



# Using Assessment Data to Make Effective Risk Based Food Safety Decisions

July 8, 2021

Organized by: The Food Safety Assessment, Audit, and Inspection PDG

Sponsored by the



Moderator: Andrew Clarke, Loblaw Companies, Canada

This webinar is being recorded and will be available to IAFP members within one week.





# Webinar Housekeeping

- For best viewing of the presentation material, please click on 'maximize' in the upper right corner of the 'Slide' window, then click 'Escape' to return to normal view.
- Questions should be submitted to the presenters during the presentation via the **Questions section** at the right of the screen. Questions will be answered at the end of the presentations.



# Webinar Housekeeping

- It is important to note that all opinions and statements are those of the individual making the presentation and not necessarily the opinion or view of IAFP.
- This webinar is being recorded and will be available for access by IAFP members at [www.foodprotection.org](http://www.foodprotection.org) within one week.

# Today's Participants



**Andrew Clarke**

*Loblaw Companies Limited, Canada*

Andrew is the Senior Director Quality Assurance at Loblaw Companies Limited, a seasoned food safety professional holding a BSc Food Technology and an MSc Food Safety Management, a Fellow of the Institute of Food Science and Technology and a 10+ year member of the International Association for Food Protection (IAFP). Currently co-chair for the GFSI Stakeholder Advisory Forum and an active contributor to the BRC Global Standards North America Advisory Board for many years. In 2020 the recipient of the IAFP Harold Barnum Industry Award, awarded for dedication and outstanding service to the public, IAFP and the food industry.



**Michael Wilson**

*BRCGS, UK*

Michael Wilson has worked in the assurance service industry for more than 20 years where he has worked with the worlds' leading brands; manufacturers and retailers helping them measure, understand and effectively manage risk within their own business and their extended supply chain. With a background in primary production, Mr Wilson has traversed the value chain working with stakeholders literally from "farm to fork". During this time, he has helped develop rigorous programs to mitigate risk and secure trust between the key role-players in the production; supply and sale of food around the world. Along with expertise in food safety management, Mr Wilson has also developed programs to address ethical trade and environmental stewardship within the global food and FMCG supply chains.

Mr Wilson is currently the Global Business Development Director for BRCGS, a leading provider of rigorous assurance services.

# Today's Participants



**Jennifer Lott**

*BSI, USA*

Jennifer Lott is the Senior Service Delivery Director for Food, Retail, and Customized Audits at BSI Group supporting Certification and Tailored Solutions.

Jennifer's is an accredited Lead Auditor and Trainer with over 25 years' experience GMP, Codex Alimentarius, FSSC 22000 Manufacturing and Packaging, RSPO, 21 CFR 111, 21 CFR 117, 21 CFR 210-211, ICH Q7, WHO GDP, EudraLex, ISO 15378, ISO 22716, BRC GS Consumer Products, BRC GS Storage & Distribution, BRC GS Packaging, BRC GS Agents & Brokers and is also a BRC ATP.

Jennifer received her B. Sc. Chemistry from the College of Mount St. Joseph in Cincinnati, Ohio and has worked with L'Oréal, Givaudan Flavors



**Lone Jespersen Ph.D**

*Cultivate SA, Switzerland*

Lone Jespersen is principal and founder of Cultivate SA, an organization dedicated to helping global food businesses make safe, great-tasting food through cultural effectiveness. She has significant experience with manufacturing, having previously spent 11 years with Maple Leaf Foods leading the execution of the company's food safety strategy and operations learning strategy and prior to that engineering and operations roles in the global automobile industry. Lone holds a Master's degree in mechanical engineering from Syd Dansk University, Denmark, a Master of Science in food science from the University of Guelph, Canada and a Ph.D. in culture enabled food safety with Dr. Mansel Griffiths at the University of Guelph, Canada. She led the Global Food Safety Initiative (GFSI) technical working group "A Culture of Food Safety", currently the chair of the International Association of Food Protection (IAFP) professional development group "Food Safety Culture", and the technical author on the BSI PAS320 "Practical Guide to Food Safety Culture."



# IAFP Webinar

Using Assessment Data to make effective risk-based food safety decisions

## PART I – WHY?

- Introduction
- Establish some context
- Set the scene

## PART II – WHAT & HOW?

- What data do we currently have access to?
- How are we using it?

## PART III – Where are we now and Where do we want to get to?

- Current status
- Future vision



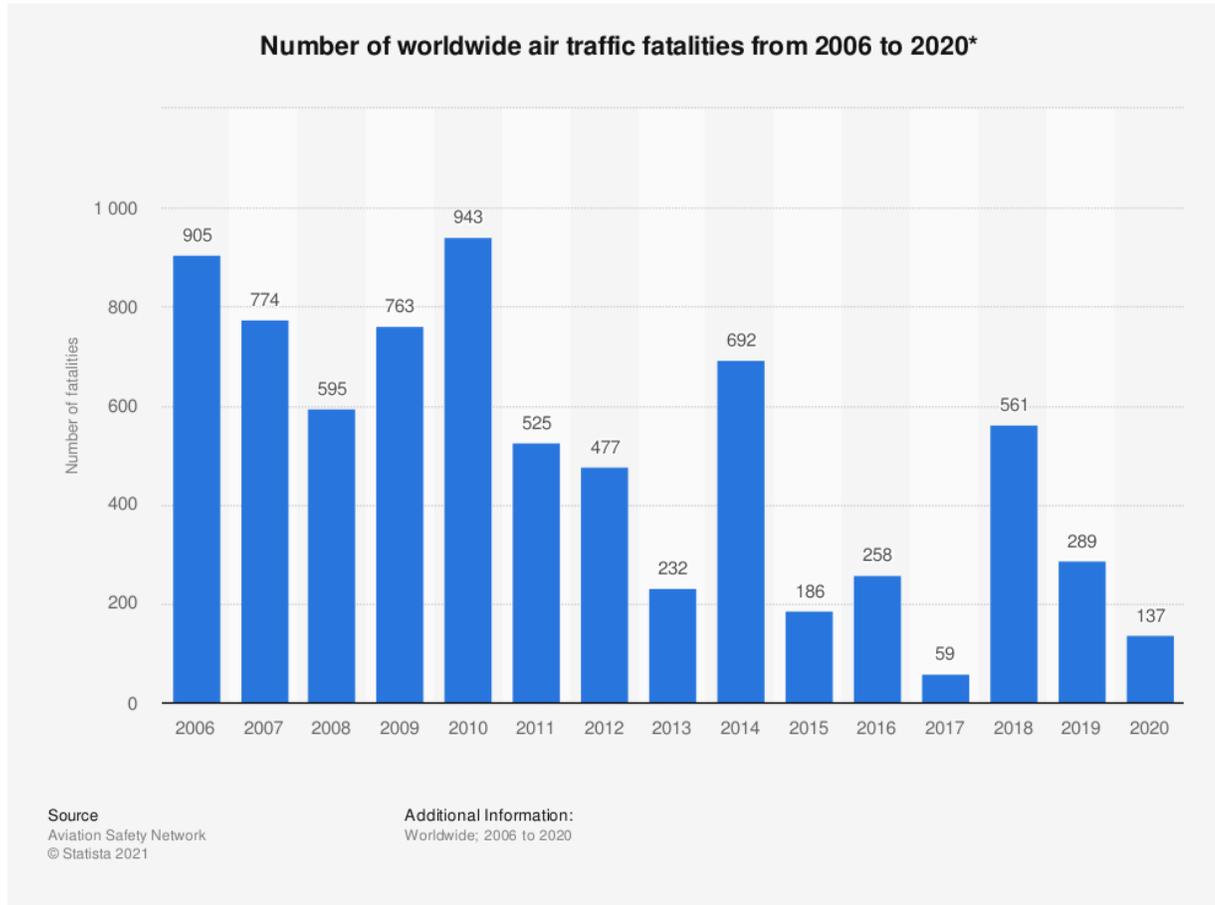
**“At least we are consistently inconsistent.”**

