

# The UK Safety Tech Sector: 2023 Analysis

DEPARTMENT FOR SCIENCE, INNOVATION AND TECHNOLOGY



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## Ministerial Foreword

Through the Online Safety Bill this government is delivering on its commitment to make the UK the safest place in the world to be online while defending free expression. We also recognise the important role of the UK's safety tech sector in protecting users online through innovative and world-leading technology.

The UK's safety tech sector was first highlighted in 2020, when the inaugural *Safer Technology, Safer Users* report set out the UK's role in developing solutions that are being used worldwide to safeguard and protect online users from harm, and to detect and remove illegal content.

In the last four years, the sector has continued to go from strength to strength. This research now finds over 130 safety tech businesses active in the UK, with strong capabilities in areas such as age assurance, brand and platform safety, digital forensics, content filtering, and detecting and countering societal issues such as fraud and disinformation. This breadth of technology helps to keep the UK at the forefront of tackling online harms, and ensures that our digital economy and tech platforms have the tools they need to keep users safe online.

Technology is developing at an exponential scale, and this means we must be increasingly vigilant and respond rapidly to ensure UK citizens are safe from online harms. The UK safety tech sector is meeting this challenge. It is one of the fastest growing tech sectors in the UK, with revenues increasing 20% in the last year alone to £456m, and it now employs over 3,300 staff across the UK.

The sector has attracted significant investor interest in the past year. 2022 was a strong year for firms raising external equity investment, with £64m raised across 16 deals. 2022 was also a record year for M&A activity.

The Department for Science, Innovation and Technology (DSIT) recognises the need to support new innovation to protect users, and has recently funded a new 'Safety Tech Challenge Fund', with three innovative projects set to receive funding to develop technologies that will help protect children by identifying and disrupting the sharing of links to child sexual abuse material online.

In March, the government also committed up to £3.5 billion for DSIT to support our ambitions to make the UK a scientific and technological superpower. The safety tech sector is a key part of ensuring that digital progress is safe and secure by design, and that the UK remains both the safest place to be online, and a leading location for developing innovative solutions to keep users safe online. We will continue to support the sector, and by working together, we will build a safer digital world for all.

**PAUL SCULLY MP**

MINISTER FOR TECH AND THE DIGITAL ECONOMY



A stylized handwritten signature in black ink, appearing to read 'Paul Scully'.

## KEY FINDINGS

This research highlights that there has been continued growth across revenue, employment and investment within the safety tech sector in 2022. Key metrics are covered below:

### Companies

- The number of UK companies providing safety tech products and services has now reached 133 firms, an increase of 14% since last year.
- Analysis of company size across the sector suggests that the sector is maturing. There are a number of potential drivers for this, which include implementation of regulation in different global regions, diversification of products and services to reach new markets, and increasing M&A activity in the sector.

### Revenues and Employment Growth

- We estimate that total safety tech sector revenues have reached £456m in the most recent financial year.
- This reflects an increase of 20% (£75m) since last year's analysis.
- We estimate that the safety tech sector remains on track to hit £1bn in annual revenues by the mid-2020s, based on its average compound annual growth rate (CAGR) since baseline. This will however be contingent on wider factors influencing the sector, such as access to finance and implementation of legislation.
- Within the safety tech sector there are currently an estimated 3,300 Full-Time

Equivalent (FTE) employees. This is an increase of 16% (450 people) since last year's report.

### Investment performance

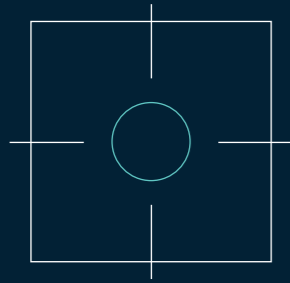
- Investment performance has remained consistent with the previous year, generating £63m across 16 deals in 2021, up to £64m across 16 deals in 2022.
- Consistent investment with previous years is significant given the challenging macro investment landscape, which consultees note is impacting the extent to which companies can access investment.
- Overall investment is also likely higher given the high-value and non-disclosed mergers and acquisitions that have occurred within the sector. Each investment highlights the growing awareness of safety tech solutions from major global organisations. Merger and acquisition activity includes, e.g.,
  - Crisp, acquired by Kroll
  - eSafe Global, acquired by Smoothwall, acquired by Family Zone
  - SuperAwesome, acquired by Epic Games
  - Factmata, acquired by Cision
  - Atomwide by AdEPT
  - SpiritAI by Twitch (Amazon)
  - Cubica by Chemring / Roke

### Support for the safety tech sector

- DSIT has supported a number of initiatives in recent years, including both the Safety Tech Innovation Network and two Safety Tech Challenge Funds, the most recent of which is live and aims to tackle child sexual abuse material (CSAM).
- In April 2022, DSIT published the Year 2 Media Literacy Action Plan, setting out the government's expanded work programme as part of the Media Literacy Strategy. This included establishing the Media Literacy Programme Fund, which gives grants to organisations to support their media literacy activity, including tackling disinformation.
- Since 2015, procurement data suggests that the UK public sector has commissioned a total of 326 contracts in relation to Trust and Safety and online safety - with total contract values equalling £76m. Key buyers include DSIT, Ofcom, Home Office and the Department for Education.



# 1. Introduction



In May 2020, DCMS published 'Safer Technology, Safer Users: the UK as a World-Leader in Safety Tech'. This was updated in 2021 and 2022 with annual evidence based snapshots, highlighting considerable growth, and illustrating the wide range of innovative companies focused on tackling online harms through a range of technical solutions that operate within the sector.

Perspective Economics, with support from PUBLIC and Professor Mary Aiken (University of East London), has been commissioned by the Department for Science, Innovation & Technology (DSIT) to conduct an updated sectoral analysis of the UK online safety technology sector (referred hereafter as safety tech), identifying how the safety tech sector has grown in the last year.

This report explores the number of businesses offering safety tech solutions, and provides an updated market estimate of the size of the sector in the UK, measured through revenue, employment, and investment. It also provides minor product and service updates to the safety tech sector definition and market taxonomy first developed in the baseline report. This research ensures that there is a consistent longitudinal evidence base to help track the long-term growth of the UK safety tech sector.

## Definition Recap:

Safety Tech providers develop technologies or solutions to facilitate safer online experiences, and protect users from harmful content, contact or conduct.

### THIS FOCUSES ON FIRMS THAT:



Work to help **trace, locate and facilitate the removal of illegal content** online



Work with social media, gaming, and content providers to **identify harmful behaviour** within their platforms



**Monitor, detect and share online harm threats** with industry and law enforcement in real-time



Develop **trusted online platforms that are age-appropriate and provide parental reassurance** for when children are online



**Identify and respond to online fraud and scams**



**Verify and assure the age of users**



**Actively identify and respond to instances of online harm**, bullying, harassment and abuse



**Filter, block and flag harmful content** at a network or device level



**Detect and disrupt false, misleading or harmful narratives**



**Advise and support a community of moderators** to identify and remove harmful content

## 1.2 TEAM AND ACKNOWLEDGEMENTS

The study team included Sam Donaldson (Study Lead, Perspective Economics), Conor Tinnelly (Senior Consultant, Perspective Economics), and Professor Mary Aiken (University of East London).

DSIT and Perspective Economics would like to acknowledge the consultees, nationally and internationally, who contributed to the development of this report through participation in a series of one-to-one consultations with the research team. In total, our research engaged with more than thirty industry and policy representatives.

Beyond the core statistics set out within this report, the team continues to be impressed by the dedication, commitment, and vision of many of the businesses consulted throughout this research.

The safety tech sector has consistently demonstrated significant growth each year in the UK. Further, it has supported government, civil society and industry in tackling and mitigating the impact of harmful and illegal activity online.

## 1.3 SCOPE

This research seeks to identify providers of safety tech products or services, with a clear presence in the UK market (UK registered), and that are active and undertake commercial activity. For research purposes, the following is considered within this report; however, we recognise the broader contribution of many organisations involved within the wider online safety ecosystem.

### RESEARCH SCOPE

#### Safety Tech providers, which:

- ✓ have a clear presence in the UK market (registered and active status)
- ✓ demonstrate an active provision of commercial activity related to online safety technology (e.g. through the presence of a website / social media)
- ✓ provide safety tech products or services to the market (i.e. sell or enable the selling of these solutions to other customers)
- ✓ have identifiable revenue or employment within the UK

Section 2 of this report sets out the type of organisations within scope and sets out the products and services typically offered.

## 1.4 METHODOLOGY

The research team updated the safety tech taxonomy<sup>1</sup> for products and services considered in scope. The team identified company trading data for 133 safety tech providers using Companies House data (for financial metrics), Beauhurst (a research platform that identifies high-growth

and high potential firms in the UK, including investment data), web data, and through direct consultation with industry members.

The full methodology used for this research is set out in Appendix A.

STAGE	DESCRIPTION
Desk Research	The research team undertook an initial rapid review of literature and data relating to the safety tech market (including wider policies and legislation) to identify new companies, consider new language or business models adopted by the sector, and to identify how organisations have responded to the status of the Online Safety Bill and other international legislation.
Taxonomy Update	The research team reviewed and updated the previous safety tech taxonomy to account for the changing safety tech landscape.  The updated taxonomy has been developed through collaboration with academic partners and industry experts.
Identification of Firms	The research team has identified 133 dedicated firms to be included in this year's study.
One-to-One Consultations	This research is informed by upward of 30 direct interview consultations with a range of safety tech stakeholders (in the UK and internationally), focusing on the views of industry.  This included gathering feedback about the respective strengths, challenges, and opportunities facing the sector.
Data Enrichment and Sector Modelling	The research team has built on the metrics set out within the previous iterations of this research, using Companies House data (for financial metrics), Beauhurst (data on investment raised and accelerator participation), and internal modelling for identifying safety tech related activity.

<sup>1</sup> Safer technology, safer users: The UK as a world leader in Safety Tech (May 2020) Safety Tech Taxonomy p. 21 <https://www.gov.uk/government/publications/safer-technology-safer-users-the-uk-as-a-world-leader-in-safety-tech>

## 2. Scoping the Safety Tech Sector



### 2.1 INTRODUCTION

Safety tech providers develop technologies or solutions to facilitate safer online experiences, and to protect users from harmful content, contact or conduct.

This definition was established in the baseline Safety Tech Sectoral Analysis (2020) report and expanded through a market taxonomy that provided scope to identify a range of products and services used to help make users safer online. This ultimately distinguishes the safety tech sector from adjacent sectors. For example, there may arguably be some overlap between safety tech and fields such as cyber security, FinTech, and RegTech; however, we seek to identify firms that are distinct in terms of focus on online safety, compared to areas such as data security.

### 2.2 UPDATING THE SECTOR TAXONOMY

The original safety tech taxonomy was developed in 2020 with support from DCMS and industry stakeholders. However, much has changed in the past three years with respect to users, devices, technologies, harms, markets, and the legislative backdrop.

As such, we have updated the taxonomy to reflect the evolving breadth and depth of the sector, with minor changes to allow for time-series analysis (see full outline of steps taken in Appendix B).

We have therefore made two updates to the taxonomy in the current iteration, which include:

- **Fraudulent advertising as a harm:** This update has been made to reflect new firms that help identify and counter fraudulent advertising and scams online.
- **Violation of privacy as a harm:** This update has been made to reflect the new firms identified that work to support individuals in maintaining and limiting access to personal data, or respond to incidents of doxxing, intimate image abuse (also known as 'revenge porn'),<sup>2</sup> or forms of data misuse.

The taxonomy has been developed to illustrate the scope of the safety tech sector and has primarily been used to support DSIT mapping of safety tech firms. The research also recognises diverse use cases and technologies within the safety tech sector, and acknowledges that many firms within the sector can provide products or services across the different levels of the taxonomy.

It is also recognised that several of the larger tech companies are actively involved in the production or development of safety tech

solutions (e.g., Microsoft's PhotoDNA, and AWS' Rekognition Image Moderation API). However, as with previous iterations, these providers are not measured within this sectoral analysis, which is focused on dedicated third-party safety tech providers. The UK also has a particularly active community of charitable and representative organisations involved in tackling issues relating to online safety, that are also excluded from this sectoral analysis.

