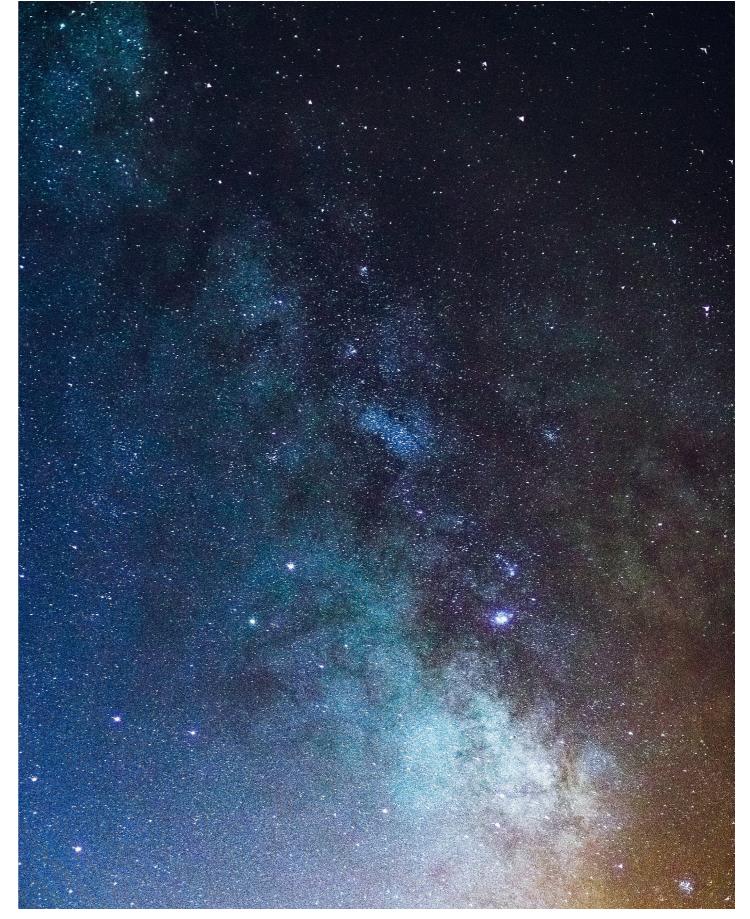
# Space Accelerator Impact Report





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## We're on a mission to open up space\_\_\_\_

In March 2021, The UK Space Agency, along with space industry experts from The University of Strathclyde and business growth experts Entrepreneurial Spark, set out to run a business acceleration programme for high potential entrepreneurs.

A thriving startup ecosystem is a hallmark of growth in any sector, and especially so the space sector where commercialising innovation is so central to progress. This accelerator set out to inject further pace and momentum into the business of space in the UK, and create a virtual network centred around ambitious entrepreneurial growth.

Entrepreneurs have a massive role to play in generating an inclusive economic recovery from the COVID-19 pandemic, and mobilising them in the Space sector has the potential to deliver this recovery across the whole of the UK.

Science Minister Amanda Solloway said: "Many entrepreneurs and businesses don't currently realise the opportunities that space presents to them. We're determined to raise awareness and present those opportunities to as many businesses as possible to make space more accessible in order to grow the space industry. This is a world-class programme of free support, delivered virtually, reaching every corner of the UK. Now is the time for action and our partnership is there to support space entrepreneurs every step of the way".



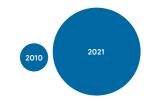
"Our ambitions for this programme were to reach out to new space entrepreneurs and help them to take the first steps in growing their space businesses – wherever they were located in the country. The strong relationships that have been established through this programme will help these companies deliver jobs and growth across the UK".

Colin Baldwin Head of Growth Strategy at The UK Space Agency "The space sector is ripe with opportunity, and as the UK recovers from the Covid pandemic this new support programme will bring in diverse ideas and talent to realise that growth opportunity".

Catherine Mealing-Jones
Director of Growth at The UK Space Agency,



UK Space Agency inspires and leads the UK in space, to benefit our planet and its people



SPACE HAS TRANSFORMED
INTO ONE OF THE UK'S FASTEST
GROWING SECTORS, TREBLING IN
SIZE SINCE 2010



THE UK SPACE INDUSTRY NOW
EMPLOYS CLOSE TO 42,000 PEOPLE
ACROSS THE COUNTRY



INCOME GENERATED FROM THE UK
SPACE INDUSTRY



EVERY YEAR THE GOVERNMENT, VIA
THE UK SPACE AGENCY, WANTS TO
ACCELERATE THAT GROWTH

### The Team



#### The UK Space Agency

The UK Space Agency plays an important role in delivering the UK Government's space agenda, supporting a rapidly growing sector and seeking to increase our global footprint in the space economy.

