Managing Risks in Food Safety Inspections

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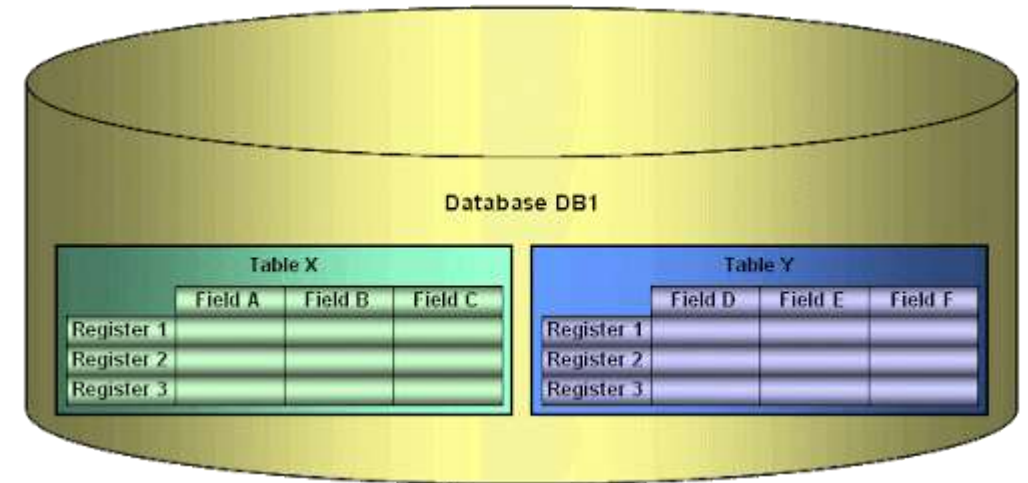Vilnius, 2025

Risk management in FS inspection

Risk identification

- Basic understanding
- Understanding uncertainties
- Cross-checking with external experiences (international, national)
- Internal cross-checking (with internal programs)
- Full definition of the risk

Risk analysis : qualitative and quantitative

- Food business operators

- Specific areas

- Specific processes (organic, products from raw milk, sprouts, etc.)

- Systems (HACCP, traceability, biosecurity on farms, etc.)

- Particular SOPs

- ....