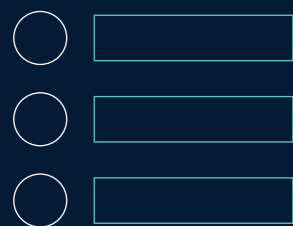
<sup>2</sup>Ministry of Justice (2015) Revenge Porn: sharing private sexual materials with intent to cause distress. Available at: <https://www.gov.uk/government/publications/revenge-porn>

# SAFETY TECH SECTOR TAXONOMY

HEADING & DESCRIPTION	HARM	APPROACH	BENEFIT	TECHNOLOGIES AND SERVICES	EXAMPLE ORGANISATIONS	
<b>SYSTEM-WIDE LEVEL FACTORS</b>						
<b>System-wide governance</b> Tracing, locating & removing illegal content	<ul style="list-style-type: none"> <li>- Terrorist content</li> <li>- Extreme/Revenge pornography</li> </ul>	<ul style="list-style-type: none"> <li>- Child sexual abuse and exploitation</li> <li>- Fraudulent Advertisement</li> </ul>	Moderation and monitoring of harmful conduct and / or content.	Protection from harmful online conduct and content	<ul style="list-style-type: none"> <li>- Computer Vision</li> <li>- Machine Learning</li> </ul>	<b>CAMERA FORENSICS</b> cameraforensics.com <b>CYACOMB</b> cyacomb.com
<b>PLATFORM LEVEL FACTORS</b>						
<b>Platform governance</b> Platform level response to illegal content, including preventing illegal content from being published	<ul style="list-style-type: none"> <li>- Terrorist content</li> <li>- Extreme /Revenge pornography</li> <li>- Child sexual abuse and exploitation</li> </ul>	<ul style="list-style-type: none"> <li>- Sharing of indecent images</li> <li>- Encouraging or assisting suicide</li> <li>- Harassment</li> <li>- Hate crime</li> </ul>	Pre-moderation, detection, flagging and removal of illegal content at platform level	Protection from illegal online content	<ul style="list-style-type: none"> <li>- Threat detection and reporting</li> <li>- Platform monitoring</li> <li>- Hashing</li> <li>- Content filtering</li> <li>- Automated and human moderation</li> <li>- Image Processing</li> </ul>	<b>DRAGONFLAI</b> dragonfl.ai <b>ROKE (VIGIL AI)</b> roke.co.uk
<b>Platform moderation &amp; monitoring</b> Prevention, detection & action against harmful conduct and / or content	<ul style="list-style-type: none"> <li>- Extremist content</li> <li>- Cyberbullying</li> <li>- Coercive behaviour</li> <li>- Intimidation</li> <li>- Violent content</li> </ul>	<ul style="list-style-type: none"> <li>- Toxic Content</li> <li>- Advocacy of Self-Harm</li> <li>- Fraudulent Advertisement</li> </ul>	Moderation and monitoring of harmful conduct and / or content	Protection from illegal online content	<ul style="list-style-type: none"> <li>- Computer Vision</li> <li>- Machine Learning</li> </ul>	<b>CRISP</b> crispthinking.com <b>UNITARY</b> unitary.ai
<b>Age oriented online safety</b> Age appropriate design	<ul style="list-style-type: none"> <li>- Age inappropriate content</li> <li>- Unsafe spaces</li> </ul>		Safety by design	Design and development of user-centred online environments to keep children safe	Age appropriate web services, consent management	<b>SUPERAWESOME</b> superawesome.com <b>AZOOMEE</b> azoomee.com
Age assurance	<ul style="list-style-type: none"> <li>- Age inappropriate content</li> <li>- Unsafe spaces</li> </ul>		Age detection and verification	Protection from age-inappropriate content	Age assurance mechanisms: age estimation, e-IDs, database matching / attribute exchange	<b>YOTI</b> yoti.com <b>TRUSTELEVATE</b> trustelevate.com
<b>ENDPOINT LEVEL FACTORS</b>						
<b>User protection</b> User initiated protection (user, parental or device-based)	<ul style="list-style-type: none"> <li>- Age inappropriate content</li> <li>- Unsafe spaces</li> <li>- Missuse of data</li> </ul>	<ul style="list-style-type: none"> <li>- Violation of privacy</li> </ul>	Safety by design, age-based safeguarding	Creating safe online experiences for children promoting data ownership & rights	Endpoint protection software and applications	<b>SAFETONET</b> safetonet.com <b>REMOVIFY</b> removify.com
Network filtering	<ul style="list-style-type: none"> <li>- Extremist content</li> <li>- Cyberbullying</li> <li>- Coercive behaviour</li> </ul>	<ul style="list-style-type: none"> <li>- Intimidation</li> <li>- Violent content</li> <li>- Harmful instruction</li> </ul>	Detection and blocking access to harmful or inappropriate content	Preventing access to harmful material within defined settings	Content filtering and monitoring	<b>SMOOTHWALL</b> smoothwall.com <b>ADEPT</b> adept.co.uk
<b>INFORMATION ENVIRONMENT LEVEL FACTORS</b>						
<b>Information governance</b> Detecting and disrupting false, misleading and/or harmful narratives	<ul style="list-style-type: none"> <li>- Misinformation</li> <li>- Disinformation</li> </ul>		Fact checking, disinformation research and disruption	Ensuring citizen information accuracy and trust in the information environment and wider society	<ul style="list-style-type: none"> <li>- Disinformation research</li> <li>- Site assurance</li> <li>- AI/ML enabled automated fact-checking</li> </ul>	<b>FACTMATA</b> factmata.com <b>LOGICALLY</b> logically.co.uk
<b>OTHER</b>						
Online safety professional services Compliance & professional services	<ul style="list-style-type: none"> <li>- All</li> </ul>		Compliance services, research, frameworks and methodologies for auditing, evaluating or mitigating potential harms	Enabling the development of safer online communities and embedding safety-by-default	Advisory support with implementing technical solutions	<b>FLYING BINARY</b> flyingbinary.com <b>ONLINE SAFETY UK</b> onlinesafetyuk.com



# 3. UK Safety Tech: Market Profile



This chapter sets out a summary of the market profile of the UK's safety tech sector.

### KEY FINDINGS:

- There are at least 133 dedicated safety tech commercial providers based in the UK.
- The number of companies in the UK safety tech ecosystem has almost doubled since the baseline study.
- As well as using language that aligns to online harm, safety tech providers are also positioning and offering their solutions to established markets, such as advertising, retail, and to larger organisations that have concerns over brand safety, integrity of supply chain, and reputation.

### 3.1 NUMBER OF SAFETY TECH PROVIDERS

Using the safety tech definition and taxonomy, we have identified 133 organisations dedicated to providing relevant safety tech products and services which are registered within the UK. An additional eight organisations have been identified that are considered as diversified (i.e., safety tech is part of what they provide) or are non-commercial in scope. Across both groups, the UK is home to over 140 organisations with a safety tech offering.

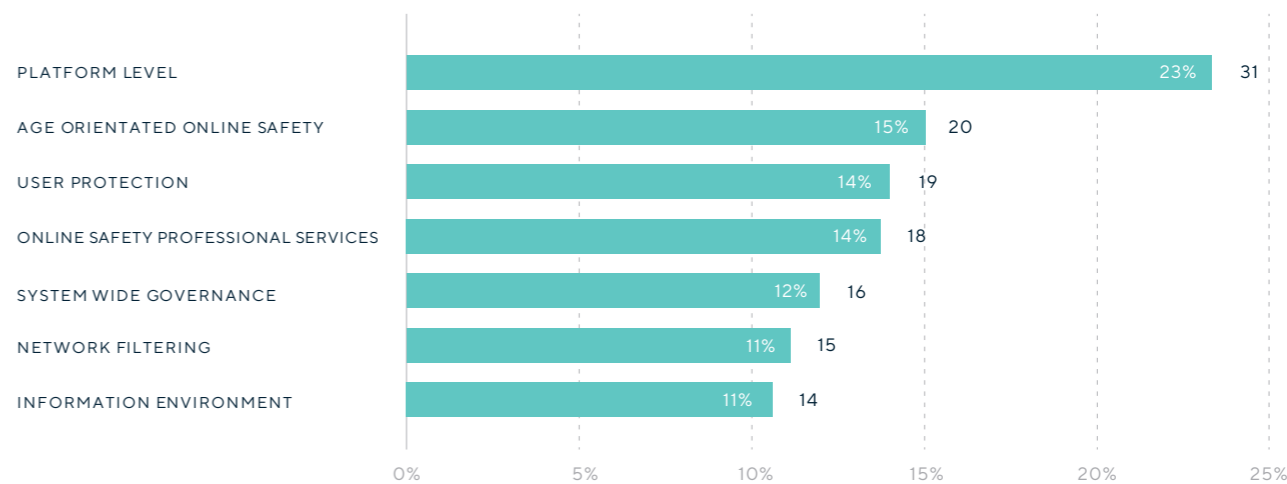
For purposes of market analysis, we will focus on the 133 dedicated providers. However, we recognise that there are likely several providers within the marketplace that have the relevant skills and expertise to become more involved with safety tech in future years. These could include companies currently using AI or designing cyber security solutions focused on threat intelligence, or AdTech firms that focus on responsible

advertising and brand safety, technologies that could arguably be deployed within the context of keeping users safer online for social purposes. This is a trend that is likely to become more apparent, with an increased number of firms utilising Trust and Safety terminologies being identified during during initial scoping exercises.

### 3.2. PRODUCTS AND SERVICES

For the 133 organisations within scope of the commercial analysis, we have identified company descriptions of what they offer by means of web scraping and direct consultation. The nature of this sector means that some organisations provide diverse products and services - for example, content moderation, sentiment analysis, and advisory services. With this in mind we have identified the best fit of each of the commercial organisations against the taxonomy categories to illustrate the overall sector composition.

FIGURE 3:1 - BEST FIT TAXONOMY CLASSIFICATION



Source: Perspective Economics (n=133)

Percentage of total firms - best fit category

The change in total number of safety tech providers across each 'best fit' taxonomy grouping since the baseline study is provided below:

**TABLE 3:1 CHANGE IN TAXONOMY CLASSIFICATION SINCE BASELINE**

STAGE	2019 (BASELINE)	2020	2021	2022	CHANGE FROM BASELINE
System-wide governance	10	13	14	16	6 Firms
Platform-level	11	20	29	31	20 Firms
Age orientated online safety	10	15	15	20	10 Firms
User protection	13	13	15	19	6 Firms
Network filtering	10	14	14	15	5 Firms
Information Environment	6	12	14	14	8 Firms
Online safety professional services	10	13	15	18	8 Firms
<b>Total</b>	<b>70</b>	<b>100</b>	<b>117</b>	<b>133</b>	<b>+63 Firms</b>

Source: Perspective Economics

#### LONGITUDINAL ANALYSIS SUGGESTS THAT:

- The number of companies in the UK safety tech ecosystem has almost doubled since the baseline study, highlighting the rapid emergence of this sector, with encouraging growth through start-ups and inward investment.
- The volume of firms that provide platform-level solutions such as content moderation or brand safety has significantly increased and is now the largest category, with nearly three times as many firms operating in this space since 2019.
- The number of companies providing age orientated online safety has doubled since the baseline analysis.
- The number of companies operating in the other taxonomy areas has increased steadily since the baseline; however, areas such as user protection and network filtering have remained consistent – potentially reflecting a small volume of large providers in these areas.

Typically, within a tech sectoral analysis – we might expect to see a majority of firms clustered in one sub-sector. However, the analysis suggests that the UK has, albeit from a small base of firms, a wide range of niche product and service capabilities available within the marketplace.

This is particularly important in terms of sector range and resilience, as it means that the UK market is home to a wide-reaching pool of expertise and capability, from which solutions can be deployed against a range of online harms for many different customer groups.

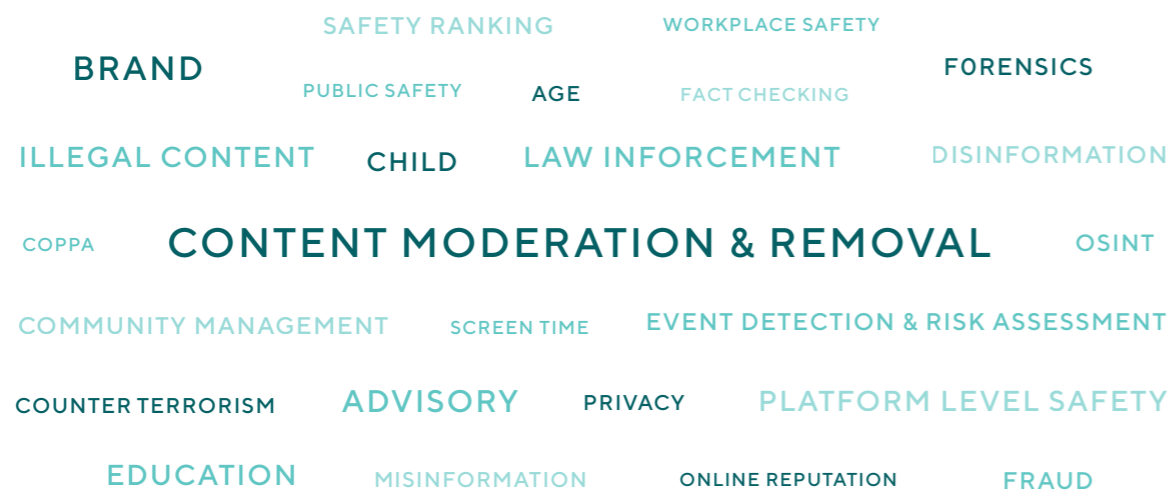
### 3.2.1 FIRM POSITIONING AND ROUTE TO MARKET

As noted previously, the taxonomy developed to define the safety tech sector for the original study was published in 2020, and has assisted DSIT in effectively mapping the sector and identifying high-level sector trends.

However, it is also important to distinguish how safety tech providers describe their offering in their ‘own words.’ This can support the analysis of market trends, routes to market and investment.

Analysis of company web data suggests that in addition to using language that aligns to online harm, many firms are also positioning and offering their solutions to established markets such as advertising, retail, and to larger brands that have concerns about brand safety, integrity of supply chains, and reputation. We highlight some of the key terminology used by firms below:

FIGURE 3:2 SAFETY TECH SECTOR WORD CLOUD



Source: Perspective Economics<sup>3</sup>

The most common terms used by the sector relate to content moderation and removal (38 mentions), child safety (31), brand safety (24), age (23), and law enforcement (16).