"Our aim is to develop and deliver a world class programme of business support that is accessible to growing Space companies and entrepreneurs wherever they are in the UK."

Portia Bircher, Local Growth Manager, Business Support, UK Space Agency



#### **Entrepreneurial Spark**

Entrepreneurial Spark has helped over 10,000 business owners to think differently about how they can grow their business and are experts in creating environments that support an entrepreneurs rapid growth.

"A practical approach to how to develop a business, combined with access to experts who can guide success are hallmarks of this programme. This is coupled with a holistic focus on supporting truly sustainable businesses to ensure that the space sector can provide new long-term secure employment right around the country".

Mike Stephens, CEO, Entrepreneurial Spark



#### The University of Strathclyde

The University of Strathclyde has a solid track record in successfully hosting UK Space Agency incubator programmes, and has the largest academic space cluster in Europe, offering deep engagement with industry and academia.

"This programme allows us to engage with the amazing start-ups and businesses that are becoming interested in the opportunities that the space sector can enable in their respective sectors, all of which supports the growth of what is an exciting and rapidly expanding UK space sector."

Dr Steve Owens, Knowledge Exchange Fellow, University of Strathclyde

## The UKSA Space Accelerator

The Space Accelerator was designed to enable entrepreneurs at any stage of the growth cycle and for all backgrounds to take advantage of UK Space Agency support. The offer was entirely virtual, enabling us to reach deep into communities and unearth new participants to the space landscape. The unique activities of the accelerator were:



#### **Business Horizons**

A series of 8 live broadcast events to stimulate new ideas and discussion



#### The Leo Accelerator

An intense growth programme for 30 high-potential entrepreneurs



#### **Industry Value**

Building lasting networks and impact around these programmes to drive a culture of returning to growth

Between these three pillars of support there was a way for everybody to engage, from early stage entrepreneurs through to scale-ups, we created inclusive opportunities to participate. This created a broad and diverse network in line with UK Space Agency's mission to open up space for more people.

#### Key areas underpinning the aims of the support:

- Impact
- Engagement
- Connectivity

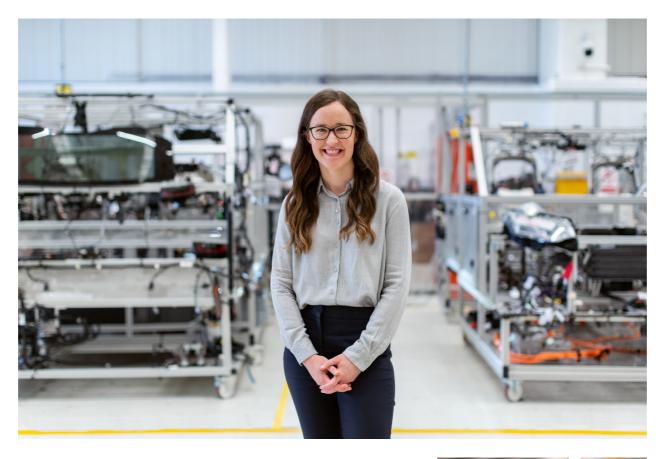


### **Business Horizons Series**

Business Horizons was a series of eight one-off live events covering diverse topics from building innovative business models to looking at industry developments and future forecasting to entrepreneurial mindset and behaviours.

Alongside the live events participants had access to;

- A pre-event toolkit that they could directly apply to their own business.
- Topic insight and live Q&A with experts during the event.
- Live acceleration each week a business joined and could take advantage of live interaction and advice, helping them to apply the theory of the session to their business.
- Follow-up peer Action & Connection sessions to help entrepreneurs take any next steps with their business.





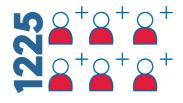
LIVED EXPERIENCE AND INSIGHT
FROM 46 EXPERT PANELLISTS AND
ENTREPRENEURS ACROSS ALL 8 EVENTS

39%

OF PARTICIPANTS IDENTIFIED
AS COMING FROM AN ETHNIC
MINORITY BACKGROUND



GENDER SPLIT 36% FEMALE VS 64% MALE



SIGN-UPS ACROSS ALL 8 EVENTS



**EVENTS IN TOTAL** 



51% OF PARTICIPANTS WERE NEW TO THE SPACE SECTOR



#### **Participant Feedback**

"I liked the refreshing honesty and vulnerability shown during these sessions".

"It's boosted my confidence and made me much clearer about who I am and what do I stand for".

