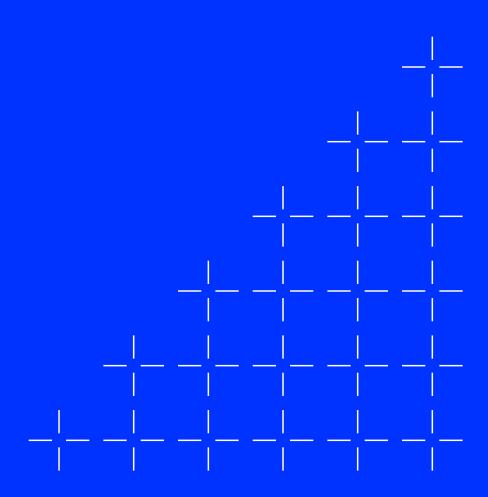


# Impact and Insights Report

Autumn 2021



# Introduction & Context

The Cyber Security Academic Start-up Accelerator Programme (CyberASAP) is the only pre-seed accelerator programme in the UK's Cyber Security ecosystem. Launched in 2017, it is an initiative designed to encourage the commercialisation of UK academic research in cyber security.

The programme is funded by the UK Government Department for Digital, Culture, Media and Sport (DCMS) and delivered in partnership by KTN and Innovate UK. The programme has played a complementary role alongside other DCMS-funded initiatives supporting the establishment, growth and scale-up of cyber businesses in the UK.

Cited as a Case Study in the UK Government's July 2020 <u>UK Research and Development Roadmap</u>, CyberASAP has built up a demonstrable track record of delivering commercialisation impact to a diverse and growing pool of academic teams and universities right across the UK.

"The CyberASAP programme plays an important role supporting academics to turn their research into market-ready products and it will not only help us build back better from the pandemic but also keep people across the country secure online."

Matt Warman MP, Minister for Digital Infrastructure (July 2019 to September 2021)

"Due to the nature of our expertise and experience in helping support and commercialise promising innovations, we were able to deliver a programme - conceived and developed by DCMS, Innovate UK and KTN - for academics looking to take their research out of the lab and into the market". Since we selected our first cohort for CyberASAP back in 2017, it has been a huge privilege to see so many academics develop their skills, progress their ideas and make such a significant contribution to the vitally important cyber security ecosystem here in the UK".

Emma Fadlon, Co-Director, CyberASAP, KTN

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Department for Digital, Culture Media & Sport





#### CyberASAP Team

#### **KTN**

Emma Fadlon & Robin Kennedy Co Directors

Lorna Miller

Project Administrator

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#### Other Contributors

#### **KTN**

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in /cyberasap

# Key Facts and Impacts





93 Projects have participated

47 Projects have graduated

51 Universities have participated
31 Universities have graduated

An additional 24 teams (not included in the number above) started Year 5 of the programme in April 2021



### CyberASAP reaches different parts of the UK Academic Research Base\*

**74**%

of projects are from non Russell Group Universities 60%

of projects are from neither Russell Group nor ACE-CSR institutions **64**%

of projects are from non Academic Centres of Excellence in Cyber Security Research (ACE-CSR)





CyberASAP Graduates succeed in raising further funding from a range of sources to develop their product/service idea

Sources: \*Alumni tracking years 1-4 inclusive, CyberASAP, ongoing \*\* Alumni Research project, Insights Team, KTN 2020 \*\*\*Figure correct as at September 6 2021

#### CyberASAP develops the cyber security pipeline\*











29% Spinouts

5%
Acquired

5% Licensed 15%

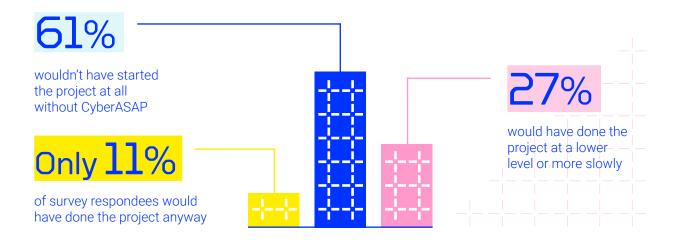
Percentage of Graduate projects

### CyberASAP gets academics started on the road to commercialisation\*\*





#### CyberASAP catalyses commercialisation\*\*



Sources: \*Alumni tracking years 1-4 inclusive, CyberASAP, ongoing \*\* Alumni Research project, Insights Team, KTN 2020 \*\*\*Figure correct as at September 6 2021

#### CyberASAP delivers highly valued content\*\*



scored the training a maximum score of 5 out of 5



would recommend CyberASAP to others in a similar position



+ > 4 out of 5

The average **satisfaction rating** of survey respondees for every module of the programme



CyberASAP acts as a gateway to other development support\*\*



Almost 40%

of respondents had moved onto other accelerators or programmes of support.



