huge gap in the UK funding landscape is the lack of institutional investor participation. It is, participants agreed, why “we have a scale-up problem”.

It is partly a regulatory issue - until recently pension funds and insurers were excluded from making such investments - and partly a cultural issue. With UK start-ups running lean, and arguably “under-funded”, it leaves founders “spending a disproportionate amount of time fund-raising rather than running their business”. And that, participants agreed, can limit ambition.

That lack of ambition has a noticeable effect when businesses list on UK markets, with “muted share prices” and institutional investors often “seeking a safer dividend yield” provided by stock market stalwarts. The US, by comparison, has “the big ambition” and the funding ecosystem to support that. It’s perhaps understandable why an increasing number of UK businesses choose to list in New York over London. “There’s a danger we are making our domestic capital markets irrelevant.”

The recent ARM listing on the Nasdaq stock exchange was the biggest US share listing of the year. But that isn’t without its challenges; while a business may be happy to relocate, the talent behind them is often reluctant.

A science and tech superpower

The government has pledged £3.5 billion in its efforts to position the UK as a science and tech ‘superpower’. It’ll see £100 million allocated to innovation accelerators in Glasgow, Greater Manchester and the West Midlands, funding for the creation of 12 investment zones, and £2.5 billion over 10 years in a National Quantum Strategy.

While the government’s efforts to support the UK regions are to be applauded, and this is clearly part of the current Conservative government’s “Levelling Up Agenda”, it’s clear that “Oxford and Cambridge are not being rewarded for their success and contribution to the UK economy”. It begs the question of whether the region needs its own champion.

Additional funding is always welcome, but what businesses crave is consistency in government policy. Where Enterprise Investment Relief (EIS) and Seed Enterprise Investment Relief (SEIS) have remained constant and valued programmes, the recent changes to the Research and Development (R&D) tax credit regime are “extraordinarily inconsistent”. Participants rightly ask, “how can you plan when the landscape is always shifting?”

To realise the government’s science and technology ‘superpower’ ambition will need more than cash. Investment in a creaking energy supply network, water use and transport infrastructure, alongside an attractive immigration policy, are equally important and pose very real threats to that ambition.

Key takeaways

- Following the chancellor's recent Mansion House speech about pension fund reform to help UK start-ups, a huge gap in the sources of funding could be filled. These UK pension funds and insurance companies would then have access to the high levels of returns which can be made from the very best UK tech scale-ups.
- Venture capital investors and private equity investors could work more closely together as an industry to ensure that the UK's best scale-ups are funded throughout their growth journey in a more seamless way.
- A number of UK businesses looking to do an IPO are turning their attention away from the UK (in particular London's AIM) and towards the US (in particular Nasdaq). This is due to the higher level of prestige and perception that it's more growth orientated. The downsides to a Nasdaq IPO are the costs (so it tends to be more appropriate for later stage technology businesses with a market cap of at least \$500 million) and the regulatory burden (AIM rules for companies imposes a moderate regulatory burden).
- The new fast-track visa for scale-ups which launched in Spring 2022 is a useful tool to enable UK scale-ups to access global talent; however, more needs to be done to ease immigration controls to allow UK businesses to more easily compete in the global war for talent.
- Despite positive pledges from the government in respect of the UK becoming a science and tech superpower, the reality is that the latest R&D reforms do not support SMEs. The previous stability of the SME scheme was a positive; it was a reliable source of funding for R&D companies. Confidence has been lost with the constant uncertainty around the scheme, increased hoops to jump through to make a claim and the likelihood of more changes to come (eg, the merging of the two schemes). It needs to return to being a stable, known source of R&D funding.
- Levelling up is to be applauded, yet a science and tech superpower needs its centres of excellence. A policy that recognises those centres of excellence and the role they might play in levelling up should be explored.

“Growth capital is available for UK businesses looking to scale-up, but in this tough economic climate investors are being highly selective in making investments, preferring to focus on those with strong management, who prioritise capital efficiency and long term value creation, while also generating some level of recurring revenues.”

Zickie Lim

Corporate partner & head of venture capital & investments team,
Mills & Reeve



The next generation of science and technology entrepreneurs

Despite the successes of UK science and technology businesses, the constant challenge of inspiring tomorrow's tech entrepreneurs remains.

There is, of course, the need to encourage more children to take an interest in STEM subjects at school and university, but that alone won't be enough. Under-represented groups need greater support and encouragement, particularly young women. It's a serious indictment that just "4% of tech founders are female".