Database DB1

Table X

	Field A	Field B	Field C
Register 1			
Register 2			
Register 3			

Table Y

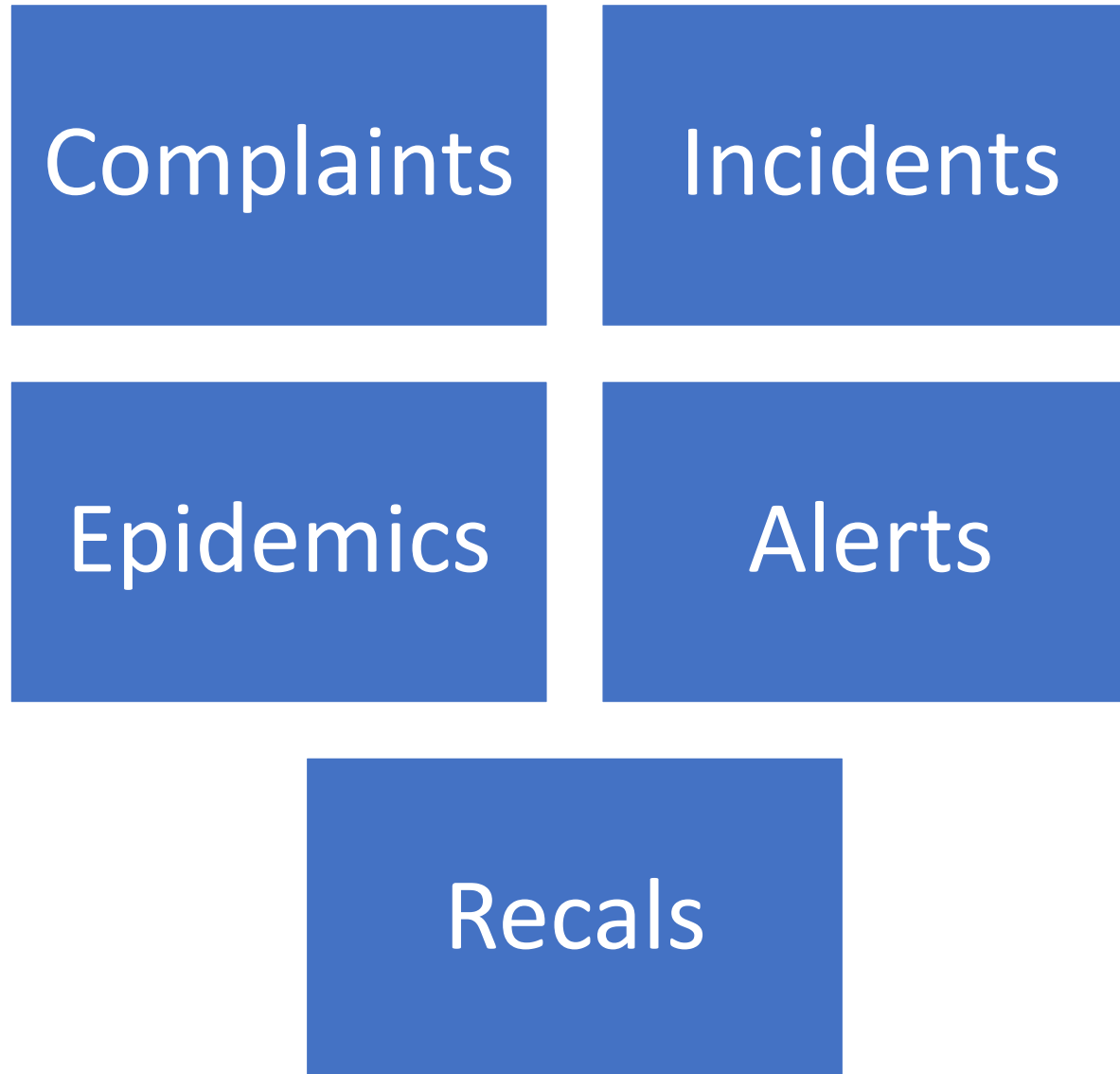|	Field D	Field E	Field F
Register 1			
Register 2			
Register 3			

Quality of data:
Q1.Validity?
Q2. Reliability?
Q3. Precision?
Q4. Integrity?
Q5. Tomeliness?
Q6. Uniqueness?