"It had an immediate impact on me making changes in my business and helped me make sense of the next steps in the context of the pandemic".

"Content was so relevant, practical and actionable".

"The events became a haven for people looking to/talking about the future rather than worrying about the day to day".

"It inspired me. I nearly gave up. Seeing other people overcoming challenges and hearing stories helped me keep going. Knowing there were like-minded people out there going through the same thing".

## Leo Programme

Leo was a 10-week programme for 31 high-growth, high-potential entrepreneurs, selected through a rigorous application process which examined their mindset as well as their business model. The programme of support was designed to inject pace and build connections in the industry and for the entrepreneurs to emerge with momentum and clarity over their strategy and business model.

The Leo Programme was delivered entirely virtually, enabling us to reach into communities across the whole of the UK and connect clusters of activity together. This created greater collaboration opportunities and inclusive access to businesses who are not currently near a major space cluster.

Leo Participants had access to:

- 1-1 fortnightly enablement
- The opportunity to take part in targeted activities and workshops
- Access to a range of academics and industry specialists.
- A community of like-minded entrepreneurs in the space sector

"Before the programme, I was in the very early stages of the business with little idea about a way forward for the business. I now have a clear roadmap and goals, I have a strong network to help, funding options, and more confidence in the future success of the business".



#### **Leo Accelerator**

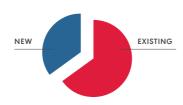
Impact - Engagement - Connectivity

31

BUSINESSES HAVE TAKEN
PART IN THE LEO PROGRAMME



GENDER SPLIT
29% FFMALE VS 71% MALE



35% OF THESE BUSINESSES CONSIDERED
THEMSELVES TO BE 'NEW' TO THE SPACE
SECTOR VS 65% WHO ALREADY CONSIDERED
THEMSELVES TO BE 'EXISTING' IN THE SPACE
SECTOR AND WANTED TO ACCELERATE
GROWTH WITHIN IT

"For me there is a high fear of doing it wrong, but this programme has shown me that there is no 'defined' right when starting a business. The sense checks the experts and network has given has really helped".



"Now we ARE a business. Before we had a product, but this process has given us the confidence we are a credible business".



#### Impact on the Entrepreneurs



95% OF ENTREPRENEURS WHO TOOK PART IN THE LEO PROGRAMME WOULD RECOMMEND THE PROGRAMME TO OTHERS LOOKING TO START A BUSINESS IN THE SPACE SECTOR



53% IMPROVEMENT IN THE STRENGTH OF THE ENTREPRENEURS' STRATEGY

86%

RATED THEIR CONFIDENCE AND CLARITY IN THEIR 90-DAY PLAN AS 9/10 OR HIGHER



THE ENTREPRENEURS DESCRIBED THE LEO PROGRAMME AS

INSIGHTFUL, INSPIRING, USEFUL, CHALLENGING, SUPPORTIVE

#### Impact on the Businesses

The acceleration for these entrepreneurs took hold very quickly. In the space of 10 short weeks:

£900k

OUR ENTREPRENEURS RAISED A
COMBINED TOTAL OF £900K OF
FUNDING DURING THE PROGRAMME



NEW JOBS HAVE BEEN CREATED BY ENTREPRENEURS GROWING THROUGH THE ACCELERATOR



THE PROGRAMME ENABLED 13
ENTREPRENEURS TO SECURE NEW
PARTNERSHIPS OR NEW SUBSTANTIAL
CUSTOMERS

13

ENTREPRENEURS WERE INTRODUCED
TO THE SPACE SECTOR THROUGH THE
LEO PROGRAMME AND WILL REMAIN IN
THE SECTOR, ADDING VALUE TO FUTURE
ECONOMIC OUTPUTS

"Absolutely great experience! This is the first programme where I actually felt I've got the real support that made a difference to me in my business".

## Meet the Entrepreneurs \_



#### **GM Scientific**

Entrepreneur: Maria Dugdale

#### 1. What was your biggest challenge as a start-up in the Space sector?

To work out where in the market I could fit and then where to start in terms of making contacts, joining trade associations and finding resources to learn more.

#### 2. The best thing about being an entrepreneur is...

Being able to try out the various ideas that pop into your head and to have complete freedom to operate.

#### 3. The one thing I've learnt is...

The importance of mindset – and that was a very comforting thing to learn when you always wonder why you think in ways that doesn't make sense to most people around you.....

#### 4. What's next?

Hopefully selling my first (existing) business, but my mind will be busy designing a potential new product to fit the space sector. Whatever happens to my first business, I plan on doing something in space next.

