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# Food, Agribusiness and Beverage

Cyber and Artificial  
Intelligence Webinar

16 April 2024



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# Sector expertise

We understand your business and the industry in which you operate. This is demonstrated by our sector expertise:



Aon clients represent **52%** of the **top 100** food manufacturers in the UK including **7** of the **top 10** (The Grocer report, 2022)



Globally, Aon advises **9** of the **top 10** largest food manufacturing companies in the world

Our UK Food & Drink Practice brings together our experts from across the UK and internationally. Our group meets regularly to share insights and best practice, but also brief colleagues on new and innovative solutions available for our clients



Our industry experts contribute regularly to our thought leadership communications, and these can be found on our [Practice website](#)



Aon is an Associate Member of the Food & Drink Federation and regularly support and attend its events

Over the last 5 years our claims consultants have **actively managed over £200m** of major losses in the Food & Drink Sector to accelerate positive claims settlements and avert crises

**Addo Foods** **Apetito** **Arla** **Asda**  
**Associated British Foods**  
Bernard Matthews **Bacardi** **Bidfood**  
**Boparan/2SFG** **Brake Brothers**  
**Country Style Foods** **Cranswick**  
**Dairy Crest** **Daniel Thwaites** **Danone**  
Danish Crown **Douwe Egberts** **First Milk**  
**Fox's Burtons Company** **Fentimans**  
**Ferrero UK** **Frontier Agriculture** **Glen Grant**  
Grenade **Greencore** **Hazlewood Foods**  
**Hills Biscuits** **Iceland Seafoods** **Kerry Foods**  
Kettle Produce **Lidl** **Marr Seafoods**  
**Martin Brower** **McQueens Dairies** **Morrisons**  
Mondelez **Nestle** **North British Distillery**  
**Ocado** **Pets Choice** **Peters Foods** **Pork Farms**  
**Quintessential Brands** **Saputo UK**  
**S&A Foods** **Scottish Salmon** **Sofina Foods**  
**Tesco** **Thomas Tunnock** **Unilever**  
Upfield Foods **Walkers** **William Jackson Foods**  
**Whyte & Mackay** **Wyke Farms** **Zwanenberg**

Aon's Insights

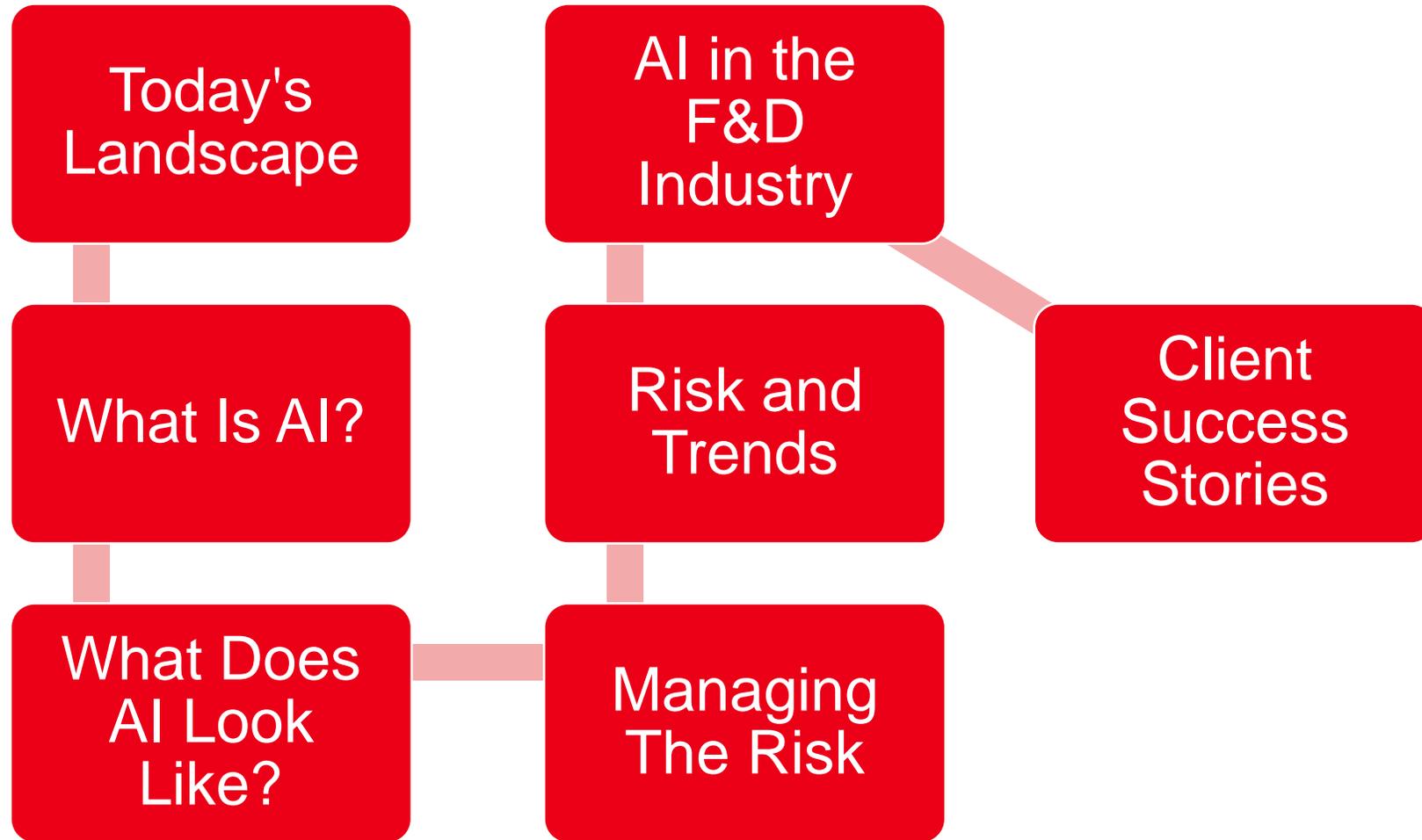
# Top Food, Agribusiness and Beverage Industry Challenges