## KEY QUESTION:

How do we use assessment data to provide actionable insight and drive positive impact?

# WHY is this important?

Some context...



## The burden of foodborne diseases is substantial

WHO ESTIMATES OF THE GLOBAL BURDEN OF FOODBORNE DISEASES

Every year foodborne diseases cause:

- almost **in 10** people to fall ill
- 33 million** healthy life years lost

Foodborne diseases can be deadly, especially in children <5

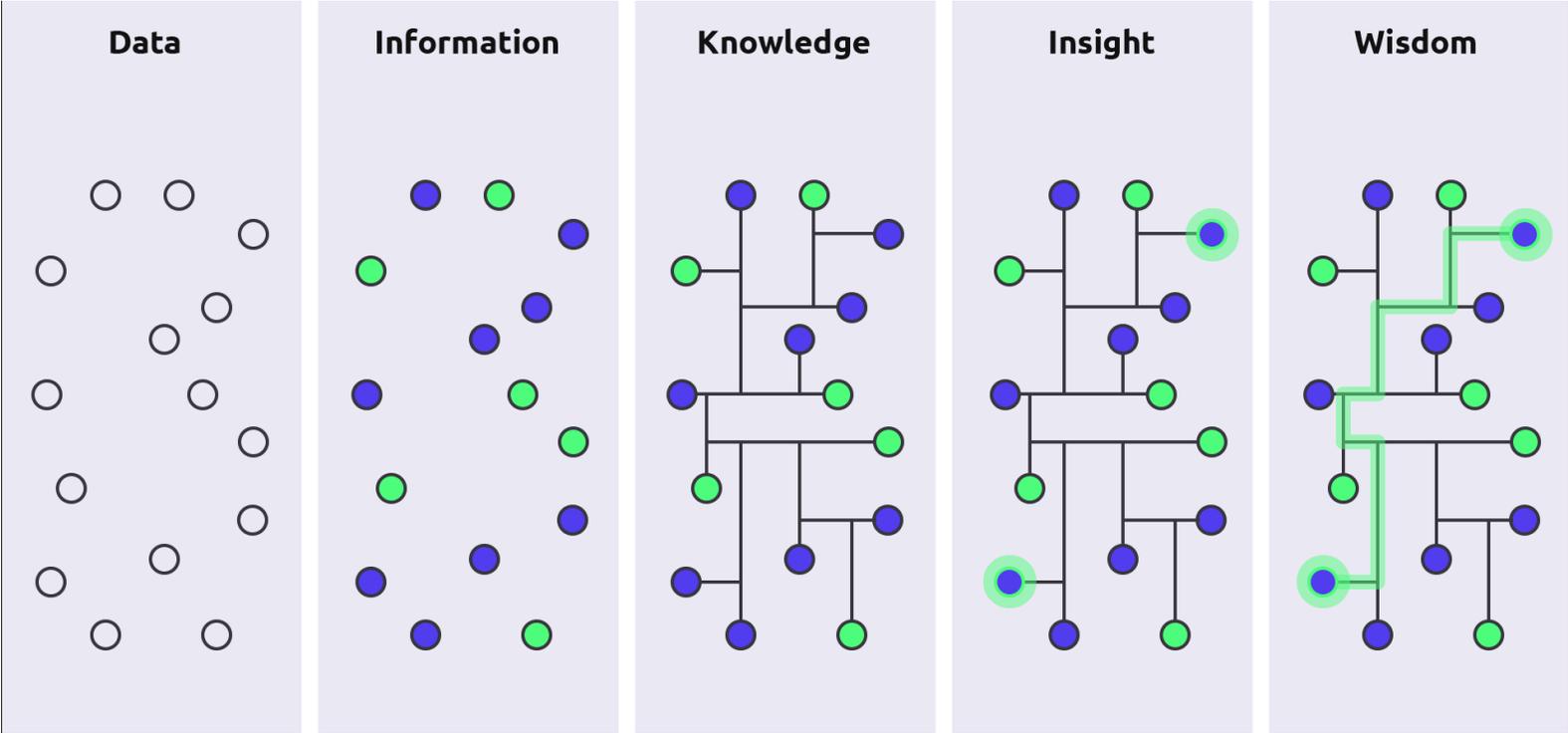
- 420 000** deaths
- Children account for **1/3** of deaths from foodborne diseases

**FOODBORNE DISEASES ARE PREVENTABLE. EVERYONE HAS A ROLE TO PLAY.**

For more information: [www.who.int/foodsafety](http://www.who.int/foodsafety)  
**#SafeFood**  
Source: WHO Estimates of the Global Burden of Foodborne Diseases. 2015.

