



Enhancing Consumer Trust in Food Systems with AI and Cybersecurity



Richard Werran

Global Director, Consumer, Retail & Food

IDDBA Member exclusive access!

View recording and download slide deck at iddba.org. (Available in 24-48 hours)

What will I cover?



- Introduction to BSI
- Consumer perceptions
- The challenges
- How to fix it and where AI and cybersecurity fits in



BSI – Your Partner in Progress

Who are we?



United Kingdom's
National Standards Body (NSB)



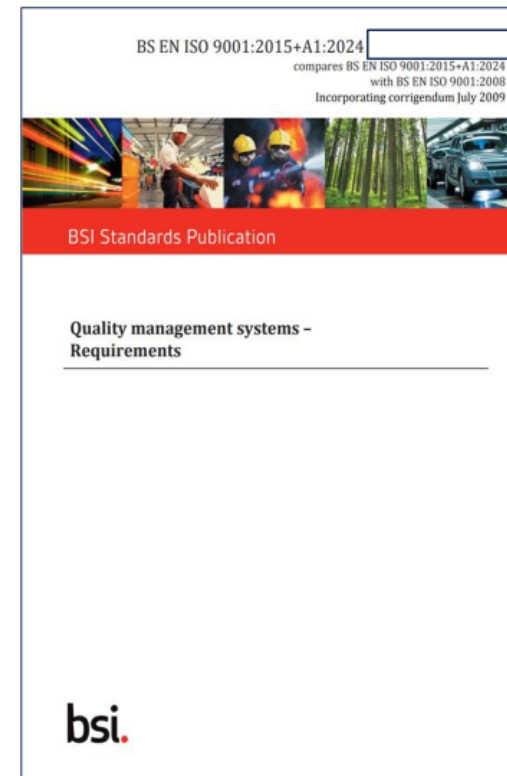
BSI – Your Partner in Progress

What do we do?



We engage with industry experts, government bodies, businesses, and consumers and originate consensus-based voluntary standards for all sectors of industry

Shaped over 80,000 best practice standards and guidelines



BSI – Your Partner in Progress

What kind of company is BSI?



BSI, a Royal Charter
Company

ELIZABETH THE SECOND
by the Grace of God of the United Kingdom of Great
Britain and Northern Ireland and of Our other Realms
and Territories Queen, Head of the Commonwealth,
Defender of the Faith: TO ALL TO WHOM THESE PRESENTS SHALL
COME, GREETING!

WHEREAS by a Royal Charter (hereinafter called "the original Charter") dated the twenty-second day of April in the year of our Lord One thousand nine hundred and twenty-nine His Majesty King George the Fifth constituted a Body Corporate and Politic by the name of "The British Engineering Standards Association":

AND WHEREAS by a Supplemental Charter dated the fifth day of November One thousand nine hundred and thirty-one the name of the said Association was altered to "The British Standards Institution" (hereinafter called "the Institution") reflecting the expansion in the type of work undertaken by the Association for different industries:

AND WHEREAS We were graciously pleased to grant Supplemental Charters to the Institution in the years One thousand nine hundred and sixty-eight and One thousand nine hundred and seventy-four:

AND WHEREAS by its humble Petition the Institution has represented unto Us that it would be conducive to the best interests of the Institution and its Members if the constitution of the Institution were revised and consolidated by the grant of a further Supplemental Charter:

NOW THEREFORE KNOW YE that We having taken the said Petition into our Royal Consideration by virtue of Our Prerogative Royal and of Our especial grace, certain knowledge and mere motion have granted and declared and by these Presents for Us, Our Heirs and Successors do hereby grant and declare as follows:

1 The provisions of the original Charter and the Supplemental Charters of 1931, 1968 and 1974 (except in so far as they incorporate the British Engineering Standards Association, confer upon it perpetual succession and a Common Seal and alter its name to "The British Standards Institution") are hereby revoked but nothing in this revocation shall affect the legality or validity of any act, deed or thing lawfully done or executed thereunder.

