Horizon
The EU Research & Innovation Magazine

European Commission

EU startups starting to break through with a bit of help

Often there's a spark of inspiration or a flash of insight. Whatever it is, these 'Aha!' or 'Eureka' moments have led to some of the world's greatest discoveries and technological innovations. And it is good to know that these breakthroughs can now reach the European and global markets more readily than ever before.

07 March 2022 - By KATHY TZILIVAKIS

Many entrepreneurs have experienced Aha! moments, which can strike at any time. For Dr Jama Nateqi, it was a clinical problem-solving assignment during his third year of medical school.

'We were in groups to study all the literature available – everything a doctor could wish for – in order to solve one patient case. In the real world, doctors may have just a couple of minutes. We had four hours,' recalled Dr Nateqi from Austria. 'But this still was not enough. Our research was incomplete. We didn't know whether we

considered all possible diseases especially all life-threatening ones, and we certainly didn't know which disease was the most likely. It was very frustrating.'

It was this frustration that inspired him to create the Symptoma search engine, whose diagnostic accuracy now raises the bar as highest in its industry. Symptoma is the most used symptom checker among both, doctors and patients, with millions of users and searches per month - in 36 languages.

'Symptoma has established the biggest disease database in the world with over 20,000 conditions and billions of connections to signs and symptoms,' said Dr Nateqi, CEO and founder of Symptoma. 'We have even helped patients uncover ultra-rare diseases.'

The notion that Symptoma was an overnight success – that all it took was the brilliant idea of an ingenious medical student – is inspiring. But it's wrong. It's not the whole story of Symptoma throughout its 16-year-long journey.

'One of our biggest accomplishments was that we didn't throw in the towel,' said Dr Nateqi. 'The early years weren't easy. There was so much we had to tackle. One was funding. Another was networking. Fortunately, along the way, we had the support of the Horizon Results Platform.'

Journey to the market

The platform Dr Nateqi refers to is an online hub showcasing the research results of projects awarded European Union (EU) funding. The idea behind the platform is to help EU beneficiaries advertise their research results and look for investors, collaborators and other entrepreneurs to deliver real-world impact and ensure their work benefits others.

'The Horizon Results Platform gave us the credibility and visibility we needed,' explained Dr Nateqi. 'We were selected to pitch our solution to a dedicated group of investors which further accelerated our traction with customers.'

Symptoma tops the list as a success story. So far, the company secured €24 million in funding such as under Europe's Horizon 2020 programme and in investments such as from the OÖ HightechFonds, an Austrian high-tech fund that is co-financed by the EU to support small and medium-sized enterprises (SMEs).

The platform currently hosts almost 2,000 EU-funded research and technology ventures and is helping to turn Europe's research results into innovations.

Backyard workshops and the next unicorns

Investing in early-stage startups flush with potential is one part of Europe's startup story that can be traced all the way back to 1847. This is the year Siemens was founded in a backyard workshop in Germany. LEGO is another well-known European startup success story. The famous toy manufacturer was founded in a small carpenter's workshop in Denmark nearly a century ago.

But starting up is not enough. Scaling up is crucial.

'Small can be beautiful,' said European Commissioner for Competition Margrethe Vestager at the European Innovation Council Summit. 'But if you want to take the lead in new technology, you need a certain size. And in that sense, we still have a long way to go. From the same number of startups per head of population, the United States grows four times as many scaled-up companies as we do. And of the current crop of seven hundred unicorns around the world, Europe accounts for less than fifty.'

While Europe lags behind the United States in innovation, the European Innovation Scoreboard 2021 shows a positive upward trend. Innovation performance increased 12.5% since 2014. Sweden continues to be the EU Innovation Leader, followed by Finland, Denmark and Belgium, all with innovation performance well above the EU average.

What's more, there is growing convergence within the EU with lower-performing countries growing faster than higher-performing ones. This means the innovation gap is closing, particularly in Estonia, Greece, Italy, Cyprus and Lithuania. In fact, Cyprus reported the highest rate of performance increase (96.5%).