## Current Top 10 Risks

<b>1</b> Commodity Price Risk or Scarcity of Materials	<b>2</b> <i>Supply Chain or Distribution Failure</i>	<b>3</b> <i>Business Interruption</i>	<b>4</b> <b>Cyber Attack or Data Breach</b>	<b>5</b> Climate Change
<b>6</b> Weather or Natural Disasters	<b>7</b> <i>Damage to Reputation or Brand</i>	<b>8</b> Regulatory or Legislative Changes	<b>9</b> <i>Failure to Attract or Retain Top Talent</i>	<b>10</b> <i>Product Liability or Recall</i>



# Overview



# 1

Today's Landscape

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# Cyber Is a Very Real Threat for the Food, Agribusiness and Beverage Industry

## Hit With Ransomware Attack

The company first noticed that hack on October 9 and says it has been able to resume production "in select manufacturing facilities."

Cyberattack a \$23 million hit on ledger

Company refused to pay ransom

## HOW A CYBER ATTACK CAUSED A CREAM CHEESE SHORTAGE

Major Bottler Threatened with Labor Revolt as Paychecks Get Delayed by Cyber Thieves

blames global outage on third party

## Ransomware hackers find vulnerable target in U.S. grain supply

The attacks have slowed the distributors' operations by hampering their ability to quickly process grain as it comes in.

pays \$11m in ransom to resolve cyber-attack

CYBER INSURANCE

## Cyberattack, Storms Could Cost Company \$140 Million

Cyber Incident and Texas Storms Will Delay Between 1.8 and 2.0 Million Hectoliters of Beer Production and Shipments

INDUSTRY NEWS • THREATS • 2 min read

staggers to its feet following \$15 million Ragnar Locker ransomware attack

**Question 1: Are these examples representative of the Cyber threats faced by your business?**

# Today's Landscape: Food, Agribusiness & Beverage

## Industry Context

### Five Key Converging Factors of Digital Transformation



#### Operational resilience of digital infrastructure

1. Artificial intelligence (AI)
2. the internet of things (IoT)



#### Renewed focus on food quality management

A growth in the use of sensor technology which can monitor and correct conditions during storage and transportation.



#### Production, logistics and warehousing automation

Automation with driverless trucks and autonomous mobile warehouse robotics.



#### Data collection expanding at a rapid rate

1. Costly and labor intensive
2. Rise of machine learning

#### Legislation is getting stricter

Network and Information Security directive (NIS2) for EU to ensure a "high common level of cybersecurity by further strengthening cyber security requirements

# The New Cyber ‘Stakeholders’

Given the material increase in cyber threats, financial losses and brand impacts, there are more ‘stakeholders’ than ever who seek to know about potential security exposures:



## Hackers

- What vulnerabilities exist that can be exploited?
- How much ransomware will you pay?
- What type of data or intellectual property can be monetised?



## Shareholders

- What preventative measures are in place today?
- How is cyber risk being addressed to prevent financial loss?
- How do cyber losses affect stock prices and profitability?



## Underwriters

- Does the organisation achieve the minimum cyber controls?
- Are there cyber issues in open-source feeds?
- What policy terms do we feel safe to provide?