2 The Institution shall by name have perpetual succession and a Common Seal, with power to alter, break and make anew the said Seal at their discretion, and by the same name to sue or be sued in all Courts and be for ever able and capable in law to acquire, have, take and hold for the purposes of the Institution any land, tenements or hereditaments whatsoever and to hold the same in perpetuity and from time to time grant, sell, demise, alienate, exchange, mortgage or otherwise dispose of the same or any part thereof and by the name aforesaid to do all other matters incidental or appertaining to a Body Corporate, but so that the Institution shall apply its profits (if any) or other income in promoting its objects and not at any time pay any dividends to its Members. Provided that nothing herein contained shall prevent the payment in good faith of reasonable and proper remuneration to any officer or servant of the Institution or to any member of the Board or any constituent body thereof in return for services actually rendered.



BSI – Your Partner in Progress

Our history



Sir John Wolfe-Barry





BSI – Your Partner in Progress

Trams to Trains



BSI – Your Partner in Progress

BSI Today



- 90 offices in 31 countries
- 95,000 clients in 193 countries
- 5,965 colleagues and 11,900 experts
- 250,000 delegates trained last year
- 63,000 standards published
- \$950 million revenue





Essential insights - in a nutshell





Startling statistics



53% of
consumers feel
confident their
food is safe

Source: ETI Food Consumer Observatory Report 2024





Startling statistics



44% of
consumers believe
their food is
healthy

Source: ETI Food Consumer Observatory Report 2024





Startling statistics



36% of
consumers
believe their
food is
sustainable

Source: ETI Food Consumer Observatory Report 2024





In fact...

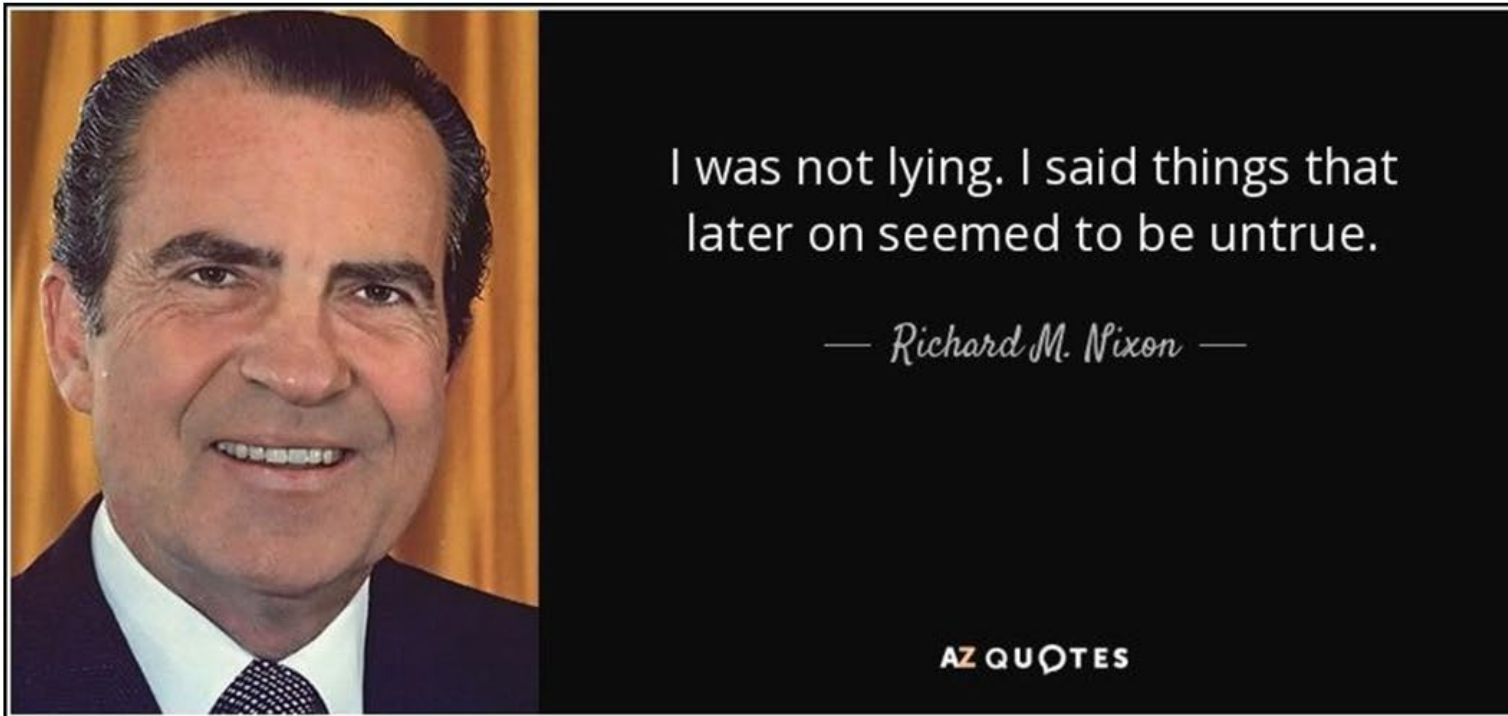


Trust has
never been
SO low.

