About Safefood 360°

Software Platform
Comprehensive platform covering all aspects of food industry compliance:

- SaaS Solution
- Web Access
- 30+ Modules
- Compliance Software

Domain Expertise
World class knowledge of food safety and compliance provided by a team of experienced food industry experts:

- IT developers led by food safety experts
- Experienced team
- Food safety product – not an IT project

Innovative Software + Domain Expertise = Safefood 360°

World class support
Robust SLA
Shared Concerns

- Globally 1 in 10 people affected and >420,000 die from foodborne illness every year (WHO, 2015)
- Food fraud costs UK food industry £12bn pa
- Food recalls increasing
- Food recall processes inefficient
- Learnings rarely shared
Shared Concerns

- Increasing dependence on a global supply chain to source raw materials/partially processed product
- Increasing food trade volume/pace
- Complexity of trade borders/barriers
- Varying country food safety standards and capability
- Food chain operators >95% SME
Major Challenges

- Full visibility of supply chain data – flow of supplier data
- Cooperation across interested parties and stakeholders
- Secure permissioned systems
- Interoperable, usable, and affordable technology
What is Risk?

“The scientific evaluation of known or potential adverse health effects resulting from human exposure to foodborne hazards” - WHO
What is the requirement for conducting risk assessment on your supply chain?

**GFSI Standards**

“The company shall undertake a documented risk assessment of each raw material…”  BRC I7 3.5

**FDA – FSMA Rules**

Supplier Verification - risk assess individual suppliers, supplier facilities and products

**Retailers**

“All suppliers to the site must be assessed to determine the overall potential risk associated with their materials on an ongoing basis” TFMSv6Sec 3
Scope of Risk Assessments Required On Your Supply Chain

**Suppliers**
Supplier entity with title of ownership

**Facilities**
Individual facilities accounting for local objective risks

**Agents / Brokers**
Assessed as a supplier

**3rd Party**
Must be within the scope of assessment and addressed as a facility

**Raw Materials**
Individual raw materials, ingredients, packaging

**Products**
Traded products where title of ownerships is assumed - FSMA
1. Nature of supplier’s operation and compliance with requirements

2. Intrinsic hazard to the material supplied

Companies should identify suppliers that drive the greatest level of risk. The lack of visibility through the overall supply chain and amount of information required are the main challenges that a company needs to face.
Potential risk added as complexity of chain increases
More appropriate for HACCP based assessments focusing on a specific hazard at a specific process step or stage.
More appropriate for Supply Chain risk assessments looking at various risk factors contributing to supplier or material risk.

Risk Weighting
Some risk criteria will contribute more to the overall risk value – some will contribute less.
<table>
<thead>
<tr>
<th>Type of Sample Criteria Being Used by Companies</th>
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<tbody>
<tr>
<td><strong>GFSI / Other Certification</strong></td>
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<tr>
<td>Has the supplier / facility achieved some 3rd party certification standard?</td>
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<td><strong>COA / COC</strong></td>
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<td>Does the company issue certificates of analysis or conformance?</td>
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<tr>
<td><strong>Country of Origin</strong></td>
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<td>This criteria involves referring to public databases on the history of food safety from particular countries or regions including likelihood for food fraud</td>
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<td><strong>Recall / Alerts in Last 24 Months</strong></td>
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<tr>
<td>Measuring the number of recalls, alerts, notifications, withdrawals, sanctions over a recent period may indicate the level of risk with a particular supplier</td>
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<tr>
<td><strong>Threat / Food Defense</strong></td>
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<tr>
<td>A measure of the potential level of threat in the supply chain – food fraud / adulteration etc</td>
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<tr>
<td><strong>Volume of Supply</strong></td>
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<tr>
<td>Integrating exposure into the RA. The greater the volume the greater the exposure should an issue arise</td>
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Pre-Assessment allows you to drill down into your supply chain as far as you need while maintaining the relationships to produce quality supply chain maps.
Pre-Assessment Allows:

1. Pre-Assess before engaging activities
2. Determine whether you wish to invest more time
3. Initial assessment can be conducted based on basic data collection
4. Will allow data on all other entities such as facilities, agents, and broker to be collected
5. A decision can be made regarding triggering further assessment of these entities
You need to know WHO at various Tiers in your supply chain [MAPPING]

You need to know WHAT for individual supply chain entities and any given moment in time [INTELLIGENCE]
Supply Chain Mapping & Intelligence

Do they have a history of Food Fraud issues?

Are they from a high risk country?

Are they GFSI certified?
Technological Developments

- Distributed ledger technology (Blockchain)
- Secure cloud technologies and platforms
- Smart contracts (payment on evidence of compliance)
- Internet of Things
- Big data analysis/modelling
- Smart manufacturing
- Tagging and tracking, holographic labels, smart packaging
- Sensors –temperature
- Whole genome sequencing and DNA speciation / Stable isotope
Given the nature of the challenges it's clear that technology is the only thing capable of solving these challenges medium to long term. What that looks like remains an open question.
Questions?
Thank you!

George Howlett
CEO, Safefood 360°
george@safefood360.com
www.safefood360.com