

AI Cyber Security Survey: Technical Report

Department for Science, Innovation and Technology

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1 Introduction

Background

The Department for Science, Innovation and Technology (DSIT) commissioned IFF Research to conduct a survey to understand how Artificial Intelligence (AI) is used by businesses in key sectors, and how businesses implement cyber security practices and processes around the AI technology they deploy.

Artificial intelligence is the broader field encompassing knowledge-based systems, data-driven and machine learning-enabled systems, including classic machine learning (supervised learning, unsupervised learning), deep learning, and reinforcement learning, referring to the development of systems that can perform tasks requiring human intelligence. The use of AI is growing. In April 2023, an estimated 16% of all UK businesses had adopted at least one AI technology¹ and with the growth of more accessible and powerful generative AI models, this number is likely to increase significantly. The growing use of AI among businesses presents huge opportunities; however, without appropriate safeguards there are also significant risks. This is particularly the case with cyber security which is an essential precondition for the safety of AI systems. It was in this context that DSIT commissioned IFF Research to carry out primary research among UK businesses.

Research objectives

The core objectives of the research were to understand:

- What types of technology are being used, and for what purpose;
- Businesses' cyber security practices in general terms, and specific to AI;
- Businesses' future plans in relation to AI and cyber security; and
- How these activities and attitudes vary across businesses in different sectors and of different sizes.

This report

This report supplements the main report and provides more detail on research approach including information on cognitive interviewing, pilot fieldwork, sampling, weighting, data analysis and sample outcomes.

¹ <u>Understanding AI uptake and sentiment among people and businesses in the UK - Office for</u> <u>National Statistics (ons.gov.uk)</u>, June 2023



2 Methodology

Research design

The survey sought to create a robust sample base of businesses that were adopting at least one AI technology as well as businesses that planned to adopt AI in the future to ensure robust findings could be drawn. The quantitative research involved two stages. First, a pilot telephone survey of 20 interviews was conducted between $10^{th} - 12^{th}$ January 2024. The pilot survey revealed an initial idea of the proportion of businesses that might screen out for not using or considering using AI.

The mainstage telephone survey consisting of 350 interviews with businesses of varying size and industry sector was conducted between 24th January and 13th February 2024. Interviews lasted around 15 minutes on average. Please find a copy of the questionnaire in the Appendix.

Sectors of interest

The research targeted UK businesses currently using or considering using AI in the following sectors:

- D,E,H: Electricity, Gas and Air Conditioning Supply; Water Supply; Sewerage, Waste Management and Remediation Activities; Transportation and Storage
- C: Manufacturing
- G: Wholesale and Retail Trade
- J: Information and Communication
- K: Financial and Insurance Activities
- M: Professional, Scientific and Technical Activities
- Q: Human Health and Social Work Activities

The sectors were chosen by mapping SIC sectors where AI uptake is likely to be high, alongside Critical National Infrastructure sectors where the largest societal impacts from the exploitation of cyber security vulnerabilities are likely to exist. The chosen list of sectors was informed by several evidence sources, including ONS' "Understanding AI uptake and sentiment among people and businesses in the UK, June 2023" report, and the Department for Digital, Culture, Media & Sport's (DCMS) "AI Activity in UK businesses", report.

Sampling

The sample for the survey was sourced from Market Location, a commercial database of UK businesses. It was not possible to know at the point of drawing sample whether or not businesses were in-scope for the survey, therefore it was necessary to screen for this with a question at the point of recruitment. A sample of 21,000 businesses was purchased in order to ensure there were enough records to call through in order to achieve the desired number of interviews for both the pilot and mainstage fieldwork.



3 Pilot fieldwork

Ahead of the mainstage quantitative fieldwork, IFF Research piloted the questionnaire between 10th – 12th January 2024. These interviews were conducted via telephone by IFF interviewers, therefore under conditions that replicate how the mainstage fieldwork will run.

A total of 20 interviews were conducted, 12 with businesses currently using AI and 8 with those planning to adopt it in the future. The average survey length was 14 minutes and 53 seconds.

Achieved interviews and response rate

A total of 1,200 records were loaded for the pilot. Table 3.1 sets out the call outcomes for the records called.

