

# Cyber Runway

## Grow Cohort Showcase

# CYBER RUNWAY

Funded by



Department for  
Digital, Culture,  
Media & Sport

Delivered by



plexal

with

**CSIT** CENTRE  
FOR SECURE  
INFORMATION  
TECHNOLOGIES

**Deloitte.**

# Introduction to Cyber Runway

Arutyun Arutyunyan  
Cyber Runway Grow Lead, Plexal



# Capture the Talent

Shaun Whorton  
CTO







**CAPTURE THE TALENT**  
**RAISE YOUR GAME**



# THE PROBLEM





**CYBER  
WORKFORCE  
GAP**

**14,100**



In a recent study of UK businesses...

A yellow gauge with a thick arc representing 33% of a circle.

33%

**have an advanced  
skills gap in an area  
such as pen testing**

A yellow gauge with a thick arc representing 51% of a circle.

51%

**have a basic security skills  
gap**

A yellow gauge with a thick arc representing 41% of a circle.

41%

**of cyber sector firms  
have a complementary  
(or soft) skills gap**





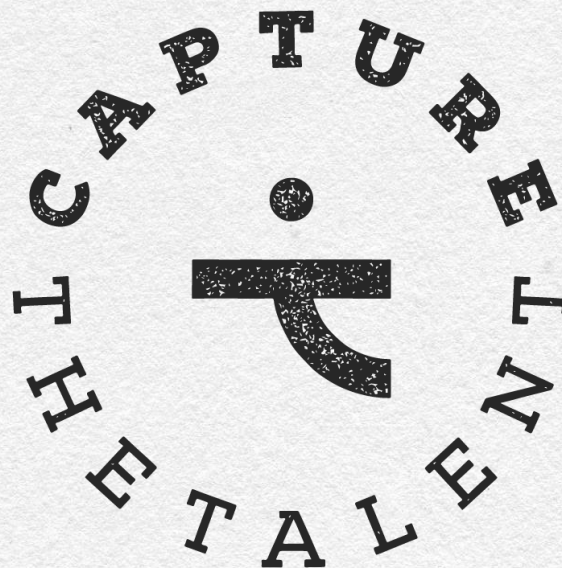
# THE ANSWER





## Learning Academy

Offensive Security Training  
Courses, Guidance on Getting  
Into Cyber Security



## Bespoke CTF Events

Team Building,  
Recruitment, Skills  
Assessments



## Cyber Certifications

Engage, Exploit,  
Report, Debrief,  
Remediate, Success!





**WE GET BY WITH A LITTLE HELP  
FROM OUR FRIENDS**

**SOME BAND**



# OUR COMMUNITY

- c1,500 people
- Inclusive and nurturing environment
- Guidance with CV writing and interview prep
- Free workshops with industry leaders
- Mentoring: P2P and with industry professionals.





# OUR ADVISORY BOARD



**TINESH CHHAYA**

FOUNDER,  
DECIPHER CYBER



**PHIL CRACKNELL**

CISO,  
IP PERFORMANCE & MOD



**LORNA ARMITAGE**

FOUNDER,  
CAPSLOCK



**KEITH PRICE**

CSO,  
DECIPHER CYBER



# FOUNDING TEAM

## OUR DIRECTORS



AMY STOKES-WATERS

CHIEF COMMERCIAL OFFICER

SHAUN WHORTON

CHIEF TECHNICAL OFFICER







# OUR CUSTOMERS

## B2B PROJECTS

**CAPSLOCK**



Quorum  
Cyber



MATILLION

**PLUS...**

...current opportunities  
with major UK retailers,  
global Fintech, and local  
and national government.





A novel, fun and effective way to help us baseline the technical ability and softer skills of the many graduates interested in joining our graduate scheme.

Something that was cyber specific rather than resorting to banks of aptitude tests that everyone hates. Capture the Talent fit the bill perfectly.

- **BILL THOMPSON**

TALENT MANAGER,  
QUORUM CYBER

# THANK YOU!



[capturethetalent.co.uk](https://capturethetalent.co.uk)



[discord.gg/infosec](https://discord.gg/infosec)

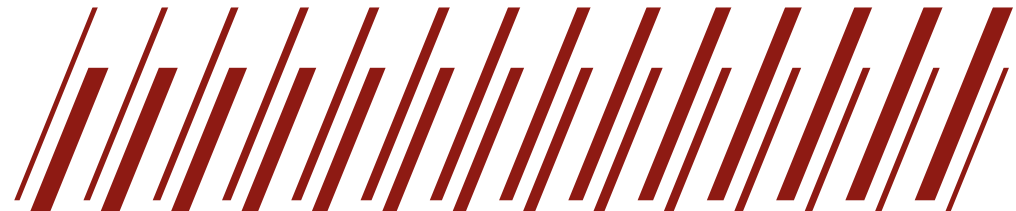


[@capturetalent](https://twitter.com/capturetalent)



# Shaping

Adam Bolas  
CEO







**SHAPING**

We aim to make the web a  
safer place for children  
and vulnerable people.



# Online harms are increasing



50% more children are suffering from mental health issues than in 2017

(Source: NSPCC)



More than 4 in 5 parents fear their children being exploited online

(Source: Independent)



UK Safety Bill Ineffective To Solve Online Harms

(Source: DCMS)



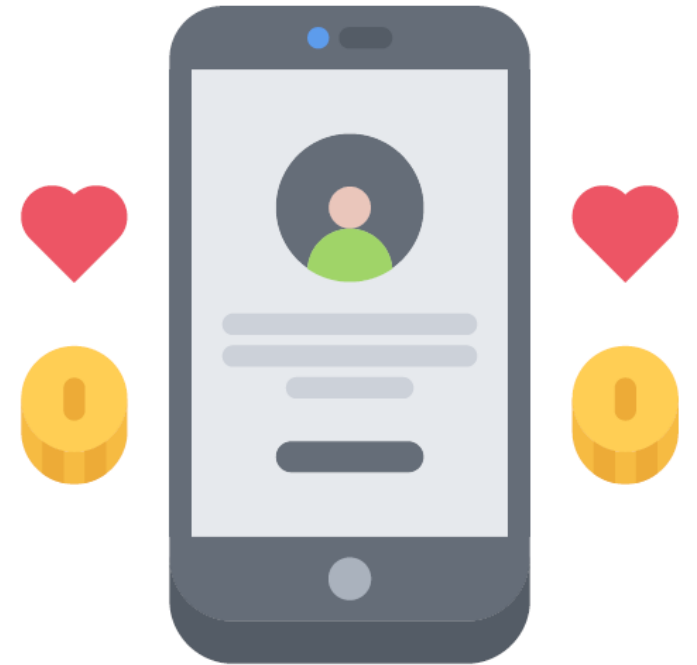
# Real-time prevention driven by AI-Edtech