Source: ETI Food Consumer Observatory Report 2024

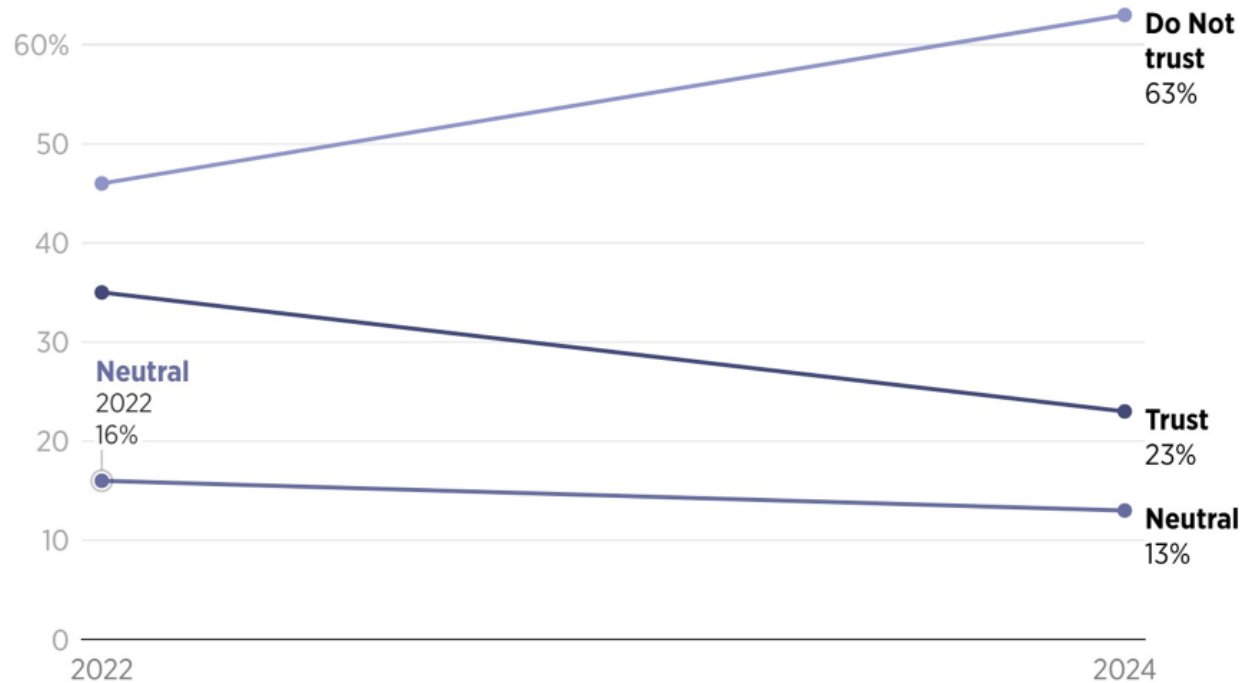


Perhaps the government should just tell consumers 'trust your food'



Do consumers trust the federal government?

bsi



Question was asked on a scale of 0 to 10. "Do not trust" includes answers from 0 to 4. "Neutral" includes answers of 5. "Trust" includes answers from 6 to 10.

Source: Partnership for Public Service surveys



So who do consumers trust?



65% of
consumers trust
farmers



The sector has a trust problem



So why is trust so low?