#### CyberASAP helps participants to understand business and commercialisation\*\*

Key achievements of survey respondees were:



Product development (prototype or minimum viable product)



Market testing and understanding



Establishing a company



Developing Commercial skills



Finding funding





















Sources: \*Alumni tracking years 1-4 inclusive, CyberASAP, ongoing \*\*Alumni Research project, Insights Team, KTN 2020 \*\*\*Figure correct as at September 6 2021

# About the Programme

### Programme Overview

Now in its fifth year, CyberASAP continues to provide a comprehensive range of support to develop academics' entrepreneurial skills and translate their research into products and services in the cyber security sector.



Through a varied, year-long programme of expert workshops, training, briefings and bootcamps CyberASAP helps teams at every stage along the complex journey from lab to market.

The programme operates over three stages, supported by external assessments. Teams receive a grant to cover their engagement in the programme and, for those progressing to Phase 2, to develop a Proof of Concept. Throughout, they benefit from the input of experts within KTN as well as its wider network of industry specialists, entrepreneurs and investors.

Graduates of the programme have been encouraged to progress their projects, going on to achieve a range of successes including:

- Acquisition by technology firms;
- + Receiving seed funding;
- + Joining other accelerator programmes;
- Securing government grants;

- Making important innovative approaches available open source;
- + Partnering with commercial enterprises.

In helping accelerate the roll out of great cyber security ideas from universities, CyberASAP supports the ecosystem and DCMS's aims to develop and sustain sustain a security sector that meets the UK's national security demands.

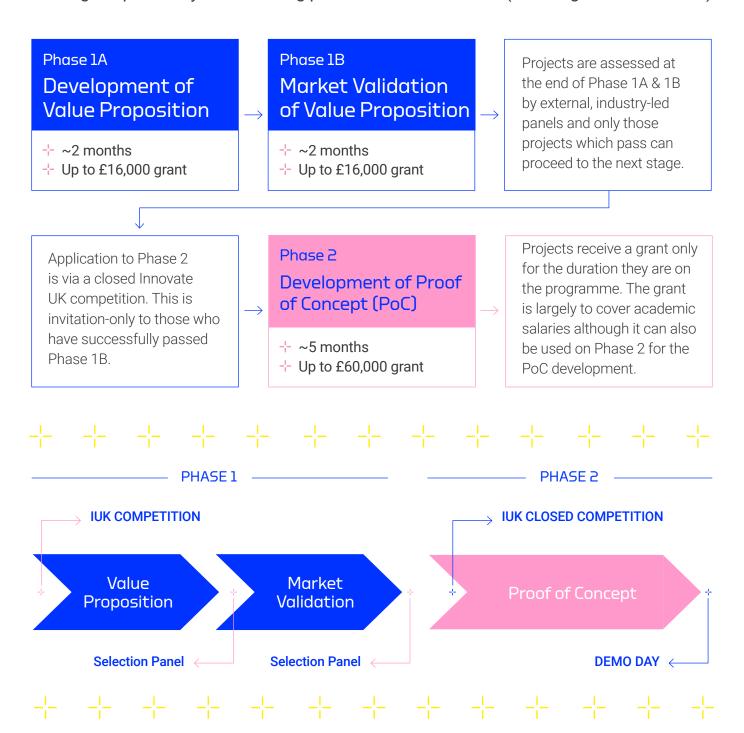
By doing so CyberASAP creates a dynamic interface between government, cyber security academics and the business and investment community so vital to the health and development of this critically important sector.

"CyberASAP has been a whirlwind of excellence, business communication and the 'how to' models of change. We are loving our journey and look forward to building our vision into reality".

Ellen Kay, University of Wolverhampton, Year 4 cohort

# Programme Structure & Funding

The programme has evolved since inception and currently has a two-phase approach starting in April each year and taking place over eleven months (including a summer break).



# Programme Content and Project Selection

A series of interventions - including bootcamps, workshops, seminars, and mentoring sessions - provides participating teams with the insights and skills necessary to take their product /service to the market.

Led by KTN's Emma Fadlon and Robin Kennedy, the programme draws on their expertise, and also benefits from the experience and specialist knowledge of their extensive network of practitioners (including in IP, New Product Development, Innovation Planning, Investment, Pitching, Communications, Sales) who contribute to the 11 month programme.

Academics initially apply to Phase 1 in February/early March via an open competition through Innovate UK who manage the selection process and monitor the grants. The following eligibility criteria applies:

#### **Applicants must:**

- be based in a UK academic institution
- have a cyber security idea
- be interested in the commercialisation of their idea
- have the support of their academic institution's Technology Transfer Office, or equivalent.

"I was already impressed with this programme when I got an opportunity to attend the Demo day. True to what they do, the team provided some excellent guidance to the cohort this year on how to progress with our innovative ideas. The expertise available with this team is worth tapping into even if you yourself are an expert".

