

# How to build Food System Resilience within a learning organization

Ir. Cornelis van Elst, John T. Hoffman and Carl C. J. Unis

# Food Company

- Dynamic playing field
- 2000 quality requirements
- 100 suppliers
- 100 customers
- 100 employees
- 400 legislative changes



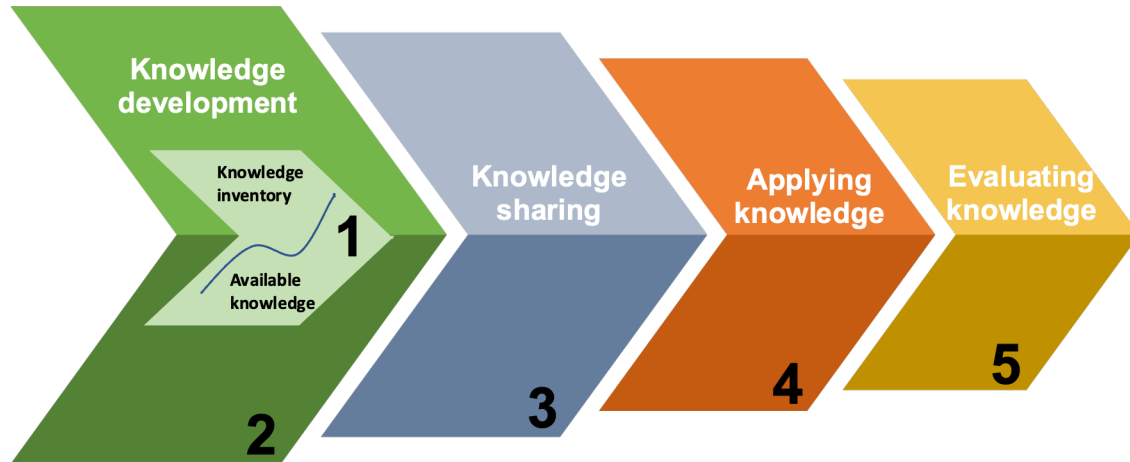
# How to organize?

- Certification management
- Demand relationship management
- Business performance management
- Supply relationship management
- Legislation management



# What is knowledge management?

- Knowledge = Information \* Experience \* Skills \* Attitude
- Knowledge management focuses on the structured development, transfer, dissemination and application of knowledge within an organization.



# Real-time Food Assurance: knowledge areas?

Management of:

- Specifications
- Quality activities
- Traceability
- Assessment



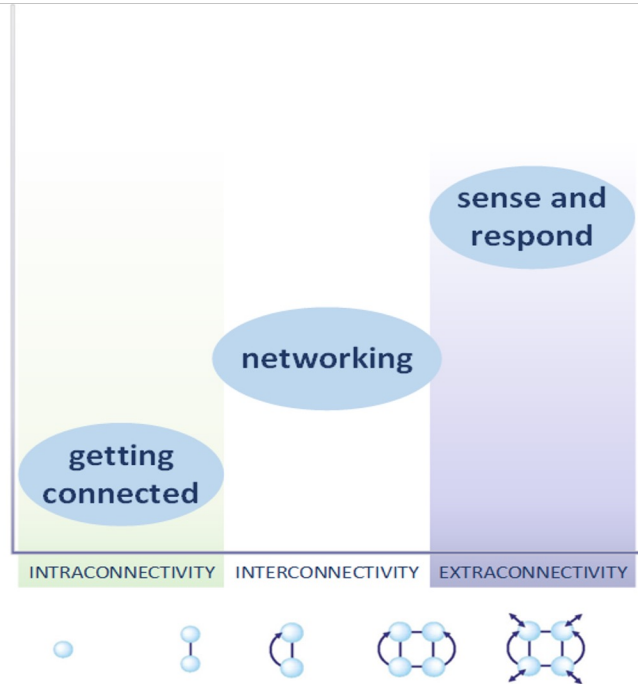
## Food Safety Compliance management

Management of business performance, demand and supply relations, legislation and certification with regard to Food Safety, taking into specifications, quality activities, traceability and assessment.