Real-Time Threat  
Detection and  
blocking



Bitesize guidance  
tailored to the problem



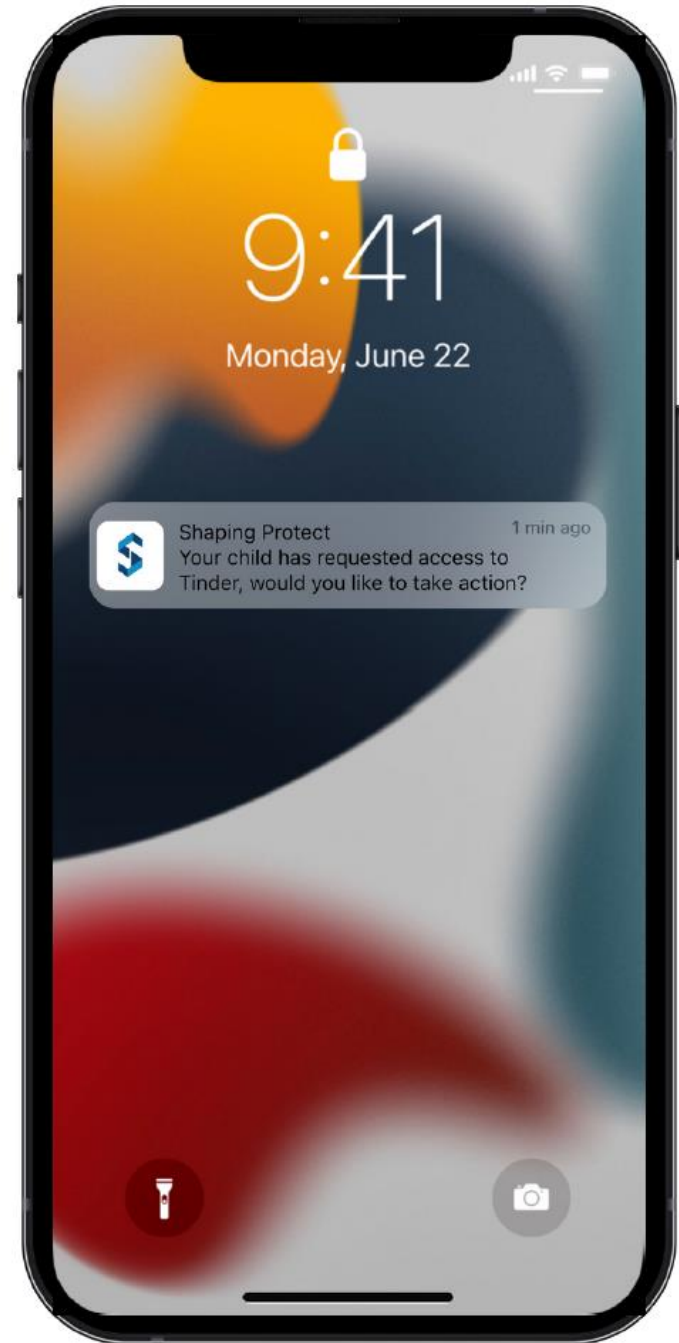
Support from charities in  
the moment



# Shaping Protect

## Threat Detected

- Real-time threat scanning
- Notification sent to parent/carer

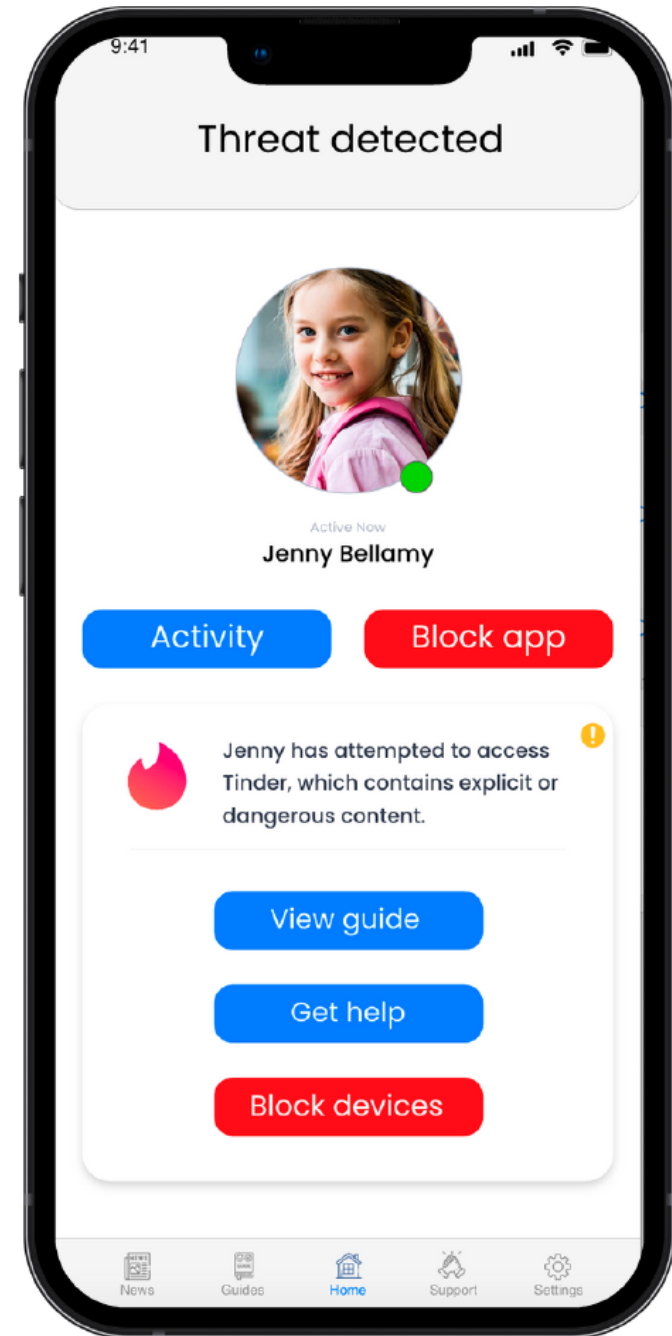




# Shaping Protect

## Threat Management

- Threat-orientated solutions
- Bite-sized guides on the issue
- Call / IM charities to get help
- Block app / website on all or some devices

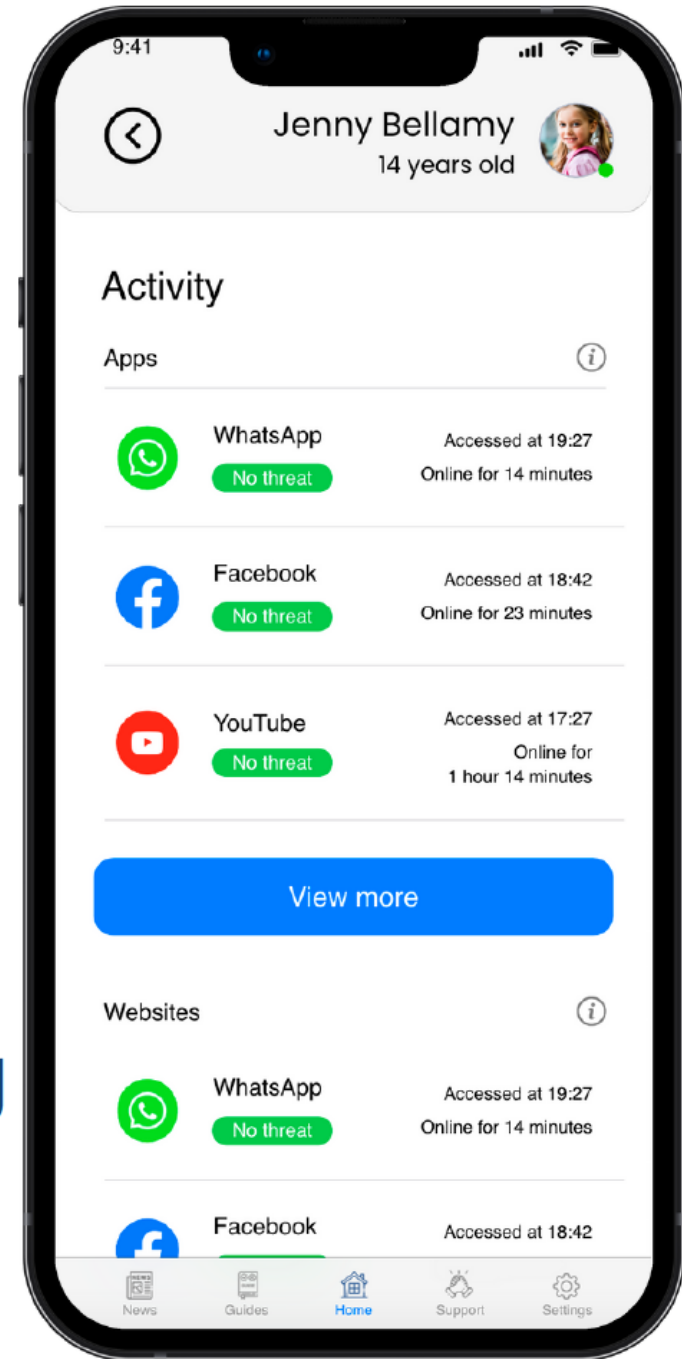




# Shaping Protect

## Activity Dashboard

- Brief overview of online activity
- Not sacrificing child autonomy / privacy
- Time tracking for digital wellbeing

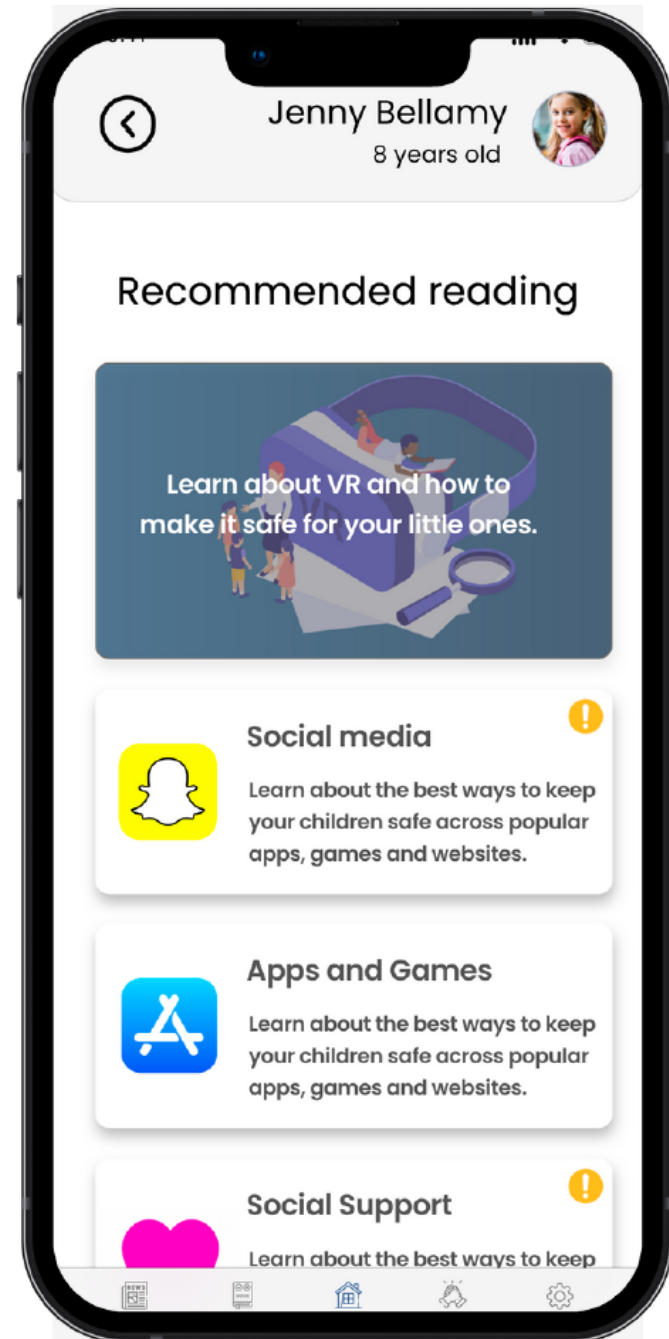




# Shaping Protect

## Relevant Guidance

- Learn about social media, apps, games and more.
- Relevant to child's online activity, saves unnecessary information.