<sup>3</sup> OSINT, or open-source intelligence



We used to work primarily with corporations and within politics... In the last few years however we have been pivoting into different sectors... There's quite a lot [of use cases]

- CEO AT A SAFETY TECH COMPANY



#### EXAMPLE TECHNICAL SOLUTIONS OFFERED BY FIRMS INCLUDE:

- Detection and removal of illegal or harmful content e.g., through digital forensics provided to law enforcement
- User protection at the device level (e.g. ensuring that a phone or tablet is safer for a child to use) that can be pre-installed onto a device, or installed directly by a child, parent or guardian;
- Provision of content moderation and threat intelligence expertise on a Business-to-Business (B2B) and Software-as-a-Service (SaaS) basis;
- Supporting community moderation and management within gaming platforms, forums and apps;
- Network and content filtering offered to schools and the education sector;
- Detection of disinformation and misleading narratives for consumers and media providers.

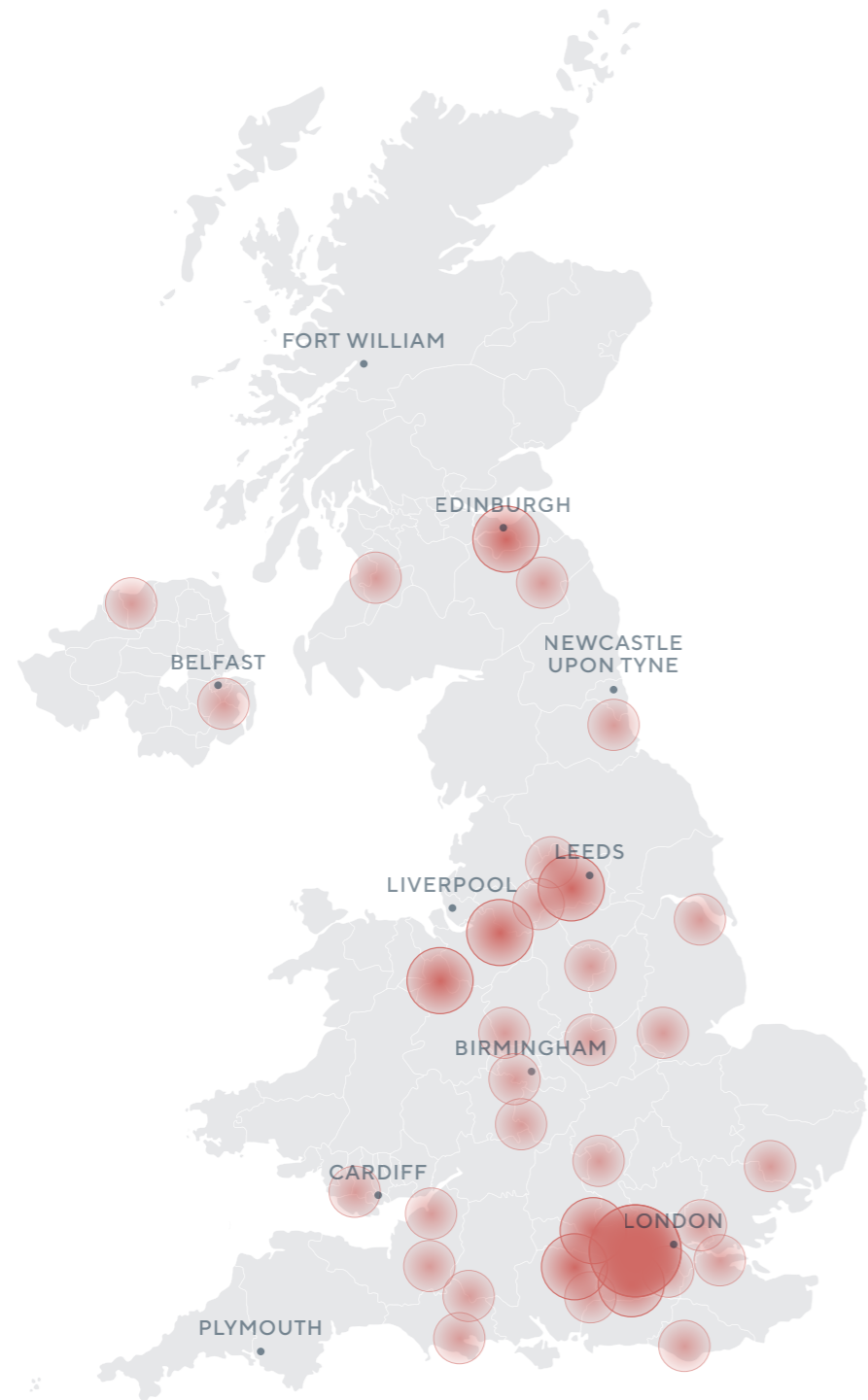
### 3.3 LOCATIONS

This section sets out the location of safety tech providers, suggesting that over half of all providers have a registered or trading presence in London or the South East (57%), with other firms spread relatively evenly across other regions.

However, as set out in previous studies, there are also identifiable safety tech clusters in areas such as Leeds, Edinburgh and Cambridge. Safety tech office locations are outlined in Fig 3.3, and regional employment is explored in Section 4.

Data for the most recent year suggests that the increase of foreign-owned safety tech providers setting up in the UK has resulted in an increased safety tech presence in London.

FIGURE 3:3 REGISTERED AND TRADING LOCATIONS OF UK SAFETY TECH FIRMS



Source: Perspective Economics (n=210)



## 4. Economic Contribution of the Safety Tech Sector



### KEY FINDINGS:

- We estimate that total UK safety tech sector revenues for the last financial year (modal: FY ending 2022) have reached £456m, an increase of 20% since last year's report (+£75m).
- We estimate that across the safety tech sector, there are currently 3,300 Full-Time Equivalent (FTE) employees. This is an increase of 16% (450 people) since last year's report.
- We anticipate that, in line with the baseline study projections, the sector could reach its ambitions of £1bn turnover by the mid-late 2020s. However, the industry consultations have highlighted a number of challenges facing safety tech start-ups, particularly around the costs of training data, and wider market uncertainty.

### 4.1 INTRODUCTION

This section outlines how the safety tech sector has grown in recent years, including estimates for annual revenue and employment.

While the safety tech sector has demonstrated significant growth in recent years, it is still an emerging and nascent area. As such, many organisations are at 'pre-revenue' or micro stage, and therefore do not provide full annual accounts. We therefore estimate total sectoral revenues through a mix of known company accounts, direct consultations, and company-level estimation as appropriate.

### 4.2 COMPANY REGISTRATIONS

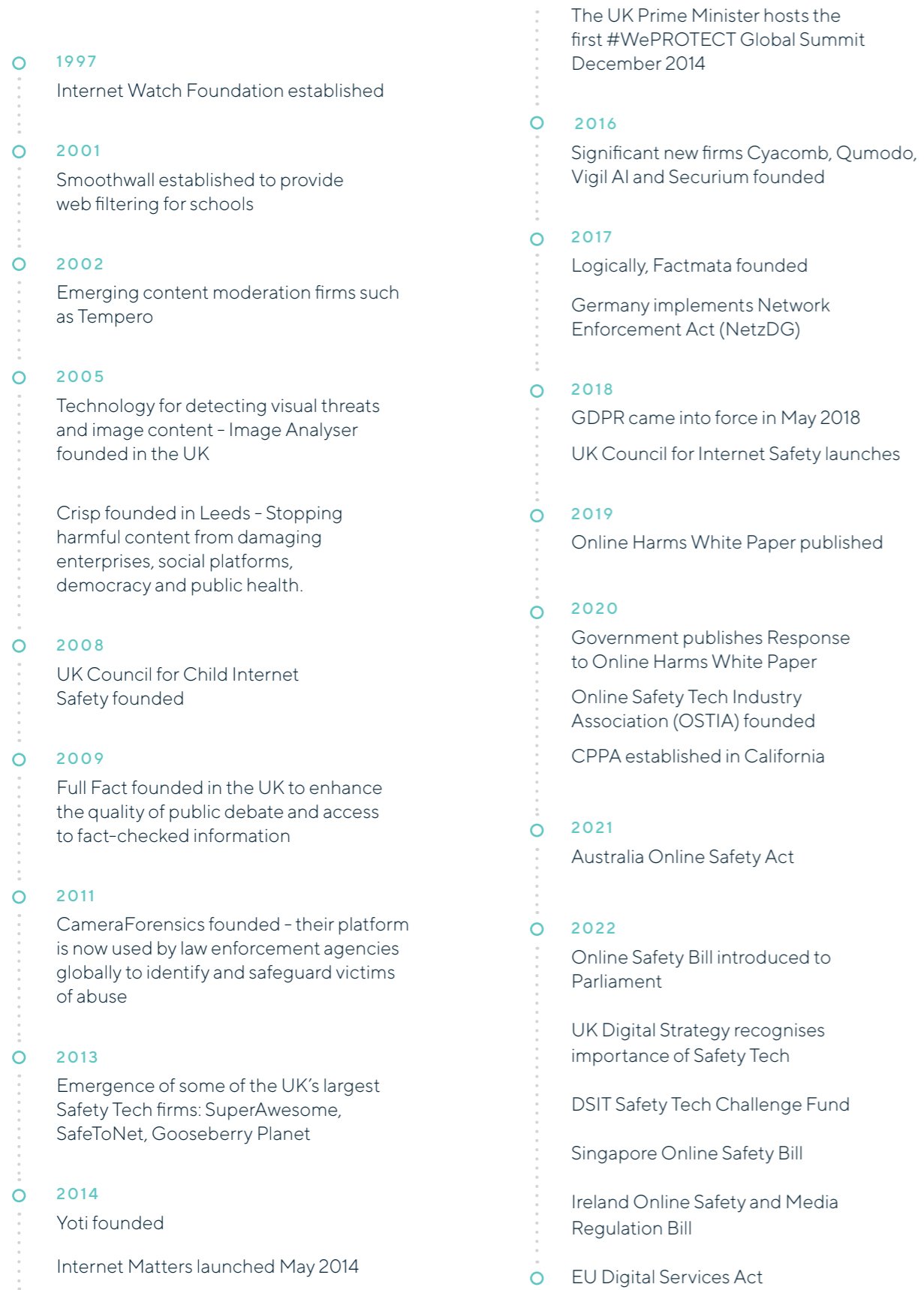
Figure 4.1 sets out the incorporation date (when the business started) of the 133 dedicated safety tech providers, which highlights considerable growth over the last five years.

Encouragingly, there are examples of early-stage companies that have demonstrated high-growth relatively quickly following establishment, e.g., SuperAwesome, Crisp and Yoti.

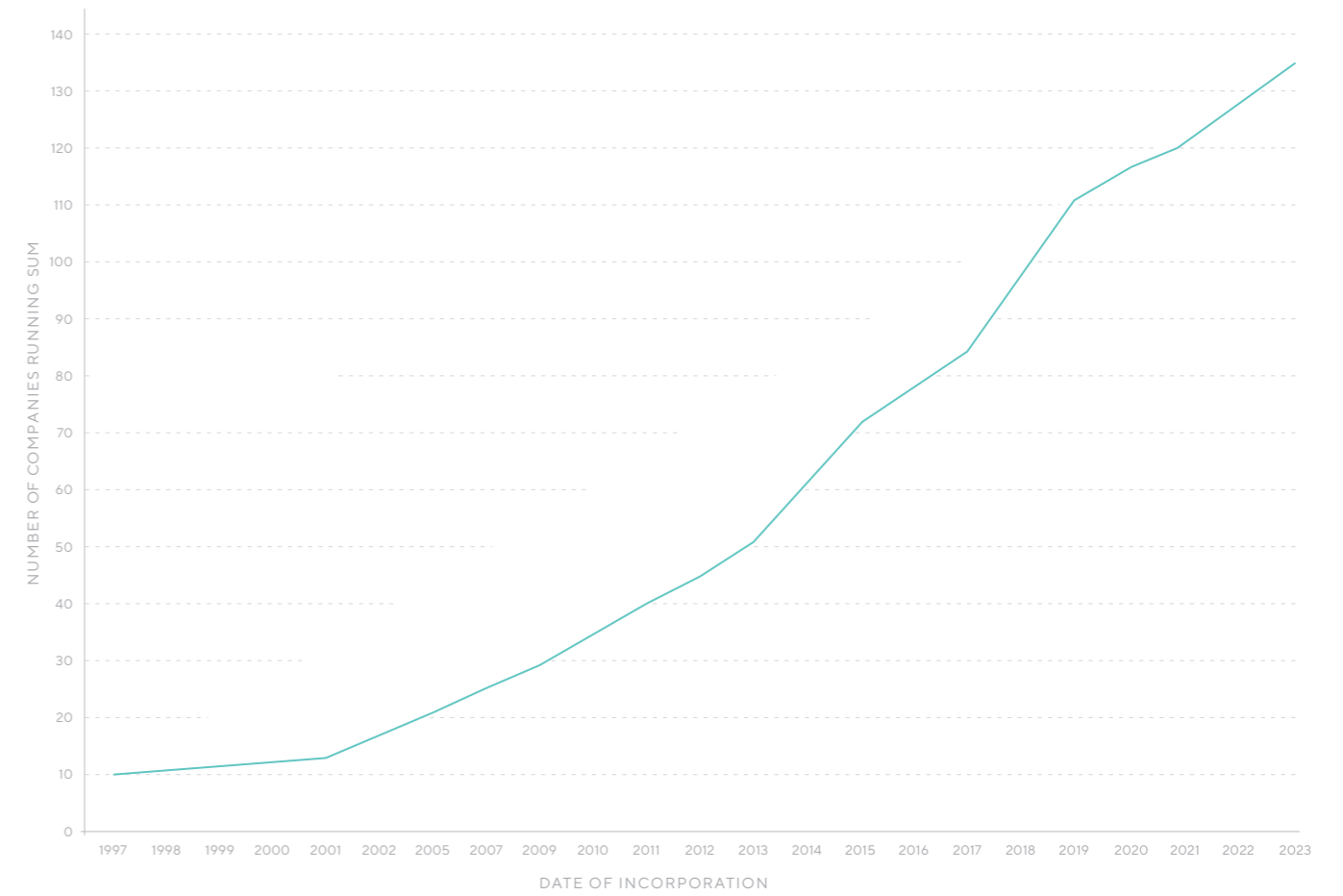
Further to this, a timeline of key milestones within the safety tech ecosystem is also provided overleaf.