	Specifications	Quality activities	Traceability	Assessment
	Requesting, drawing up, issuing and securing specifications regarding raw materials, semi-finished products, processes and end products, with which legislation, quality standards and customer requirements are met.	Drawing up, complying with and guaranteeing product and process parameters through procedures, job descriptions and responsibilities with which legislation, quality standards and customer requirements are met.	Registering all information flows and related actions regarding raw materials, semi-finished products, processes and end products, with which legislation, quality standards and customer requirements are met (transparency and consumer intimacy).	Testing whether the product and process parameters and the related procedures, job descriptions and responsibilities meet legislation, the quality standards and customer requirements that are set.
<b>Quality Standards</b>				
Certification	Standard requirements	Operational framework	Test, certification body informed	HACCP, TACCP, VACCP, standard based practice
<b>Customers &amp; Consumers</b>				
Demand Relationships	Product, process requirements	Demand Information Center	Products, specifications	Customer satisfaction, consumer needs
<b>Food Company</b>				
Food Company	Product, process and people requirements	Training, support, procedures, quality documents and database	Ingredients, semi-products, final products	Business System
<b>Suppliers</b>				
Supply Relationships	Product, process and people requirements	Supply Information Center	Raw materials, services, specifications	Supplier selection and performance
<b>Legislation</b>				
Legislation	Legal requirements	HACCP and prerequisite program	Food Safety Authority informed	HACCP, legal based practice

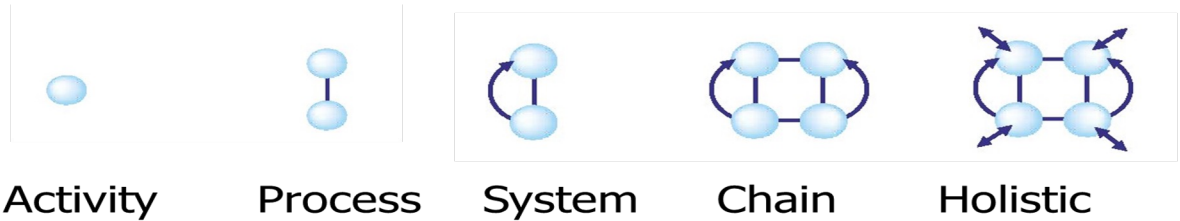
# How do we want to be organized?

Knowing that something will happen.  
Knowing why something happens.  
Knowing that something is happening.  
Knowing that something has happened.



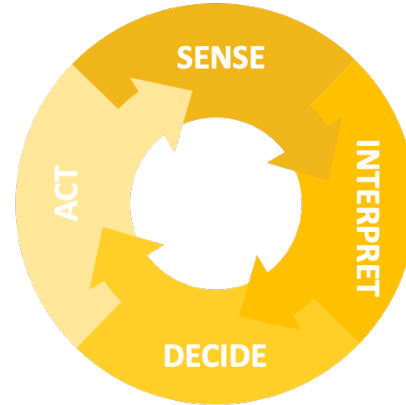
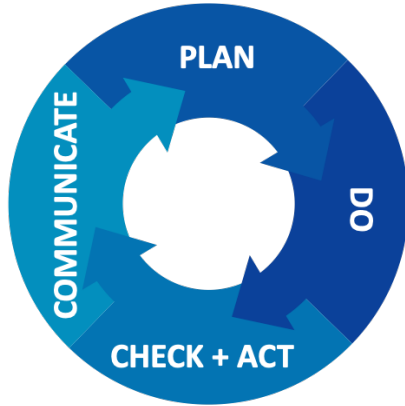
# Connectivity phases

Management of	Getting Connected	Networking	Sense and Respond
Certification			
Demand relationships			
Business performance			
Supply relationships			
Legislation			