I have a slight emotional attachment to space in that I was always fascinated by it. I wanted to be an astronaut (which my career advisor laughed at!) and I'm in awe of that big old universe out there.



#### **MAC SciTech**

Entrepreneur: Michael Maughan

#### 1. What was your biggest challenge as a start-up in the Space sector?

Being taken seriously. The UK Space Agency "endorsement" through the Leo Programme helped massively as leverage to speak to and be taken seriously by individuals, companies and agencies and also gives you as an entrepreneur a seed of confidence to grow in a sector in which they may never have operated.

#### 2. The best thing about being an entrepreneur is...

Possibilities are endless and freedom to operate and pivot is within your own control (but focus is a key element).

#### 3. The one thing I've learnt is...

Mindset is (almost) everything. If you think and feel "I cannot do this" then that can only be true.

#### 4. What's next?

Good question! A client in the space industry would be nice... Perseverance, and pushing ourselves out there and out of our comfort zone. Hard but focused work.



#### **Quantum Dice**

Entrepreneur: Wenmiao Yu

#### 1. What was your biggest challenge as a start-up in the Space sector?

Sales cycles are generally very long for hardware technology within the Space section, and hence the biggest challenge is the identification of space-focused funding opportunities, whether through government grants, or through networking with other SMEs/primes.

#### 2. The best thing about being an entrepreneur is...

The challenge of creating a new market which leads to limitless opportunities to learn.

#### 3. The one thing I've learnt is...

To consciously take time to step back from an execution mode during a complex project and strategize with a long-term view.

#### 4. What's next?

Officially setting up Quantum Dice in Oxford, onboarding new hires, and starting our work with different customers, one of which is to develop the world's first space-qualified Quantum Random Number Generator for a satellite-based Quantum Key Distribution mission.

## Building Industry Value

Beyond the Business Horizons and Leo programmes, this accelerator set out to make a lasting difference to the entrepreneurial ecosystem in the space sector. Our aim was to connect more people in every region of the UK, foster collaborative relationships and remove the barriers to growth for startups in the industry. This will ultimately add value to both established and emerging clusters supported by UKSA.

#### We accomplished this in three ways:



#### **01/Community**

Building a community of likeminded entrepreneurs and stakeholders



#### 02/Sparkathon

Tackling an industry challenge through the Sparkathon series



#### 03/Profile

Raising the profile of a new group of space entrepreneurs





#### BUILDING INDUSTRY VALUE



Within the 3-month delivery window of the accelerator we created a vibrant online community of Space entrepreneurs and organisations prepared to support them. This is a place where people can come together to network, share resources and discuss pressing Space industry issues. We achieved:

- Over 120 members
- Over 400 member posts
- 42 useful resources, events and support offers shared

Within the Leo programme we worked on the mindset challenges faced by entrepreneurial leaders in collaborating with others. This led to:



ON AVERAGE THE ENTREPRENEURS ARE
NOW 30% MORE LIKELY TO REACH OUT AND
UTILISE THEIR WIDER NETWORKS DURING
CHALLENGING TIMES THAN WORK IN

48%

THE ENTREPRENEURS ARE NOW 48%

MORE LIKELY TO ENGAGE AND USE THEIR

WIDER NETWORKS WHEN EXPLORING

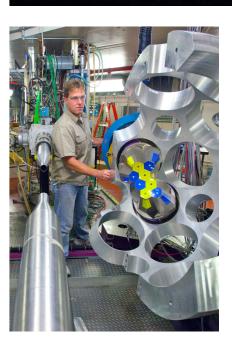
NEW OPPORTUNITIES AND IDEAS



- Satellite Applications Catapult
- Seraphim Space Camp
- SET Squared
- Alden legal
- UKSA
- ESA BIC
- Dept for International Trade
- ESA Business Applications UK Ambassador Network
- Harper Macleod

- UNOOSA
- Plus X Accelerator
- Science & Technology Facilities Council
- PwC
- Space Skills Alliance
- Boeing
- West of Scotland Knowledge Transfer Partnership





BUILDING INDUSTRY VALUE

## **\* 02/Sparkathon**

Sparkathon saw the bringing together of 30 individuals from both inside and outside the space sector with the key objective being to unite them in solving an industry challenge. These events were designed with cognitive diversity in mind, attracting people from all across the UK and from many different backgrounds.

Opening up Space for more businesses is a key focus for the UK Space Agency, so understanding how the sector can be more accessible; hearing first-hand from those who have experienced this challenge; and learning more about how barriers to growth can be reduced naturally formed the theme for the two-day event.