**FIGURE 4:1:1 UK SAFETY TECH FIRMS, DATE OF KEY SECTORAL MILESTONES**



**FIGURE 4:1:2 UK SAFETY TECH FIRMS, DATE OF INCORPORATION (RUNNING SUM)**



Source: Perspective Economics, BvD FAME, n = 70

### 4.3. ESTIMATED COMPANY SIZE

Of the 133 organisations identified for commercial analysis, the majority are micro (<10 employees) or small firms (<50 employees) representing 50% and 37% of firms respectively. However, comparison with the baseline study (2019) suggests that as well as a greater volume of companies operating

within the sector, the proportions of medium, and small providers have all increased – suggesting emerging maturity and growth among a range of providers that are securing their business models and customer base.

FIGURE 4.1 SAFETY TECH COMPANIES BY SIZE

CATEGORY	DEFINITION	NO. OF FIRMS (BASELINE)	NO. OF FIRMS (2022)
Large Company	Employment > 250 And Turnover > €50m or Balance sheet total > €43m	1 (1%)	1 (1%)
Medium Company	Employees >50 and <250 And Turnover > €50m or Balance sheet total > €43m	6 (9%)	15 (11%)
Small Company	Employees >10 and <50 And Turnover > €10m or Balance sheet total > €43m	22 (31%)	49 (37%)
Micro Company	Employment <10 And Turnover > €2m or Balance sheet total > €2m	41 (59%)	67 (50%)
<b>TOTAL:</b>		<b>70</b>	<b>133</b>

Source : Perspective Economics

### 4.4. ESTIMATED EMPLOYMENT

We estimate that there are approximately 3,300 people working within dedicated safety tech firms based in the UK. This has been estimated through company accounts, web data and consultation data.

As with the baseline analysis, employment within the sector is well distributed across UK regions, with the majority (51%) outside of London, and hotspots including Yorkshire and the Humber (15%), North West (8%) and Northern Ireland (6%). It is important to note that this is in part due to the nascent nature of the sector, and several significant employers spread across UK regions.

Regional employment is significant for the sector, with several of the largest safety tech providers in

the UK including Crisp (over 250), SuperAwesome (over 250), and Yoti (over 200) operating outside of London and serving international markets.

### 4.5. ESTIMATED REVENUE FOR THE SECTOR

We estimate that in total, the safety tech sector generated £456m in annual revenues in 2022. Figure 4.2 highlights how the sector has grown since the baseline study, suggesting that the sector has doubled in size in the last three years.

**This also highlights an effective average compound annual growth rate of c. 25% since the baseline report.**

FIGURE 4.2 REVENUE GROWTH SINCE BASELINE



Source : Perspective Economics

#### 4.6. GROWTH SCENARIOS

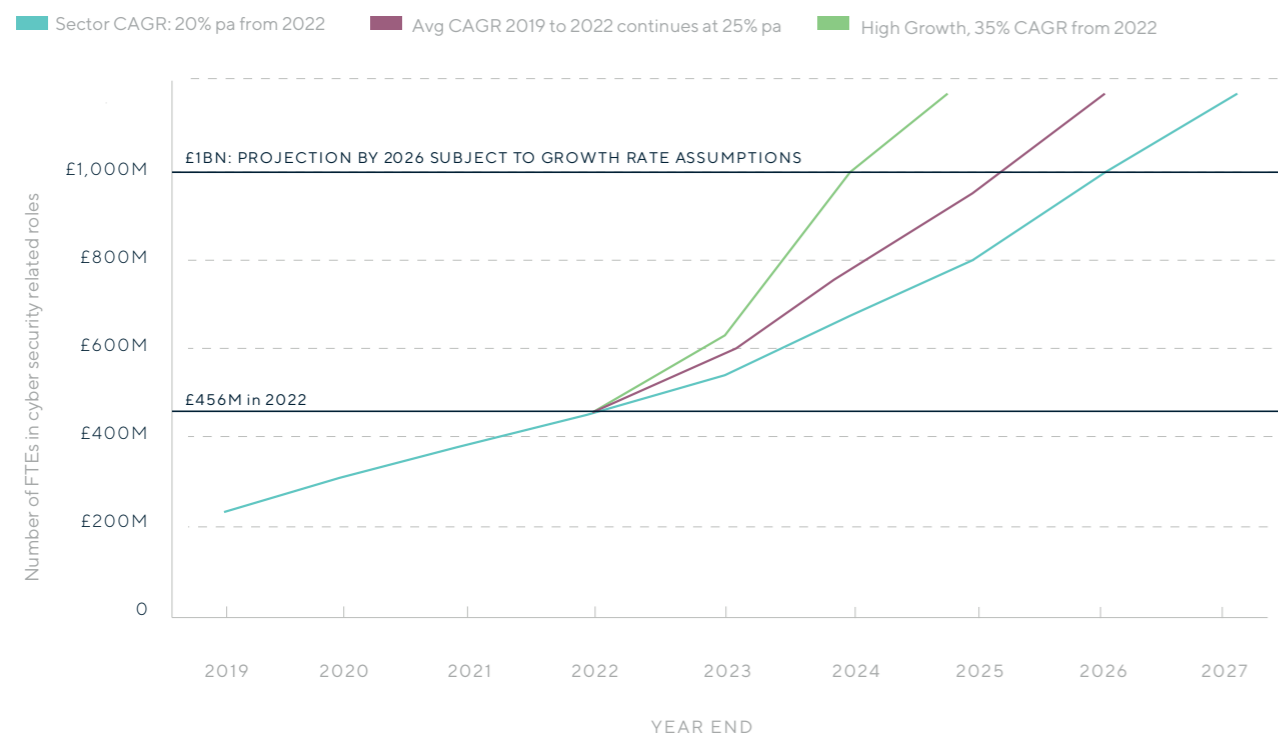
Previous iterations of this report have suggested that the safety tech sector may reach over £1bn in annual revenues by the mid-2020s.

Using the past four years of data, the project team has reassessed average yearly growth of company revenue since the baseline report (which now suggests a compound annual growth rate<sup>4</sup> of c.25%<sup>5</sup> per year). It is important to note that this growth has occurred against the backdrop of global economic uncertainty and

the emerging regulatory landscape within which safety technologies can be applied (wider factors are discussed in the section below, as identified through consultations).

Despite identified issues, the sector still has a strong annual growth rate, which suggests that revenue could still surpass the c. £1bn revenue mark by 2026 if the average 25% growth per annum is upheld by the sector.

FIGURE 4:3 SAFETY TECH GROWTH SCENARIOS



Source: Perspective Economics

<sup>4</sup> CAGR is the annual growth rate over time, with the effect of compounding taken into account and is used to measure and compare past performance to expected future performance

<sup>5</sup> This is slightly lower than the previous 35% per annum growth rate identified in the previous three reports. The growth between 2021 - 2022 was approximately 20%, and re-assessing the data available from 2019 to 2022 suggests a new

The safety tech sector continues to grow at a particularly strong rate compared to other tech industries. However, whilst many consultees are confident about revenue prospects, others have highlighted the need for support with a clear regulatory landscape, and support to grow domestic demand for safety tech solutions.

#### 4.7. CONSULTEE VIEWS ON FACTORS SUPPORTING GROWTH IN THE UK SAFETY TECH SECTOR

The research team sought to explore the drivers and barriers to growth within the UK safety tech sector in order to gather views among both established and early-stage companies. A number of factors have been identified as significant for the sector. These include:

##### An increased societal awareness regarding online harms, alongside an expressed loss in trust among those using tech platforms:

A continued trend, consultations suggest that customers have become much more knowledgeable regarding online rights. This is driven by increased news coverage of real-world events inspired by online interactions, legislation (e.g., GDPR and the Digital Service Acts in the EU, COPPI in the United States) and increased transparency through reporting mechanisms (e.g., Australian eSafety Commissioner's Basic Online Safety Expectations<sup>6</sup>).

**An increased awareness within the tech community of the trust and safety ecosystem – but continued issues with diversity:** Several consultees have noted an increased awareness and interest among tech workers regarding ethical design and how platforms implement trust and

safety. While this reflects a positive cultural shift within the tech community, several consultees have also highlighted the lack of diversity within the industry, noting that longer-term, the promotion of tech careers to minority groups will likely support the development of solutions built around personal experiences of online hate.

##### Significant data costs and a challenging investment landscape:

Consultees have noted the challenging landscape that exists for firms developing a new product within the safety tech space. They note high costs, along with potential ethical and legal restrictions that are inherent in terms of accessing data. The consensus is that this is negatively impacting many early stage firms – particularly those with a financial 'burn rate' to consider whilst striving to develop products and bring them to market.

##### An increased talent pool – but diverse business requirements:

Some safety tech providers have noted that there is an increased talent pool to draw from as a result of the restructuring of several big tech firms. While some firms have noted that this may support recruitment, others have noted that the sector still faces the technical skill gaps typical across all tech sectors. Several consultees have also noted that while there is an increased talent pool, the cost of product development and the challenging investment landscape has meant that firms are reassessing where and how their resources should be allocated. Several firms have suggested that they have opted to recruit sales staff in place of technical staff for two reasons: i) to identify and to market their product to the firm's identified customer base in order to increase revenue and support commercialisation, and ii) in lieu of having the resources available to employ technical staff.

<sup>6</sup> eSafety Commissioner (2022) Basic Online Safety Expectations Summary of industry responses to the first mandatory transparency notices. Available at: <https://www.esafety.gov.au/sites/default/files/2022-12/BOSE%20transparency%20report%20Dec%202022.pdf>



**Market preference to minimise toxicity and abuse from platforms, and to disassociate platforms from harmful or damaging material – but only when the solution does not risk alienation of the platform users:** Consultations suggest that overall there is a maturing sector with increased application in diverse markets. For example, there are a number of firms now offering moderation / monitoring services which extend beyond identifying and removing harmful or illegal content. These firms also provide community management services which support positive online interactions with the aim of improving the overall perception of a brand and the level of customer engagement online. Consultations also suggest, however, that there is potentially less demand from platforms when it comes to other applications of safety tech, such as the use of safety tech to remove potentially harmful, but not illegal, misinformation. Consultees suggest that this type of intervention may be viewed by some platform users as politically motivated, or a form of censorship. This can have negative implications on how users view and engage with a platform, and is a potential reason as to why some platforms limit the application of safety tech in this area.

**Enhanced legislative and regulatory considerations, particularly in tackling illegal and harmful content, and an emergent effort to introduce international standards:** As noted, previous and upcoming national legislation is playing a significant role in increasing the demand for solutions provided by the safety tech sector, and has supported the efforts of UK firms to export to foreign markets – particularly those markets with established and well defined legislation. Additional initiatives such as the Global Coalition for Digital Safety also increase awareness around online harms through a multistakeholder approach with ambitions to accelerate public-private cooperation to tackle harmful content and conduct online. While the current regulatory

landscape reflects a positive direction of travel, consultees suggest that the pace at which new regulation is implemented in different markets will have significant impacts on the developing sector.

**A strong export market that reflects the high demand for UK safety tech solutions globally – but which also signals potential barriers faced by the sector domestically:** UK safety tech firms have a strong international presence, supporting clients in North America, the European Union, Australia and further afield. Consultees have noted that in some ways sales in export markets are driven by the already established online safety legislation in different regions (e.g. Digital Service Act across the EU, the Network Enforcement Act in Germany, the Online Safety Act in Australia, and the Age Appropriate Design Code Act in California) while also noting that passage of the Online Safety Bill will further support the domestic market in the UK.

**Increased application of generative AI, presents challenges and opportunities to firms operating in the safety tech sector:** Building on the consensus identified in the 2020 safety tech report, content is being generated at a volume that cannot currently be moderated solely by humans. This is a trend that is likely to continue with increased application of generative AI. While new technologies such as OpenAI's ChatGPT are likely to increase efficiency and improve the safety tech market offering, it is also likely that this technology will introduce new challenges to the sector. This could include, for example, increasing instances of synthetic data which can have implications for companies in how they respond to harmful content.

## 5. Investment & Funding Landscape



### KEY FINDINGS:

- The tracked safety tech sector companies have raised £296m in external investment between 2016 and 2022.
- 2022 was a strong year for safety tech, with £64m raised across seventeen deals.

### 5.1 INTRODUCTION

This section sets out an overview of the investment landscape for the firms identified within this sectoral analysis, using the Beauhurst platform as an evidence source.

Beauhurst ([www.beauhurst.com](http://www.beauhurst.com)) tracks announced and private investments, along with

the performance of high-growth companies in the UK. It also monitors UK business participation within well-known business accelerator and incubator initiatives, and tracks where businesses have secured funding from public bodies such as Innovate UK.