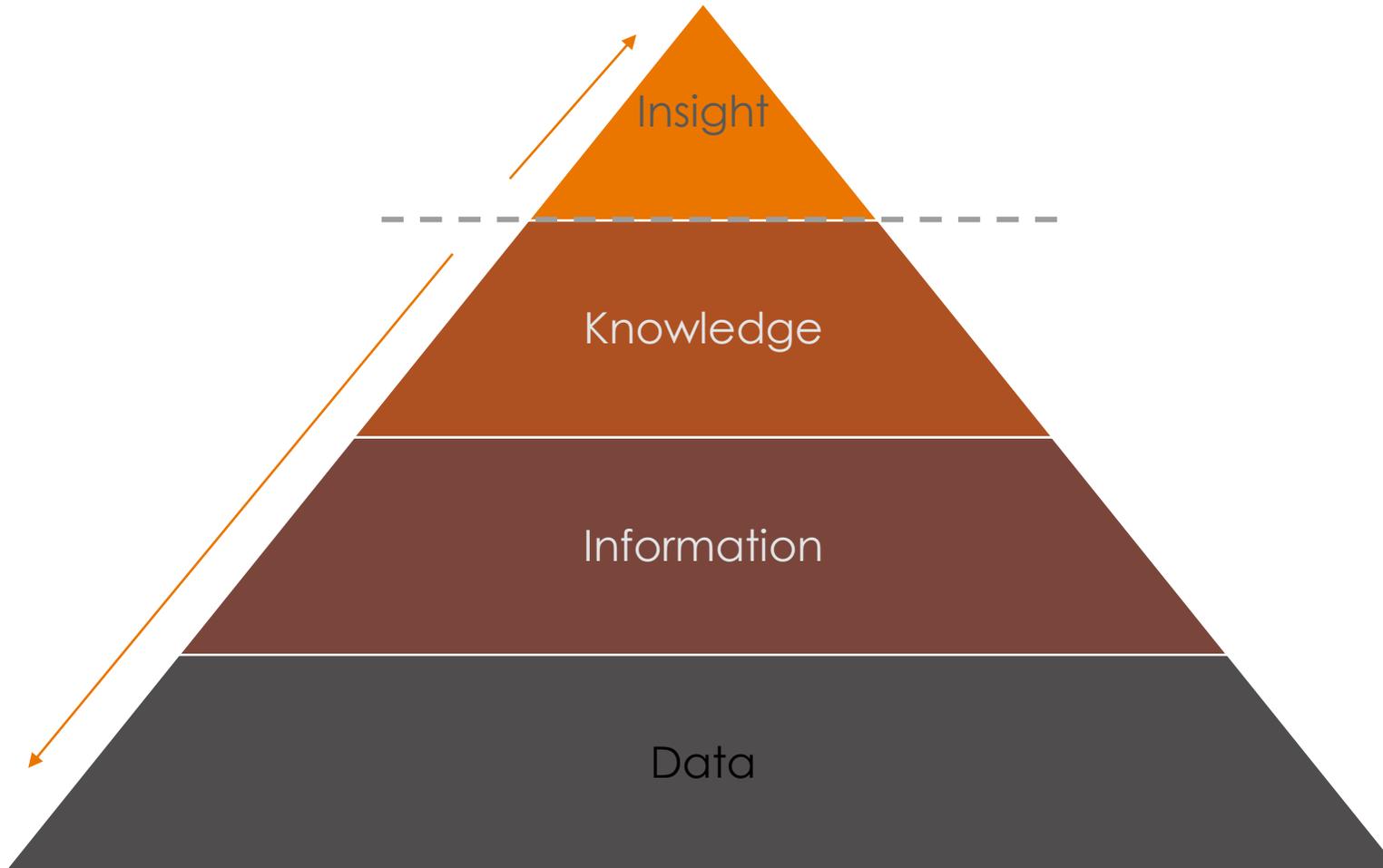
# Giving data meaning

Making sense of it all...



# Knowledge Pyramid

Turning Raw Data into Actionable Insight



Application:  
I'd better check the oven and turn up the temp

Context:  
The temperature needs to remain at or above 70°Celsius to remain safe

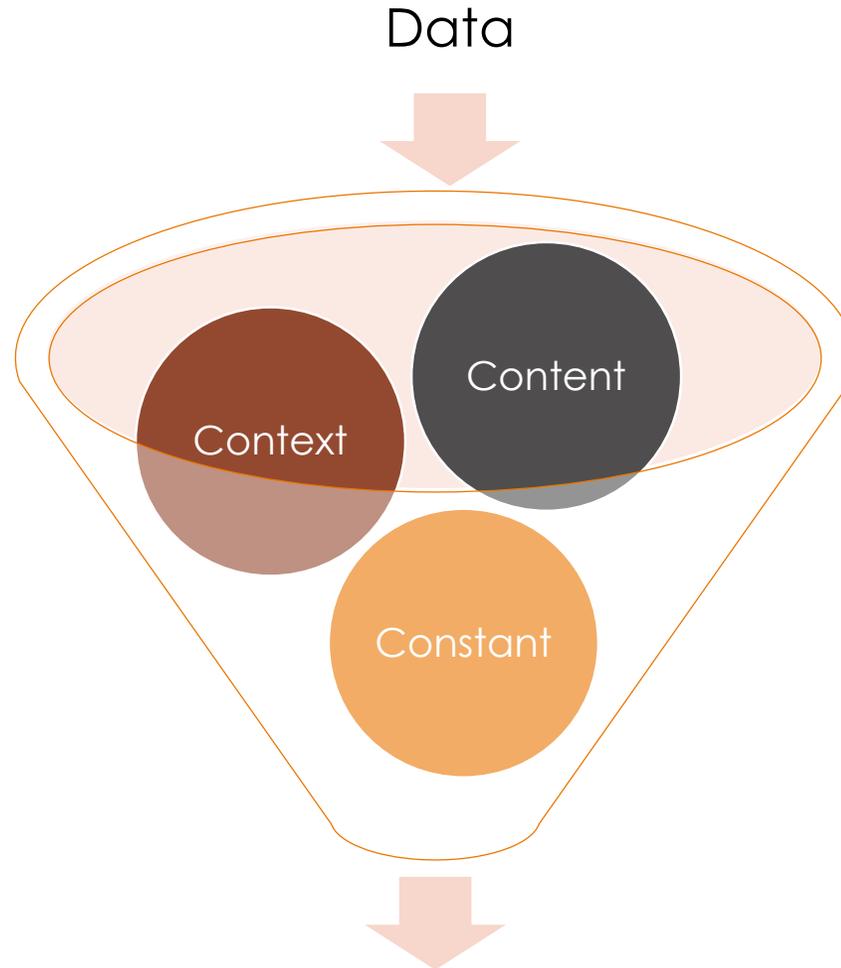
Translation:  
The cooking temperature of the oven has dropped