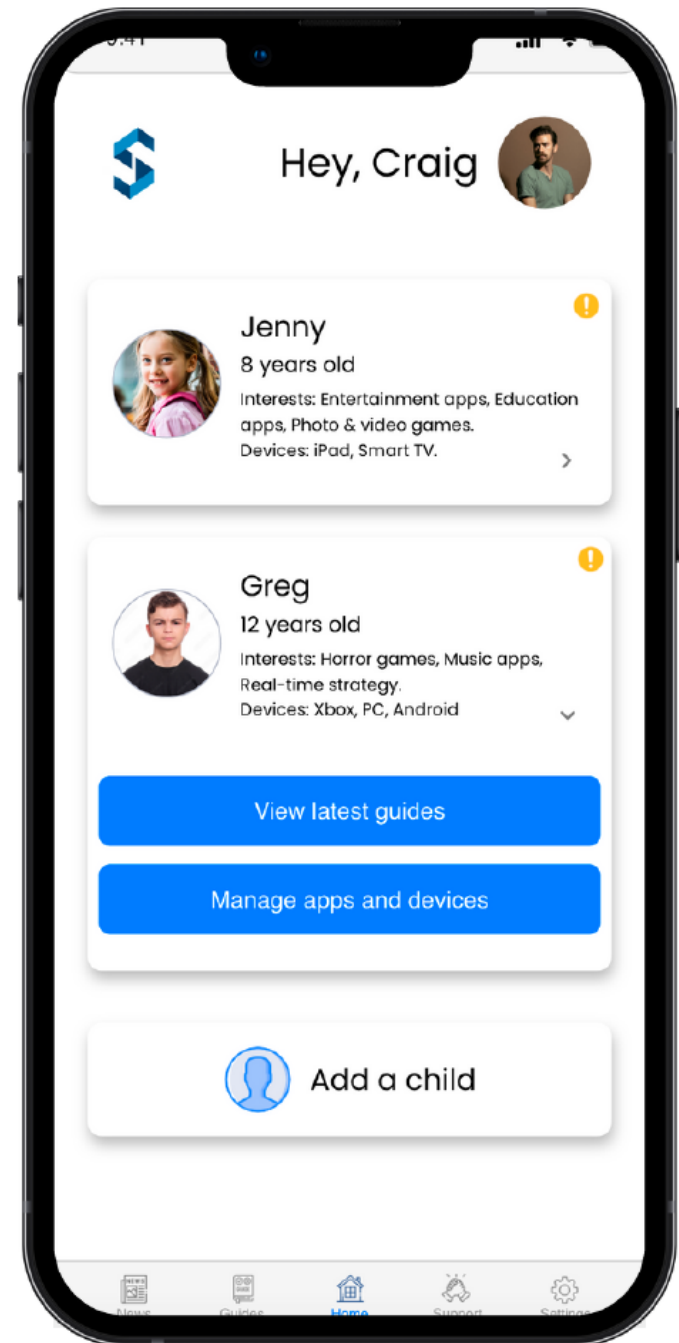




# Shaping Protect

## Family Manager

- Add or remove children and devices.
- Receive notifications relevant to individual child online activities.





# Parents & schools need help



64% of guardians had  
rules about their  
children going online



52% of schools have  
no cyber safety  
mechanisms



Ofsted's new  
framework requires  
schools to focus on  
wellbeing and  
prevention

(Source: ONS/Ofsted)



# Our go-to market strategy



School & charity  
sponsorships



Police and local  
community support



Technology  
suppliers

# Traction to date

Cost: £0

**2,000+**

20% month on month  
growth in user  
numbers

**11**

Schools ready to trial  
and pilot application

**20+**

with outreach to  
thousands

Organisations ready  
to promote MVP on  
release in October



# Founding team



**CEO**

**Adam  
Bolas**

Founder & CEO  
MD of Webbles



**CTO**

**George  
Carter**

Head of Digital RAF  
MD of Darter



**CFO**

**Michelle Van  
Deventer**

Financial Controller at  
Sci-MX Nutrition



**ED-ADVISOR**

**Rob  
Whitehouse**

Senior Lecturer @ UoG  
Marketing & Ed Expert

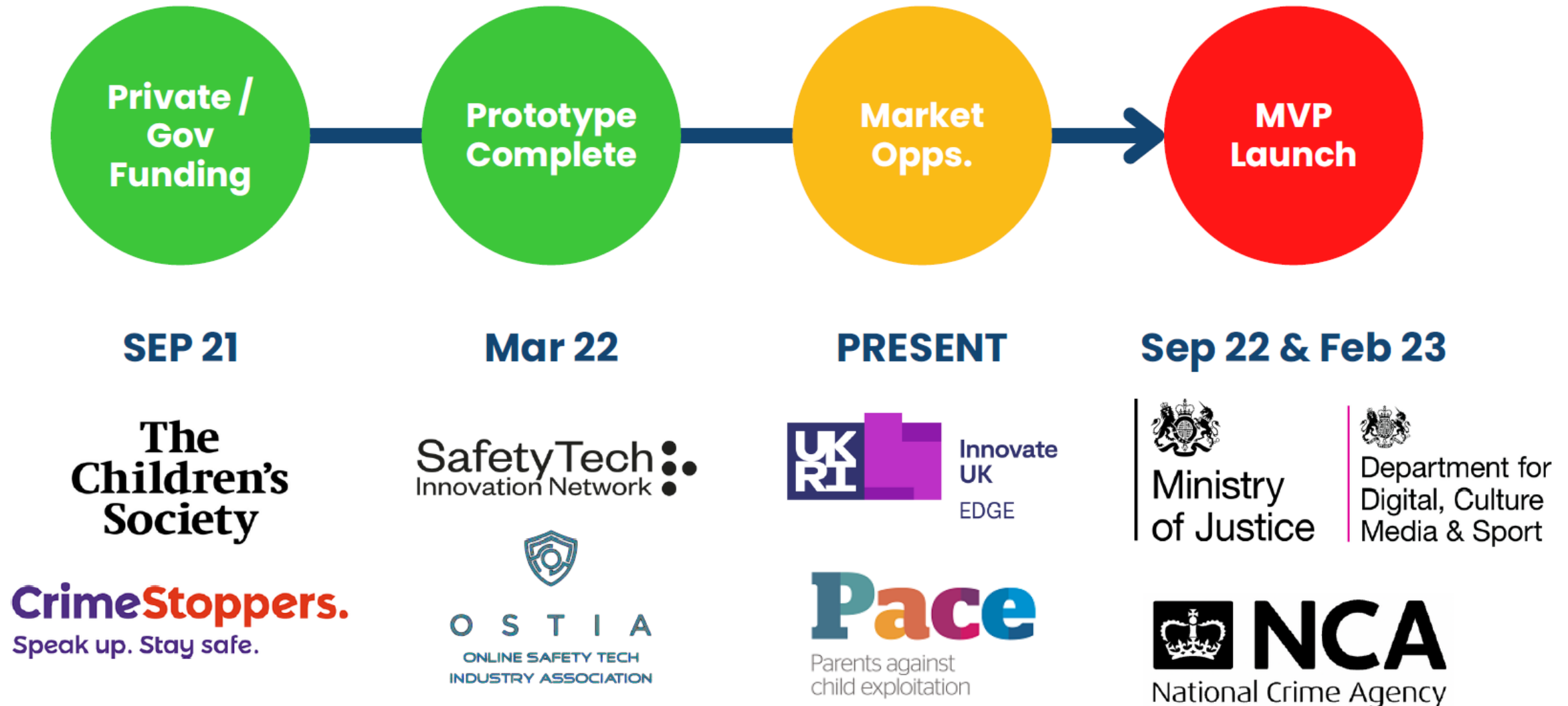


**MARKETING-  
ADVISOR**

**Jane Warren**

Supporting  
businesses, CIC's

# Mission milestones



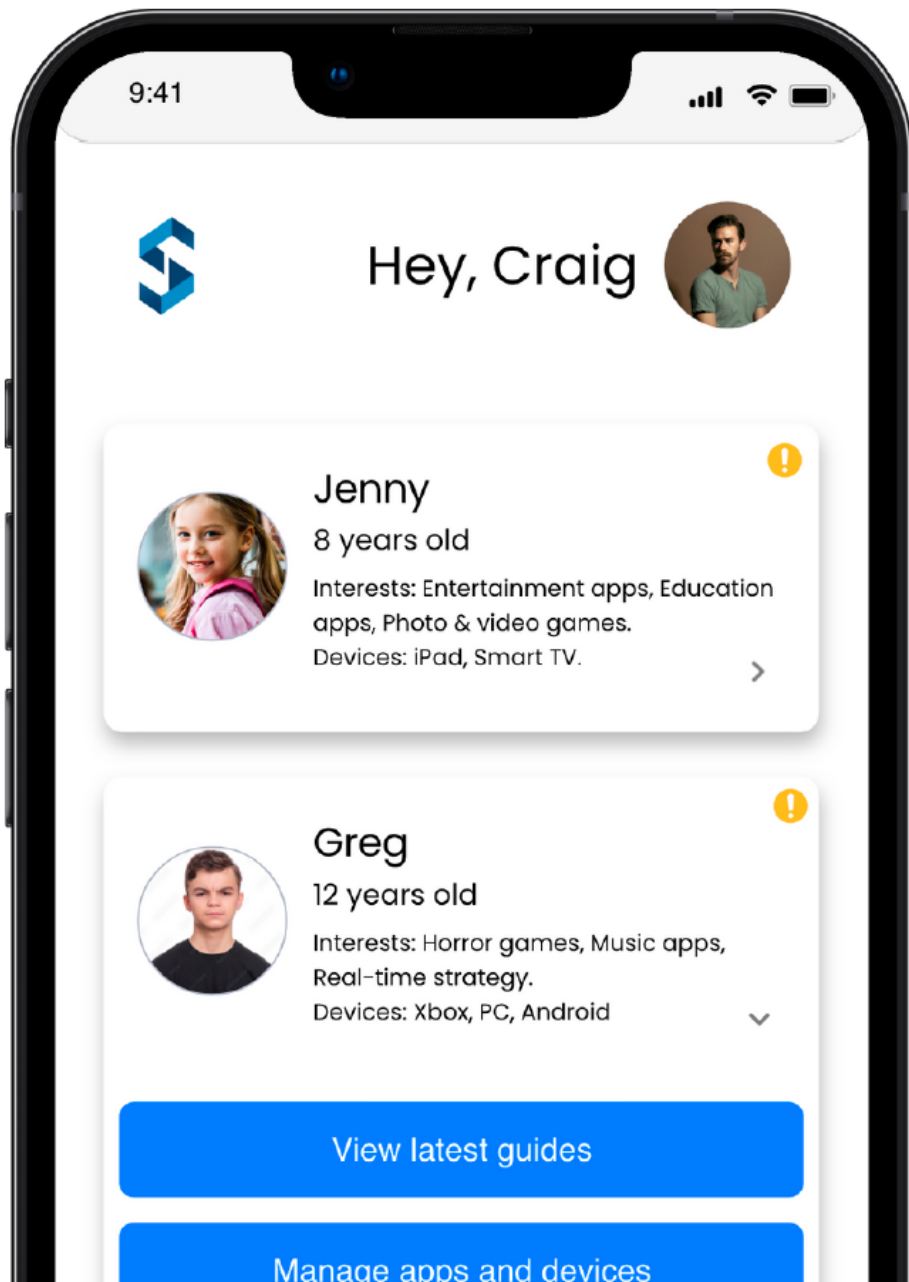


# Our goals

- **Prevent as much child exploitation as possible.**
- **Empower parents and organisations for good with knowledge and tech.**
- **Support organisations financially to deliver the help children and the most vulnerable need.**



**SHAPING**



# Thank you

THE TIME TO ACT ON DIGITAL EXPLOITATION OF CHILDREN WAS YESTERDAY, BUT TOGETHER, WE CAN START TODAY.