### 'SIGNIFICANT MERGER AND ACQUISITION ACTIVITY

- Outside of the Beauhurst platform, we also track M&A activity. We have identified eight M&A deals; and whilst these values are typically undisclosed, overall, these are likely to be worth hundreds of millions in 2021 to 2022 – signalling a significant year for exits and acquisition activity e.g.
  - Crisp, acquired by Kroll
  - eSafe Global, acquired by Smoothwall, acquired by Family Zone
  - SuperAwesome, acquired by Epic Games
  - Factmata, acquired by Cision
  - Atomwide by AdEPT
  - SpiritAI by Twitch (Amazon)
  - Cubica by Chemring / Roke

Please note that while the analysis in this section covers investment raised in 2022, this is typically reflective of the retrospective efforts of safety tech firms to raise investment. While investment figures for 2022 are consistent with that of the previous year, consultations suggest that the investment landscape is challenging both for safety tech providers, and more generally. Consultees have highlighted several sector specific factors

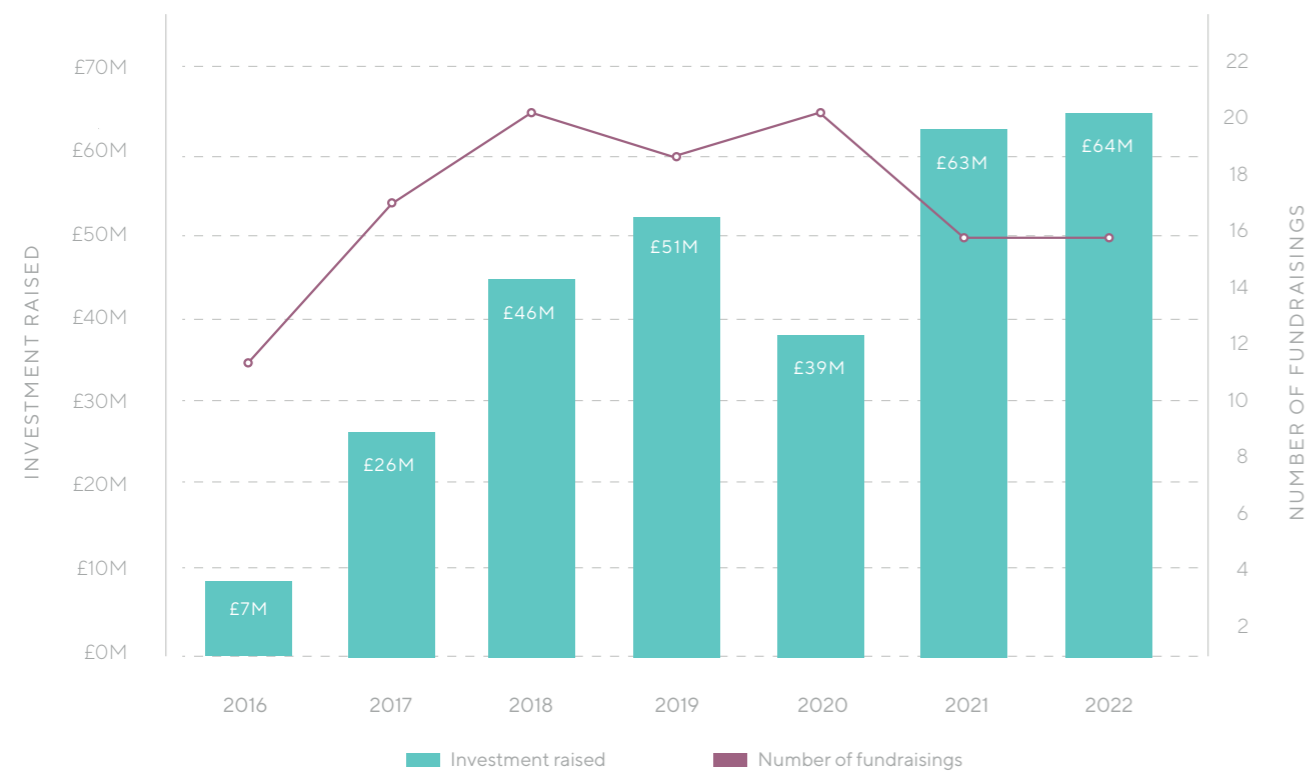
influencing investment. These include investor awareness of the sector, ability for firms to identify the right product to market fit, the policy landscape, and the infrastructure available to support the sector in raising investment (e.g., business support and accelerators relevant to safety tech firms).

### 5.2 INVESTMENT ACTIVITY TO DATE

Within the last five years, the volume and value of external investment within safety tech companies has grown significantly. In 2015, the safety tech sector raised £6m in external investment across ten deals. By 2022, this has increased tenfold to £64m across sixteen deals, reflecting the increased scale and maturity of companies within the sector as it has developed.

Previous iterations of the safety tech sectoral analysis have identified a number of high-growth success stories which reflect a growing understanding of the need for safety tech solutions. Examples of significant investments in 2022 include Faculty (£30m), Logically (£18m) and Pimloc (£5.5m).

FIGURE 5.1 ANNUAL INVESTMENT INTO THE SAFETY TECH SECTOR



Source: Beauhurst

### MERGER AND ACQUISITION ACTIVITY

Figure 5.1 presents an overview of investment activity. However, it is important to acknowledge the recent mergers and acquisitions within the safety tech sector. These include high profile M&A activity for undisclosed sums that centred on safety tech firms such as SuperAwesome (acquired by Epic Games), Smoothwall (acquired by Family Zone), and Crisp (Kroll). While figures are undisclosed, it is assumed that these deals were of considerable value, highlighting the acknowledged value of safety tech solutions when the product to market fit is right. Kroll for example, are likely to incorporate Crisp’s services into their risk assessment capabilities, whereas Epic Games will benefit from SuperAwesome’s capabilities in age assurance and age-appropriate data management.

### 5.3 INVESTMENT ANALYSIS

The following subsections set out an overview of safety tech investment by stage of evolution (maturity), taxonomy classification, and location.

<p><b>SEED</b></p>	<p>A young company with a small team, low valuation and funding received (low for its sector), uncertain product-market fit or just getting started with the process of getting regulatory approval. Funding likely to come from grant-awarding bodies, equity crowdfunding and business angels.</p>
<p><b>VENTURE</b></p>	<p>A company that has been around for a few years, has either got significant traction, technology or regulatory approval progression and funding received and valuation both in the millions. Funding likely to come from venture capital firms.</p>
<p><b>GROWTH</b></p>	<p>Company that has been around for 5+ years, has multiple offices or branches (often across the world), has either got substantial revenues, some profit, highly valuable technology or secured regulatory approval significant traction, technology or regulatory approval progression, funding received and valuation both in the millions. Funding likely to come from venture capital firms, corporates, asset management firms, mezzanine lenders.</p>

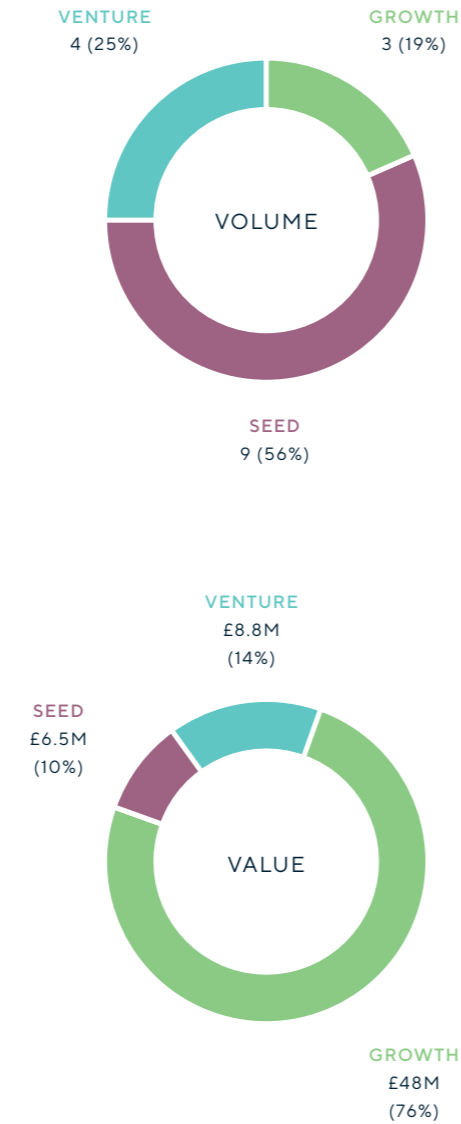
Source: Beauhurst definition

### Investment by Stage of Evolution

The Beauhurst investment platform suggests that since 2015 just under half (46%) of all investment was raised by firms at the Seed stage. A further 43% was raised by firms at the Venture stage, and just 11% of fundraising occurred for firms at the Growth stage. This may reflect the exit-nature of the sector (examples are outlined above and include, e.g., SuperAwesome etc), with many of the larger safety tech providers recently merged or acquired by multinational organisations.

Analysis of investment raised in 2022 suggests a relatively larger proportion of Growth stage firms raising most of the investment (19% of firms, 76% of investment). The analysis for 2022 is outlined in Figure 5:2 which also outlines number of investments and value by Beauhurst investment stage.

**FIGURE 5:2 NUMBER OF INVESTMENTS AND VALUE OF INVESTMENT BY STAGE OF EVOLUTION (2022)**



Source: Beauhurst

### Investment by Region

The following diagram sets out an overview of investment (value) within dedicated safety tech providers for 2022 by region. This demonstrates that London was the most active region for investment (reflecting 56% of total investment made). Yorkshire and the Humber also performed strongly with 29% of total investment raised.

**FIGURE 5:3 INVESTMENT BY REGION (2022)**



Source: Beauhurst

The remaining investment was distributed across the South East, Scotland, and North West (15% of investment raised).

Investment by company offering

FOR THE 15 FIRMS THAT SECURED INVESTMENT IN 2022, THE ANALYSIS SUGGESTS THAT:

- £38m has been invested in firms that provide solutions that identify and remove illegal content, or that can be used to support law enforcement. This includes firms such as Faculty, Raven Science, Cyacomb, Securium and Pimloc.
- £8.1m has been invested in firms that provide solutions that support content moderation and brand management. This includes firms such as Arwen AI, Checkstep, and ContextAI.
- £18m has been invested in Logically, a firm focused on tackling disinformation online.
- £1.5m has been invested in firms that provide solutions that support age-orientated online safety. This includes firms such as GoBubble, Azoomee, Verifymyage and SafetoNet.

Please note that the classification of each of the safety tech firms listed above is indicative, with many of the firms offering services in more than one area, e.g., Cyacomb is noted as providing services to tackle illegal content, but can also be included in content moderation.

5.4. GRANTS AND SUPPORT

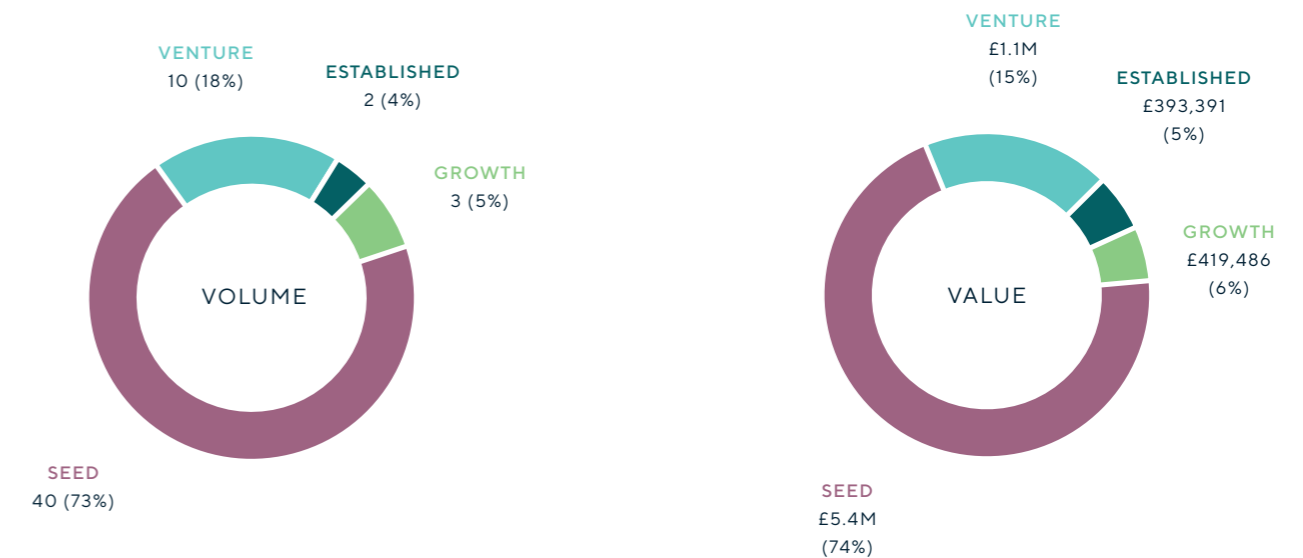
Beauhurst has also been used to identify where tracked companies have been in receipt of grants from public bodies. Please note that this analysis reflects only grants received by firms tracked on the platform, and is therefore unlikely to present a full view of the sector, instead offering an indicative view only.

We have identified 55 grants received by 24 tracked safety tech providers since 2015. The

value of grants range from c. £1,000 to £475,000, with the median value of grants of c. £100,000.

In total, c.£7.4m worth of funding was made available through grants. The Figure 5.4 demonstrates how the majority of funding was awarded to firms at the seed stage, which is also consistent with the total number of grants.