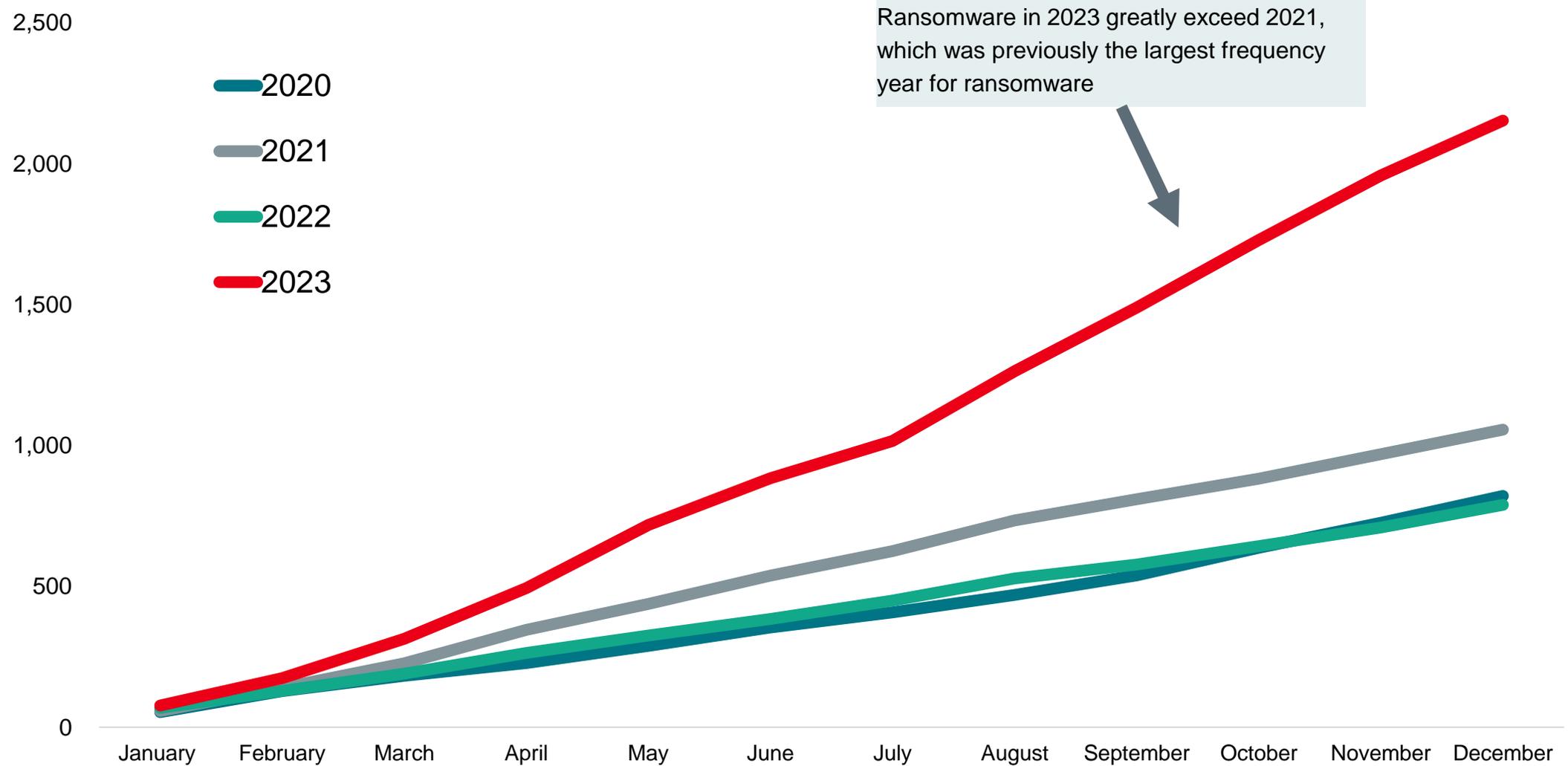


## Regulators

- What risk management strategies are in place to mitigate cyber event impact?
- How frequently are cyber events reported to the Board of Directors?
- What cybersecurity experience does the Board of Directors have?

# Today's Landscape

## Cumulative Ransomware Frequency Growth by Month



# Today's Landscape

## Threat actors

Figure 1 //

### TOP 10 ACTIVE RANSOMWARE GROUPS IN Q4



# 2

What is AI?

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# What is Artificial Intelligence?

**Artificial Intelligence (AI):** the theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.



## Machine Learning

Find **patterns in data** and **make predictions** based on those patterns to answer business questions, detect and analyse trends, and solve problems



## Natural Language Processing

Computers **comprehend texts/languages** in the same way that humans do

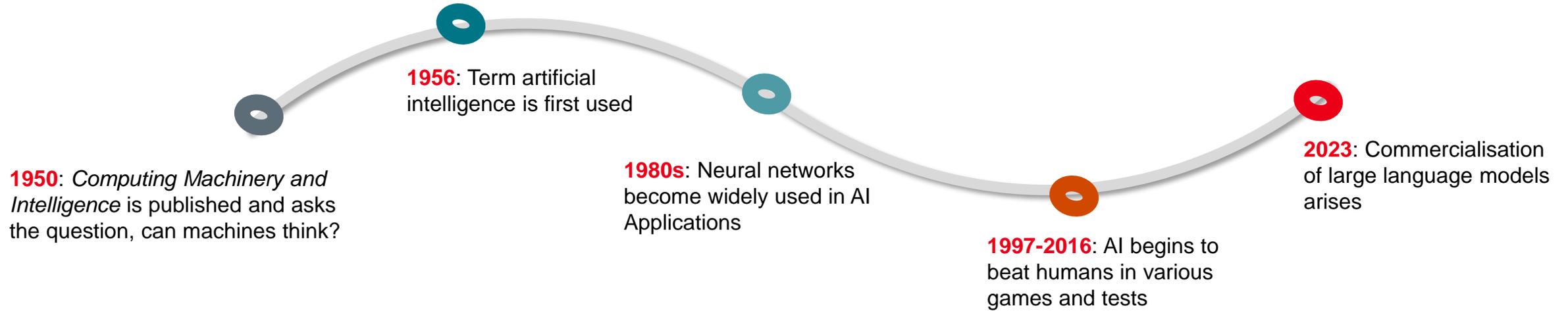


## AI Powered Tools

Devices that can **analyse data and act on that data** without involvement by humans