**Scan here to  
sign up for free**



arcX

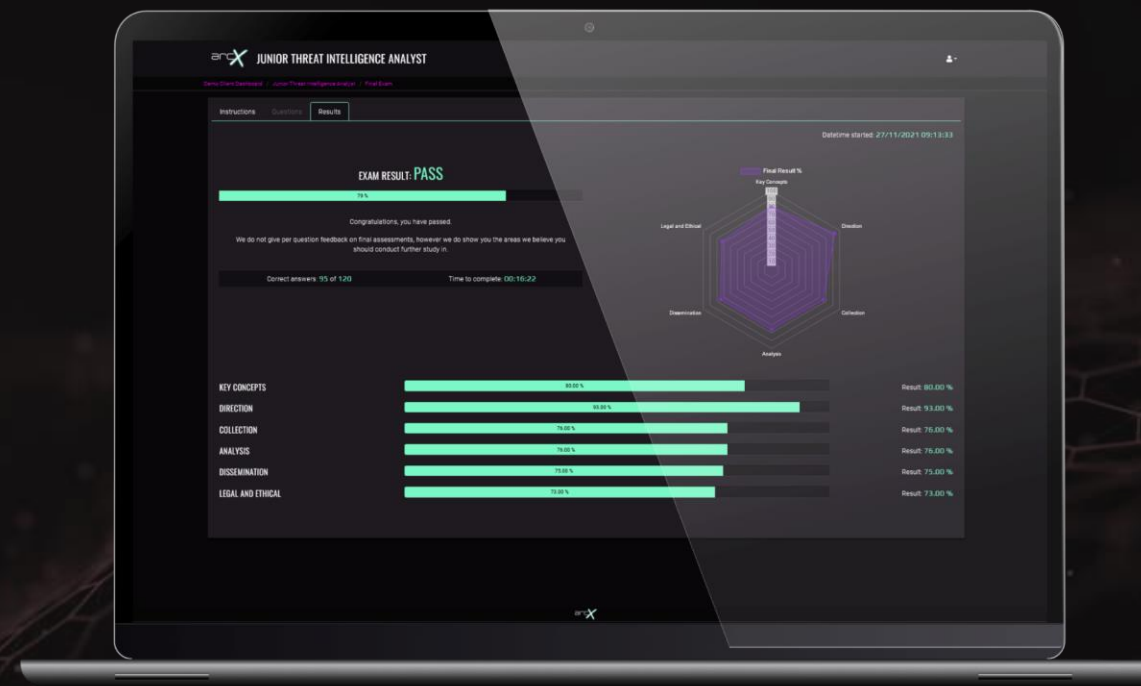
Matthew Roberts  
CEO

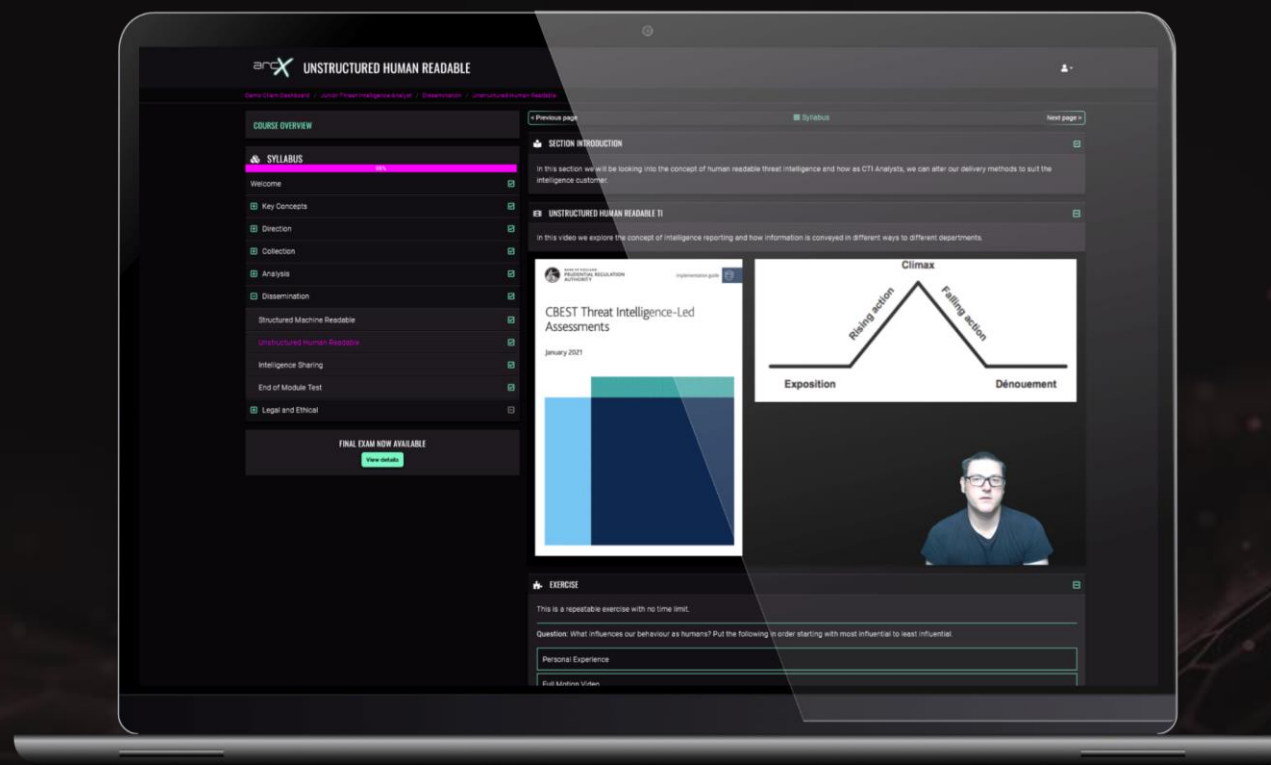


Training does not guarantee learning  
Certification does not prove aptitude  
Cost does not always equal value



Intelligent platform that  
inspires **learning** and  
measures **aptitude** at an  
**affordable** price that  
scales globally





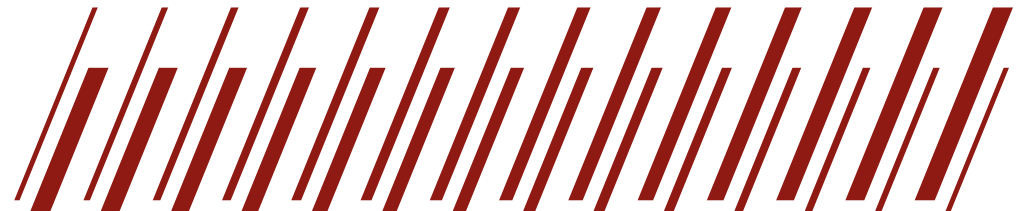
Join the production  
community to inspire  
others with your  
experience and earn  
from every course





Bilic

Saminu Salisu  
CTO





# bilic

## Community Driven Blockchain Forensics

**bilic**

Registered in England and Wales with company number: 14232181

79 Argent House, NW9 4BP, London  
email: [admin@bilic.io](mailto:admin@bilic.io), Phone: 02030088888,



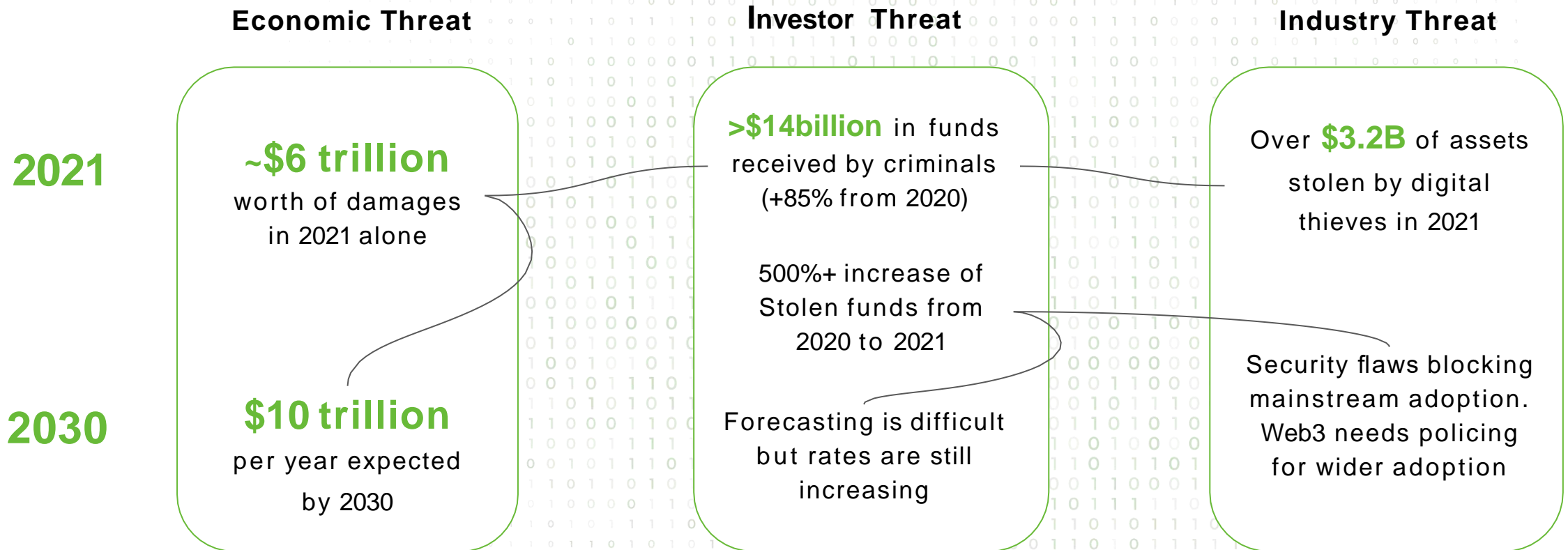
**SCAN2VERI™**



**The global financial system needs an urgent intervention in recovering stolen funds through cyber crimes on blockchains, create awareness of cyber safety, and development of Innovative tools to tackle security issues associated with this novel financial instrument.**