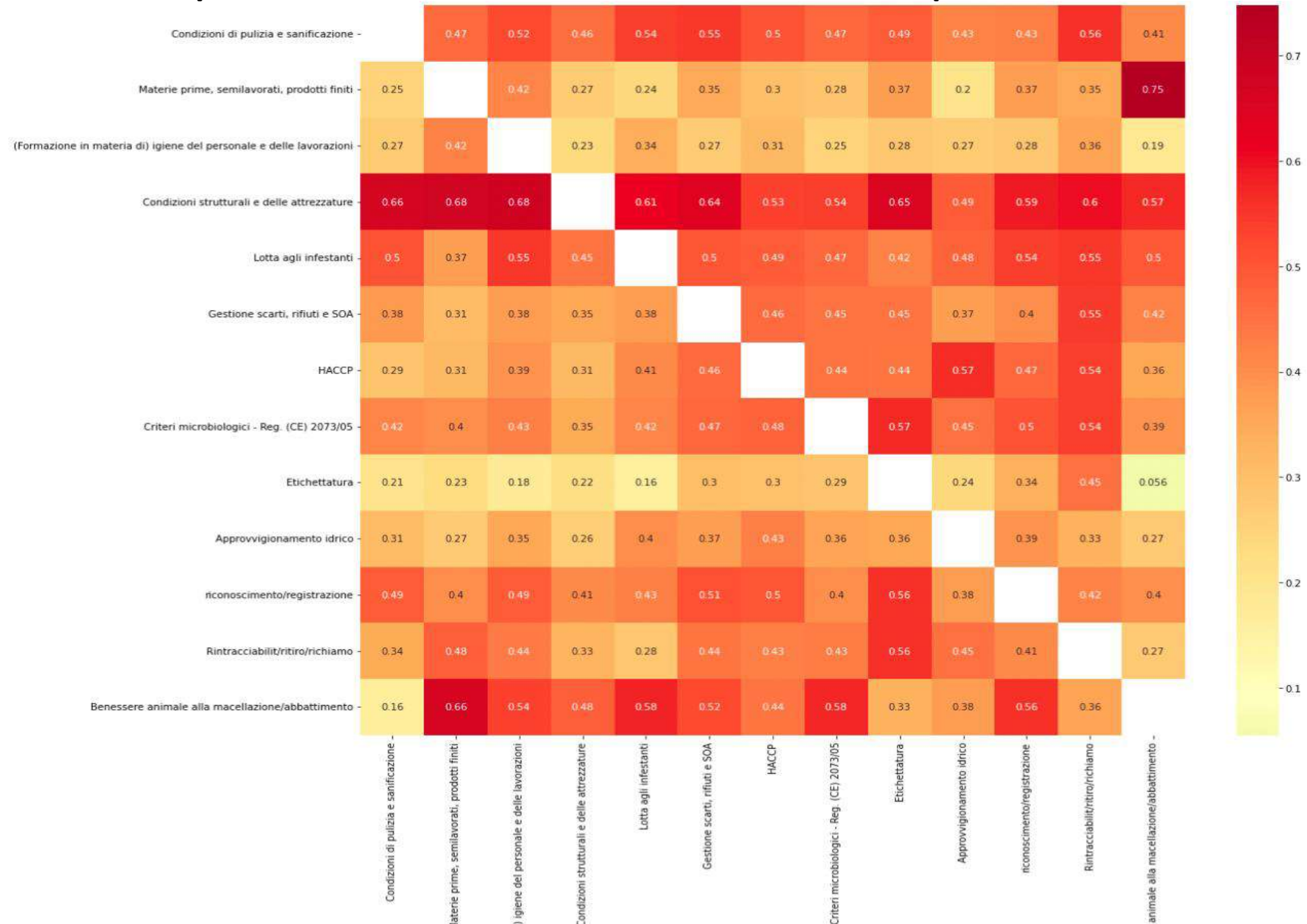# Risk-proportionate management of signals