Meha Shukla, PhD Candidate, Physical & Cyber security of smart street infrastructure, Department of Security and Crime Science and Civil, Environmental and Geomatic Engineering, University College London, UK.

CyberASAP Programme Directors, KTN

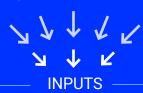


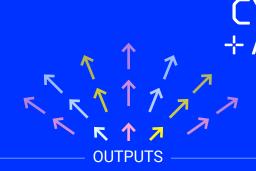
Robin Kennedy KTM, Cyber Security



Dr Emma Fadlon KTM, Investment

# Overview of Programme Reach and Impact





#### **Structure**

### University Team Application/Selection:

- » ACE
- » Russell Group
- » Post 92
- » All across UK
- » Independent Assessors

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**Activities** 

- » Bootcamps
- » Training
- » Tools
- » Mentoring
- » Peer to Peer learning
- » Industry Showcase (Demo Day)

### KTN-curated sessions with external mentors on:

- » Sales & Presentations
- » PR, Marketing & Comms
- » Meet the Entrepreneur
- » Market Validation
- » Developing a Proof of Concept
- » Investor Readiness
- » IP & Legal Issues

#### Outcomes

- Validated proof of concept
- + Spin outs / patents / trademarks
- † Further funding
- + New skills
- + New jobs
- + Industry / academic collaboration
- + Pipeline

#### **Impacts**

- UK has leading cyber security sector
- UK academics recognised as source of innovation

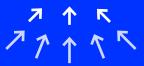
Structure

**Activities** 

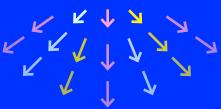
Outcomes

**Impacts** 

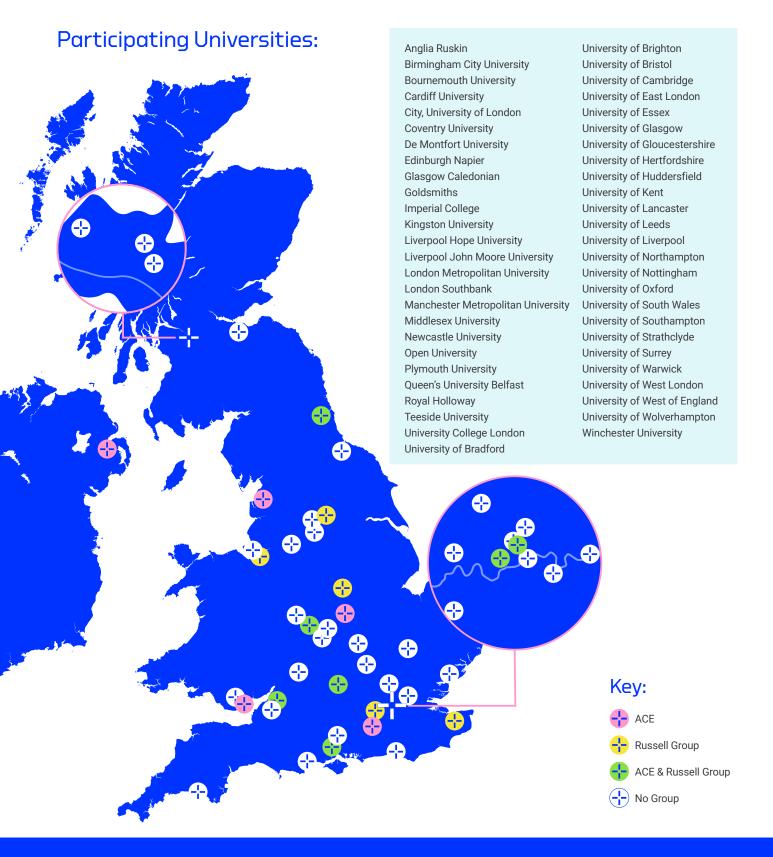
**INPUTS** 



**OUTPUTS** 



# Reaching a Broad Spread of the UK Academic Base



# Reaching a Broad Spread of the UK Academic Base

As of April 2021





CyberASAP represents a wide geographic spread of Universities with excellent representation from non Russell Group and Non ACE-CSR institutions

**Graduate Projects** 

79%
come from universities outside

26% come from Russell Group universities

36%
come from Academic
Centres of Excellence for
Cyber Security Research
(ACE-CSR).

60%
come from universities
that are neither Russell
Group nor ACE-CSR.

# Attracting Funding from a Variety of Sources

In addition to the 21 companies formed, we are aware that several former CyberASAP projects are planning to register companies in the near future. In some cases this will be delayed as receipt of public sector grants means that companies cannot be established due to WTO Subsidies control rules.