# Financial Losses to Blockchain and CyberCrime





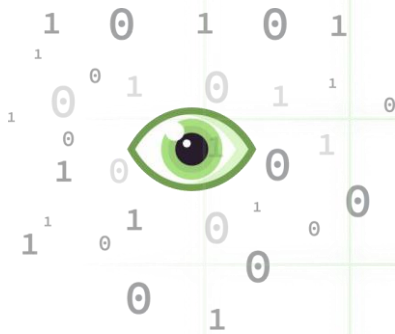
**Bilic provides world-class capabilities in AML compliance, data analytics, funds recovery, cyber security, blockchain investigation, training, and managed intelligence services.**



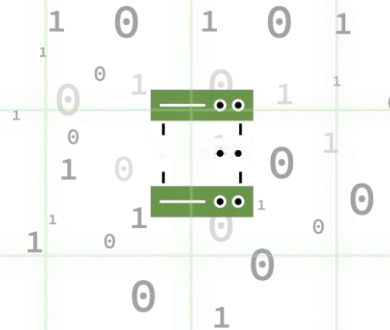
# Data Driven Intelligence Meets Industry Expertise

Easily track stolen funds with the FTM product suite, launch the pattern engine to automatically detect patterns and irregularities and report easily with the Bilic Software suite

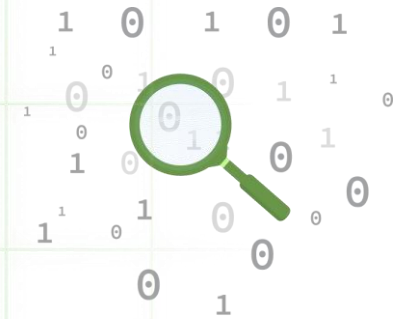
## Follow the Money (FTM)



## Scam Pattern Recognition



## Intelligence Marketplace

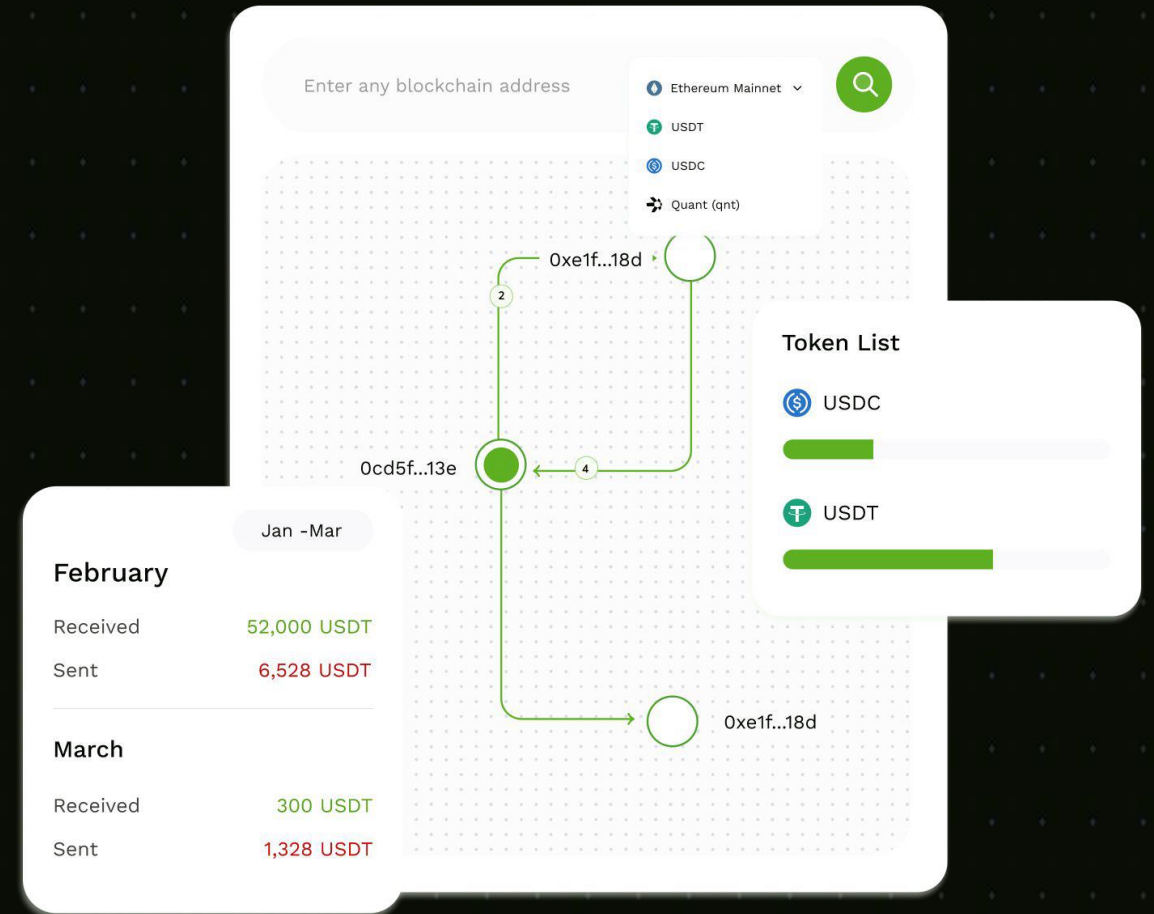


# Follow the Money

FTM is used to investigate transactions, identify fraudulent wallets involved in illegal transactions.

The FTM dashboard shows in details the movement of funds from the sender to the receiver.

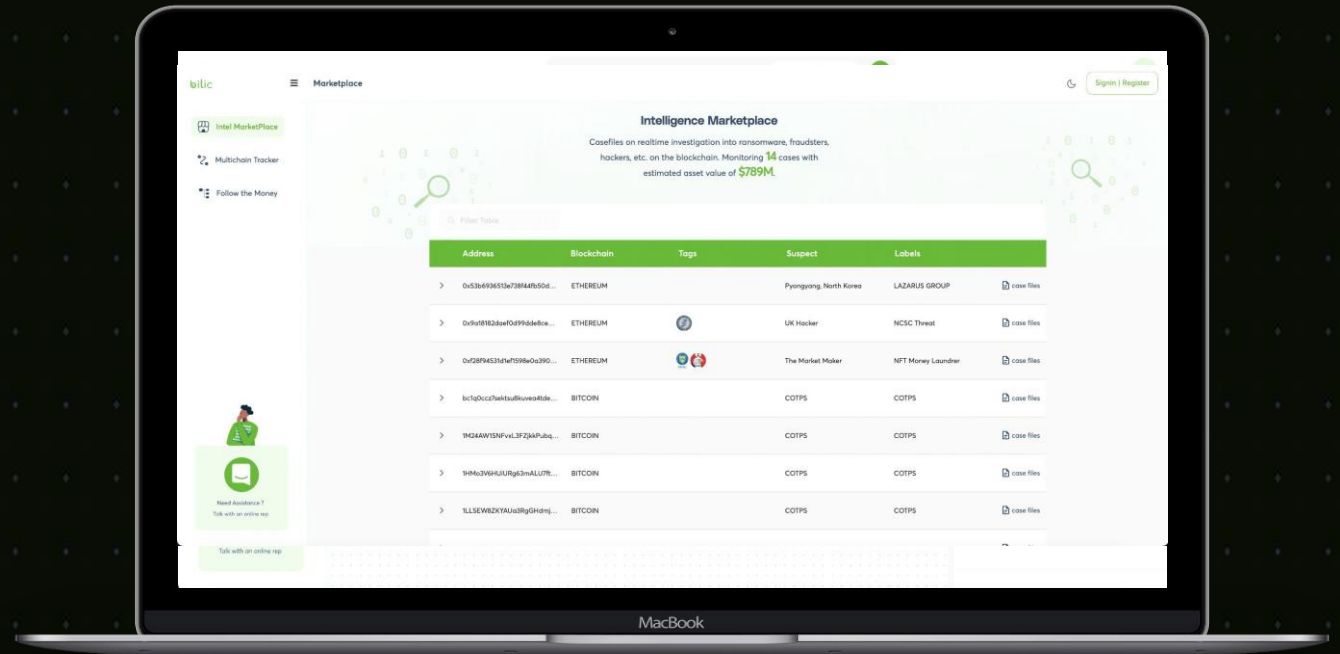
<https://ftm.bilic.io/follow-the-money>



# Intelligence Marketplace

The Bilic Intelligence Market Place is a state of the art one-stop platform for users and organisations to report and research suspicious incidents involving malware, hacks, scams and fraudulent activities.