2018 *E. coli* outbreak

200 became ill, 5 died

Dirty canal water may have tainted romaine lettuce with *E. coli*

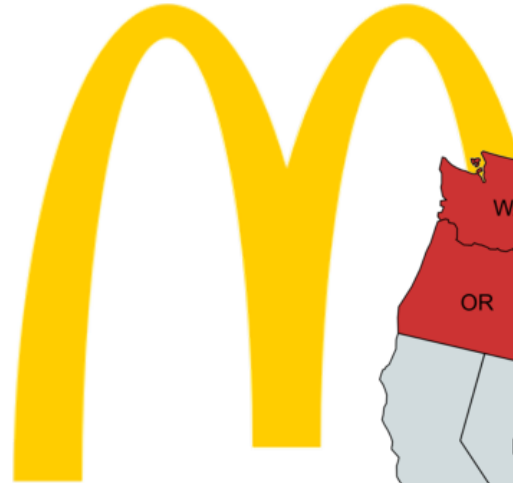
SHARE & SAVE —



Dirty canal water may have tainted romaine lettuce with *E. coli*

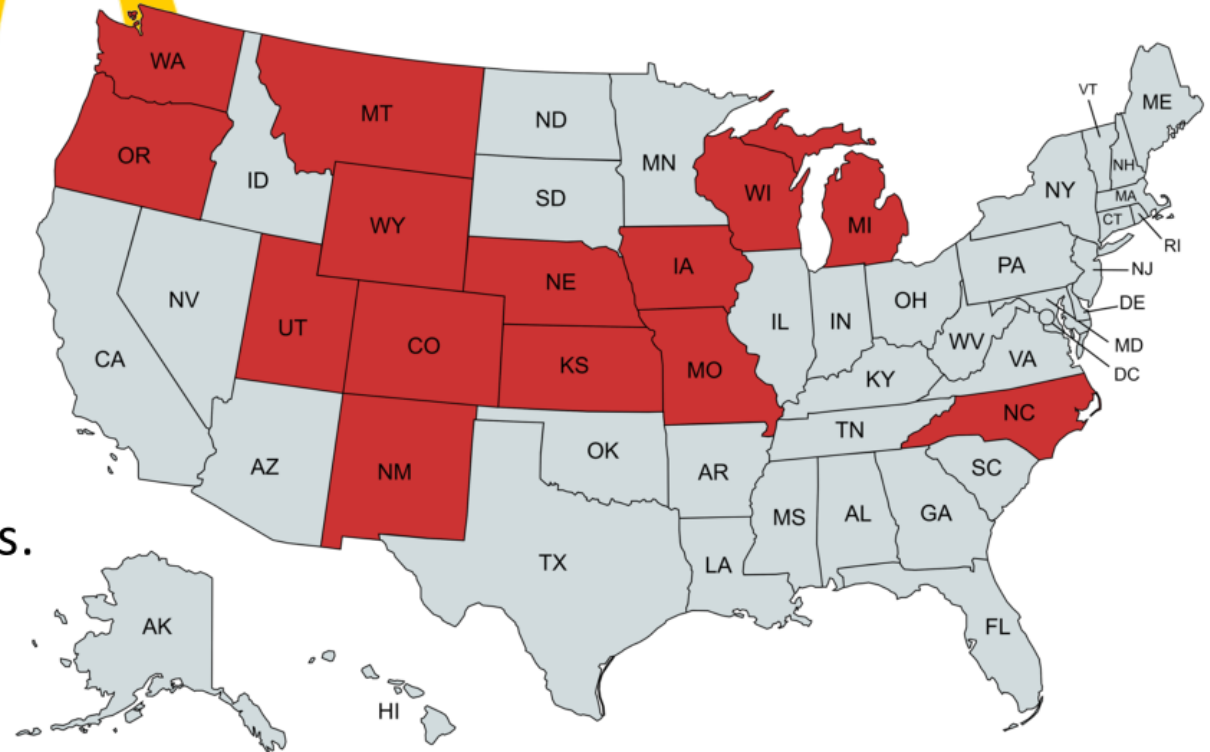
More than 200 were sickened and five died in this spring's *E. coli* outbreak, the FDA says.





2024 McDonald's *E. coli* outbreak

Quarter Pounders sold
at McDonald's stores in 14 U.S. states.
At least 104 people ill, 1 died



Naked Juice Agrees to \$9M Class Action Settlement Over 'All Natural' Claims

By Anne Bucher | July 9, 2013



Honey, I shrank the bunches of oats: 'Family' and 'Giant' size cereal boxes are getting smaller

Consumers may not notice shrinkflation when cereals are downsized



Morning Brew



Grubhub cyberattack exposes some restaurant and customer data



A hacker gained access to names and contact information stored in the delivery company's customer support system. The situation is now fully contained.