Raw Data:  
63°Celsius

# Giving Data Meaning

## Key Characteristics of Data

The circumstances relevant to the event  
e.g. Cooking 50kg's of Chicken in an electric oven Vs 5kg in a pot or on a grill



The event to which the data relates  
e.g. Cooking Chicken

# Some Examples...

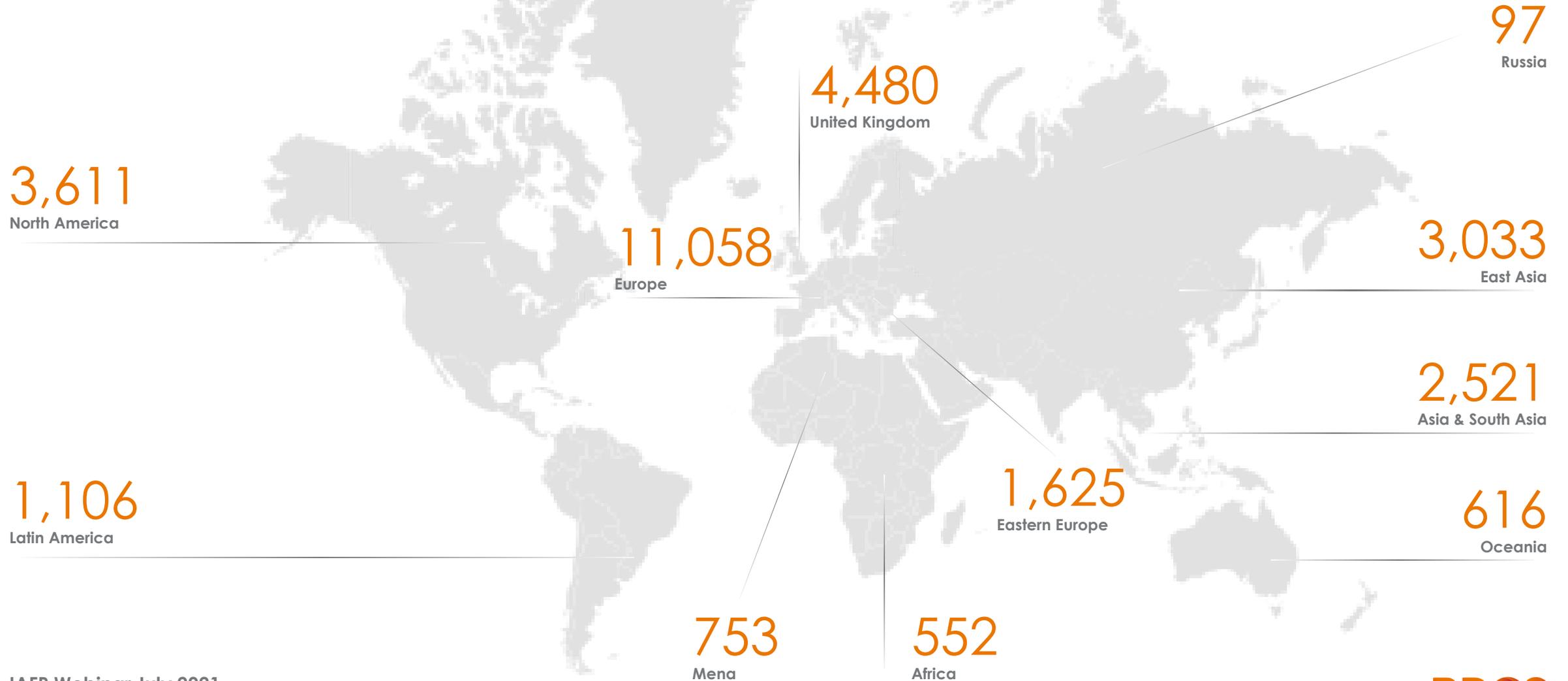
Context – Sources of data across spectrum of value chain

<p><b>1996</b></p> <p>BRC Global Standards was set up to reduce audit duplication by UK retailers</p>	<p><b>2000</b></p>  <p>Food Safety first standard to be recognised by GFSI</p>	<p><b>2003</b></p>  <p>Consumer Products first published</p>	<p><b>2014</b></p>  <p>Agents and Brokers first published</p>	<p><b>2015</b></p> <p><b>BRCGS e-Learning</b></p> <p>e-learning launched</p>	<p><b>2017</b></p>  <p>Food Safety Culture Excellence launched</p>	<p><b>2018</b></p>  <p>Acquisition of the Allergen Control Group Inc. (AGC) New Service package launched</p>	<p><b>2020</b></p>  <p>Virtual training launched</p>	<p><b>2020</b></p>  <p>Plant-based Standard Published Tell BRCGS Confidential Reporting launched</p>
---	---	---	--	--	---	---	---	---

<p>Food safety first published</p>  <p><b>1998</b></p>	<p>Packaging and Packaging Materials first published</p>  <p><b>2001</b></p>	<p>Storage and Distribution first published</p>  <p><b>2006</b></p>	<p>Offices opened in USA and India Acquired by LGC Group Retail first published</p>   <p><b>2016</b></p>	<p>START! Global Markets Food Safety Published</p>  <p><b>2018</b></p>	<p>BRCGS Branding Launched February 2019</p>  <p>Issue 3 Gluten-Free published</p> <p><b>BRCGS 2019</b></p>	<p>Ethical Trade and Responsible Sourcing Published</p>  <p><b>2019</b></p> <p><b>BRCGS</b></p>
--	--	---	---	--	---	---