# Two important knowledge processes

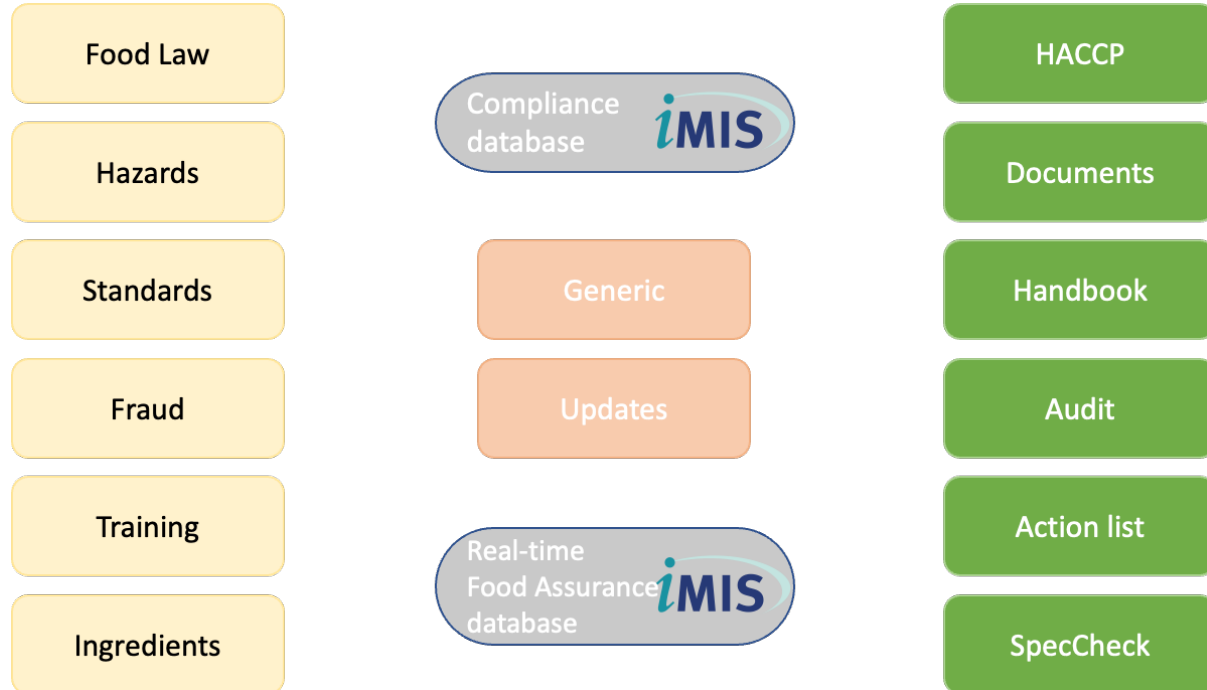


# A learning organization needs

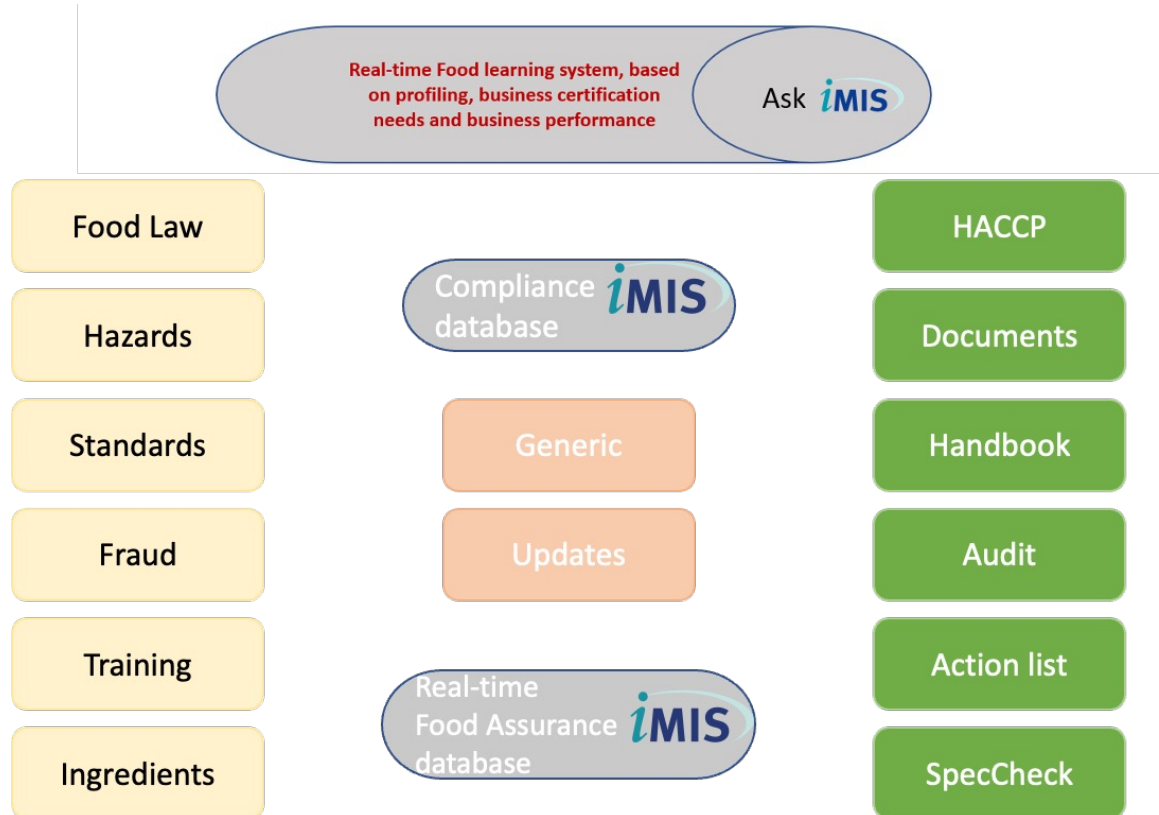
- The right infrastructure and processes in place to be organized for Food Safety Excellence.
- To define who is responsible for which knowledge area
- To define who is responsible for PDCA and SIDA.