Table 3.1 Summary of call outcomes during the pilot

	Number of respondents
Pilot sample available	1,200
Completed	20
Screen out (S2/A1/B1) - Organisation has not used AI and is not considering deploying AI in the future	131 (average of 12% of connected calls)
Respondent refusal	44
Refusal - not available during fieldwork period	10
Contact made – no definite outcome	526
No direct contact made with respondent	381
Unobtainable (e.g. wrong number, out of service)	88

Profile of pilot respondents

Tables 3.2 and 3.3 show the completes broken down by business size and sector (no quotas were set for the pilot).

Table 3.2 Profile of businesses by size

Size of business	Frequency
Micro: 1-9 employees	12
Small: 10-49 employees	3
Medium: 50-249 employees	3
Large: 250+ employees	2



Table 3.3 Profile of businesses by sector

Sector of business	Frequency
Manufacturing	1
Wholesale and Retail Trade	1
Information and Communication	6
Professional, Scientific and Technical activities	11
Human Health and Social Work Activities	1

Pilot findings

Generally, the pilot revealed that the questionnaire worked well and did not require significant changes for the mainstage fieldwork. Only two main changes were made to the questionnaire following conclusion of the pilot.

Question B1 consisted of a list of different AI technologies which were read out to respondents for them to say for each one whether their organisation is currently using it (including piloting), not currently but have plans to adopt in the future, or has no plans to use it. This question was revised for the mainstage to include specific examples of the different AI technologies, in order to help businesses recognise AI tools they may be utilising. The question was also updated to clarify that we are interested in existing AI tools as well as AI tools they are developing themselves.

Question C3 asked businesses to summarise the specific cyber security practices or processes they have in place explicitly regarding the AI technology they deploy, or those they plan to have in place for future AI technologies. During the pilot fieldwork this was an open text question, however, the pilot responses were used to introduce some pre-codes for the question based on the most common responses. This reduces the time the interviewer spends on the question and subsequently saves the respondent time.



4 Mainstage fieldwork

Mainstage fieldwork was conducted using Computer Assisted Telephone Interviewing (CATI) between 24th January and 13th February 2024. Interviews lasted an average of 15 minutes.

The interviewing team asked to speak to the person responsible for cyber security within the organisation. Participants interviewed held a range of roles, often within the remit of IT or operations, such as: Head of IT, IT director / manager, Operations director / manager, Business development manager, and Office manager.

Interview targets

This research sought to interview a total of 350 UK businesses, split equally among seven (grouped) sectors as shown in Table 4.1.

Table 4.1 Interview targets by sector

Sector	Target
D,E,H: Electricity, Gas and Air Conditioning Supply; Water Supply; Sewerage, Waste Management and Remediation Activities; Transportation and Storage	50
C: Manufacturing	50
G: Wholesale and Retail Trade	50
J: Information and Communication	50
K: Financial and Insurance Activities	50
M: Professional, Scientific and Technical Activities	50
Q: Human Health and Social Work Activities	50

Achieved interviews and response rate

Profile of participating businesses

A total of 350 interviews were achieved, split by size and sector in Table 4.2.



Table 4.2 Profile of participating businesses

Sector	Business size				
	Micro (1-9)	Small (10-49)	Medium (50-249)	Large (250+)	Total
D,E,H: Electricity, Gas and Air Conditioning Supply; Water Supply; Sewerage, Waste Management and Remediation Activities; Transportation and Storage	11	21	13	5	50
C: Manufacturing	18	16	8	8	50
G: Wholesale and Retail Trade	20	12	10	8	50
J: Information and Communication	23	18	6	3	50
K: Financial and Insurance Activities	27	15	4	4	50
M: Professional, Scientific and Technical Activities	23	11	11	5	50
Q: Human Health and Social Work Activities	14	17	9	10	50
Total	136	110	61	43	350

Call outcomes and survey response rate

A call outcome is defined as a definite response to the survey invitation, i.e. whether an interview was achieved, or whether an interview could not be achieved and the reason was established. Among the 10,924 businesses called at least once, the response rate for the survey was 3% (shown in Table 4.3). This included businesses where no final outcome was reached, for example where the interviewing team were not able to get through to the right person, where an appointment had been made to call back at a later date, or where a or where the call went to answerphone. Among the 2,193 businesses where a definite call outcome was achieved, the response rate was 16% (shown in Table 4.4).