By **Joe Guskowski** on Feb. 04, 2025



Login and banking information was unaffected, Grubhub said. | Photo: Shutterstock





Wake Up And Smell The Ransomware Impacted By Cyber Attack

By [Davey Winder](#), Senior Contributor. ⓘ Davey Winder is a veteran cybersecuri...

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Nov 27, 2024, 06:47am EST

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What can be done?

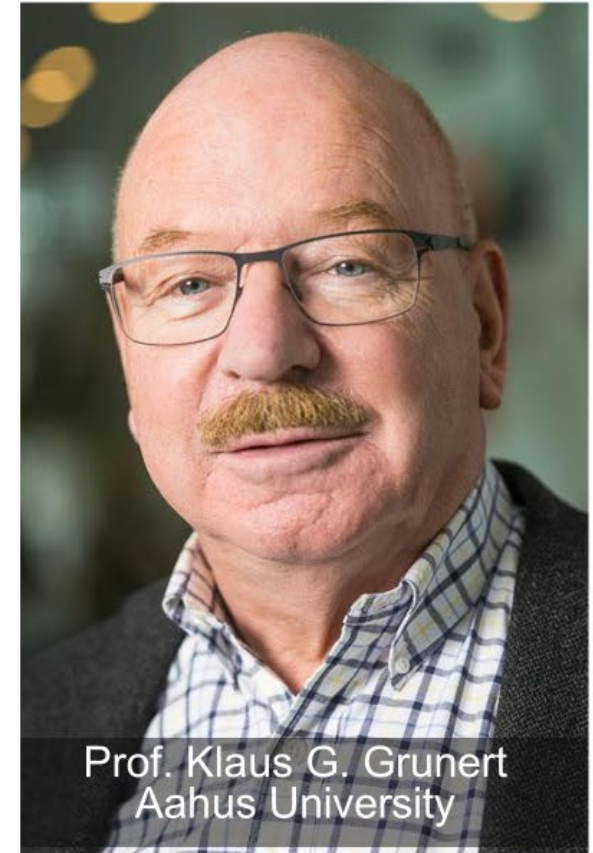




How to fix it?

Consumers need to trust the food they eat is good for them and the planet...

*...consumers need **better information, options and access to affordable healthy and nutritious diets.***