The industry challenge: How can the Space industry collaborate more to break down intrinsic barriers to business growth and accelerate more opportunities for people and businesses both in, and attracted to the Space Sector?

Over 2 days teams explored the problem from different angles, making it tangible and understanding the full extent of the impact it has. They were taken through a creative process to help them to design innovative solutions at pace and used lean principles to go on to test their ideas. In true entrepreneurial style the teams then pitched their ideas back to a panel of expert judges.

"The whole event has been a breath of fresh air in the sense that everyone has been so open and collaborative. I think that SME-led conferences could be a way to 'give ideas a voice'".

#### The winning pitch

#### **Team Resonate**

"There is a gap for young people between showing an interest in space and being able to explore the sector and start to have an impact on the issues within it. We will build a group of charged, diverse and driven young ambassadors to bridge this gap as role models for other children in communities across the UK."

The winning team will now be taking forward their idea and pitching to the wider UKSA Education Team, the SA Catapult and SPAN (Space Academic Network), expanding on the problem and the vision for their solution and the impact this could go on to have in the sector.

While the innovative solutions and ideas which came out of the Sparkathon event were key outcomes, the benefits did not stop there.

100%

OF PARTICIPANTS LEAVING THE 2-DAY
EVENT WITH A STRONG LEVEL OF
UNDERSTANDING ABOUT HOW THIS
CHALLENGE IS IMPACTING THE SECTOR



THE EVENT WAS DESIGNED WITH
DIVERSITY IN MIND AND ATTRACTED 35%
FEMALE PARTICIPANTS

**70%** 

OF PARTICIPANTS WHO JOINED HAD EXPERIENCED THE PROBLEM STATEMENT FIRST-HAND AND WERE ABLE TO SHARE THIS AND BRING THE CHALLENGE TO LIFE



THE EVENT PROVIDED A GREAT OPPORTUNITY
FOR DIVERSE NETWORKING AND
COLLABORATION



ALL PARTICIPANTS HAD IDENTIFIED OPPORTUNITIES
WHERE THEY COULD PERSONALLY TAKE ACTION
TO HELP BREAK DOWN SOME OF THESE BARRIERS,
AND WERE MOVING AHEAD WITH INDIVIDUAL AND
COLLECTIVE ACTION PLANS

40%

OF PARTICIPANTS CLASSED THEMSELVES AS 'NOT CURRENTLY WITHIN THE SPACE SECTOR'

BUILDING INDUSTRY VALUE



The launch campaign for the space accelerators featured all three partner organisations engaging with their networks to promote the opportunities of bringing on a diverse cohort, alongside an engaging social campaign to catch the eye of those within the sector and those in adjacent sectors. In total we achieved:

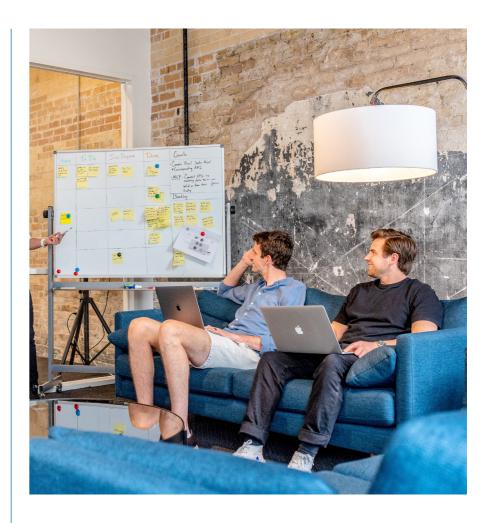




OVER 35,000 EMAIL OPENS



170 UNIQUE ITEMS OF PRESS COVERAGE



This presence has increased awareness of the entrepreneurial opportunities in the sector and what UK Space Agency, Entrepreneurial Spark and University of Strathclyde are doing to support them.

This presence continues through the Business Horizons series. These events were designed to be re-used by future entrepreneurs and remain available to watch online. Making these events and the content within them evergreen is an important step in making the sector more accessible to those who do not have the privilege of accessing a space cluster nearby.

## The Future





The Space Accelerator has helped hundreds of businesses to rebound from COVID, develop their mindset and create a pathway to success. We set ambitious goals and built new standards of inclusion for this type of programme. The lasting impact will be the community of likeminded people who are striving to create opportunities for startups (their own or others) in the Space sector.

UK Space Agency, Entrepreneurial Spark and University of Strathclyde are all deeply committed to driving up the success rate for entrepreneurs. This pilot has enabled us to learn how virtual accelerators can create impact in the Space industry in a post-COVID world, and we will be independently using the recommendations to shape future support.







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