FIGURE 5:4 FUNDING AWARDED, AND NUMBER OF GRANTS AWARDED BY STAGE OF EVOLUTION



Source : Beauhurst

Innovate UK KTN was the main provider of grants to the safety tech sector, with total value detailed below alongside the names of other identified grant programmes:

TABLE 5:1 GRANT VALUE BY FUNDER

GRANT PROVIDER	AMOUNT AWARDED	PERCENTAGE OF TOTAL
Innovate UK KTN	£5.4M	74%
Defence and Security Accelerator (DASA)	£1.1M	15%
SMART – Innovation funding for SME prototype development	£220K	3%
SMART Scotland: Feasibility project studies	£200K	3%
SMART – Innovation funding for SMEs (Proof of concept grant)	£99K	1%
Other	£252K	3%
<b>Total</b>	<b>£7.4M</b>	<b>100%</b>

Source : Beauhurst

Further review of Innovate UK KTN grants awarded to safety tech providers suggests that, between 2015 – 2022, grants were typically awarded across nine types of research areas.

#### THIS INCLUDES GRANTS AWARDED FOR PROJECTS THAT FOCUS ON:

- Digital Forensics (c. £1m, 14% of funding awarded)
- Ethics and Explainable AI research (c. £855k, 12%)
- Computer Vision and Image Analysis (c. £840k, 11%)
- Content Moderation and Brand Safety (£693k, 9%)
- Disinformation (£514k, 7%)
- Mobile Devices and Safety (c. £484k, 7%)
- Regulatory Compliance in Advertising (c. £475k, 6%)
- Protecting children from image-based abuse (c. £398k, 5%)
- Detection and prevention of fraud (£260k)
- Other<sup>7</sup> (c. £1.85m, 25%)

It is important to consider grant funding in the context of company overheads and project costs, which are significant for the sector. This suggests that grant funding may be more appropriate for firms with the capacity to match the funding provided.



“Anything [grant] less than £100k is less than two weeks of runway”

- CEO AT A MEDIUM SAFETY TECH COMPANY



Despite this, it is worth noting that the twenty-four firms that have received c.£7m in grants have subsequently raised £38m in external investment in 2022 alone.

This reflects the importance of continued grant and challenge fund support, as such grants can help safety tech organisations to facilitate network development, pitching skills, and secure external investment. It may however be valuable to consider the role of larger grants to support non-micro firms as they continue to scale.

<sup>7</sup> This includes where safety tech providers have received grants or research funding for other or adjacent areas such as physical safety, health, or use of AI / ML technologies in other sectors.

#### 5.5. CONSULTEE VIEWS ON THE INVESTMENT LANDSCAPE

During the safety tech one-to-one consultations, we asked businesses for their views on investment. Consultees suggest that:

**Although investment has increased year-on-year from the original safety tech study, it is perceived that it is harder for safety tech firms to raise investment when compared to traditional technology firms:** Analysis of safety tech investment data suggests that 60 firms have raised investment. Consultees suggest that this investment is likely due to the ability of some safety tech providers to establish a strong narrative and use case for their product, alongside an increased awareness among investors of the Trust and Safety landscape. With that being said there is still a lot more to be done to encourage investment in safety tech. There are a number of factors identified by consultees that influence the extent to which investors are likely to invest in safety tech (outlined in subsequent points below).

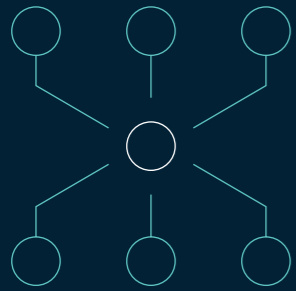
**Unlike traditional tech sectors, safety tech lacks the infrastructure to support investment raising, and consultees suggest more can be done to encourage investment:** Consultees that are currently raising investment in the UK suggest that unlike other areas of tech there is a limited roadmap to support safety tech investment. They note how other sectors have better infrastructure which includes, for example; access to sector-specific accelerators and engagement events. This in turn can make it more difficult for safety tech providers to raise investment. Consultees also suggest that investors have greater interest in core tech sectors (e.g., cyber security) and businesses with a well established commercial model, e.g., a subscription-based approach. While consultees suggest that these barriers are in part due to the nascent nature of the sector, they have also noted that the current level of government support for the sector needs to be strengthened.

**Investors will be more likely to engage with the sector once the Online Safety Bill reaches Royal Assent:** Consultees note that the passage of the Online Safety Bill will support investment in the UK. In some sub-sectors, investors may be less likely to invest until they are better informed of what measures will be in place to enforce the Online Safety Bill, and how this will impact industry.

**Uncertainty around Big Tech firms has an influence on investor confidence:** Consultees have noted how many Big Tech providers are currently in a transition period and that this has resulted in changes to their finance models, governance structures and focus as an organisation. Consultees have noted that this level of uncertainty influences the extent to which investors view some safety tech offerings as suitable for investment.

**Investors are being more cautious with their funds – but they still have the money (‘dry powder’) to invest:** Consultees have noted that investment is down across sectors and it has been suggested that this is a result of investors becoming increasingly selective over which firms they invest in as opposed to what funding is available.

## 6. Growing the safety tech sector



### 6.1 INTRODUCTION

This section explores how public buyers can help to promote and develop safety tech solutions, and provides a snapshot of the UK procurement landscape.

#### KEY INSIGHTS SUGGEST THAT:

- Ofcom have taken a number of steps as it prepares for its role as online harm regulator in the UK while also showing demonstrable enforcement in the area of age assurance.
- Ofcom is also supporting World Economic Forum efforts to develop a principle-based approach to online safety, demonstrating the global direction of travel and standardisation within the trust and safety landscape.
- There have been a number of challenge funds in recent years, and while consultees have highlighted the value of this support, they have also noted that the current ambiguity around future legislation and enforcement has resulted in an increased effort on global markets and diversification of offering to areas outside of safety tech.
- Since 2015, procurement data suggests that the UK public sector has commissioned a total of 326 contracts in relation to ‘trust and safety’ and online safety – with a contract value of £76m. Key buyers include DSIT, Ofcom, Home Office and the Department for Education, relating to both the procurement of services, products, and commissioning of research.

### 6.2. THE UK APPROACH TO ONLINE SAFETY

There are several ongoing initiatives that highlight the scale of ambition for online harms regulation.

*International Human Rights for the Digital Context.*<sup>11</sup>

As noted, the UK’s Online Safety Bill is currently at the committee stage in the House of Lords. In preparation for the bill reaching Royal Assent, Ofcom are preparing for their role as the UK’s online safety regulator and as of early 2023 have put out a call for evidence<sup>8</sup> on the risks of harms to children online and how they can be mitigated (open January to March 2023). Insight from this call for evidence will inform Ofcom’s draft code of practice and guidance.

The Information Commissioner’s Office (ICO) is also involved in a number of initiatives relevant to the safety tech sector. It will, for example, ensure digital accountability through its Age-appropriate Design Code which sets fifteen standards that online services have to follow to ensure compliance to children’s data protection laws.<sup>12</sup> The ICO sets out ambitions to monitor this code through a series of proactive audits, using various powers to take action for a breach of GDPR by issuing, e.g., warnings, reprimands, stop-now orders and fines.

Ofcom have also launched an enforcement programme (open January 2023)<sup>9</sup> into age assurance measures of UK adult sites. This enforcement will be in place under existing powers to regulate video-sharing platforms in the UK and follows Ofcom’s report published in October 2022, which highlights how many small UK-based adult sites may not have robust measures in place to prevent children accessing adult content. This enforcement is occurring in place with wider work at Ofcom to identify other organisations in the video-sharing platform sector that fall under the remit of Ofcom enforcement.

The data protection laws, regulated by the ICO, complement the online safety regime by requiring organisations to use, share and innovate with personal data responsibly and holding them accountable for their practices. In addition to offering a suite of innovation services, the ICO also monitors conformance with its Children’s code, which explains how online services likely to be accessed by children in the UK can appropriately safeguard children’s personal data.

Ofcom is also engaging in multi-stakeholder global efforts to build shared online safety tools through its membership of the World Economic Forum’s Global Coalition for Digital Safety<sup>10</sup> which is currently developing a principle-based approach to advancing digital safety in a rights-respecting way. Most recently, in January 2023, the coalition published its White Paper titled *Global Principles on Digital Safety: Translating*

Government is also facilitating export activity. For example, the Department for International Trade (DIT) delivered a UK-Singapore Digital Economy Agreement (DEA) Trade Mission in September 2022.<sup>13</sup> This followed a commitment within the DEA, for the UK and Singapore to collaborate in Safety and Security Online, recognising that safe and secure online environments support the digital economy.

<sup>8</sup> Ofcom (2023) Call for evidence: Second phase of online safety regulation. Available at: <https://www.ofcom.org.uk/consultations-and-statements/category-1/call-for-evidence-second-phase-of-online-safety-regulation>

<sup>9</sup> Ofcom (2023) Enforcement programme into age assurance measures on UK-established, adult video-sharing platforms [https://www.ofcom.org.uk/about-ofcom/latest/bulletins/enforcement-bulletin/open-cases/cw\\_01266](https://www.ofcom.org.uk/about-ofcom/latest/bulletins/enforcement-bulletin/open-cases/cw_01266)

<sup>10</sup> World Economic Forum (2023) Global Coalition for Digital Safety. Available at: <https://initiatives.weforum.org/global-coalition-for-digital-safety/home>

<sup>11</sup> World Economic Forum (2023) Global Principles on Digital Safety: Translating International Human Rights for the Digital Context. Available at: <https://www.weforum.org/whitepapers/global-principles-on-digital-safety-translating-international-human-rights-for-the-digital-context>

<sup>12</sup> Information Commissioner’s Office (2023) Introduction to the Age appropriate design code. Available at: <https://ico.org.uk/for-organisations/guide-to-data-protection/ico-codes-of-practice/age-appropriate-design-code/>

<sup>13</sup> Safety Tech Innovation Network (2023) Online Safety Tech: 2022 Recap. Available at: <https://www.safetynetwork.org.uk/online-safety-tech-2022-recap/>

### 6.3 SUPPORTING THE SAFETY TECH SECTOR

Since the original sectoral study was published in 2020, the infrastructure available to support the safety tech sector has grown. This includes the establishment of the Online Safety Tech Industry Association,<sup>14</sup> which is the UK body for organisations operating in safety tech; and the international Safety Tech Innovation Network,<sup>15</sup> which is funded by DSIT and delivered by Innovate UK KTN.<sup>16</sup>

There have also been several initiatives in recent years to support firms operating in the safety tech sector such as DSIT's Online Safety Data Initiative. This initiative was designed to test methodologies to facilitate better access to higher quality data to support the development of technology to identify and remove harmful and illegal content from the internet. As part of the initiative over seventy interviews with sector stakeholders were conducted and five macro problems facing the sector were identified alongside twenty-three potential solutions.<sup>17</sup>

The Safety Tech Challenge Fund<sup>18</sup> also supported five projects designed to improve the response to child sexual exploitation and abuse online combining innovative approaches developed by safety tech companies, academics and third sector organisations. Each funded company received £85,000 to develop their solutions, enhancing government and safety tech collaboration and addressing the role of responsible innovation in positioning children's safety at the centre of technology design and deployment.

<sup>14</sup>Online Safety Tech Industrial Association (2023). Available at: <https://ostia.org.uk/>

<sup>15</sup>Safety Tech Innovation Network (2023). Available at: <https://www.safetytechnetwork.org.uk/about/the-safety-tech-innovation-network/>

<sup>16</sup>Innovate UK KTN (2023). Available at: <https://iuk.ktn-uk.org/>

<sup>17</sup> Department for Digital, Culture, Media & Sport (2021) A longlist of data access solutions for safety tech developers. Available at: <https://onlinesafetydata.blog.gov.uk/2021/06/02/a-longlist-of-data-access-solutions-for-safety-tech-developers/>

<sup>18</sup> Safety Tech Innovation Network (2021) Government announces the winners of the Safety Tech Challenge Fund. Available at: <https://www.safetytechnetwork.org.uk/government-announces-the-winners-of-the-safety-tech-challenge-fund/>

<sup>19</sup> Safety Tech Innovation Network (2023) Safety Tech Challenge: link sharing of Child Sexual Abuse Material. Available at: <https://www.safetytechnetwork.org.uk/safety-tech-challenge-link-sharing-of-child-sexual-abuse-material/>

More recently, DSIT has partnered with Home Office, GCHQ and Innovate UK KTN to invest £700,000 in innovation projects that enhance UK capabilities in protecting children online,<sup>19</sup> focusing on content moderation regarding the sharing of links to child sexual abuse material, detecting and disrupting the modification of links and locations facilitating CSAM access, including gateway and torrent sites.