Prof. Klaus G. Grunert
Aarhus University





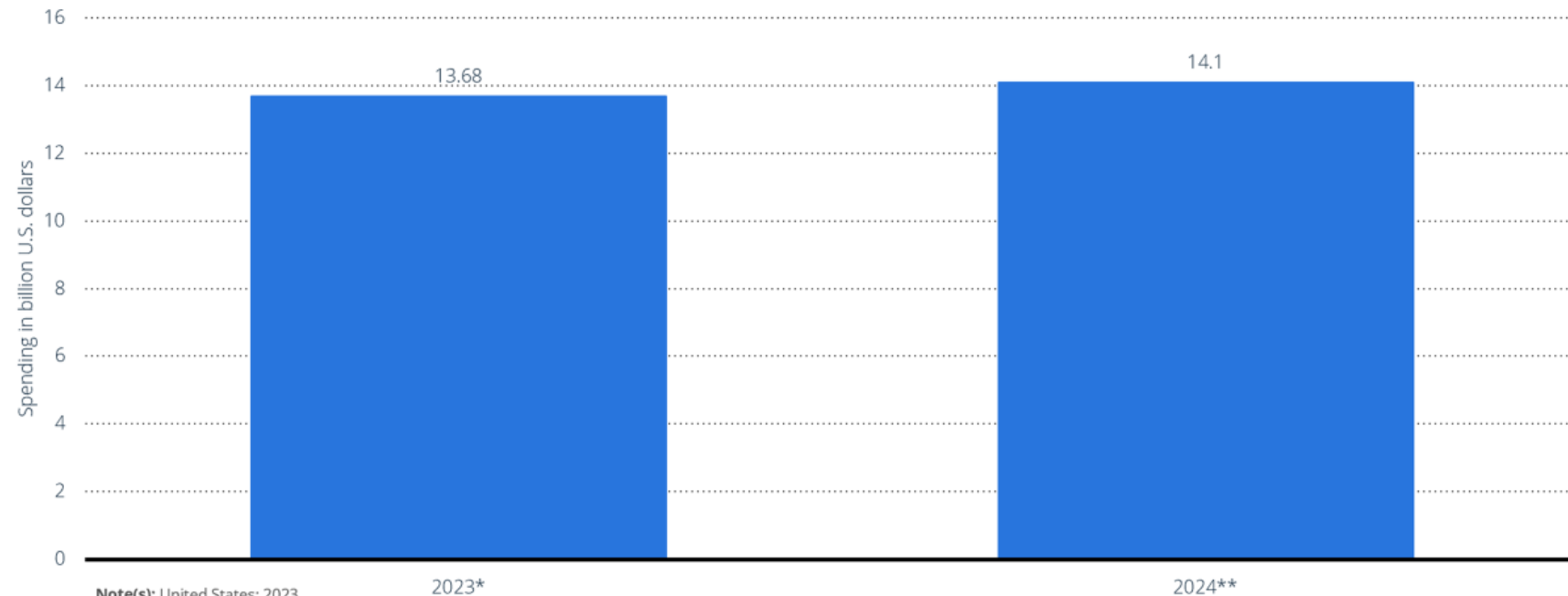
So, let's spend more money



Local advertising spending of the food and restaurant industry in the United States in 2023 and 2024
(in billion U.S. dollars)

Local advertising spending of the food & restaurant industry in the U.S. 2023-2024

statista 



Note(s): United States; 2023

Further information regarding this statistic can be found on [page 8](#).

Source(s): BIA Advisory Services; [ID 1560441](#)



Will this fix consumer trust?





PROBABLY NOT





Given that **consumers don't trust** food manufacturers in the first place, is there a **risk** that it might have the **opposite effect**?





The food industry is its own worst enemy





And needs to introduce its own solutions





What are the top 4 challenges?



Concerns about
food **safety** and quality





What are the top 4 challenges?



Complex **global**
supply chains





What are the top 4 challenges?



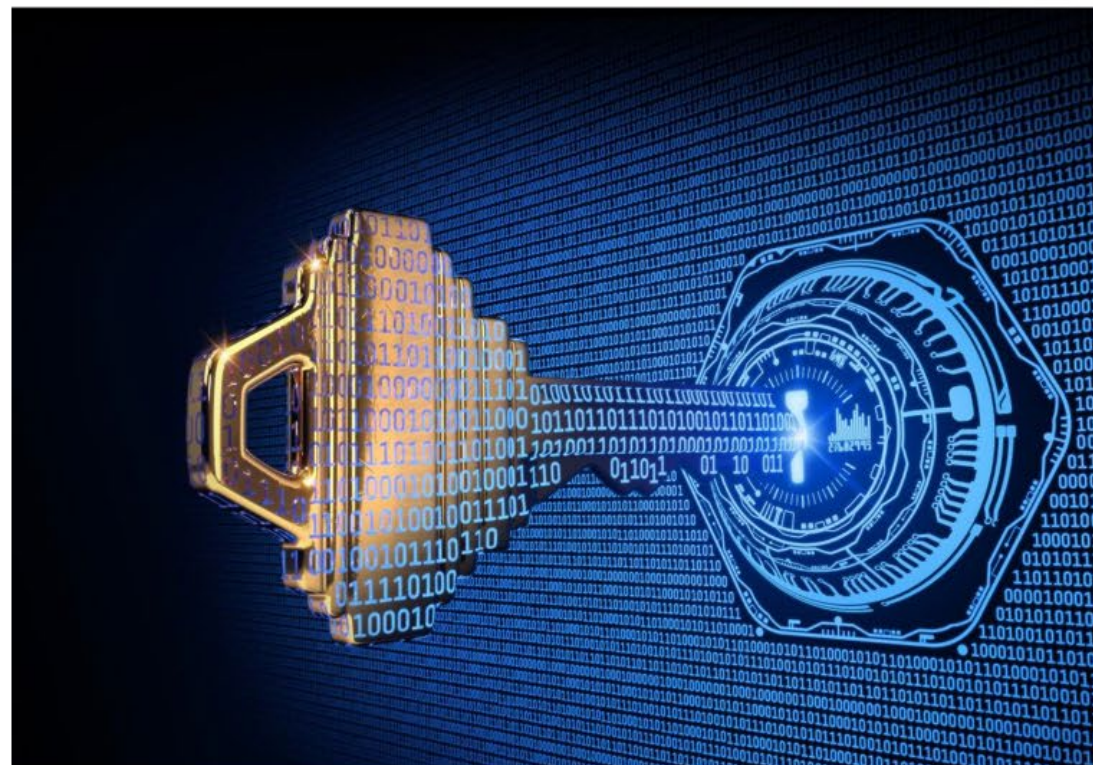
Lack of transparency



What are the top 4 challenges?