94% of business leaders agree that AI is critical to success over the next 5 years

# Evolution of Artificial Intelligence and Large Language Models



## Artificial Intelligence (noun)

ar·ti·fi·cial in·tel·li·gence

*the theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.*

Machine Learning

Connected Devices

Physical Robots

# AI 101: The Lingo, Process, and Deployment

- AI works through process that involves data, algorithms, *and most importantly, learning*
- Process of how “The Machine” is built and used:



# 3

What does AI look like?

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**Question 2: Have you used Chat GPT Before?**

# Chat GPT, what is it?

## Let us hear from the Simpsons.

Please explain to a new audience in the style of a Simpsons script, Chat GPT and its features.

Title: "ChatGPT: The Springfield Chatbot"

INT. SIMPSONS LIVING ROOM - DAY

*The iconic living room of the Simpson family. HOMER is sitting on the couch, MARGE is knitting, and BART is skateboarding indoors.*

HOMER: *(munching on a donut)* Marge, have you heard about this new thing called ChatGPT? It's like having a smart friend in your pocket!

MARGE: *(looking up from her knitting)* Oh, Homer, you mean that AI chatbot thing?

HOMER: Yeah, that's the one! It's like having Lenny and Carl combined, but without the annoying laughter.

BART: *(skateboarding past)* Hey, Dad, can ChatGPT help me with my homework?

HOMER: Absolutely, boy! ChatGPT can answer questions, find creative inspiration, and even teach you how to negotiate. It's like having Principal Skinner in your phone, minus the detention slips.

MARGE: And it's not just for kids, Homer. ChatGPT can draft emails, essays, and even help with code. It's like having Professor Frink without the lab coat.

HOMER: *(leaning in)* But wait, Marge, there's more! ChatGPT can transform into a Simpsons character. You send it a picture, and it shows you what you'd look like in Springfield. I tried it, and I looked like a yellow version of Ned Flanders!

BART: *(excited)* Can it make me look like Radioactive Man?

HOMER: Maybe, boy. But that's not all! ChatGPT can chat with images and even create new ones. It's like having Duff Beer, but for your eyes.

MARGE: And guess what, Homer? ChatGPT can chat with voice too! You can talk to it on the go, request bedtime stories, or settle dinner table debates. It's like having Apu's accent without the Kwik-E-Mart.

HOMER: *(dreamy)* Imagine the possibilities, Marge. ChatGPT could help me troubleshoot my grill, analyze the contents of our fridge, or even explain why my hair looks like a donut.

MARGE: *(rolling her eyes)* Oh, Homer, you and your crazy ideas. But I have to admit, ChatGPT sounds pretty useful.

HOMER: *(raising his donut)* To ChatGPT, the eighth wonder of the Springfield world!

BART: *(skateboarding past)* And to donuts! Woo-hoo!

MARGE: *(smiling)* Cheers, everyone.

*They clink their imaginary donuts together as the sun sets over Springfield.*

FADE OUT. THE END.