10% of businesses screened out because they confirmed their organisation does not use AI and is not considering deploying it in the future. However, this proportion increases to 48% when based on records where a definitive outcome was reached. The high proportion of businesses screening out and subsequent lower response rate was expected due to the specific eligibility requirement of businesses needing to be using or have plans to use AI.

Table 4.3 Unadjusted response rate

	Number	%
Total records called at least once	10,924	100%
Completed	350	3%
Screen out - Organisation does not use AI and is not considering deploying AI in the future	1,059	10%
Respondent refusal	486	4%
Respondent unavailable during fieldwork	234	2%
Contact made – no definite outcome	2,707	25%
No direct contact made with respondent	5,056	46%
Over quota	64	1%
Unobtainable (e.g. wrong number, out of service)	968	9%

Table 4.4 Adjusted response rate based on a definitive call outcome

	Number	%
Definitive call outcome	2,193	100%
Completed	350	16%
Screen out - Organisation has not used AI and is not considering deploying AI in the future	1,059	48%
Respondent refusal	486	22%
Respondent unavailable during fieldwork	234	11%
Over quota	64	3%

Of the 350 businesses that took part in the survey, 239 were currently using AI. These businesses as a proportion of all those for whom we have a definite answer on whether or not they use AI, equates to 21%. This is slightly higher than the ONS finding in April 2023 which reported an estimated 16% of all UK businesses had adopted at least one AI technology.²

Reasons for not using AI

Respondents who confirmed during the survey that they do not use, or have plans to use, any Artificial Intelligence tools within the business were asked what has prevented their organisation from implementing AI technologies.

Among the 193 businesses who answered, the most common reason provided was that they have not identified a need for AI, including deeming it irrelevant for their sector or industry (44%). 10% said they have not thought about AI or do not know enough about it and they have no interest in it, for example preferring human interaction (9%). 8% deemed AI unnecessary due to the small size of their business, 6% said they lack the time or resources to set it up and 6% had concerns about the security of AI models and systems, including data security and confidentiality.

Data analysis and weighting

Large and medium-sized businesses are over-represented in this survey compared to the business population. This was a deliberate decision - the Department needed a good-sized sample base of these types of businesses. Weighting by size and sector was therefore considered. However, as the

² <u>Understanding AI uptake and sentiment among people and businesses in the UK - Office for</u> <u>National Statistics (ons.gov.uk)</u>, June 2023



number of interviews is small, the weights were deemed too large to apply and would have had a considerable negative impact on the effective base size. Specifically, it would have meant that it would not be possible to report the findings of businesses of a particular size or sector. The survey results cannot therefore be considered representative of the business population, however, can still provide useful insight into the behaviour of businesses that took part.

5 Appendix: Questionnaire

Screener

ASK TELEPHONIST

S1 Good morning / afternoon. My name is NAME and I'm calling from IFF Research. Please can I speak to [IF NAMED CONTACT: NAME] [IF NO NAMED CONTACT: the person responsible for cyber security in your organisation]?

IF NECESSARY:

These could include individuals in your organisation who hold roles such as:

- Chief Information Officer (CIO)
- Chief technical officer (CTO)
- Chief Information Security Officer (CISO)
- Director of Security
- Head of Cyber Security/Information Security
- Senior IT role (e.g. IT director)

ADD IF NECESSARY: We're conducting a survey on behalf of the Department for Science, Innovation and Technology to improve the department's understanding of how Artificial Intelligence (AI) is used by businesses in key sectors and of how businesses implement cyber security practices and processes around the AI technology they deploy.

Transferred	1	CONTINUE	
Hard appointment	2		
Soft Appointment	3	MAKE APPOINTMENT	
Engaged	4	CALL BACK	
Refusal	5		
Refusal – company policy	6		
Refusal – Taken part in recent survey	7		
Nobody at site able to answer questions	8	CLOSE	
Not available in deadline	9		
Fax Line	10		
No reply / Answer phone	11		
Residential Number	12		



Dead line	13	
Company closed	14	
Request reassurance email		COLLECT EMAIL ADDRESS THEN CONTINUE OR MAKE APPOINTMENT

S2 Good morning / afternoon, my name is NAME, calling from IFF Research, an independent market research company. We're conducting a survey on behalf of the Department for Science, Innovation and Technology.