'I'm not a policymaker nor have I analysed the results to see the full picture, but in my view – from the entrepreneurial side of a highly scientific company that is developing research results – I believe there is a lot of progress,' said Tasos Kounoudes, co-founder and CEO of SignalGeneriX, an award-winning tech company in Cyprus. 'Particularly with Horizon 2020 and now Horizon Europe, there are so many new instruments assisting companies like ours to fast-track innovation and breach the valley of death by paving a path to success for small businesses.'

'An oasis in the desert'

As one of Cyprus' earliest tech companies, which launched its first of many products (a sensor cross-layer platform) 15 years ago, SignalGeneriX has participated in EU-funded projects since the EU's Sixth Framework Programme, which ran from 2002 to 2006.

'SignalGeneriX is a small company with many years of experience, and we are very successful in designing and developing innovative signal processing technologies – with many innovation awards to prove it!' said Kounoudes. He attributes much of his company's success to participation in EU-funded projects, and most recently in the Horizon Results Platform.

'The platform was crucial in helping us bridge this gap and bring to market our new products, such as our smart buoys,' he explained. 'Not only was the new platform necessary, but it was launched at the perfect time – right before the outbreak of the coronavirus pandemic. If it weren't for this platform, we would not have managed to forge leads, new consortiums and find investors. We were able to create these leads and the synergies we needed through contacts with other companies, investors and European Innovation Council instruments.'

In terms of finance and growth capital – central elements in the scaling journey of any business – Kounoudes likens the Horizon Results Platform to an 'oasis in the desert'. He explained: 'Simply put, it's a huge dissemination opportunity, and it's free! It's an opportunity to show your products to others – from the companies next door to venture capitalists and private investors who are interested in your technology, both in Europe and beyond. It's exposure that your company may not have had otherwise.'

And the award goes to… Finnish custom-made enzymes

In terms of exposure, Finnish enzyme producer MetGen has enjoyed unprecedented opportunities – one of the benefits of winning industry awards.

In 2019, the company won the European Technology Innovation Award by global research company Frost & Sullivan. Most recently, it was awarded the overall 2021 Innovation Radar Prize for its gamechanging bio-based solution to replace petrochemical wax-based coatings used in cardboard boxes.

MetGen is one of few companies in the industrial enzymes segment that can customise enzyme solutions for different sectors, such as pulp and paper and biorefineries, according to Matti Heikkilä, MetGen Chief Operating Officer.

'Basically, we are replacing petrochemical-based coating materials with better solutions that are more affordable and better for improving paper strength. This was the winning combination for the Innovation Radar Prize,' explained Heikkilä, a biotech engineer who has led MetGen in numerous commercial joint ventures, research and development initiatives, and Horizon 2020 projects.

This technology was developed under the EU-funded FALCON project, in which MetGen was a partner. The Innovation Radar Prize, a European Commission initiative to identify high potential innovation and innovators in EU-funded research, has increased the Finnish firm's visibility in the market and led to new collaborations in

Finland and beyond. Heikkilä describes the prize and the recognition that comes along with it as ‘a catalyst’ for further growth.

‘We are a company of only 30 people, so approaching the large companies is a big deal,’ he explained. ‘They hear many pitches from a lot of companies but being the winner of the innovation prize is definitely a big advantage!’

It’s the ‘biggest ever’ year for startup funding

The European Commission has just adopted the 2022 work programme of the European Innovation Council (EIC), which was launched last year under the Horizon Europe programme. It opens funding opportunities worth over €1.7 billion in 2022 for breakthrough innovators to scale up and create new markets.

European Commissioner for Innovation, Research, Culture, Education and Youth Mariya Gabriel said: ‘The work programme for this year is backed by the biggest ever annual funding for visionary entrepreneurs and researchers, as well as new measures to support female innovators and scale-ups.’

The funding will be split as follows:

EIC Pathfinder: €350 million for multidisciplinary research teams to undertake ambitious research

EIC Transition: €131 million to transform research results into innovation opportunities and build a business case for specific applications

EIC Accelerator: €1.16 billion for startups and SMEs to develop and scale up high-impact innovations

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EIC work programme 2022

Innovation Radar Prize

European Innovation Scoreboard 2021

Horizon Results Platform