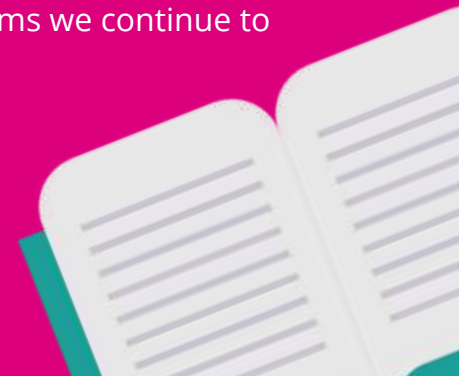
Business and academia have an important role to play. The perception, wrongly, remains that "being a scientist is what you do for the love of science". There's a need to engage undergraduates and "help them understand what options are open to them outside of education". It is, participants agreed, possible to still be involved in cutting-edge science in a commercial environment and deliver tangible results.

"There is life outside of academia," said one participant, it's just that "academia isn't very good at highlighting the options available."

Academia shouldn't be embarrassed by the wealth successful entrepreneurs can make. There is much, it was suggested, we can learn from the worlds of sport and media.

The example was shared of the head of a faculty at one of the universities who on founding a drug discovery company and successfully raising "eight figures" in funding, reportedly said that "his ambition is to see someone pull into the university car park in a yellow Porsche" demonstrating that "this is what you get as a reward for entrepreneurship".

Yet, while money is undoubtedly important, it's the possibility of what science and technology can achieve that remains a powerful motivator. "Those in academia, even when they move into a more commercial environment, don't leave academia entirely at the door. They still want to solve the problems we continue to face."



The role of business

Successful entrepreneurs have an important role to play in nurturing tomorrow's talent. The Dyson model was highlighted as a first-class example of how this can work and should be replicated.

There's a risk that "we're too obsessed with the academic route" and fail to recognise that there's much to gain from vocational learning. There are many routes into the sciences, with apprenticeships offering a valuable alternative, particularly for under-represented and hard-to-reach groups. "We should be aspiring to and supporting that."

There's a real need to open up and demystify Oxford and Cambridge, "bringing young people into the workplace before we lose them". Cambridge Unlocked is making notable headway, offering one-week work placements for sixth form students from disadvantaged backgrounds. It has been embraced by the city's businesses. The advisory ecosystem in both Oxford and Cambridge has an important role to play too.

We shouldn't, however, underestimate the drive and motivation the next generation have. "They may not follow the same career model as their parents, but the drive is there." They aren't afraid of hard work, and they understand that reward follows hard work. The entrepreneurial world is genuinely meritocratic.



Key takeaways

- The UK isn't very good at recognising the contribution of science and engineering to the UK economy. They are the building blocks of this country, and the country should celebrate that. Academia, industry and the advisory community all have a role to play in making this happen.
- Apprenticeships often remain overlooked by science and technology businesses. That's a mistake. They open up to businesses a talent pool that would otherwise be missed. Businesses and educators should work together to inspire the next generation.
- The advisory community has a powerful voice and can play its role in supporting and encouraging the next generation of science and tech entrepreneurs. That can be achieved by signposting opportunities and working with educators, businesses and other bodies, such as LEPs.





“A fundamental change of mindset is needed to encourage children and young adults into science and engineering careers. We need to make it look sexier. Sciences and engineering need also to embrace the concept of portfolio careers, recognising that it may keep talent for a limited period of time.”

Alison Richardson
Partner,
Richardsons

How we can help

Mills & Reeve

We're centred on achieving more for our clients, their businesses and the wider communities we serve.

Mills & Reeve, a full-service law firm, is the legal adviser behind some of the UK's most successful technology businesses. We act for entrepreneurs leading fast-growth technology start-ups and spin-outs through to IPO, and work closely with global technology giants and their investors. With seven offices across the UK including Oxford, Cambridge and London, our specialist team provide the full range of legal services that you need, always with a focus on your objectives.



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Richardsons

Richardsons are an Oxfordshire based firm of chartered accountants and business advisers with offices in Oxford and Thame who provide specialist accounting advice for small and medium companies, as well as large corporates and individuals.

As specialists in technology accounting they act for many companies in the science and tech field including technology start-ups, some based at Harwell, Oxford, and spin-outs from universities including Oxford University, Oxford Brookes, Reading and Sheffield Hallam. They also act for a number of aerospace clients, including suppliers to NASA and ESA (European Space Agency), and spin-outs from organisations such as the Science and Technology Facilities Council.



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