They wish to improve their understanding of how Artificial Intelligence (AI) is used by businesses in key sectors and of how businesses implement cyber security practices and processes around the AI technology they deploy.

The survey will only take around 10 minutes and the insights from this survey will provide invaluable information for policy development in this space. Is now a good time to run through some questions with you?

Everything you say will be treated in the strictest confidence, and the Department for Science, Innovation and Technology will not be told who has taken part. As part of our quality control procedures, all interviews are recorded automatically.

ADD IF NECESSARY: We are interested in speaking to you even if your organisation doesn't currently use AI technologies, but it might be something you are considering deploying in the future.

Continue	1	CONTINUE	
Referred to someone else at establishment			
NAME	2	TRANSFER AND RE- INTRODUCE	
JOB TITLE			
Hard appointment	3	MAKE APPOINTMENT	
Soft appointment	4		
Refusal	5		
Refusal – Organisation has not used AI and is not considering deploying AI in the future.	6	THANK AND CLOSE	
Refusal – company policy	7		
Refusal – taken part in recent survey	8		



Not available in deadline	9	
Request reassurance email		COLLECT EMAIL ADDRESS THEN CONTINUE OR MAKE APPOINTMENT (SEE APPENDIX FOR EMAIL TEXT)

S3 Thank you. Before we begin, I just need to tell you that under data protection law you have the right to have a copy of your data, change your data, or withdraw from the research at any point. If you'd like to do this, you can consult our website at iffresearch.com/privacy-policy.

Is that OK?

DO NOT READ OUT. SINGLE CODE.

Yes	1	CONTINUE
No	2	THANK AND CLOSE
Show reassurances	3	SHOW REASSURANCES AND RETURN

REASSURANCES TO USE IF NECESSARY

The interview will take around 10 minutes to complete.

Please note that all data will be reported in aggregate form and your answers will not be reported to the Department for Science, Innovation and Technology in any way that would allow you or your business to be identified.

If you would like further information on how IFF handles and processes personal data, as well as information on your rights under data protection regulations to access your personal data, withdraw consent, or object to the processing of your personal data you can visit: https://www.iffresearch.com/privacy-policy/

If respondent wishes to confirm validity of survey or get more information about aims and objectives, they can contact:

- IFF, for queries about the research: <u>AISecurityPractices@iffresearch.com</u>
- DSIT, to confirm the survey is genuine: cybersurveys@dsit.gov.uk
- MRS (Market Research Society), to confirm IFF is a genuine research company: 0800 975 9596, <u>www.mrs.org.uk</u>

A Background to organisation

READ TO ALL:

I'd like to start by getting a few details about your organisation.

ASK ALL

A1 Do you use, or have plans to use, any Artificial Intelligence tools within the business?

This could be at any level and for any task, including recent generative tools such ChatGPT, Microsoft Co-pilot, and more complex solutions including machine learning and robotic automation. We are interested in Al tools you might be developing yourselves as well as existing off-the-shelf Al tools.

Yes	1	
No	2	
Don't know	3	THANK AND CLOSE: We are looking to speak to organisations who are using
Refused	4	or considering using AI. Thank you for your time today.

DO NOT READ OUT. SINGLE CODE.

IF DOES NOT HAVE PLANS TO IMPLEMENT AI TECHNOLOGIES (A1=2)

A2 What has prevented your organisation from implementing Artificial Intelligence technologies?

IF RESPONDENT SAYS THEY ARE A SMALL BUSINESS, PROBE FOR WHETHER THE BARRIER IS FINANCIAL COST, LACK OF AWARENESS OR JUST DEEM AI UNNECESSARY

DO NOT READ OUT. MULTI CODE

Concerns about the security of AI models and systems (inc. data security / confidentiality)	1	THANK AND CLOSE: Thank you for that. The rest of the
Financial cost	2	survey is only relevant to organisations who are using
Organisation lacks technical resources	3	or considering using AI. Thank you for your time today.
Organisation is unclear on the purpose of using AI	4	iouay.