<https://ftm.bilic.io/marketplace>



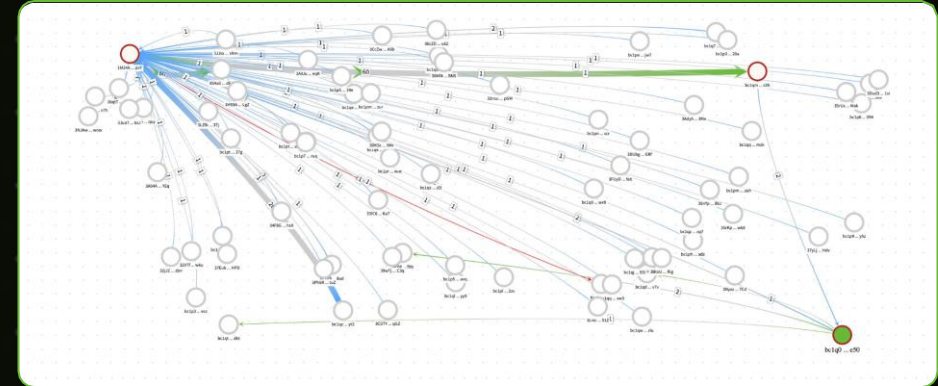


# Pattern Recognition Engine

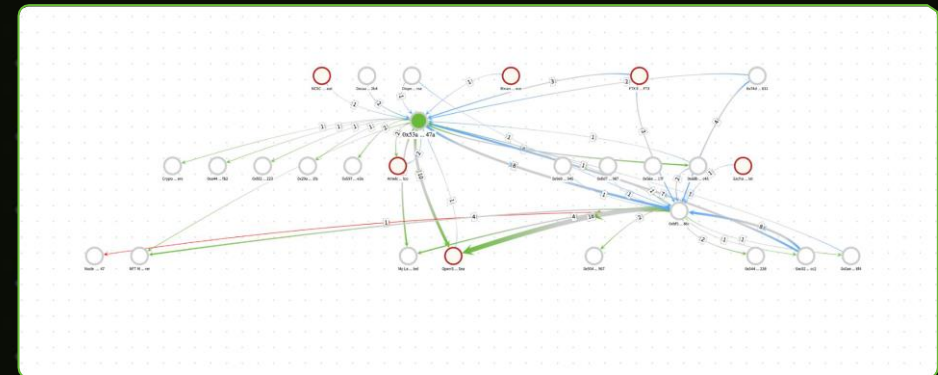
Bilic Pattern Recognition Engine employs network analysis algorithms to automatically detect patterns and irregularities in a users transaction data.

<https://osf.io/dbf4n/>

Organised Scam Pattern



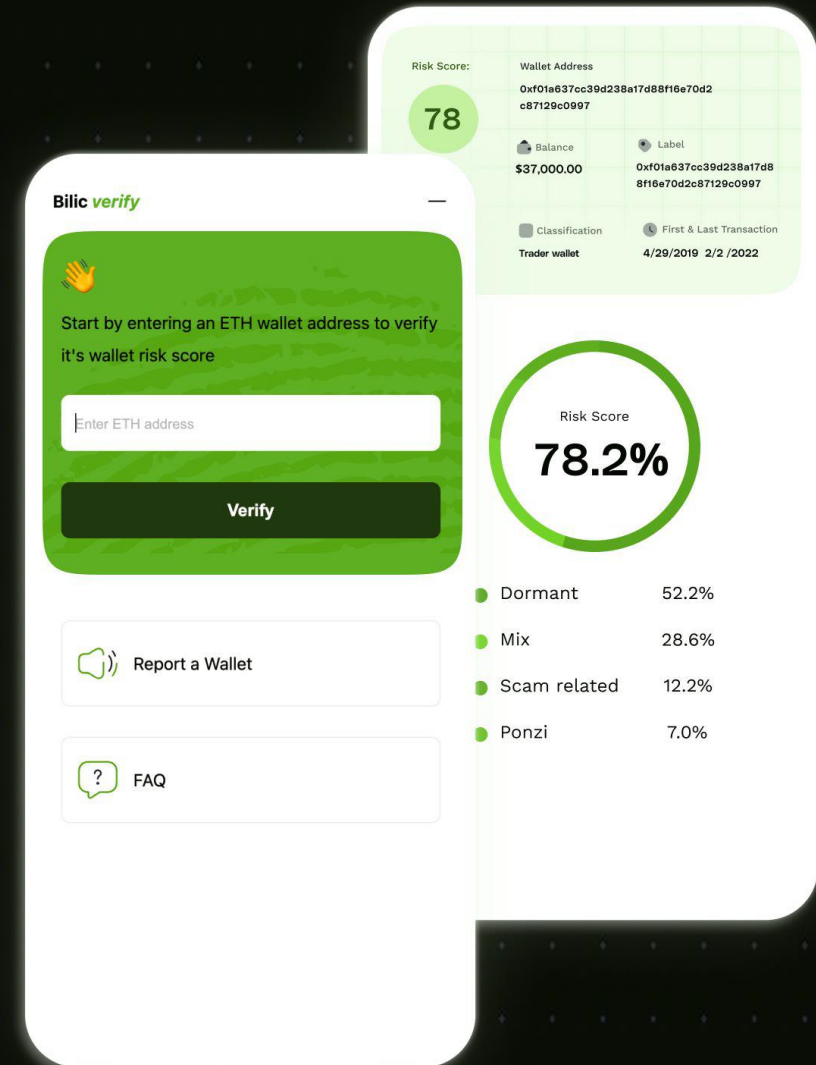
Money Laundering Pattern



# Bilic Verify

Bilic Verify is our novel AML tool for wallet risk factor check. Banks, crypto companies, custodians, exchanges, OTC desks, BTMs, fintechs and regtechs users can utilize Bilic Verify as a digital shield. This solution protects consumers from transmitting their digital assets to a fraudulent wallet address in an irreversible manner.

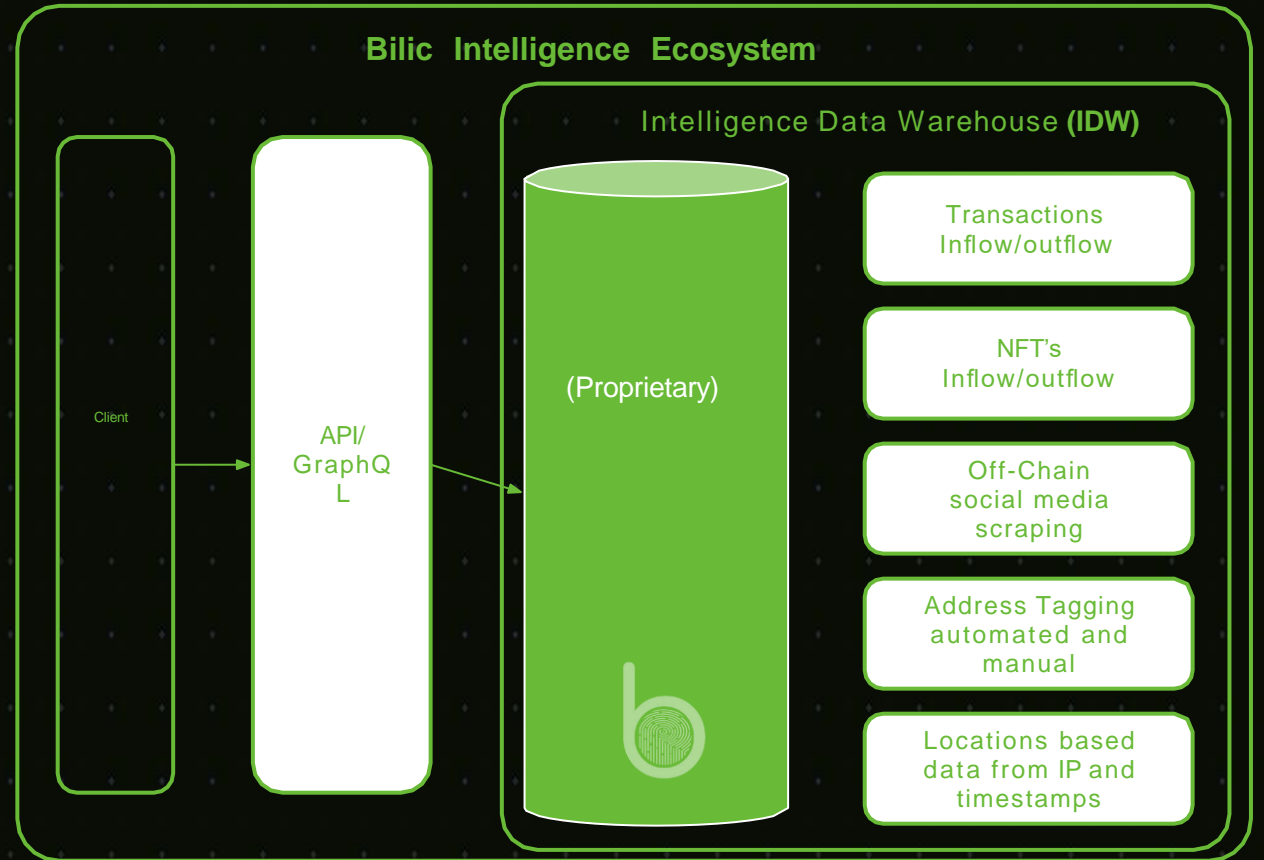
<https://osf.io/dbf4n/>



# Intelligence Data Warehouse

IDW is a critical component of the Bilic intelligence ecosystem since it allows for extensive high-level profiling, transaction segmentation, data scraping, and address tagging.

<https://osf.io/dbf4n/>





# Training and Certifications Offerings



## VAC Certification

The Bilic.io Virtual Asset Investigator (VAI) equips practitioners with the knowledge and abilities needed to analyse and trace blockchain transactions.