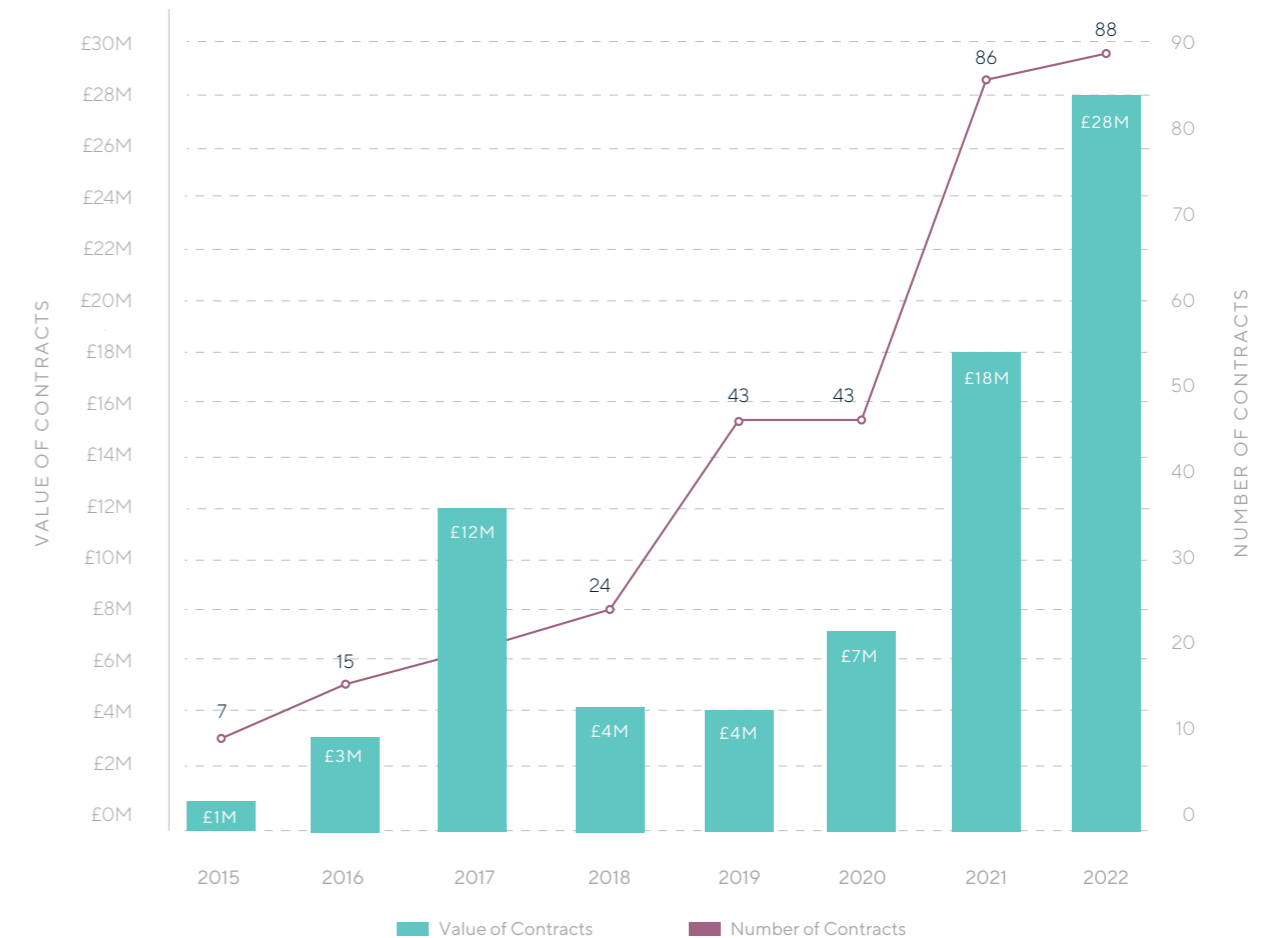
Support for early-stage firms was also made available via the Safety Tech Academy, a service that targets a cohort of early-stage businesses to test the different ways in which they can be facilitated to create good products, sustainable business, and meaningful impact.

### 6.4 TRUST AND SAFETY PROCUREMENT IN THE UK

A key-word search of trust and safety language on the Tussell procurement platform has been used to provide an indicative view of public sector demand for safety tech products and services across government, alongside commissioned research projects.

Analysis suggests that there has been an increase in contracts year on year that use terminology associated with the trust and safety ecosystem. Figure 6.1 suggests a total of 326 contracts valued at £76m between 2015 and 2022.

FIGURE 6.1 SAFETY TECH CONTRACTS BY START DATE - IDENTIFIED WITH KEY WORD SEARCH

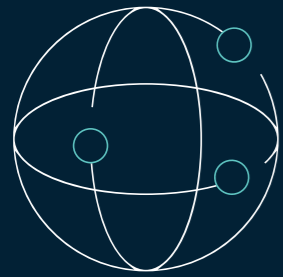


#### KEY BUYERS IN THE MARKET INCLUDE:

- DCMS, commissioning twenty-seven contracts relating to, e.g., research and mapping, training, and sector support, with values ranging from £10k to £1.3m.
- Ofcom, commissioning seventeen contracts relating to, e.g., research and mapping, and training and sector support, with values ranging from £25k to £1.7m.
- Home Office, commissioning fourteen contracts relating to, e.g., research and mapping, and technical services, with values ranging from £50k to £6m.
- Department for Education, commissioning fourteen contracts relating to, e.g., technical services, with values ranging from £1k to £2.8m.



# 7. Export and International Activity



## 7.1. INTRODUCTION

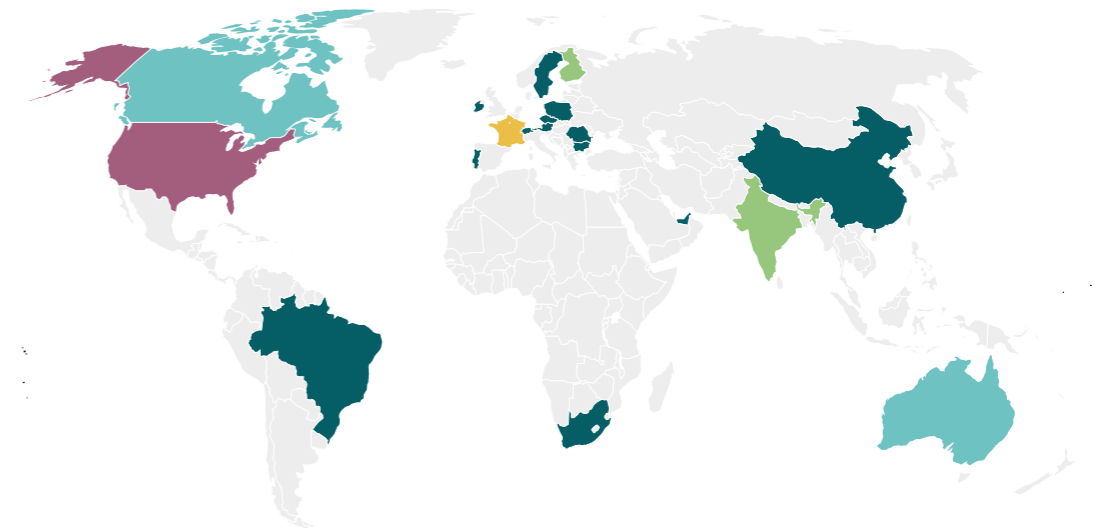
The following section explores the performance of the UK safety tech sector when compared to other countries and sectors. This continues to be used as an illustration of the potential for future growth of the sector.

## 7.2. AN EXPORT-DRIVEN DOMESTIC MARKET

Within this research, we sought to identify companies that demonstrated an export presence (e.g., through sales, or office location). We estimate that over half (54%, 60 companies) of dedicated UK-based safety tech companies have an international presence. Given that an estimated 9.8% of all UK SMEs export,<sup>20</sup> this demonstrates the comparable significance of exporting for UK safety tech firms. The export sector is even more significant for larger safety tech firms: of the largest 20 UK headquartered firms by revenue, ninety percent (18 firms) have demonstrated some form of international or export activity.

The research team conducted a review of UK-headquartered safety tech providers, identifying the countries in which they have an office location. This is outlined in the Figure below and suggests a strong presence in the United States (with 17 UK-headquartered firms setting up an office in the country). Other countries that have more than a couple of firms setting up a location include Germany, Canada and Australia. A presence in these countries highlights how many UK safety tech firms are establishing offices internationally in countries with online safety legislation.

FIGURE 7:1 UK-BASED FIRMS WITH A PRESENCE IN OTHER COUNTRIES



17	4	3	2	1
USA	Germany	Australia Canada	Denmark Luxembourg Estonia Finland India Singapore	Belgium Brazil Bulgaria China France Ireland
				Malta Netherlands New Zealand Philippines Portugal Romania
				South Africa Sweden United Arab Emirates

<sup>20</sup> British Business Bank (2020) UK SME exporting trends: finance and trade. Available at: <https://www.british-business-bank.co.uk/wp-content/uploads/2020/02/UK-SME-Exporting-FINAL-VERSION.pdf>

### 7.3. CONSULTEE VIEWS ON SAFETY TECH MARKETS

Both UK-headquartered and international consultees provided feedback on both the domestic and key export markets serviced by safety tech firms. Key insights are outlined below:

#### The United Kingdom

From an international perspective the UK is seen as an attractive destination, and several consultees have noted the strong reputation that UK safety tech providers have in the global marketplace. The various government initiatives implemented to date (see pg. 2), and OSTIA have also been praised, alongside the skill level available in UK regions, which is viewed as talented and competitive.



“The UK leads the world in Age Assurance, Digital ID, RegTech... It is seen as a centre for excellence for standards development and privacy... It is in a prime position to grow and develop that [in relation to safety tech]”

- CEO AT A SAFETY TECH COMPANY

“What’s interesting is that despite the US market being bigger by investment and revenue... when people reach out they are looking to the UK, or in some cases the EU... The UK has a first mover advantage. The UK is still leading the way slightly in application [of safety technologies].”

- CEO AT A SAFETY TECH COMPANY



#### United States

Several consultees have noted that they have or intend to set up a subsidiary in the US market. This is due primarily to the high proportion of business that they receive from this market. Consultees have also noted the high levels of investment available for US-based safety tech providers, while also praising the developing research and policy base in the region; both of which were highlighted as a sign of a growing market.

In 2022, VC firm Paladin Capital<sup>21</sup> published ‘Towards a Safer Nation: The United States Safety Tech Market’ stating “now is the time to intensify investing in safety tech solutions for human-level protection and security in cyberspace. We see safety tech as an innovative ecosystem, an emerging global industry to align closely with Paladin’s mission, investment thesis, and expertise.”

#### Australia

Consultees suggest that the Australian Government has demonstrated its commitment to combating harm online through action. This in turn has led several safety tech providers to offer services in this market. When compared to other geographical regions, stakeholders have noted a higher level of awareness from buyers which has facilitated entry into the market.



“Australia is advanced in this space... Australia has done regulation well.”

- CHAIRPERSON AT A SAFETY TECH COMPANY

“The Australian Government has a high bar making it one of the easiest points of entry to a market.”

- CEO AT A SAFETY TECH COMPANY



Consultees have also suggested that the different legal systems across EU member states and the UK have resulted in wider principle-based regulatory approaches to online safety, which place emphasis on systems and processes.



“Europe is more mature in considering the implications within the areas in which safety tech can be deployed.”

- CEO AT A SAFETY TECH COMPANY



#### The European Union

Consultees have noted expansions into Germany and the Netherlands, suggesting that there is strong commitment within both countries to apply safety tech. Consultees have also suggested that through discussions of online safety more generally in the EU, potential clients have greater awareness of the need for intervention that underpins safety tech interventions.

<sup>21</sup> Research undertaken by Prof. Mary Aiken and Perspective Economics.

## 8. Key Findings

### Updating the 'safety tech' definition

Safety tech providers develop technology or solutions to facilitate safer online experiences, and protect users from harmful content, contact or conduct.

For example, these technologies:

- Detect and remove known illegal imagery, relating to child sexual abuse or terrorism;
- Help moderators detect and address harmful or illegal user interactions, such as cyberbullying or grooming;
- Help platforms detect and understand the use of platforms by children;
- Work at device level to limit exposure to harmful material; and
- Identify potential sources of disinformation and promote verified facts.

Since the original study there have been two updates to the safety tech taxonomy. This includes an update in scope that includes technologies that:

- Supports the identification and takedown of fraudulent advertising;
- Supports individual privacy.

### A view of the UK safety tech market

- **A growing market** – there are 133 dedicated safety tech businesses within the UK, generating £456m in annual revenues in 2022.
- **Maturing investment landscape** – a record £64m was raised in 2022, which highlights that investors remain attracted by the sector despite wider investment trends.
- **Employment** – safety tech businesses hire over 3,300 full-time equivalent (FTE) staff in the UK.
- **A strong export sector** – over half (54%) of UK-headquartered safety tech companies have an identifiable international presence.

### Towards a billion-pound sector

We have detected strong ongoing growth trends within the sector.

- **The sector could be worth over a billion pounds, based on current trends** – if current growth trends of 26% per annum continue, the sector could generate £1bn in annual revenues by c.2026. While this suggests a strengthened sector, there are several factors underpinning growth trends:
- **Continued support for exporting companies** – UK safety tech providers are established in international markets and the services they provide are considered high-quality. It is important that the UK firms that export receive continued support to maintain their position as world leading.
- **A move towards regulation** – The application of safety tech in online spaces will be driven by emerging policy and the enforcement process put in place both in the UK and across global regions. This includes the Online Safety Bill which is currently passing through parliament. Consultees note the importance of the bill, and the subsequent enforcement and the use of the bill as a mechanism to reduce online harms and as a lever to grow the sector domestically.



## 9. Appendices

### APPENDIX A

## Methodology

This section sets out our research methodology for identifying safety tech businesses, and capturing their respective economic contribution. This methodology is consistent with the previous 2020, 2021, and 2022 reports.

#### STAGE 1: DATA REVIEW

The research team recognise that safety tech is a challenging sector to define, and will contain businesses which overlap a number of other sub-domains and classifications.

