STATE OF STUDENT STARTUPS 2020

Creator Fund
Europe's leading investor in university startups
**Creator Fund’s Inaugural ‘State of UK Student Startups’ Report**

In the US, companies such as Facebook, Snapchat, Yahoo, and DoorDash demonstrate how world leading technology companies can be founded by students on campus. The UK has some of the top academic institutions in the world, and Creator Fund believes the best place to look for the next generation of great startups is inside UK laboratories and classrooms.

In the last 12 months, our team has seen over 800 startups from 94 different universities. We have found that Covid-19 has not slowed university startup activity down, instead founders have used the extra time on their hands to move their ideas forward. Today we release the State of Student Startups report, which looks at what inspiring student founders across the UK are working on. The report is based on analysis of a sample of 545 student-led companies we met in the past academic year.

This report is not scientific or perfectly representative. It does, however, paint a comprehensive national picture of what the UK’s best young minds are starting, and how to best support them. Its limitations lie in that we see a higher number of startups at the universities where we have a team on the ground, and certain founders are less likely to look for Creator Fund investment than others.

**Headline Findings:**

| **Healthcare is the biggest sector:** | At a time when the world needs medical solutions, students are working on this above everything else |
| **57% of startups have a foreign founder:** | Attracting foreign students (especially Chinese students) is key for UK innovation |
| **Student teams are more diverse than startups in general:** | 43% have a BAME founder. 40% have a female founder |
| **Postgraduates are much more likely to be founders:** | This is very different from the undergraduate-led entrepreneurship of campuses in the USA |
| **Students are key for innovation outside the South East:** | Exciting startup activity goes far beyond Oxbridge (especially in Scotland) |
The majority of UK startups have a foreign founder

Almost six in ten companies started at university have a non-British founder. Perhaps, the very act of travelling across the world to study shows an appetite for risk necessary to be a founder. And many students choose UK universities because they are world leading startup launchpads.

Shawn Du, a Creator Fund-backed Chinese founder, said “I came here to Imperial to study because I wanted to start a company and thought the UK had the best talent for building my team.”

China (including Hong Kong) sends over 120,000 students to the UK to study every year. This is more than the next eight countries combined. This corresponds to Chinese students being the most likely to start companies, followed by Americans.

Canadian students are disproportionately entrepreneurial, creating the same number of startups as French or German students, despite being half their overall number.

Francois Gouelo, a Canadian founder backed by Creator Fund, said “Freedom and creativity are key to Canadian education, especially compared to Europe where going above and beyond can be frowned upon. We also have a different attitude to hierarchy. In Europe, we still see young CEOs as students with a project. In Canada, young or old, a CEO is a CEO.”

India is notably missing from the top of the list, despite sending the second most students to study in the UK.

Creator Fund investor Richa Bajpai, said “I think it’s because of the debt Indians have to pay back, compared to Chinese students who are often paid for by the government, European students who pay less, and Americans who are more likely to be family subsidised.”
**Student startups are leaders on diversity**

Student startups are more diverse than startups in general. 40% of student startups have a female founder, compared to one in four high growth companies in the UK generally. And almost half of student startups have a BAME founder. This is partly driven by high numbers of diverse international founders.

**FOUNDBING TEAMS INCLUDE**

- 40% Female founder
- 43% BAME founder

The most diverse teams are coming from Oxbridge. In Oxford and Cambridge 61% of teams have at least one BAME founder. This is driven by the high number of international PhD students coming to study at Oxbridge and starting companies (53% of the Oxbridge companies we saw came from PhD founders, which was much higher than anywhere else). Scotland performs worse: only 21% have BAME representation on the founding team.

**Solo founders are rare**

Student founders are surrounded by talent on campus, and only a few of them start companies by themselves. 21% of students started a company alone, which is not much higher than the number of startups that have 4 founders (13%). Women are less likely than men to start a company by themselves (17% of women are solo founders). At Oxbridge we did not meet a single company that had a solo founder.

**NUMBER OF FOUNDERS**

- 21% Solo Founders
- 2.31 Average # founders
- 35% of startups have 3 founders
- 13% of startups have 4 founders

**Undergraduates are less likely to start companies**

UK student startups are more likely to be founded by Masters and PhD students compared to the USA. Leading student US VC Dorm Room Fund made 43% of investments in undergraduate companies, and just 8% in PhDs. In the UK, we found that 30% of startups are founded by undergrads, and 26% by PhDs. As stated, this number rises to 53% of companies being PhD founded at Oxbridge.
There are several factors that we believe explains the lower levels of UK undergraduate entrepreneurship:

1. **Shorter degrees**: Three years in the UK instead of four in the USA

2. **Stronger pull of conventional career paths**: Strong pull of “Milkround” jobs at management consultants and corporates deter students from less conventional entrepreneurial path.

3. **Siloed degree structure**: Undergraduates in the UK read one subject, which means they tend to meet other people studying similar things and have less exposure to ideas from outside their degree. The broader US system means that someone studying business might also be taking a course in computer science, meeting potential cofounders and getting new ideas.

Scottish student founders are more likely to be undergraduates (47%) than in England. Interestingly, Scotland has both four-year degrees and many universities follow a more American-style system of making students take a wide range of courses.