# 4

## Examples of AI in the Food & Drink Industry



# The future of fast food?



# The future of Harvesting?



# 5

## Generative AI — Emerging Risks and Insurance Market Trends



# Let's take a look at some examples.

**Ransomware Attacks**

**Trusted Vendor Compromise**

**Recipe Theft**

**Supply Chain Disruption**

**Ingredient Imbalance**

**Food Contamination**

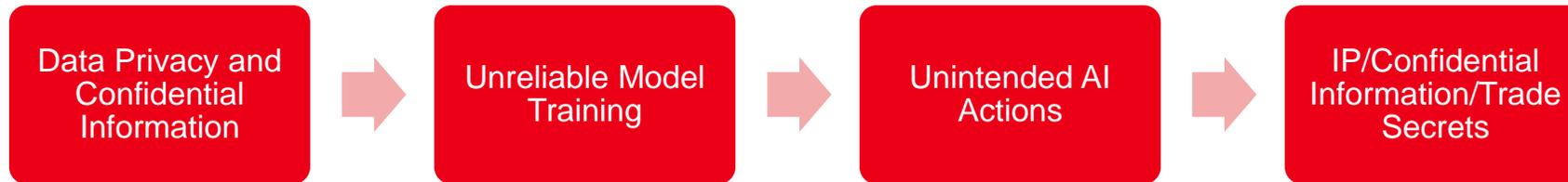
**Spoilage Control Tampering**

**Label Fraud**

**Disruption of Food Traceability**

# Spotlight Feature: **Generative AI — Emerging Risks and Insurance Market Trends**

Generative Artificial Intelligence (AI) – a type of artificial intelligence that has the ability to create material such as images, music or text – is already a proven disruptor and its adoption is growing at an explosive rate. As Generative AI changes the way companies do business, it is creating new risks and new causes of loss that impact not only the companies themselves but also their business partners such as third-party vendors and digital supply chains. Recent events and court cases highlight the developing forms of risks associated with Generative AI, including copyright, trademark and patent infringement, discrimination, and defamation. Bearing in mind that there is an important difference in the risks – and risk management approaches – associated with model creation versus model usage, some examples in this emerging risk field include:



# 6

## Aon's guide to managing Cyber Risk

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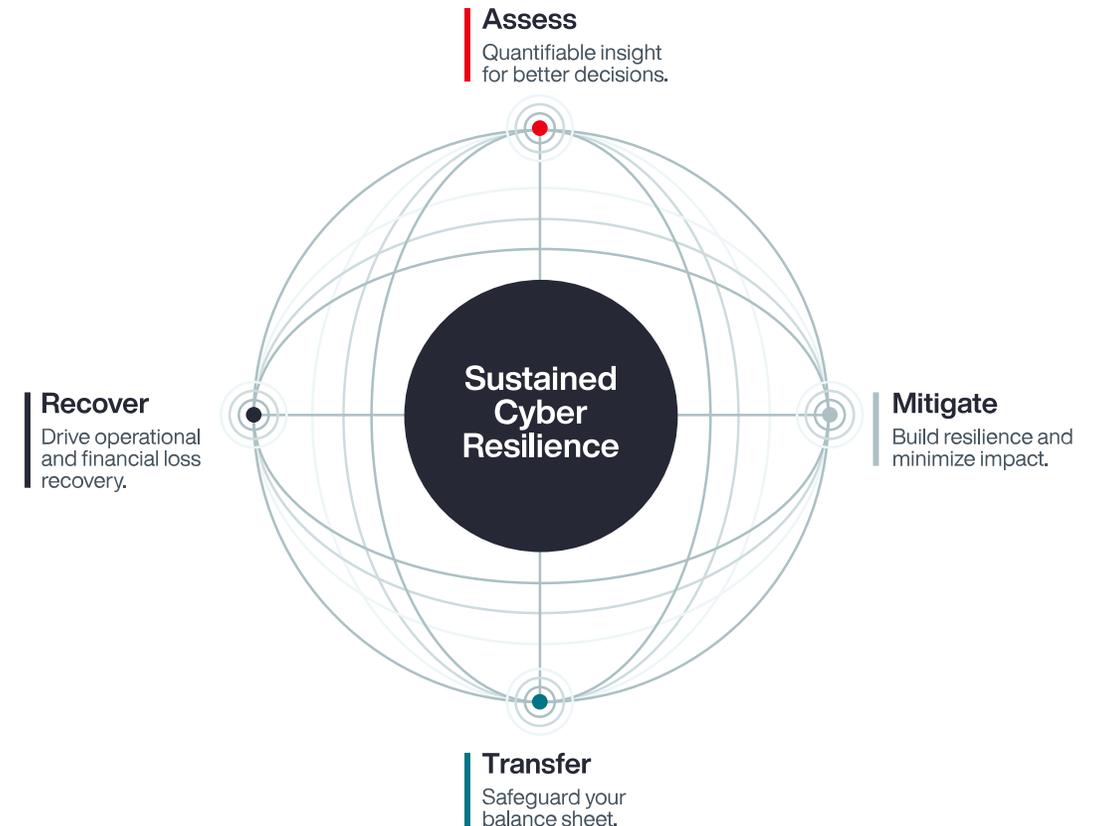
## There is Nothing Linear About Cyber Security.

This is the guiding principle of the Cyber Loop, a risk management model that **unites stakeholders** to make better decisions around cyber risk.

Aon's Cyber Loop model acknowledges that each organisation will be at a different place in its cyber risk journey: **assess, mitigate, transfer, or recover**.

In a Loop model, businesses become informed participants in managing risk, engaged in continuous review, improvement, and investment in security – guided by data.