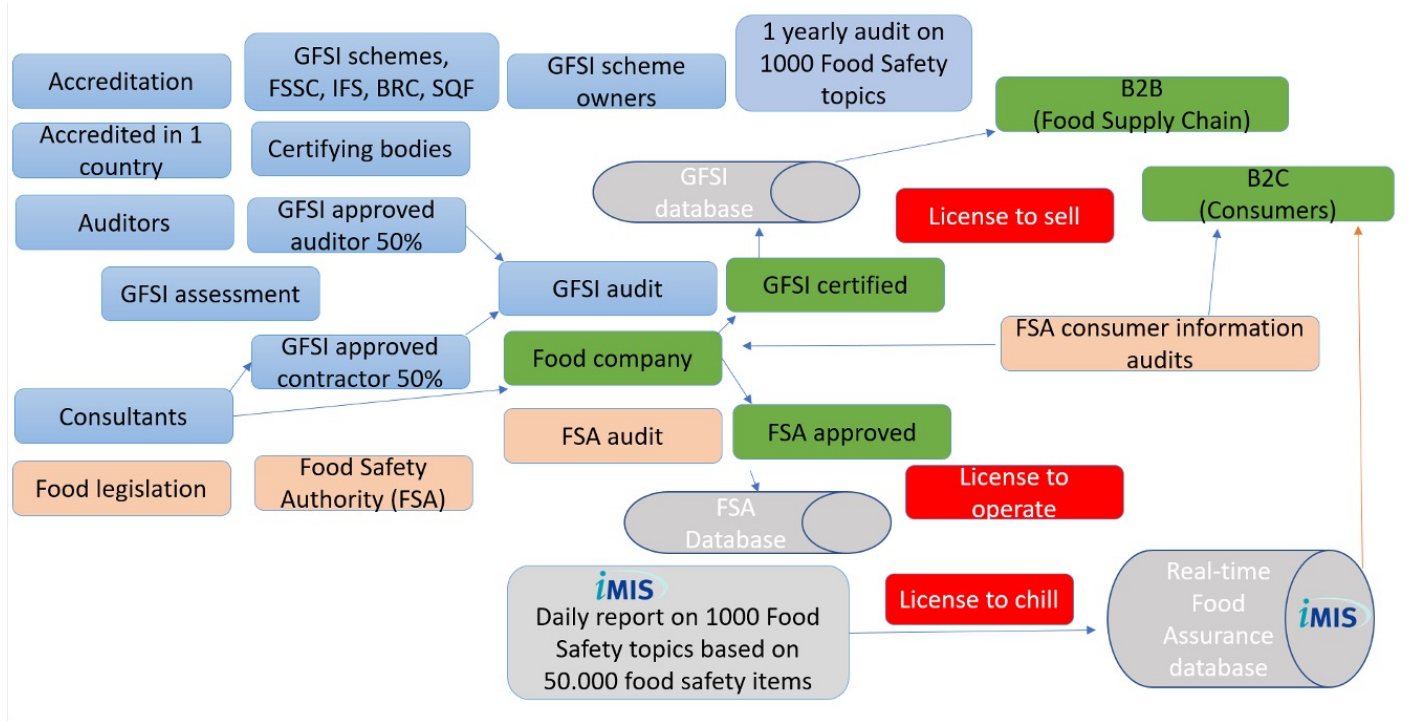
# Learning organization infrastructure: roles and responsibilities