# Some Examples...

Over 30k Sites Worldwide – Global Context



## Some Examples...

Sources of Data – Where does our CONTENT come from

30,000  
certificated sites

9  
core schemes

7  
locations

185,000  
corrected non-compliances

1,840  
auditors

6  
Annual Audit Days

10,127  
professional delegates

18  
food safety categories

57%  
unannounced visits

94%  
satisfaction with auditors

13,217  
trained by BRCGS academy

77  
number of delivery partners

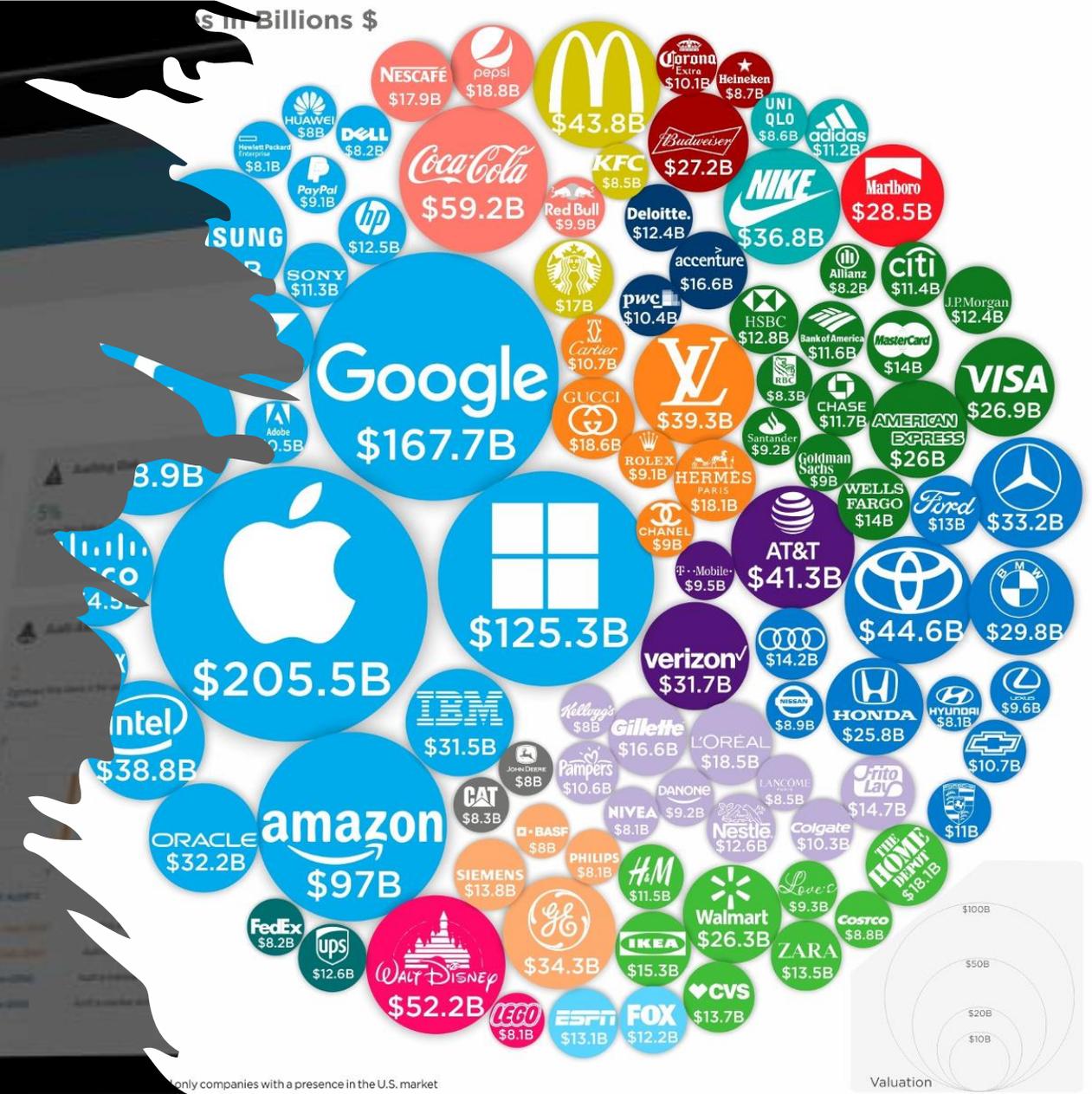
171  
compliance site visits

130+  
operating countries

Valuation in Billions \$

# Making Data Accessible...

Now we've got it; what do we do with it?



Only companies with a presence in the U.S. market



- Beverages
- Business Services
- Consumer Packaged Goods
- Diversified
- Financial Services
- Heavy Equipment
- Leisure
- Luxury
- Media
- Restaurants
- Retail
- Technology
- Telecom
- Tobacco
- Transportation

# How do we currently use this data?

Turning data into actionable Insight

## DASHBOARD AUDITOR ANALYSIS



Analyze trends in Non-Conformities and auditor performance

- Average NCs per auditor (Top 20 by volume)
- Volume of audits by NCs
- NCs by country

Clause List – Instantly find the clause reference.

Non Conformity Report

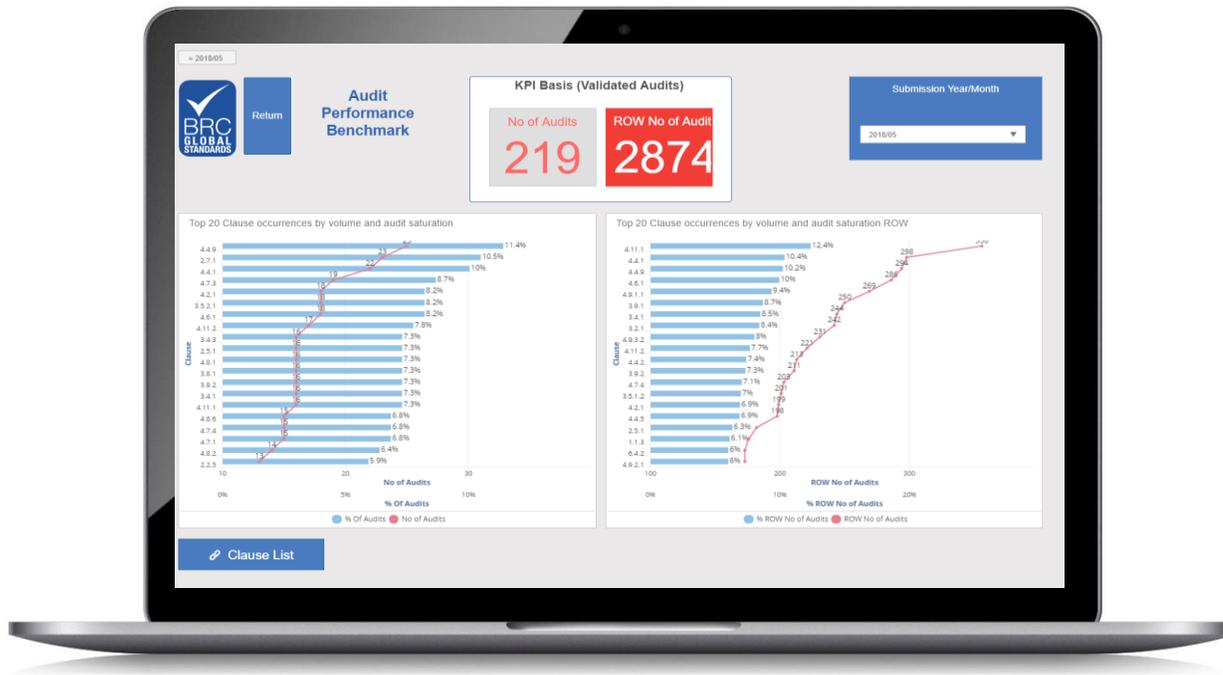
### BENEFITS

- Data is highly portable and can be scheduled to be sent to key internal stakeholders
- KPI's and statistics perfect for compliance checks and measuring auditor calibration
- Data mining opportunities for training and publishing. Segment data by scheme, country and tell prospective sites of likely problem areas
- Marketing can use rich content to create valuable insights to generate leads
- Brand owner assurance – demonstrate how your auditor experience is consistent globally