**Healthcare is priority for student founders**

UK universities have been at the forefront of the fight against Covid-19 and healthcare is the priority sector for student founders. 16% of startups are in healthcare and a further 4% are in biotech. This includes a number of startups who have pivoted existing models to help tackle Covid, like the Loughborough scientists at Figura Analytics who have taken a saliva-based test for the soft drink industry and turned it into a diagnosis tool for Coronavirus.

Cambridge and Imperial’s prestigious medical programs are generating 62% of healthcare startups overall (followed by an additional 16% from Oxford). Healthcare founders are far more likely to be postgraduates (81%).

The other major sector for student founders is foodtech and agriculture. Here, universities outside of Oxbridge come into their own. Perhaps surprisingly given its reputation for finance, LSE is the leader in generating food startups, accounting for 16% of the companies that we saw in the sector. There is also a lot of activity at Scottish universities, with 18% of overall food startups.
There were sectors where we were surprised not to come across more startups given the subjects students study. Despite lots of students reading politics we see few startups in the govtech space, nor did we see much legaltech coming out of law programs. Students are also much more interested in software than hardware. We saw limited startups across hardware categories like consumer electronics, home appliances, or automobiles and mobility.

**Top Industries by Region**

One of the strengths of the UK higher education system is the specialisation of different universities. This is often correlated to the local industries that are strong in that area. We see that with startups too.

Loughborough’s sporting excellence is helping drive exciting Midlands sports startups like waterproof headphone maker Tzuka. The strength of the agricultural industry in Scotland is reflected in agtech startups from across Scottish campuses, including robots for grain silos from Edinburgh and saline farming at Strathclyde. Universities in the North of England are using technology to make manufacturing and the energy sectors more efficient, like Buildstream from Newcastle and UrbanChain from Manchester.
Student startups key for spurring innovation across country

In the UK, 71 pence of every £1 of venture funding goes to companies based in London. But universities are one of the institutions that are most evenly spread across the country when it comes to quality. So, do student founders have the potential to drive startup activity more evenly across the UK?

We found that 38% of student startups came from universities within London. Oxford and Cambridge, not surprisingly, come next. But even when you combine London and Oxbridge, that only represents 60% of the student startup activity.

When we ranked universities by number of startups, eight of the top fifteen universities came from outside the South East. In particular, Scotland is a hotbed of student entrepreneurial activity. 15% of student startups came from Scotland, even though Scotland only receives 2% of overall VC investment in the UK. 3 out of the top 15 universities are Scottish, and Edinburgh is ranked 7th overall. Undergraduate startup activity is particularly strong in Scotland, which we believe is partly driven by the excellent enterprise teams in universities like Edinburgh and Strathclyde.

We ranked the top 15 universities by how many startups we saw from each over the year:
Ideas we see a lot. Ideas we want to see more

Creator Fund is run by a team of student investors who see hundreds of deals a year. And so, we asked them what startup ideas they see a lot. And where they see untapped opportunities.

Ideas we see a lot:

A common theme here is students focusing on their own needs and experiences, rather than thinking about solutions for problems faced by a wider base of consumers.

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<thead>
<tr>
<th>Al recommendations for unnecessary things</th>
<th>Tutoring marketplaces</th>
<th>Tinder for jobs</th>
<th>Student housing</th>
<th>Social media platforms</th>
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<tr>
<td>e.g. AI to find your perfect gin or pair of socks. These startups overstate how much value the consumer gets, and understate how hard it is to achieve</td>
<td>Fragmented market, and there are many existing mid-size players</td>
<td>Hard to add value vs. LinkedIn. Makes discriminatory hiring more likely</td>
<td>Is the student experience sufficiently different to need its own platform separate from Rightmove? Hard to unify fragmented &amp; informal market</td>
<td>Always a chance we are missing out on the next Facebook. But too often this lacks a strategy for why users are going to switch from existing platforms</td>
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Ideas we would like to see more:

There are a number of problems our investors would like to see students turn their considerable talents towards solving:

| **Improving Clinical Trial Process** | We see a lot of great drug discovery startups. But less enabling technology to improve the clinical trial process – PhDs have good insight into pain points. |
| **Cultured Meat and Leather** | UK is a biotech leader, but lab grown meat innovation is being driven by the US and Israel. We see big opportunities in less developed alt-leather space. |
| **Gaming** | Mobile gaming is growing 10% YoY, students know the target consumer, Improbable was born on campus; but we see very few gaming startups. We are especially interested in enabling technology or ancillary services. |
| **Solutions for the Elderly** | It’s natural to create solutions for people like you. But we would like to see more of the best student talent creating technology solutions on unaddressed issues like senior health, loneliness, and restricted mobility. |
| **Enterprise SaaS built from professional experience** | Undergraduates are less likely to start B2B startups. But we think there are more opportunities for MBAs to build solutions for industries they worked in and understand the pain points. |

Excited about the potential of UK student founders

Across universities and sectors, we have seen how student founders are solving some of the biggest challenges we face, and how they have adapted and persevered in the face of Covid-19. Creator Fund finishes this year even more excited about the startups emerging from UK campuses. This year we have invested in teams simplifying the convoluted process of VAT refunds, machine vision PhDs creating robots that can identify recyclable material, and a team getting homes ready to be transformed by the internet of things.

In September we will be expanding from 21 university campuses to 27, informed by where we have seen the most interesting deal flow this year. If you are a student founder dreaming up Europe’s next big technology startup, we look forward to meeting you on campus.