#### Over the 4 years of CyberASAP

21

startup companies have been formed from CyberASAP participants, find out more here

## Over £16.3 million attracted by projects from CyberASAP from a range of sources including:

- + Private investment
- + Angel investment
- + SEED stage investment
- Direct investment (Lloyds banking)
- + Innovate UK funding (ICURe Covid 19)
- + Company buy-out (by Google)
- + EU grants (Horizon 2020 ERDF)
- + Accelerator programmes.

## Graduates have joined further (in some cases multiple) accelerator and incubator programmes including:

- + HutZero (at least 3 projects)
- + IoT Accelerator Wales
- + BetaDen
- + Seraphim Space Camp
- Facebook & BT's TIP Ecosystem Acceleration Centre (TEAC)
- + Cyber101 (at least 5 projects)
- + MI Garage
- + Entrepreneurs First Europe 15
- + Barclaycard Techstars
- + NCSC
- Mastercard accelerator

### Beyond CyberASAP

### Programme Impact Extends Wider than Start-Up Success

- Projects which have not graduated from CyberASAP have **joined ICURe** to further develop their proposition.
- A number of projects which participated in the early phase but did not graduate from CyberASAP have still gone on to **commercialise their offering** (product/service), e.g. Fact360, Seclea.
- Where the original CyberASAP project has been abandoned, the training, insights, motivation and inspiration from the programme have led to development of other Cyber related businesses, commercial projects or alternative employment (outside academia). E.g. Capslock, SceneGraph Studios.
- Outputs from at least three projects have been made available open source - allowing for wider exploitation and commercialisation. It is important to recognise the further value of open source content for both the public good and commercialisation in other activities.
- Further commercial opportunities exist around the implementation of open source activities. E.g. Cambridge Authentication and GraphicsFuzz.
- At least three companies have patents associated with their project in the UK. Patenting is not traditionally a route of intellectual property protection associated with cyber and digital technologies such as software. Other IP rights have been secured, such as trademarks, copyright and database rights.
- Some projects are also exploring the need for patents overseas as well as registering trademarks.
- A number of projects have influential and valuable collaborators and partners. E.g. <a href="PhishAR">PhishAR</a> with Mastercard, <a href="AirID">AirID</a> with Lloyds Banking Group, <a href="RavenScience">RavenScience</a> with Metropolitan Police and Mayor of London, GraphicsFuzz with Google.

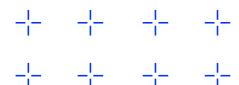
### Soft outcomes of the programme include:

- Commercial upskilling, enterprise training and development of academics (including sales, networking, communications, IP)
- Commercialisation

   including spinout, licensing and open source of products, goods and services
- Better understanding of how to engage and collaborate with industry
- Greater awareness within the academic community for the programme and subsequent applications and participation
- In some cases, improvements to university processes and practices for commercialisation and IP management.

### **Testimonials**

"CyberASAP has been extremely valuable in communicating the importance of finding the right product/market-fit, encouraging our team to take the time and energy for market validation, and in providing us with valuable feedback to carve out the unique selling points for our project."



Ivo Sluganovic, PhishAR/University of Oxford

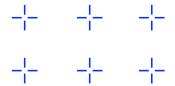
"CyberASAP seemed perfectly designed for us: academics with a desire to commercialise academic cybersecurity research but no clear understanding of what Step 1 looked like."

Jack Hogan, Shoji/Imperial College London

"The training provided throughout both phases of the programme was excellently delivered by the KTN Team, including many interesting external speakers. This was the first time I had received marketing and commercialisation training, so this was very useful to me and will be applied during my future research activities. The development of the Proof of Concept has enabled me to propose a spinout company from Bournemouth University, to disseminate Authentibility Pass, as well as my previous research projects."

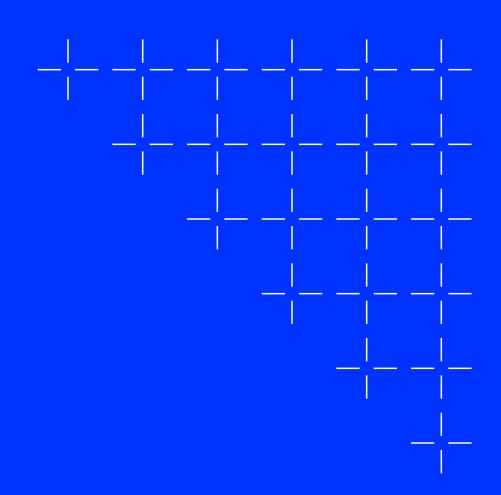


Prof David Chadwick, Verifiable Credentials/University of Kent



"CyberASAP kickstarted my journey and gave me the confidence to step away from academia, and do something that potentially makes a huge impact to society."

Daniel Lewis, Awen Collective/University of South Wales





For more information visit cyberasap.co.uk

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