# How do we currently use this data?

Turning data into actionable Insight

## DASHBOARD BENCHMARK & KPI



Performance Benchmark compares

- Audit KPI's
- Non-conformity clause occurrence vs ROW
- Grade volume vs ROW
- Audits by standard vs ROW

### BENEFITS

- Create your own value-add benchmark report by offering common non conformities, grade profiles and site numbers by scheme, country and category
- Potential additional revenue charge for the benchmarked audit report
- Market Position – A real point of difference for a CB that uses data to drive new business and increase renewals

# Where are we now & Where do we want to get to?



# Brand Confidence Starts With A Conversation.

At BRCGS, our definitive Global Standards underpin brand reputation through compliance. To instil greater confidence in your brands and manage your risks in rapidly changing times, start a rewarding conversation with us.

## Start the conversation:

+44 (0)20 3931 8150

[contactus@brcgs.com](mailto:contactus@brcgs.com)

# Using Data & Information From Audits and Inspections to Improve and Advance Food Safety

Jennifer Lott  
Senior Service Delivery Director – Food, Retail,  
and Customized Audit

July 8, 2021



# From Short Term to Major Shift

Great Depression

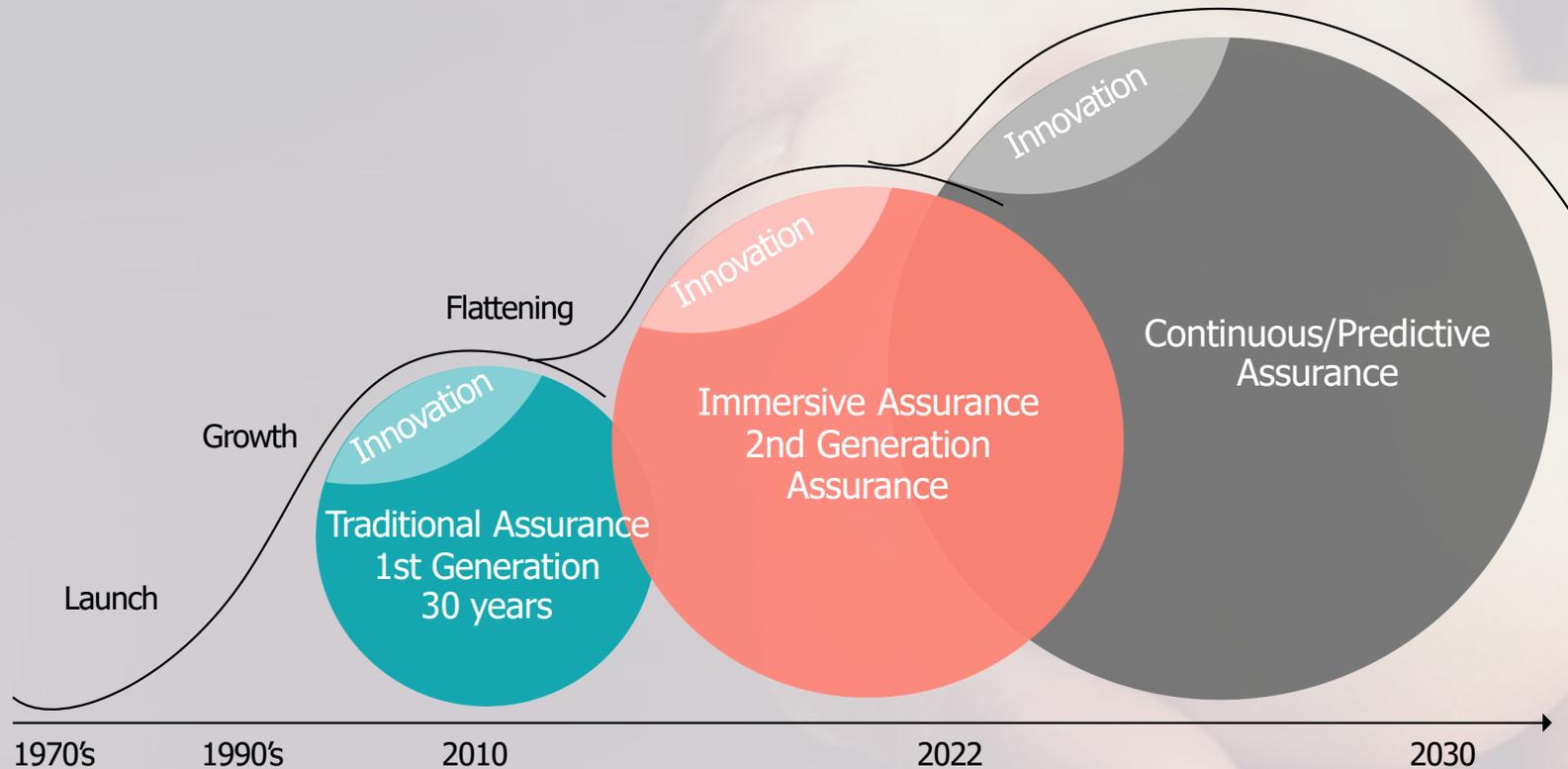
Military-Industrial Complex

Identified Risks

9/11 Attacks

COVID -19 Pandemic

# Assurance Types



## Traditional Assurance

- Quality is a separate function
- Focus catching issues
- Data is disjointed, separate systems

## Immersive Assurance

- Quality is everyone's job
- Focus on identification, isolation, and mitigation
- Continuous Improvement
- Data is better harmonized and organized

## Continuous/Predictive Assurance

- Embedded connected technologies will model, assess, and predict improvement opportunities.