**The Result. Sustained Cyber Resilience.**

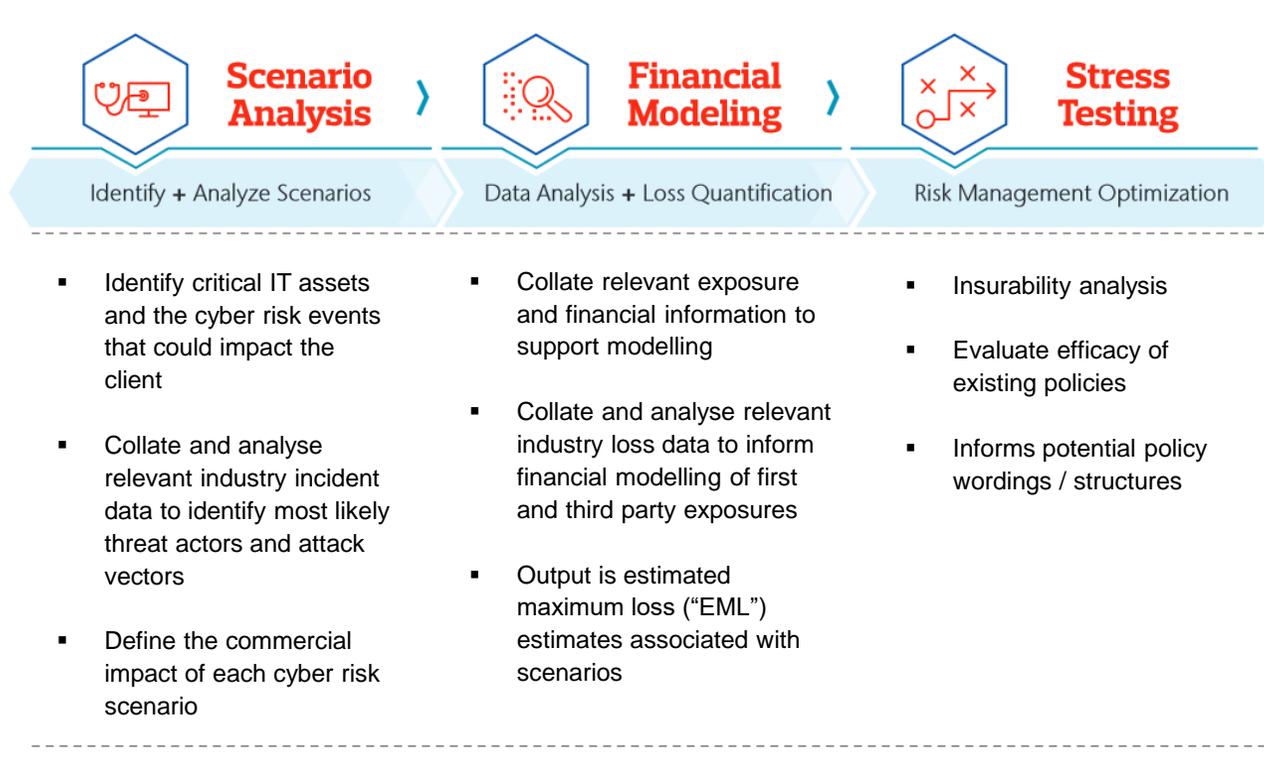


**Question 3: If a claim arises tomorrow, do you understand the potential impact to the balance sheet and cash flow to the business?**

# Aon's Cyber Impact Analysis | Cyber Risk Quantification

## A proven analytics platform to model cyber exposures

Applying leading proprietary and industry data along with innovative analytics capabilities, the Cyber Impact Analysis platform develops unique insights on your balance sheet exposure from cyber risk.



## Outputs

- Understanding of financial exposure from cyber risk
- Identify "economic value" (cost-benefit) of investment in cyber mitigation and transfer
- Inform decision making on whether to purchase insurance and most appropriate limit of cover/structure
- Enhance Board understanding of shareholder value at risk associated with your cyber risk profile

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██████████ pays \$11m in ransom  
to resolve cyber-attack

██████████  
\$140 Million

Cyberattack, Storms Could Cost Company

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Cyber Incident and Texas Storms Will Delay Between 1.8 and 2.0 Million Hectoliters of Beer Production and Shipments