## VAI Certification

The Bilic.io's Virtual Asset Certification (VAC) equips practitioners with the knowledge and abilities to create an effective digital asset strategy, philosophy and select relevant



**Multiple revenue streams  
and large addressable  
markets create a powerful  
opportunity for investment**

# Revenue Stream



## Funds recovery Service

Managed service to trace clients funds include access to the follow-the-money dashboard, funds moving alerts, and police report creation



## Intel-as-a-Service

Managed service or access to a suite of Intelligence software including API, funds moving alerts, databases wallets and machine learning algorithms



## Training and Certification

Paid training services offered by experts on latest cybersecurity threats and prevention methods with certification



# Metric and Traction

After several successful PoCs, Cases and established contacts and processes, we are now going to focus on training and SaaS products

- **24** Blockchain Investigations with **5 Funds** Frozen and in the process of recovery
- **26** Intel MarketPlace Reports
- **\$924M** worth of illicit transactions monitored on our intelligence marketplace
- **362** Public Tagged Wallet Labels
- **86** Private Labels



# Go-to-market strategy

## Content Marketing

- Publishing expert-level content for education
- Analyze scale and frequency of money laundering activities
- Summarize our AMAs for LinkedIn, Medium, Twitter, Bilic's Blog, and online Archives
- Paid Ads, Speaker-Events, Sponsoring

## Event and Awareness

- Event hosting (online and offline)
- Gain access to other case files
- Expand the community of Intel
- Aggressively advertise funds re
- Guide our community through stolen funds



**The leadership team has a track record of success in data science, digital forensics, and in the blockchain industries.**



# TEAM



**Saminu Salisu, CTO**  
**Data Engineer / Digital Forensics**

Saminu Salisu is a Certified Cryptocurrency Investigator, and a PhD candidate at TU Wien with a research focus in Data Analytics and masters degree in Electronic Security and Digital Forensics.

He has extensive commercial experience in blockchain development where he co founded a successful blockchain startup bird.money which was incubated by binance for the season 3 programme.

As part of a research, we built timeset <https://vis4sense.github.io/>, an intelligence visualization tool with Middlesex University in collaboration with <https://mass.co.uk/> for the Ministry of Defence (MOD) UK.



**Merlin Spöttl**  
**Data Scientist**

Merlin is a Tech Enthusiast, data scientist and former Partner in an AI Startup with > 8 years of experience. He assists the team in developing the PoCs and deploy the solutions smoothly. He worked for startups and renowned enterprises in the area of finance and sportsbetting and has expert knowledge in image and pattern recognition.



**Lukas Meilhammer**  
**Operations**

Lukas is a serial Entrepreneur and Blockchain Investor since 2017.

Lukas manages company operations, automation and client communication.

After finishing his degree in Aerospace Engineering, he worked for Airbus & consultancies before moving into AI, blockchain and finance.



**Irhimefe Otuburun**  
**Business Intelligence**

Irhimefe Otuburun is a Business and Integration Solutions Architect with a focus in Operations and Business strategy to help technology startups navigate existing markets. His granular knowledge in software engineering and data analytics supports his ability to be a skilled problem identifier. He's experience as part of a fintech startup puts him in the unique position to lead such an innovative idea into future frontiers.

# TEAM



**Bolaji Alade**

**Product Delivery**

As a Product Delivery and Project Manager, he has helped to deliver multimillion dollars sports betting, casino & payments platforms, for both B2B and B2C businesses across the globe.



**Michael Nnamdi**

**UI Engineer & Creative Directory**

A graduate of computer science and UX design virtuoso. Certified by Google as a UX designer, has deep experience branding startups with creative, user driven designs that reflect their core values and resonate with their qualified audiences. As Creative Director, Michael's unique and sensible approach to design will shine through for Bird.Money



**Velitchko Filipov**

**Software Developer**

PhD candidate, Visual analytics expert with a focus on dynamic and networked data, Crypto Enthusiast, Loves JS, R&D, and the web. LinkedIn: <https://www.linkedin.com/in/velitchko-filipov/>



**Regina Chukwunyere**

**Outreach and Partnerships**

Regina Chukwunyere is a legal tech entrepreneur with a Master's degree in International Trade and Commercial Law from the University of Durham.

# TEAM



**Raymond Xu**

**Legal Counsel**

Raymond has provided legal services to British and Far East clients across a mix of industries including mining, pharmaceutical, financial institutions, securities, mergers and acquisitions, energy and environmental. Raymond's clients including Chinese and British State-owned companies, private companies and high net worth individuals.



**Barry Pene**

**Forensics and Cybersecurity**

Barry is a stern blockchain research/copywriter with technical affinity to forensics and cybersecurity. Barry's research expertise cuts across blockchain as a disruptive technology, DeFis, NFTs, Web3, and reduction of energy consumption levels of cryptocurrency mining.



**Imran Naqvi**

**Software Developer**

Imran Naqvi is a Javascript developer and Blockchain enthusiast with 7 years of web development experience. He has a Bachelor's in Computer system engineering and Masters in Computer science and is a proud co-author of Paper published in BMC Bioinformatics. His main focus is frontend development and enjoys development of challenging UIs in ReactJs



**Wali Ibrahim Usman**

**Legal Counsel**

Ibrahim wali is a Capital Markets and taxation lawyer. He advices in mature and growth markets covering a range of security products, including debt and equity, high yield, structured finance and derivatives, corporate trust among others.



# Established Partnerships

Contact to INTERPOL



IDs and  
verification

SCAN2VERI™

Institute for Money  
Laundering  
Prevention Officers



THE INSTITUTE

Business partners



## Accepted in 2 Accelerators

## CYBER RUNWAY GROW

## Bilic in the Media

MarketWatch

NASDAQ

benzinga

Medium



[Terrorism financing](#)

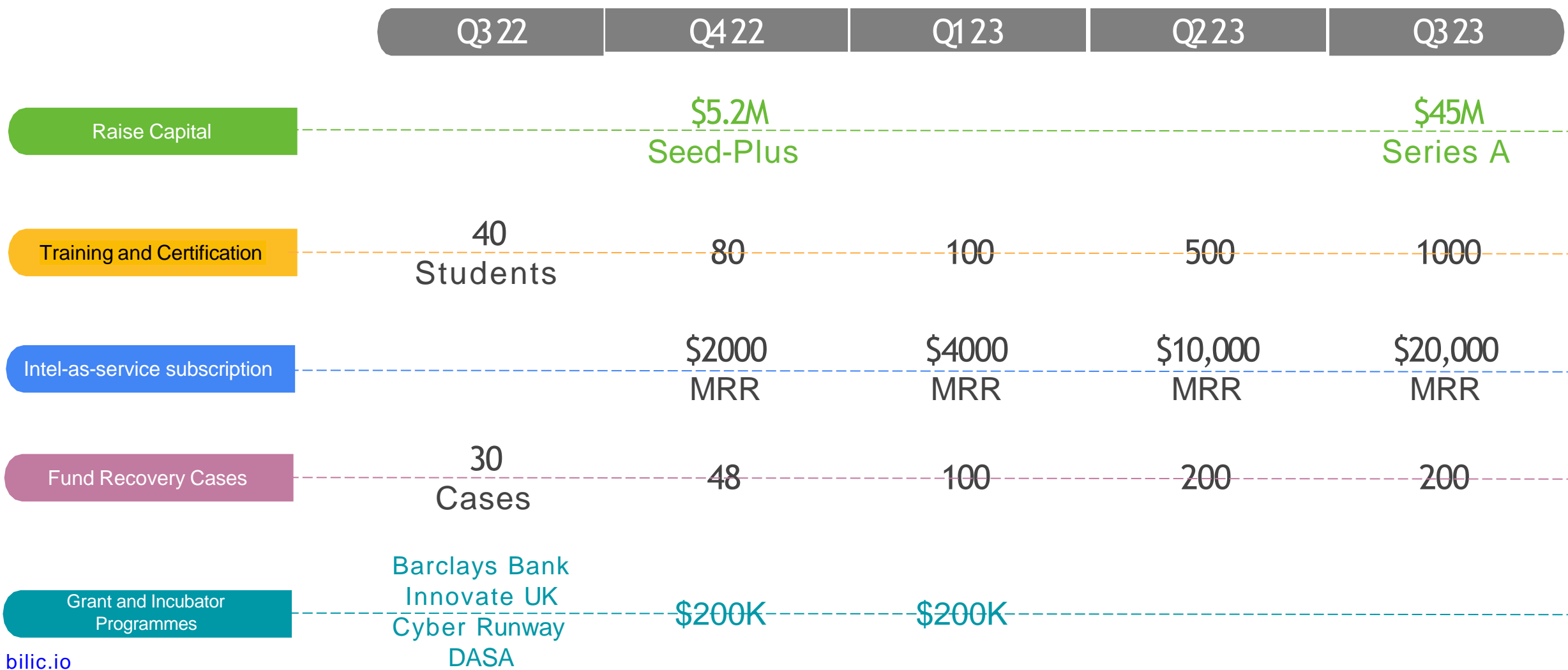
[Sanctions evasion](#)

[Money laundering](#)

Bloomberg

yahoo!  
finance

# RoadMap





**Saminu Salisu**

CTO

+44 7415 197423

[saminu@bilic.io](mailto:saminu@bilic.io)



**Lukas Meilhammer**

CMO

+49 177 586 9213

[lukas@bilic.io](mailto:lukas@bilic.io)

Thank You. We  
are looking  
forward to  
your questions



# Cyber Mentor Dojo

David Tyler  
Co-founder & CEO



# CyberMentorDojo\_

## International Cyber Expo Presentation

“The destination for anyone wanting to succeed in cyber security”

28 September 2022



plexal

# Problem & Solution

- People with knowledge, but no guidance
  - Content Creators make as little as 5%
  - Global Cyber employment gap of 4 million
  - Learners not knowing what they need
  - Both lacking tools they need to succeed
- ✓ Access to a fountain of Experienced Mentors
  - ✓ Content Creators make 75%
  - ✓ Global Marketplace, Global Recruitment
  - ✓ Mentorship, Courses, Content, Recruitment
  - ✓ Mentors can monetise, Mentees recruited



# Mentors on CMD from World Leading Companies

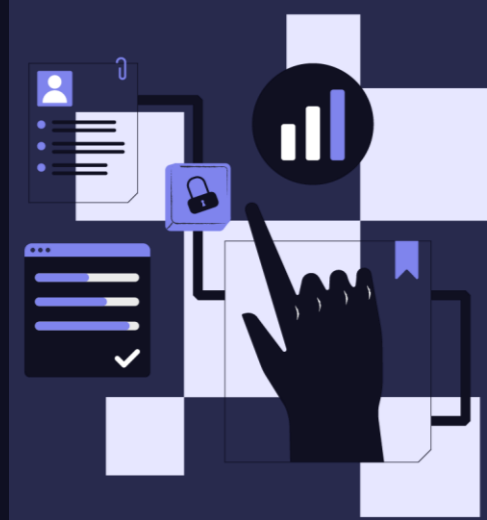
- Over 5000 members
- Companies already recruiting from Platform
- Mentees hired by large private and public sector organisations
- Part on Plexal and Super Charger Ventures



CMD\_

# Product

- On demand (video/content) Created by leaders in their field
- 1-2-1 Classes run by mentors
- Mentors/Trainers can create live bootcamps/Group Mentoring
- Practical Labs
- Online recruitment platform tapping into the huge number of users
- Community support
- Peer recommended by our Mentors



CMD\_

# Tour of Platform...

The screenshot displays the CyberMentorDojo platform interface. The top section features a grid of mentor profiles, each with a photo, name, title, location, and a list of skills. The mentors shown are Lloyd Evans, Benjamin Laski, Michala Liavaag, Chris Cockburn, Abhishek Vyas, Alan Jenkins, Codrut Andrei, and Charles Smunt. Below the grid, the 'Conversations' section shows a chat interface with a sidebar for navigation (Explore, My Mentors, Messages, Bookings, Tasks, Notifications, Forums, Account) and a main chat area. The chat area displays a conversation with Josh Tatum, including messages like 'Josh Tatum has confirmed your booking.' and 'yes got them both'.