Have not identified a need for it (inc. not relevant for sector/industry)	5	
Haven't thought about it / don't know enough about it	6	
Deemed unnecessary due to small size of business	7	
Other (please specify)	8	
Don't know	9	
Refused	10	

A3 Are your organisation's main headquarters in the UK?

DO NOT READ OUT. SINGLE CODE.

Yes	1	
No	2	
Refused	3	THANK AND CLOSE

IF MAIN HEADQUARTERS ARE NOT IN THE UK (A3=2)

A4 Are your products and/or services available for sale in the UK?

DO NOT READ OUT. SINGLE CODE.

Yes	1	
No	2	THANK AND CLOSE
Refused	3	THANK AND CLOSE

ASK ALL

A5 Which of these best represents the size of your organisation, based on the number of employees working for your organisation, including yourself?

READ OUT. SINGLE CODE

Micro: 1-9 employees	1	
Small: 10-49 employees	2	



Medium: 50-249 employees	3	
Large: 250+ employees	4	
DO NOT READ OUT: Don't know	5	THANK AND CLOSE
DO NOT READ OUT: Refused	6	THANK AND CLOSE

A6 I have <SAMPLE SECTOR> as a general description of your company's principal activity. Bearing in mind that this is a general description only, does this sound correct?

Yes	1	
No	2	
Don't know	3	

IF DISAGREE WITH SAMPLE SECTOR (A6=2/3)

A7 What is the main business activity of your company?

INTERVIEWER PROBE FOR THE FOLLOWING - START WITH FIRST PROBE AND ONLY USE THE OTHERS IF NECESSARY TO GET CLEAR INFORMATION

- What is the main product or service of this establishment?
- What exactly is made or done at this establishment?

WRITE IN. TO BE CODED TO 4 DIGIT SIC 2007.		
Don't know	1	
Refused	2	



B Al usage

READ TO ALL:

My next questions are about your organisation's use of artificial intelligence (AI).

ASK ALL

B1 For the following Artificial Intelligence technologies, please could you tell me whether your organisation is currently using it (including piloting), not currently but have plans to adopt in the future, or has no plans to use it.

INTERVIEWER NOTE / ADD IF NECESSARY: We are interested in AI tools you might be developing yourselves as well as existing off-the-shelf AI tools.

READ OUT. SINGLE CODE FOR EACH

		Not used but			
Technology	Currently using	planning to adopt in the future	Not using	Don't know	Refused
_1 Machine learning					
ADD IF NECESSARY:					
This is a branch					
of artificial intelligence					
which focuses on the					
use of data and					
algorithms to imitate the					
way that humans learn,					
gradually improving its					
accuracy. Example Al					
tools include Microsoft					
Azure Machine					
Learning, IBM Watson					
and Google					
TensorFlow.					
_2 Natural language					
processing and					
generation					
ADD IF NECESSARY:					
This is the use of					
artificial intelligence					
programming to produce					
written or spoken					
narratives from a data					
set, including creating					
computer code or					
transcribing audio to text					
in real time. Example AI					
tools include ChatGPT					
and Bard.					
_3 Computer vision/					
image processing and					
generation					
ADD IF NECESSARY:					
This is the use of					
artificial intelligence					
programming to					

produce, generate, analyse, interpret, and manipulate digital images. Examples AI tools include OpenCV and Viso Suite.			
_4 Hardware related to			
AI ADD IF			
NECESSARY: such as			
Edge Computing Chips,			
Quantum Hardware,			
Application Specific			
Integrated Circuits			
(ASIC), Neuromorphic			
Hardware, and Field			
Programmable Gate			
Array (FPGA).		 	
_5 Robotic process automation (RPA)			

B1a Are there any other Artificial Intelligence technologies not mentioned that your organisation is currently using (including piloting) or planning to adopt in the future?

INTERVIEWER NOTE / ADD IF NECESSARY: We are interested in AI tools you might be developing yourselves as well as existing off-the-shelf AI tools.

MULTI CODE.