# Compromised Assessment

**Question 4: Do you have a formal plan for what you would do in the event of a Cyber incident?**

**Have you got an IR firm on a retainer?**

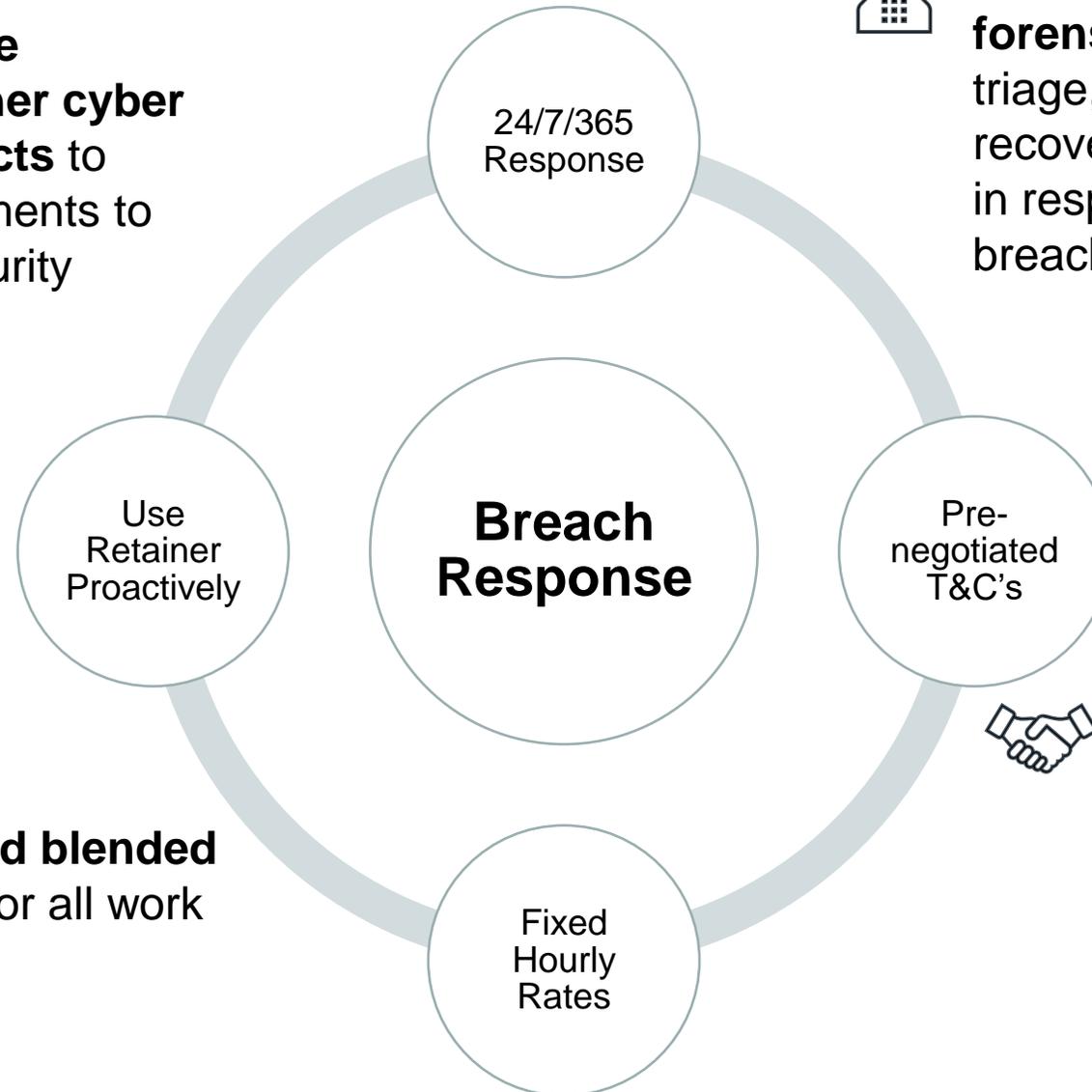
# Cyber Services Retainer Benefits



Retainer can be **utilised for other cyber security projects** to make improvements to your cyber security posture.



On-call **access to digital forensic experts** to help triage, analyse, contain, and recover organisational assets in response to an incident or breach.



**Pre-negotiated blended hourly rates** for all work carried out.



Ability to **react quickly** via pre-negotiated terms and conditions with Aon's Cyber Solutions, a premier incident response, investigations, and security advisory firm.

# Artificial Intelligence: Insurance Coverage Gap Analysis

	Media Liability	Tech Errors and Omissions, MPL, PI	Product Liability	General Liability	Intellectual Property <sup>xxii</sup>	Standalone Cyber Liability	D&O	Employment
<b>AI Peril</b>								
Third-Party Damages Liability for Faulty Product or Service	●	●	●	●	●	●	●	●
Copyright, Trademark or Service Mark Infringement	●	●	●	●	●	●	●	●
Patent Infringement	●	●	●	●	●	●	●	●
Discrimination	●	●	●	●	●	●	●	●
Defamation, Libel, Slander	●	●	●	●	●	●	●	●
Bodily Injury	●	●	●	●	●	●	●	●
Tangible Property Damage	●	●	●	●	●	●	●	●
Privacy and Security Breaches	●	●	●	●	●	●	●	●
Loss of Financial Assets (requires crime policy)	●	●	●	●	●	●	●	●
Market Manipulation	●	●	●	●	●	●	●	●
Autonomous Weapon	●	●	●	●	●	●	●	●
Product Recall	●	●	●	●	●	●	●	●
Business Interruption	●	●	●	●	●	●	●	●
Breach of Directors' or Officers' Duties	●	●	●	●	●	●	●	●

● Available ● Limited ● Excluded, unless customized contingent liability added

## Managing AI Risk

While the productivity gains of generative AI are easily recognizable, organizations should take great care and conduct regular risk assessments as they embrace this new world. Aon suggests that organizations work with their Aon team as well as technology experts, attorneys and consultants to set policies and establish a governance framework that aligns with regulatory requirements and industry standards. As respects organizations' use of AI, some components of that framework may include:

- Routine audits of your AI models to ensure that algorithms or data sets do not propagate unwanted bias.
- Ensuring an appropriate understanding of copyright ownership of AI-generated materials.
- Developing and implementing this same framework into a mergers and acquisitions checklist.
- Mitigating risk through the implementation of B2B contractual limitation of liability, as well as vendor risk management.
- Insertion of human control points to validate that the governance model used in the AI's development aligns with legal and regulatory frameworks.
- Conducting a legal, claims and insurance review and considering alternative risk transfer mechanisms in the event of the insurance market begins to avoid these risks.