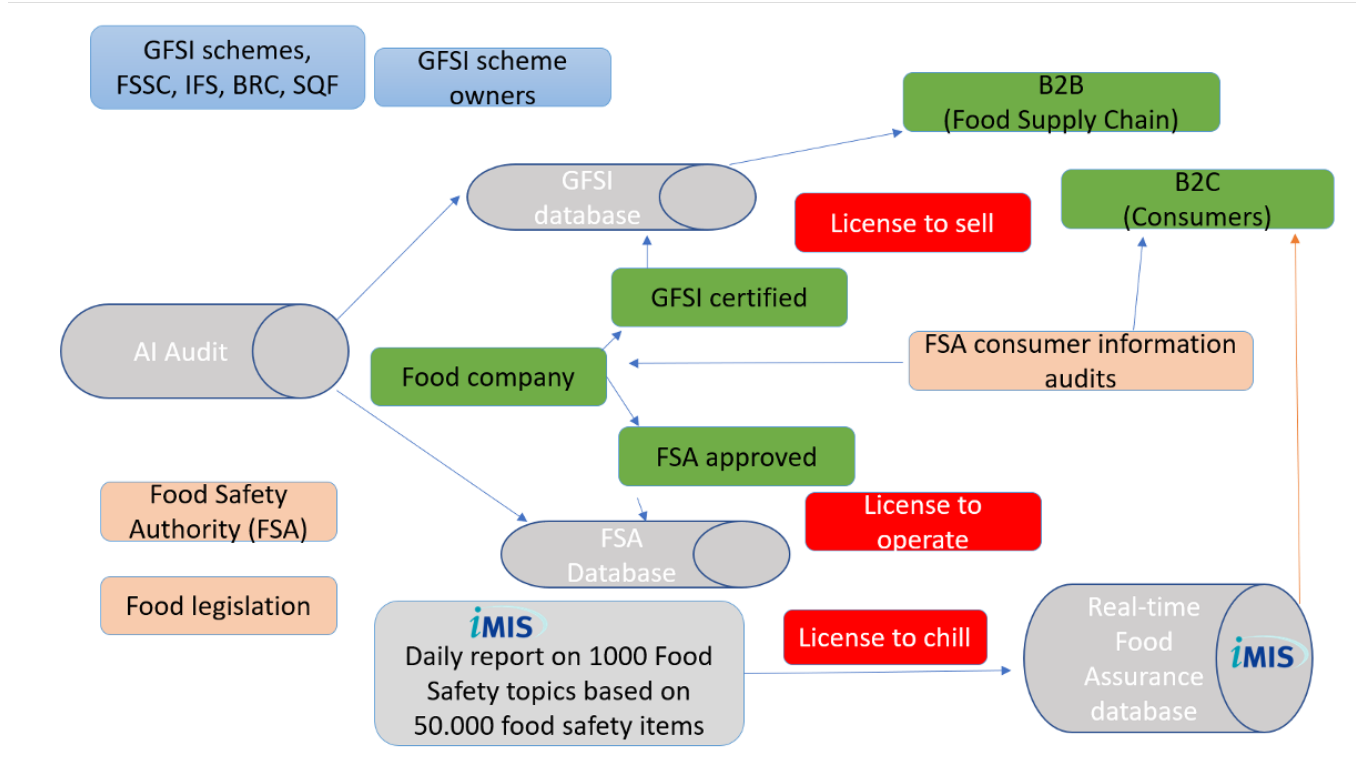
# When you digitize: you are ready for AI



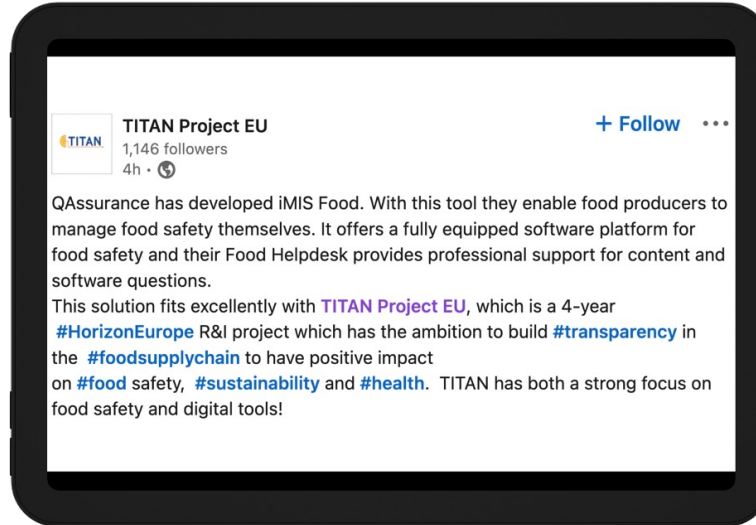
# Real-time Food Assurance



# Real-time Food Assurance by AI



# EU Titan project



# Article

## **Food System Resilience within a Learning Organization**

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- The original pdf can be found the following link:  
[https://www.nxtbook.com/nxtbooks/trilix/fpt\\_20220708/index.php#/p/338](https://www.nxtbook.com/nxtbooks/trilix/fpt_20220708/index.php#/p/338)



# Scorecards

- Food Safety Compliance (Knowledge areas)  
<https://www.qassurance.com/online-food-safety-compliance-scorecard/>
- Digital Transformation (Processes & Digitizing)  
<https://www.qassurance.com/free-real-time-food-safety-compliance-calculator/>
- Food Safety Culture, 7S model (Infrastructure)  
<https://www.qassurance.com/imis-food-safety-culture-scan-for-staff-management/>



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