Cybersecurity threats





Rebuilding consumer trust with AI



Monitoring soil nutrients and
detecting pests to **reduce
pesticide residues**

Enhance efficiency and **safety**
in food manufacturing

**IMPROVE
QUALITY**



AI for Quality Control and Food Safety

AI-driven vision **inspection** systems

Real-time **monitoring** of CPs and CCPs

Predictive analytics to identify
contaminants

**IMPROVE
SAFETY**



AI in Food Production



**IMPROVE
TRANSPARENCY**

Tracking products from harvest
to distribution

Accurate **inventory** management





AI has a close relative...

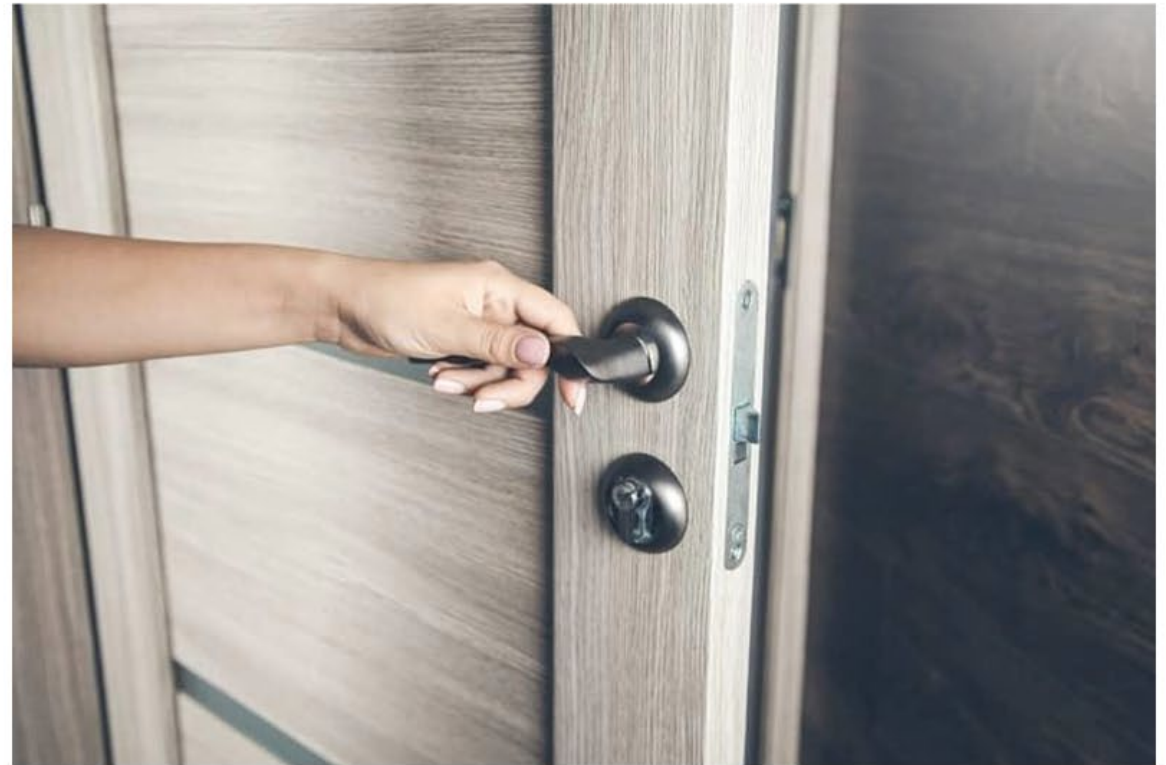




Cybersecurity

74% of all cyber breaches are due to people and

90% of all cybercrime



Cybersecurity



Safeguard your **data**

Protect from attacks on **control systems**

Prevent disruption in production and **distribution**

So just when you thought it couldn't get worse





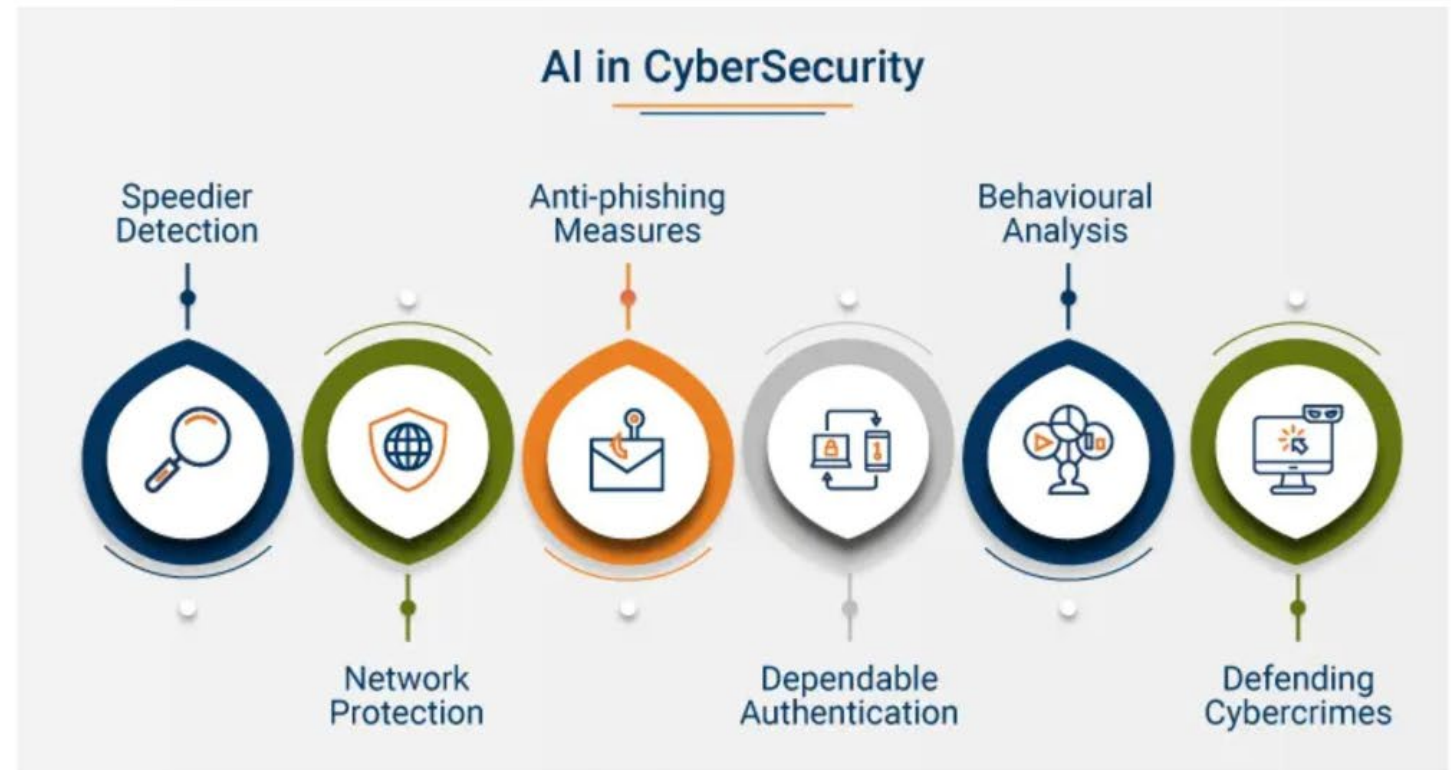
AI powered hacking

AI is used to automate, enhance, and scale cyberattacks



The good news

AI-powered threat detection



AI in CyberSecurity – Source: [Read Write](#)



And remember

Continuous
education about
emerging threats





One last thing

Communicate!

Communicate your **values**

B2C **engagement** via social media

Partner with **influencers**

Be open and **transparent**

**EDUCATION
AND
ENGAGEMENT**

How can BSI assist you?

Penetration testing
Ethical hacking
Training in AI and cybersecurity
Ethical deployment of AI
Develop AI algorithms





Richard Werran
Global Director Consumer, Retail & Food



Thank you

Richard Werran
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Questions?



Thank you for your attendance

- For further questions, please reach out to us
at: Richard.Werran@bsigroup.com
Gary.Wills@BSIGroup.com

IDDBA Member exclusive access!

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