Bloomberg Research forecasts the generative AI market will grow to \$1.3 trillion over the next 10 years – up from \$40 billion in 2022. As firms race to share in that growth, they would do well to stay focused on the potential risks and issues that will arise along the journey.

## Global Risk Management Survey Risk Ranking

Artificial Intelligence rose a massive 32 places – from number 49 to number 17 in the future risks ranking of Aon's most recent [Global Risk Management Survey](#), with Human Resources respondents placing it eighth, while participants from India and the UK ranked it their seventh and third top future risk, respectively. This signals that while organizations recognize AI's economic potential and are embracing new technologies to fuel growth, they also recognize the potential cyber security, legal, operational and human-capital risks it brings.

# 7

Client Success Stories

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# Case Study 1: F&B Producer

## Assessing Cyber Risk & Building a Roadmap

Aon's **Cyber Risk Advisory** provided an integrated approach, assessing potential loss areas and control vulnerabilities through a **Cyber Quotient Evaluation Enterprise (CyQu)**, which **assisted the client in identifying, measuring and managing their cyber risk exposure and Ransomware protection**.

### The Challenge

- A multinational food and drink producer with manufacturing locations across the world was concerned about the IT dependency of their operations in the event of a cyber incident and its impact on the insurance eligibility. The client, therefore asked Aon Cyber Risk Advisory Team to support in assessing and understanding the business's critical cyber threats, communicating their security integration roadmap, ensuring that their cyber resilience was adequate to underwriter's request.

### Solution

- Our Cyber Risk Advisory Team manages the construction of a robust strategy to identify key risk areas using CyQu to effectively and efficiently collect data needed to build a security roadmap to improve cyber posture and meet underwriting requirements.
- Assessment of the client's cyber maturity posture across 9 Critical Domains using Aon's Cyber Quotient Assessment (CyQu) and allowed comparison against industry peers.
- Preparation of recommendations based on CyQu scores. Where Aon consolidated data from the CyQu and generated a bespoke recommendation to meet underwriting submission requirements for the client.

### Result

- Aon delivered a detailed document with **Performance Breakdown** across **nine security domains** elaborating on the client's cyber posture across 35 sub-domains.
- The report provides a comparison between the Client and its peers.
- The scores provided **highlights vulnerabilities and prioritises based on underwriter's feedback**.
- Recommendations were then presented to the client to support the business developing their cybersecurity roadmap.

The results of this engagement produced a valuable output for the client, which resulted in:

- The **Security roadmap** guided the client understand and build their cyber posture and overcome business critical threats.
- Recommendation helped the client to **swiftly identify and execute available improvements and become ready for the underwriting submission**.

# Case Study 2: Supermarket Chain

## Assessing & Transferring Cyber Risk

Aon's Cyber Risk (AGRC) and Broking teams provided an integrated approach, assessing potential losses through a **Cyber Impact Analysis** which enabled the client to make an informed decision regarding its **risk transfer strategy**.

### The Challenge

- Insurance Manager instructed by top management to review cyber insurance as a priority initiative and asked how they should determine the appropriate limits & coverage.
- Aon was engaged to support the company determine the appropriate and proportionate insurance limit and assist in building a cyber underwriting submission, utilising our expertise to effectively articulate the company's cyber risk to respective carriers.

### Solution

- Assessment of the client's cyber maturity posture to inform '**severe yet plausible**' cyber risk scenarios.
- Thorough research on the client's value and supply chains to facilitate discussions in stakeholder workshops.
- Creation of a variety of scenarios enabling **Aon and the client to determine the 5 most critical scenarios** to be **quantified** and then analysed against existing insurance coverage.
- The quantification covered first and third party losses including crisis & extra expenses, business interruption losses, contractual penalties and regulatory fines.
- Aon **conducted an insurability gap assessment** of the cyber risk exposures to differentiate between costs that were covered by the existing policy and costs that remained uninsured and retained by the business.

### Result

- Aon's analysis indicated that estimated maximum losses (EMLs) were greater than original policy limits, giving the client the necessary information to make data - informed decisions at renewal.
- **Risk Transfer:** Following completion of the Cyber Impact Analysis, our Cyber Risk Consultants project managed the construction of a robust cyber insurance underwriting submission, effectively and efficiently collecting data needed to meet underwriting requirements.

Subject Matter Experts (SMEs) were engaged to identify quick security wins and build out additional areas of the submission known to move the dial with underwriters and address specific areas of market scrutiny.

- **Security Controls:** Alongside a successful insurance renewal, Aon identified specific control areas of weakness for the client and provided recommendations to strengthen security in the most vulnerable areas.
- **Risk Management:** The CIA identified that post application of insurance, exposures remained on the balance sheet. To minimise financial and operational loss, Aon proposed a Business Continuity methodology, aimed at maintaining operations through an event

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Q&A

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Thank you for attending

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