To support the development of a sector definition, the research team used the initial definition and sector taxonomy developed through previous studies.

This was subsequently subject to minor revisions, and tested through stakeholder workshops to inform a 2023 definition and market taxonomy.

This helped to:

- Consider any new language or business models used by safety tech providers (e.g. such as public safety, content provenance, brand safety)
- Identify any companies not previously identified, or recent start-ups in safety tech
- Identify where any platforms are integrating trust and safety solutions, which can have market implications

The project team also reviewed all of the recent 2022 list of dedicated safety tech firms, excluding any that have ceased trading, as well as the list of c. 600 global safety tech businesses in order to explore any international firms registering in the UK. The purpose of this step was to identify any new keywords, companies, or organisations relevant to the safety tech domain, prior to the revised taxonomy and firm identification process. At this initial stage, the project team identified as many potential input sources or pre-existing lists of firms classified as relevant to a number of agreed high-level terms e.g. content moderation, digital forensics, VAWG, etc, as well as 'new' areas set out within DSIT's ITT such as fraudulent advertising and public safety. This allowed the project team to build upon the previous year's list, and to include any additional providers that fit into the revised taxonomy.

Perspective Economics holds a number of datasets and licence agreements to help identify relevant businesses. Analysis was undertaken with Companies House data, Beauhurst, Tussell, web data, and FDI Markets to help identify firms for potential inclusion in the sectoral modelling.

The long-list was subsequently reviewed to provide:

- A working list of initial keywords to help better classify safety tech firms, and enable subsequent classification and taxonomy updates.
- Markers for each of the companies identified to date to highlight broader validation for inclusion within the final safety tech sector list. For example, if a firm has a clear description where they are developing safety tech products, has a team of engineers and data scientists, and has secured external funding or validation – this would be a strong candidate for inclusion. If a firm is only identified in a small number of sources, and / or has a more limited aligned definition – this would be subject to a manual review.

## STAGE 2: TAXONOMY DEVELOPMENT

In 2019, Perspective Economics designed the first safety tech sector taxonomy, in collaboration with DCMS and industry stakeholders. This recognised a need to set out the core products and services offered, as well as the technology, harms addressed, approach, and benefit to end users.

In 2023, Perspective Economics engaged with OSTIA and DSIT to provide an update to the existing taxonomy. Please note that when

updating the taxonomy, the project team sought to ensure that DSIT should be able to track the continued growth of the sector over time, and therefore any updates to the original taxonomy have been iterative.

Minor updates to the taxonomy are set out in the report, and include consideration of the evolving policy landscape, as well as market focus on areas such as brand safety, public safety, content, cyber-physical safety, and fostering positive user interactions. A full overview of steps taken to update the safety tech taxonomy is outlined in Appendix B.

## STAGE 3: IDENTIFICATION OF FIRMS AND INITIAL MODELLING

Using the updated taxonomy and keywords, the project team searched for additional firms to include within this study. All company data was enhanced using a blend of proprietary sources (incl. Beauhurst, Lightcast, FDI Markets, web data (using identification algorithms), and Companies House). Sector modelling included an assessment of company accounts, investment data, and estimated team sizes to identify an initial assessment of how the safety tech sector has grown, and helped to identify any gaps for subsequent primary research (consultations).

## STAGE 4: PRIMARY RESEARCH

Perspective Economics and PUBLIC spoke with over 30 consultees. Consultations included industry, investors, and wider stakeholders in the UK and internationally. Discussions consisted of:

- A full introduction, and background to the study, including the importance of the findings for the safety tech sector and reassurance / link to the project privacy policy
- Discussion of the organisation's engagement with online safety / safety tech / trust and safety
- Exploration of relevant themes (growth of the sector, challenges for the adoption of safety tech, where intervention or support might be most appropriate, drivers for growth, potential impact of regulation on the safety tech industry etc)
- Key barriers to business development and growth.

## APPENDIX B

## Taxonomy Update

**Definition context and considerations:**

The Department for Digital, Culture, Media and Sport (DCMS) published the Safer Technology Safer Users report in May 2020. This research piece was conducted by Perspective Economics with advisory input from Professor Mary Aiken and Professor Julia Davidson and provides an outline of the online safety technology or safety tech sector profile in the UK.

A number of steps were taken within this original study to define the scope of the safety tech sector. Factors considered include:

- **The technical response utilised to reduce harm**, such as detection and removal of illegal and harmful content, age-appropriate design or age-based safeguarding, detection of disinformation, and or content filtering etc)
- **The type of harm involved that solutions seek to address**, (such as illegal video and image-based content, hate speech, child exploitation, sexual material, personal harm, violence, bullying and harassment etc.)
- **The type and extent of the risk involved:** for example, identifying solutions that can detect and notify platforms and law enforcement about high risk behaviours online.
- **Those at most risk of harm**, such as children and young people, those vulnerable to grooming or radicalisation, or those who may not be aware they are exposed to harm e.g., disinformation or deep fakes etc.); and

- **The technologies and approaches deployed to counter the harm** (for example, understanding the technical approaches deployed, for example risk detection and response through artificial intelligence (AI) or machine learning (ML) approaches.

For the purposes of this research, we retain the following definition of the safety tech sector:

*Any organisation involved in developing technology or solutions to facilitate safer online experiences, and to protect users from harmful content, contact or conduct.*

When considering 'online safety' in the broadest sense, the risks can include:

- Content: being exposed to illegal, inappropriate, or harmful material;
- Contact: being subjected to harmful online interaction with other users; and
- Conduct: personal online behaviour that increases the likelihood of, or causes, harm.

As such, this research seeks to identify organisations that provide or implement technical products or solutions that either help to:

- Protect users from social harms when using technology and online platforms or services (typically through filtering or controls, or through detection and removal of potentially harmful content); or
- Provide mechanisms to flag, moderate, or intervene in the event of illegal or harmful incidents when using online platforms or services.

For avoidance of doubt, this research seeks to identify and understand organisations that:

- Help trace, locate and facilitate the removal of illegal content online;
- Work with social media, gaming, and content providers to identify harmful behaviour within their platforms;
- Monitor, detect and share online harm threats with industry and law enforcement in real-time;
- Develop trusted online platforms that are age-appropriate and provide parental reassurance for when children are online;
- Identify and counter fraudulent advertising and scams online;
- Support individuals in maintaining and limiting access to personal data, or respond to incidents of doxxing or revenge porn
- Verify and assure the age of users;

- Actively identify and respond to instances of online harm, bullying, harassment and abuse;
- Filter, block and flag harmful content at a network or device level;
- Detect and disrupt false, misleading, or harmful narratives; and
- Advise and support a community of moderators to identify and remove harmful content.

As reflected in this list, given the scale of online harms that exist, there are a wide range of technical and applied solutions that can help counter these, and our research seeks to identify the scale and breadth of approaches that exist in the market.

**Taxonomy context**

The development of a sector taxonomy which establishes a common definition of the different components of the sector was central to this original research study. The development of the taxonomy was informed by two in person workshop events and over forty semi structured stakeholder interviews. The final output provides a foundational structure on which subsequent updates are based, ultimately supporting DSIT's ability to track sector growth and to guide policy development in the safety tech area.

The initial safety tech sector taxonomy was developed in the original 2020 study and used for two subsequent yearly update reports in 2021 and 2022.

## Updating the UK safety tech taxonomy

The existing UK safety tech taxonomy used by DSIT was reviewed to ensure it reflects changes within the sector, technological innovations, and the changing landscape of online harms. Preliminary updates were made in early January and were conducted by Perspective Economics with support from PUBLIC and Professor Mary Aiken and reviewed internally by DSIT colleagues. A summary of steps taken are outlined below:

### Step 1:

Perspective Economics conducted a refresh of their international list of safety tech providers, conducting analysis of newly identified providers and / or existing providers that have further developed services to identify emergent areas of safety tech.

### Step 2:

Evolving online safety legislation alongside the wider market context of safety tech were considered and factored into design.

### Step 3:

Emerging evidence was refined with DSIT colleagues and subject matter experts at an internal workshop in mid-January

## Updated taxonomy

Please note that any proposed updates to the original taxonomy definitions in the current sections are marked with green text.

## Level one: System-wide level factors

This refers to organisations involved at the highest levels, often working closely with law enforcement, to trace, locate and remove (or help to facilitate the removal) of illegal content online.

These organisations help to identify and tackle some of the internet's most harmful content e.g., child sexual abuse and exploitation, terrorist content. This can be achieved through:

Working closely with law enforcement to assist with investigative capabilities e.g., use of forensic science tools to scan and detect known illegal content using MD5 hashes, [or use of AI and tools to identify patterns<sup>22</sup> of harmful behaviour online;](#)

Maintaining and providing access to technology aimed at preventing the upload, and facilitating the removal of illegal content e.g., the IWF's Hash List (with Microsoft PhotoDNA); and

Combating abuse or threats with automated content analysis and artificial intelligence e.g., automated detection of terrorist content, including previously unseen material.

Please note that the proposed updates at the system level also consider the harms associated with [fraudulent online advertisements<sup>23</sup> and commerce.](#)

## Level two: Platform level factors

This refers to organisations that are involved in making online services safer, typically at the platform level i.e., alongside social media, gaming, and content providers to improve safety and behaviour within their platforms. These have been segmented into the sub-categories, outlined in the subsections below.

### Platform governance

These organisations are focused upon helping providers of online content to govern their offering with respect to illegal content. Whilst there is some overlap with 'System Governance', this is more focused on organisations that help to tackle issues such as:

- Embedding prevention mechanisms e.g., using machine learning to prohibit the production of indecent underage imagery on social media platforms;
- Identifying and blocking harmful images and videos in real-time; and
- Identifying child abuse or grooming in conversations.

### Platform moderation and monitoring

These organisations also help providers of online content to monitor and moderate behaviour and content posted within their platforms. This is typically focused upon reducing harmful content or behaviour, e.g., offensive language, bullying, or toxic content, [fraudulent online advertisements and commerce](#). Services can include:

- Moderation and monitoring of content e.g., pre-moderation or post-moderation of content, undertaken by automated content analysis and / or humans;
- Chat moderation e.g., identifying and removing users subject to language or words used; and
- Behavioural Monitoring e.g., identifying good and bad behaviour, typically using Natural Language Processing within online communities.

<sup>22</sup> These patterns of behaviour may have offline implications e.g., use of technology to identify potential terrorist activity.

<sup>23</sup> Fraudulent advertising is included as an area of harm within the current iteration of the Online Safety Bill. The research team has identified new start-ups and businesses developing products and solutions to help counter fraudulent advertisements or counterfeits such as White Bullet Solutions. These firms are considered in scope of the research; however, we have undertaken an agreed manual review of the population to include firms within this area focused on countering online harms. This does not typically include a wider population of firms that tackle 'fraud' at the broadest level e.g., cyber security firms, payment fraud, KYC / AML checks etc - as these will be covered by other studies / sector populations.

### *Age orientated online safety*

These organisations seek to support online content providers in ensuring that their platforms are either offering:

- Age-appropriate services that increase the privacy for children online (e.g., compliant with GDPR-K, or that the content and access requirements are suitable should the website or app be targeted at under-18s, thereby ensuring ‘safety by design’), or
- Age assurance services (i.e., help companies to validate and confirm that only particular age groups can access particular content).

### **Level three: Endpoint level factors**

This refers to organisations that provide products or services that help to ensure that the device being utilised by the end-user is suitably secure with respect to online safety. This focuses upon online safety solutions (i.e., ensuring that the user’s risks with respect to content, conduct, and contact are reduced). It does not include endpoint protection from viruses, malware, or adware, each of which are covered by ‘cyber security’. User protection at the endpoint level can be segmented into two main categories.

#### *User initiated protection (user, parental and device-based)*

This includes organisations that provide products or services that can be installed on devices to help secure the end-user from online harms (typically a parent or guardian installing on behalf of a child).

The underlying ambition is to create a safer online experience for the user e.g., through safeguarding assistants, oversight of social media content, or through monitoring of a child’s digital or online

behaviour and interaction with other users. Where deployed, these solutions can help to prevent issues relating to sexting, grooming, bullying, harassment, abuse, or aggression. *Solutions may also support users in promoting awareness of personal data rights and / or preventing public access to private information (where consent is not provided) e.g. supporting those affected by intimate image abuse (or ‘revenge porn’).*

#### *Network filtering*

This includes organisations involved in providing products or services that actively filter content (e.g., through white-listing or black-listing, or through actively blocking content perceived to be harmful or illegal). This can often include solutions provided to schools or home users to filter content for users.

### **Level four: Information environment level factors**

This refers to organisations that actively detect and disrupt false, misleading and / or harmful narratives.

#### *Information governance*

This includes tackling misinformation and disinformation through the provision of fact checking and disinformation research and disruption. Organisations within this space seek to ensure citizen information accuracy and facilitate trust in the information environment and wider society.

### **Level five: Other providers**

#### *Online safety professional services*

This includes organisations typically involved in supporting the design, implementation and testing of online safety through the provision of compliance services, research, frameworks and methodologies for auditing, evaluating or mitigating potential harms, and helping to enable the development of safer online communities.

#### *Support*

Further, this analysis has also sought to identify organisations involved in supporting the development and scaling of online safety products and services but do so in an advocacy capacity e.g civil society organisations.







Perspective  
Economics

#SAFETYTECH

**Perspective Economics**

48-60 High Street

Belfast

BT1 2BE

[www.perspectiveeconomics.com](http://www.perspectiveeconomics.com)