Yes – other technology 1 (please specify)	1	WRITE IN
Yes – other technology 2 (please specify)	2	WRITE IN
Yes – other technology 3 (please specify)	3	WRITE IN
No	4	EXCLUSIVE
Don't know	5	EXCLUSIVE



ASK IF USES A DIFFERENT TECHNOLOGY (B1A_1-3 ≠ BLANK)

B1b And please could you tell me whether your organisation is currently using it (including piloting) or not currently but have plans to in the future.

Technology	Currently using	Not used but planning to adopt in the future	Don't know	Refused
DS: Show if B1a_2 <i>≠</i> blank. <b1a 1=""></b1a>				
DS: Show if B1a_2 ≠ blank. <b1a 2=""></b1a>				
DS: Show if B1a_3 ≠ blank. <b1a_3></b1a_3>				

READ OUT. SINGLE CODE FOR EACH

B1Dum DUMMY VARIABLE, DO NOT ASK				
Currently uses AI in one or more technology	1	(B1_1 = 1 or B2_2 = 1 or B1_3 = 1 or B1_4 = 1 or B1_5 = 1 or B1b_1 = 1 or B1b_2 = 1 or B1b_3 = 1)		
Does not use AI in any technology but is planning to adopt in the future	2	$(B1_1 \neq 1 \text{ or } B2_2 \neq 1 \text{ or } B1_3 \neq 1 \text{ or } B2_4 \neq 1 \text{ or } B1_5 \neq 1 \text{ or } B1b_1 \neq 1 \text{ or } B1b_2 \neq 1 \text{ or } B1b_3 \neq 1) \text{ AND } (B1_1 = 2 \text{ or } B2_2 = 2 \text{ or } B1_3 = 2 \text{ or } B2_4 = 2 \text{ B1}_5 = 2 \text{ or } B1b_1 = 2 \text{ or } B1b_2 = 2 \text{ or } B1b_3 = 2)$		
Neither uses nor has plans yet to use a specific technology.	3	(B1_1 \neq 1-2 or B2_2 \neq 1-2 or B1_3 \neq 1-2 or B2_4 \neq 1-2 or B1_5 \neq 1-2 or B1b_1 \neq 1-2 or B1b_2 \neq 1-2 or B1b_3 \neq 1-2)		

SCREEN OUT: IF B1DUM=3: We are looking to speak to organisations who are using or considering using AI. Thank you for your time today.

IF CURRENTLY USES AI TECHNOLOGIES (B1Dum = 1)

B1c Please could you tell me the specific Al products you are using?

WRITE IN		
Don't know	1	
Refused	2	



IF CURRENTLY USES AI TECHNOLOGIES (B1Dum = 1)

B2 Please could you tell me whether your organisation is currently piloting the following technology, has used it for 1-3 years, or has used it for over 3 years.

READ OUT. SINGLE CODE FOR EACH

DS: ONLY SHOW CODES WHERE B1_1-6=1 or B1b_1-3 = 1)

Technology	Currently piloting	Used for 1-3 years	Used for over 3 years	Don't know	Refused
Machine learning					
Natural language processing and generation					
Computer vision/ image processing and generation					
Hardware related to AI					
Robotic process automation					
<b1a_1></b1a_1>					
<b1a_2></b1a_2>					
<b1a_3></b1a_3>					

IF PLANS TO ADOPT AI TECHNOLOGIES IN THE FUTURE (B1Dum = 2)

B3 Please could you tell me whether your organisation is planning to adopt the following technology in the next year or whether you plan to adopt it further in the future.

READ OUT. SINGLE CODE FOR EACH

DS: ONLY SHOW CODES WHERE B1_1-6=2 or B1b_1-3=2

Technology	Planning to adopt in the next year	Planning to adopt further in the future	Don't know	Refused
Machine learning				
Natural language processing and generation				
Computer vision/ image processing and generation				
Hardware related to Al				
Robotic process automation				
<b1a_1></b1a_1>				
<b1a_2></b1a_2>				
<b1a_3></b1a_3>				

IF CURRENTLY USES AI TECHNOLOGIES (B1Dum = 1)



B4 How did your organisation adopt the following technology?