# Assurance Tools

## Immersive Assurance Tech to Auditor & Consultant

- Smart Wearables
- Remote Audit
- Connected Auditor/Consultant
- Audit Mobility Application

## Continuous Assurance Tech to Tech Audit

- AI Based Management System auditing
- Cognitive Technology assessments
- AI based image recognition & computer vision

## Continuous Assurance Tech to Client

- Smart Factory & Connected Supply Chain
- Sensor / Smart Wearable Monitoring
- Cognitive Analytics / Monitoring
- Auto Reporting
- Immersive Operations support and call center

# Spatial Solutions Overview

## Drone:

Comprehensive view of sites above ground



## LiDAR:

Indoor, to-scale 3D modeling

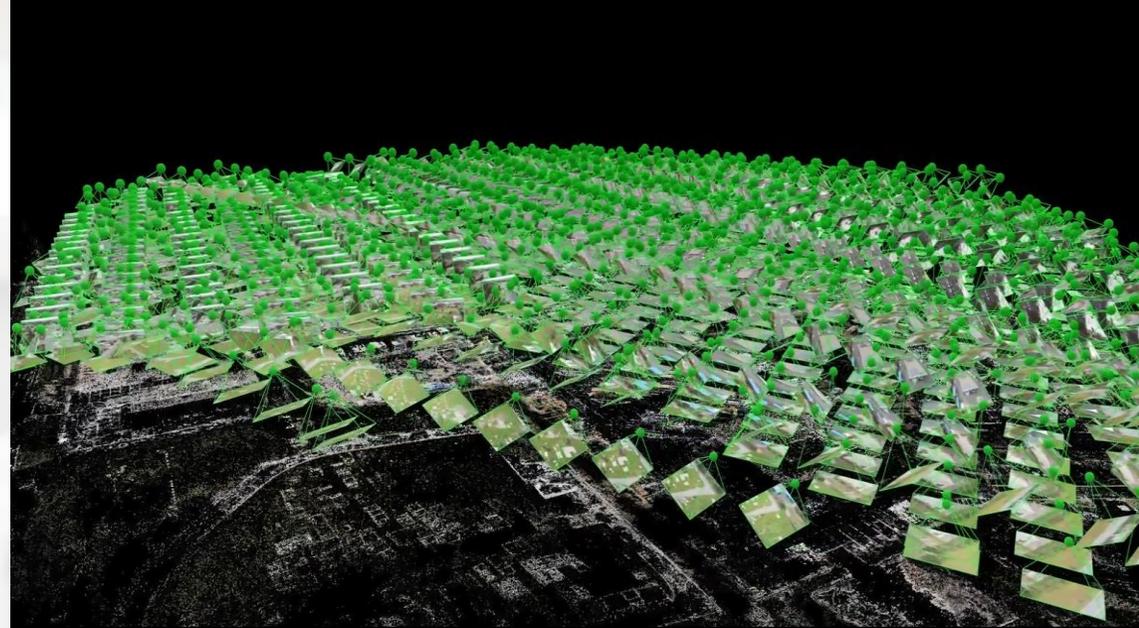


## SaaS:

Seamless monitoring of nonconformities



- conducts assessments through drone and LiDAR technology that helps visually identify hazard exposures, nonconformities, compliance concerns, and anomalies
- This technology provides high-resolution visuals to assess progress or change, identify anomalies, assist in site planning, and help ensure regulatory compliance
- Consultants/auditors can quantifiably assess sites through tools such as area and linear distance measurements.
- BSI tags and prioritizes each finding including the applicable regulation and recommended remediation measures







# Let's Co-Innovate

Jennifer Lott  
Senior Service Delivery Director – Food, Retail, and  
Customized Audit  
[jennifer.lott@bsigroup.com](mailto:jennifer.lott@bsigroup.com)