## Make an application

Some mentors require an application to make bookings. Please answer the below questions to make an application.

What is the main goal you are looking to achieve?

Type answer here..

Are you currently in the tech industry?

Type answer here..

Proposed timeframe in which you want to achieve your goals?

Type answer here..

What is the best means of communication to help you on your journey?

Type answer here..

What time zone are you currently located in? Note: I am based on EST/New York City Time, USA.

Type answer here..

Cancel

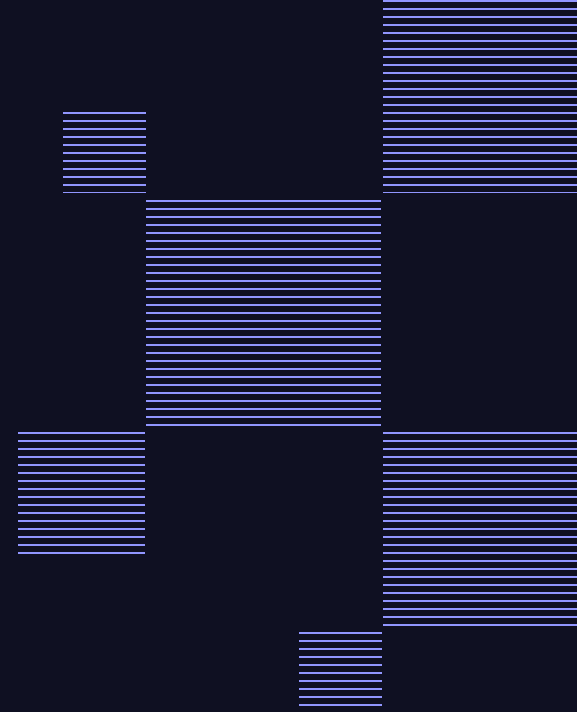
Make application

# CMD\_



# Partnership Model – LMS / Paid Mentoring

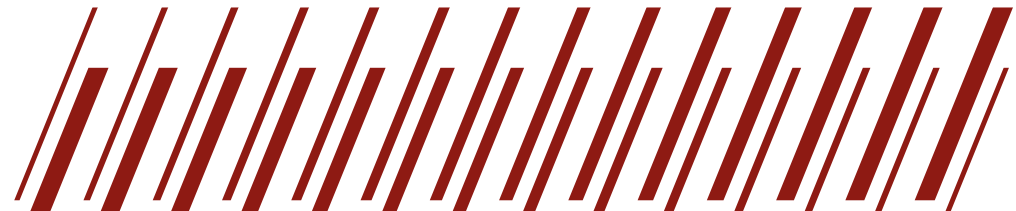
- CMD receive 25% of paid activity over its platform
- Mentors / Teachers retain 75%
- £250 per role advertised by a recruiter – moving to subscription model once comfortable with service



CMD\_

# Safeshark

Alex Buchan  
Director







Alex Buchan, Director, SafeShark

# **Secure by Design**

**What are the requirements?**

**When are they coming?**

**How cyber security testing is  
evolving**

International Cyber Expo – 28<sup>th</sup> Sept 2022

# Now is the time to act – UK and EU introduce cyber security legislation

- UK and EU market access requirements are under development now
- These represent a minimum baseline requirement for compliance and on their own are not enough to build trust around a product or brand

**“45% of UK consumers are more likely to buy a TV with an official certificate for high security standards over one that doesn’t”\***

\*DTG State of the Nation Report 2022: <https://dtg.org.uk/project/state-of-the-nation/#:~:text=State%20of%20the%20Nation%20analyses,world%20leading%20digital%20TV%20sector.>



# What are requirements?

- International standard EN 303 645 is set to underpin legislation
- This has 13 provisions which can be tested against using TS 103 701

5	Cyber security provisions for consumer IoT .....
5.1	No universal default passwords.....
5.2	Implement a means to manage reports of vulnerabilities .....
5.3	Keep software updated .....
5.4	Securely store sensitive security parameters .....
5.5	Communicate securely .....
5.6	Minimize exposed attack surfaces.....
5.7	Ensure software integrity.....
5.8	Ensure that personal data is secure.....
5.9	Make systems resilient to outages .....
5.10	Examine system telemetry data .....
5.11	Make it easy for users to delete user data.....
5.12	Make installation and maintenance of devices easy .....
5.13	Validate input data.....
6	Data protection provisions for consumer IoT.....

## When is it happening?

- PSTI Bill is going through parliament now
- Once through secondary legislation will be used to outline timescales for compliance and further details
- This covers 'network connectable products'
- Cyber security requirements in RED are coming into force 1<sup>st</sup> Aug 2024
- This covers 'internet connected radio equipment'

### Product Security and Telecommunications Infrastructure Bill

#### Government Bill

Originated in the House of Commons, Sessions 2021-22, 2022-23

Last updated: 26 May 2022 at 13:29



NEWS ARTICLE | 29 October 2021

### Commission strengthens cybersecurity of wireless devices and products



Secure by Design: What are the requirements, when are they coming, and how cyber security testing is evolving



## What are the threats?

- Mirai is probably the most well known
- Creating a 'Botnet' of IoT devices to target organisations
- It was targeted at consumer IoT devices including smart cameras and PVRs
- Occurrences of Mirai using IoT devices are still happening
- It has to date taken down major websites globally such as Twitter



# What is SafeShark?

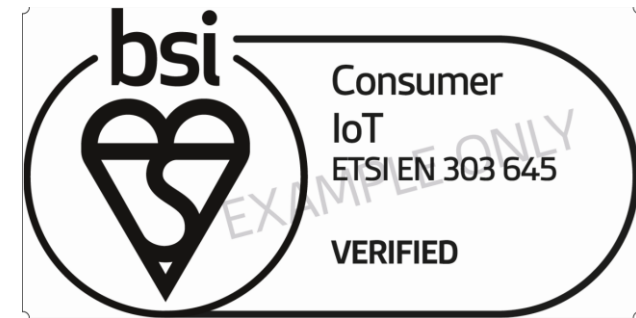
**Joint cyber security testing and certification service**

**BSI best practice powered by SafeShark testing**

- SafeShark combines accredited testing and cyber security expertise
- Set up through DCMS funding, we work closely with UK Government and international standards organisations

## What is the service?

- SafeShark provide cyber security testing services carried out against international standards
- Testing covers market access requirements + complete best practice requirements
- Backed with certification from BSI
- A consumer facing logo can then be used to provide assurance of cyber security best practice
- Leading global brand LG are the first to pass the certification



## How can SafeShark help?



- A combination of expert assessment and automated objective testing

Unique Intercept platform enabled continuous monitoring of devices

Ensure that devices remain compliant through software updates and specification developments

Regular reporting to manufacturers is provided to assist product development





## Opportunities presented by certification:

1. Get ahead of proposed UK and EU legislation.
2. Further differentiate your product in the market by proving to customers that your products are secure, and their information is safe.

Secure by Design: What are the requirements, when are they coming, and how cyber security testing is evolving



SafeShark

## The evolution of cyber security testing

Intercept – the unique cyber security test platform



- The platform checks in with devices every hour of every day
- Devices connected to Intercepts can be viewed in a cloud portal
- Latest reports, changes to the device, test findings and correlation with standards can be instantly viewed
- Supporting the product lifecycle and ensuring the robustness of the certification

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## Some interesting finds

- TV that has code in for a fridge
- Remote access to devices through brute force attacks
- Devices with many open ports
- Devices making 000's of DNS requests daily

```
"refridgeDoor": "Refrigerator Door",
"remoteConrol": "Remote Start",
"expressCooling": "Ice Plus",
"waterSensor": "Water Leak",
"actHoming": "Go Home",
"act.wakeup": "Power-Saving Mode Off",
"totalAirQuality": "Overall Cleanliness",
```

[illegible]

## 5 key takeaways

Now is the time to act

- UK and EU market access requirements are under development now
- These represent a minimum baseline requirement for compliance and on their own are not enough to build trust around a product or brand

## SafeShark and BSI's testing and certification will:

- Protect your customers, your business, your investors, your reputation, and your brand position
- Prepare you for the legislation and increasing consumer demand before this becomes a business-critical issue
- Enhance your products and brand early on, building a reputation and trust by taking a hard consumer protection stance

Secure by Design: What are the requirements, when are they coming, and how cyber security testing is evolving



**SafeShark**



## Contact us

- alexb@safeshark.co.uk
- jonm@safeshark.co.uk
- [www.safeshark.co.uk](http://www.safeshark.co.uk)

# Thank you!

Find out more at the Plexal stand, D15

## CYBER RUNWAY

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