READ OUT. SINGLE CODE FOR EACH

DS: ONLY SHOW CODES WHERE B1_1-6=1 or B1b_1-3 = 2

Technology	Developed in-house (fully, or by adapting existing software)	Through purchase of external software or ready-to-use systems	Out-sourced the development of Al applications to external providers	Don't know	Refused
Machine learning					
Natural language processing and generation					
Computer vision/ image processing and generation					
Hardware related to Al					
Robotic process automation					
<b1a_1></b1a_1>					
<b1a_2></b1a_2>					
<b1a_3></b1a_3>					

IF CURRENTLY USES AI TECHNOLOGIES (B1Dum = 1)

B5 For what reasons does your organisation employ AI technology?

IF RESPONDENT SAYS WHAT THEY USE AI FOR, PROBE FOR <u>WHY</u> THEY USE AI AS OPPOSED TO AN EMPLOYEE DOING THE TASK THEMSELVES.

DO NOT READ OUT. MULTI CODE

Cyber security defence	1	
Fraud detection	2	
Financial savings (inc. efficiency, productivity and automation)	3	
Algorithmic trading	4	
Customer services	5	
Inventory management	6	
Recruitment	7	



Other (please specify)	8	WRITE IN
Don't know	9	EXCLUSIVE
Refused	10	EXCLUSIVE

ASK IF USES AI TECHNOLOGY FOR CYBER SECURITY DEFENCE (B5 = 1)

B6 And how does your organisation employ AI technology for Cyber security defence?

WRITE IN		
Don't know	1	
Refused	2	



C Cyber security practices around the AI

IF USES OR IS CONSIDERING USING AI TECHNOLOGIES (B1DUM = 1-2)

My next questions are about your business' cyber security practices surrounding AI technologies.

IF USES AI TECHNOLOGIES (B1DUM = 1)

C1 Does your organisation have specific cyber security practices or processes in place explicitly regarding the AI technology you deploy?

Yes	1	
No	2	
Don't know	3	
Refused	4	

DO NOT READ OUT. SINGLE CODE.

IF CONSIDERING USING AI TECHNOLOGIES OR DOES NOT HAVE AI TECHNOLOGIES (B1DUM = 2)

C2 Would your organisation have specific cyber security practices or processes in place explicitly regarding the AI technology once your planned AI technologies are deployed?

Yes	1	
No	2	
Don't know	3	
Refused	4	

DO NOT READ OUT. SINGLE CODE.



IF HAS SPECIFIC AI CYBER SECURITY PRACTICES OR PROCESSES (C1=1 OR C2 =1)

C3 Please could you summarise what these practices or processes < TEXT SUB if B1Dum = 1 "are"> < TEXT SUB if B1Dum = 2 "might be">?

Ensuring personal data isn't shared with third parties	1	
Firewalls for AI	2	
Al-driven Attack Signal Intelligence (e.g. Vectra)	3	
Other (please specify)	4	
Don't know	5	
Refused	6	

DO NOT READ OUT. MULTI CODE

IF DOES NOT HAVE SPECIFIC AI CYBER SECURITY PRACTICES OR PROCESSES IN PLACE (C1=2 OR C2 = 2)

C4 Please could you briefly explain why that is?

WRITE IN	1	
Don't know	2	
Refused	3	

IF USES OR IS CONSIDERING USING AI TECHNOLOGIES (B1DUM = 1-2)

C5 Are there specific cyber security requirements or features that you expect to be built into AI companies' models and systems?

IF YES: WRITE IN	1	
No	2	
Don't know	3	
Refused	4	



IF THEY OUTSOURCE DEVELOPMENT OF THEIR AI TECHNOLOGY (B4_1-8=3)

C6 Has your organisation identified a vulnerability or been breached as a result of the AI service deployed in your infrastructure?

Yes, been breached	1	
Yes, identified a vulnerability but not been breached	2	
No	2	
Don't know	3	
Refused	4	

PROMPT AS NECESSARY. SINGLE CODE



D General cyber security practices

READ TO ALL:

For the rest of the survey, we will be asking about cyber security. By this, we mean any strategy, processes, practices or technologies that organisations have in place to secure their networks, computers, programs or the data they hold from damage, attack or unauthorised access.

ASK ALL

D1 Which of the following governance or risk management arrangements, if any, do you have in place?