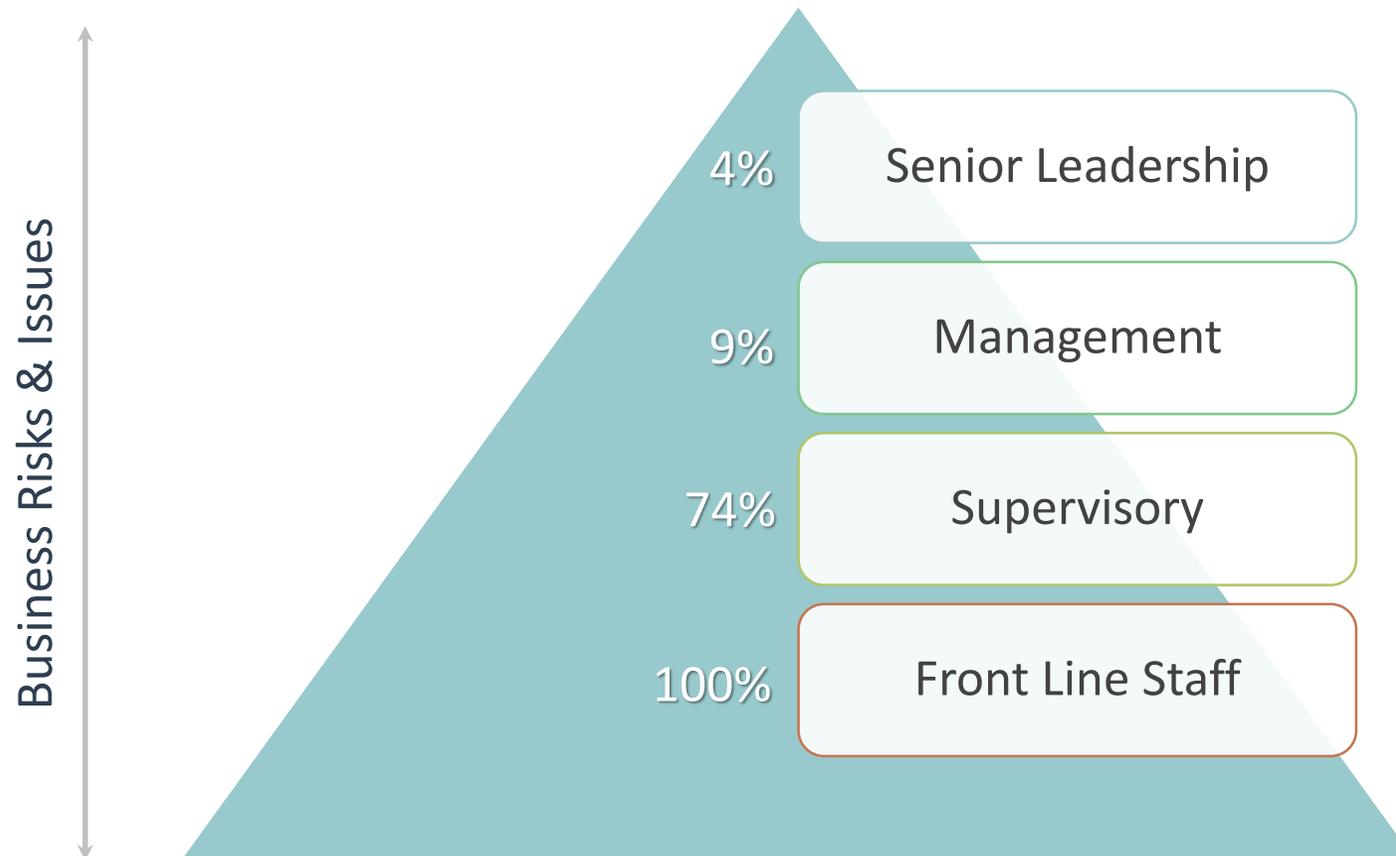


# Does your data make your food safer?

IAFP July 8, 2021



# Organisational culture and risk visibility



# Data process



Collect

Record

Transfer

Analyze

Visualize

Take Action

**So...**



**Does your data make  
your food safer?**



**It depends ...**



# Case

---





**Spring 2020**

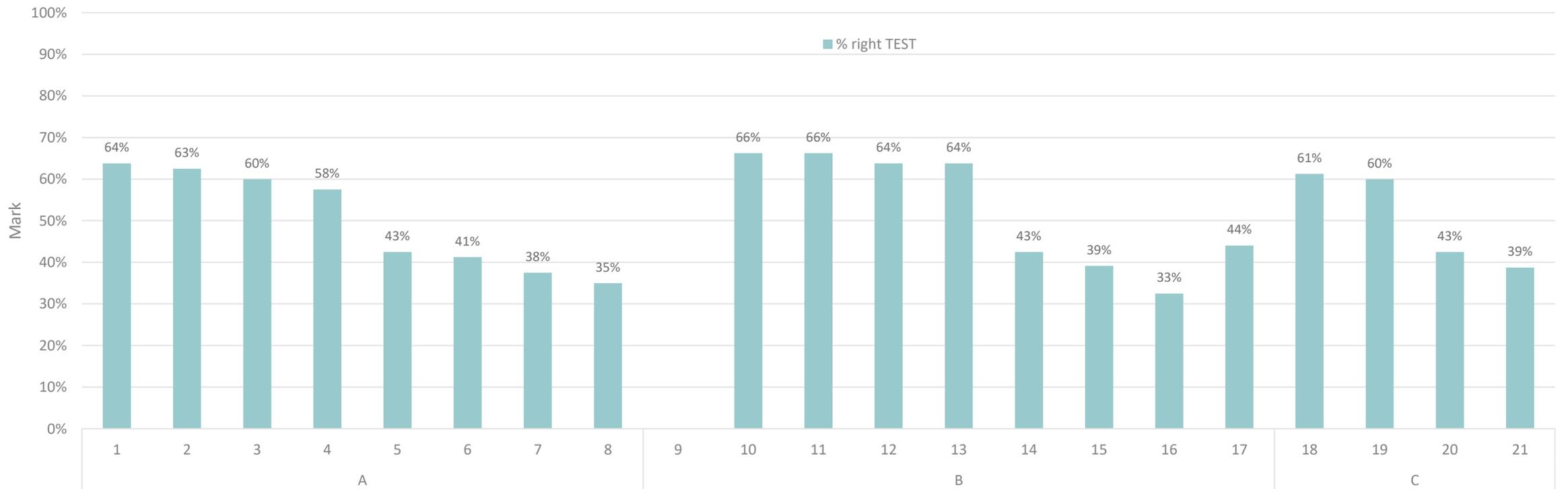


## Case

- U.S. based meat company with multiple manufacturing sites.
- Regular environmental monitoring positives at all sites.
- Leaders were found to anchor their low estimation of food safety risks in the 'few' EMP findings and review of customer complaints.
- Food safety risks were only discussed in the HACCP teams and not in management or executive meetings.

# HACCP proficiency

- HACCP Team proficiency range **33-66%**



# Change Focus



Leadership behaviours



Data process and  
Rhythm



HACCP Proficiency



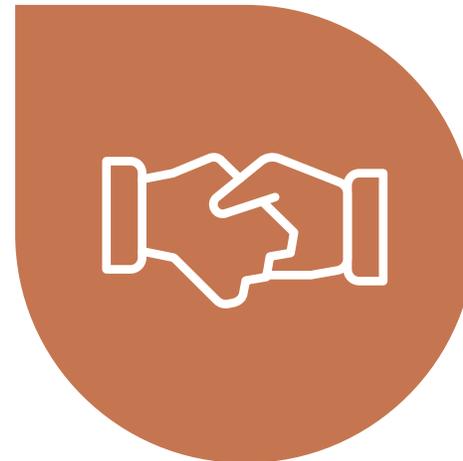
# Building measurable proficiency

Virtual 4 week learning program



30-minute sessions with in-plant homework

Team learning



Norms focus



**November 2020**

# HACCP proficiency (retest)

- HACCP team proficiency range **59-83%**





# In summary

**So...**



**Does your data make  
your food safer?**

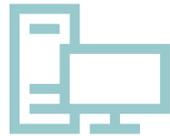


**It depends ...**

# To get better value from your data...



Behaviours



Data process



Rhythm



Proficiency



# Thank you

Lone Jespersen, Ph.D.

[lone@cultivatefoodsafety.com](mailto:lone@cultivatefoodsafety.com)

+41 79 246 0807



# Questions?

Questions should be submitted to the presenters via the **Questions section** at the right of the screen.



## Contact Information

- [andrew.clarke1@loblaw.ca](mailto:andrew.clarke1@loblaw.ca)
- [jennifer.lott@bsigroup.com](mailto:jennifer.lott@bsigroup.com)
- [lone@cultivatefoodsafety.com](mailto:lone@cultivatefoodsafety.com)
- [michael.Wilson@brcgs.com](mailto:michael.Wilson@brcgs.com)



This webinar is being recorded and will be available for access by **IAFP members** at [www.foodprotection.org](http://www.foodprotection.org) within one week.

**Not a Member?** We encourage you to join today.

For more information go to:

[www.FoodProtection.org/membership/](http://www.FoodProtection.org/membership/)

All **IAFP webinars** are supported by the IAFP Foundation with no charge to participants.

Please consider making a donation to the [IAFP Foundation](#) so we can continue to provide quality information to food safety professionals.