READ OUT. MULTI CODE

Board members with responsibility for cyber security	1	
An outsourced provider that manages your cyber security	2	
A formal policy or policies in place covering cyber security risks	3	
A Business Continuity Plan that covers cyber security	4	
A written list of the most critical data, systems or assets that your organisation wants to protect	5	
DO NOT READ OUT: None of these	6	SINGLE CODE
DO NOT READ OUT: Don't know	7	SINGLE CODE
DO NOT READ OUT: Refused	8	SINGLE CODE

ASK ALL

D2 Which of the following standards or accreditations, if any, does your organisation adhere to?

READ OUT. MULTI CODE

The Payment Card Industry Data Security Standard, or PCI DSS	1	
Any National Institute of Standards and Technology (NIST) standards	2	
The Cyber Essentials standard	3	
The Cyber Essentials Plus standard	4	
ISO 27000 Standard	5	



DO NOT READ OUT: None of these	6	SINGLE CODE
DO NOT READ OUT: Don't know	7	SINGLE CODE
DO NOT READ OUT: Refused	8	SINGLE CODE

D3 Which of the following, if any, have you done over the last 12 months to identify cyber security risks to your organisation?

READ OUT. MULTI CODE

A cyber security vulnerability audit	1	
A risk assessment covering cyber security risks	2	
Used or invested in threat intelligence	3	
Used specific tools designed for security monitoring, such as Intrusion Detection Systems	4	
Penetration testing	5	
Testing staff awareness and response (e.g. via mock phishing exercises)	6	
DO NOT READ OUT: None of these	7	SINGLE CODE
DO NOT READ OUT: Don't know	8	SINGLE CODE
DO NOT READ OUT: Refused	9	SINGLE CODE

ASK ALL

D4 What was your business' approximate turnover for the last financial year?

DO NOT READ OUT. SINGLE CODE.

IF NECESSARY: PROMPT WITH RANGES

£0 – £49,999	1	
£50,000 - £84,999	2	
£85,000 - £249,999	3	
£250,000 - £499,999	4	



£500,000 - £999,999	5	
£1,000,000 - £4,999,999	6	
£5,000,000 - £24,999,999	7	
£25,000,000+	8	
Don't know	9	
Refused	10	



E Thank and close

ASK ALL

E1 Thank you very much for taking the time to speak to us today. Would you be willing for us to call you back regarding this particular study – if we need to clarify any of the information?

Yes	1	
No	2	

ASK ALL

E2 In the near future we may be conducting some follow-up interviews to explore some of the areas discussed in this survey in more detail. Would it be okay to contact you about taking part in this research? Agreeing to be contacted does not mean you have to take part. You can opt-out at any time if we contact you.

Yes	1	
No	2	

IF CONSENT TO RECONTACT (E1=1 OR E2=1)

E3 And could I just check, is [NUMBER] the best number to call you on?

Yes	1	
No - write in number	2	

IF CONSENT TO RECONTACT (E1=1 OR E2=1)

E4 Please could I take a few more details:

Name:	ALLOW REFUSED OPTION
Job title:	ALLOW REFUSED OPTION
Email address:	ALLOW REFUSED OPTION



READ TO ALL

You've been speaking to NAME from IFF, on behalf of the Department for Science, Innovation and Technology. Thank you very much for your time today.

Would you like the Market Research Society freephone number in case you wish to check our credentials? (If yes, that's 0800 975 9596).



"

IFF Research illuminates the world for organisations businesses and individuals helping them to make better-informed decisions."

Our Values:

1. Being human first:

Whether employer or employee, client or collaborator, we are all humans first and foremost. Recognising this essential humanity is central to how we conduct our business, and how we lead our lives. We respect and accommodate each individual's way of thinking, working and communicating, mindful of the fact that each has their own story and means of telling it.

2. Impartiality and independence:

IFF is a research-led organisation which believes in letting the evidence do the talking. We don't undertake projects with a preconception of what "the answer" is, and we don't hide from the truths that research reveals. We are independent, in the research we conduct, of political flavour or dogma. We are open-minded, imaginative and intellectually rigorous.

3. Making a difference:

At IFF, we want to make a difference to the clients we work with, and we work with clients who share our ambition for positive change. We expect all IFF staff to take personal responsibility for everything they do at work, which should always be the best they can deliver.



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