Evaluation and prioritizing

Will it comply with regulations and industry standards

Dairy factory; City water supply factory; Big market selling food and non-food, small food shop selling only ambient-stable food
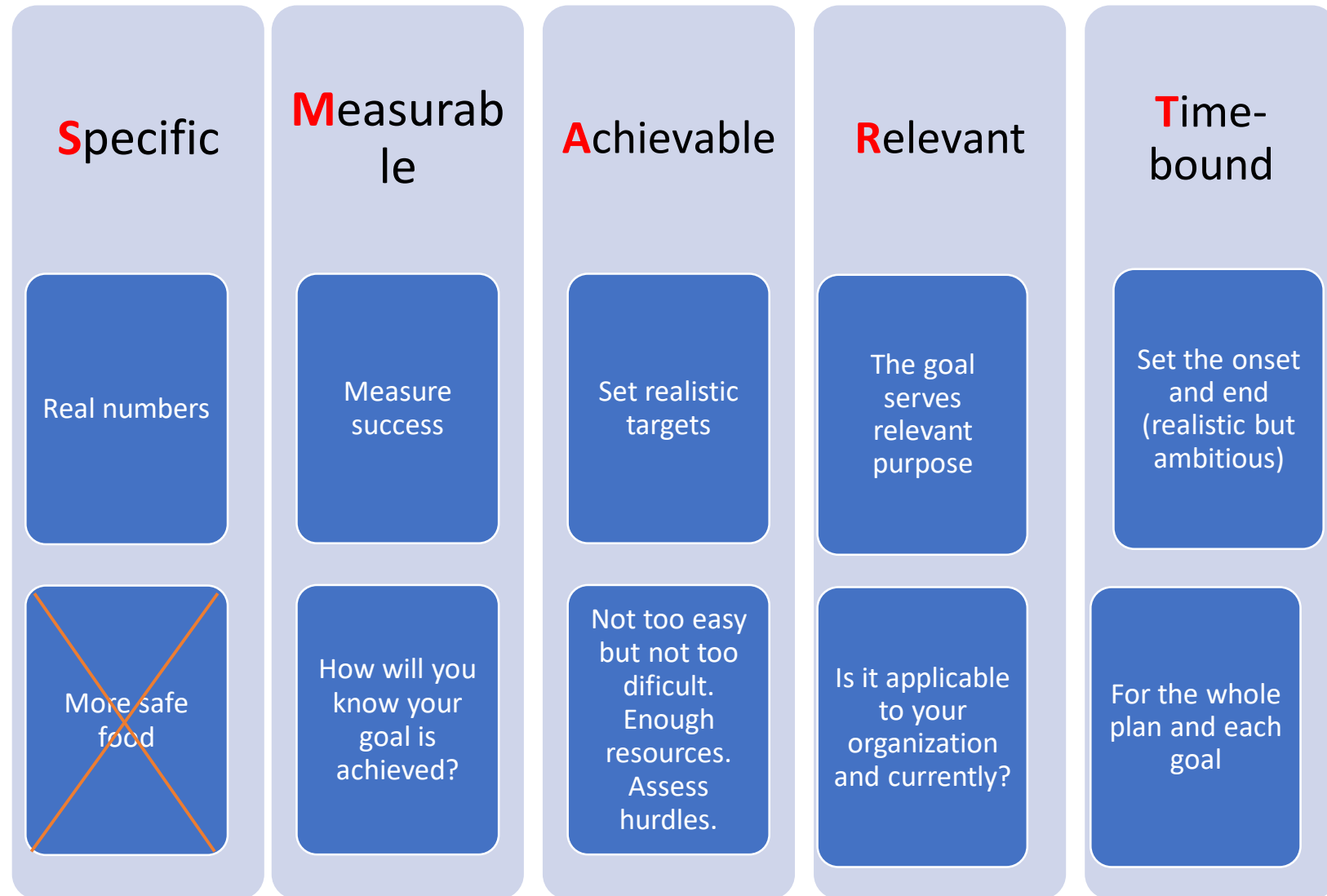
Likelihood of non-compliance

Level of hazard		Very low	Low	Medium	High	Very high
	High	Lower Medium	Upper Medium	Upper Medium	High	High
	Upper medium	Lower Medium	Lower Medium	Upper Medium	Upper Medium	High
	Lower medium	Low	Lower Medium	Lower Medium	Upper Medium	Upper Medium
	Low	Low	Low	Lower Medium	Lower Medium	Upper Medium

Heat map: Lombardia and Campania

Risk mitigation

- Planning
  - Strategic plans
  - Goals:Outcomes and outputs
  - KPIs
- Logistics
- Implementation
  - Operational plans

Specific	**M**easurable	**A**chievable	**R**elevant	**T**ime-bound
Real numbers	Measure success	Set realistic targets	The goal serves relevant purpose	Set the onset and end (realistic but ambitious)
More safe food	How will you know your goal is achieved?	Not too easy but not too dificult. Enough resources. Assess hurdles.	Is it applicable to your organization and currently?	For the whole plan and each goal

Monitoring and reporting

- Indicators (outcomes) to be monitored

  Selection

  Formulation

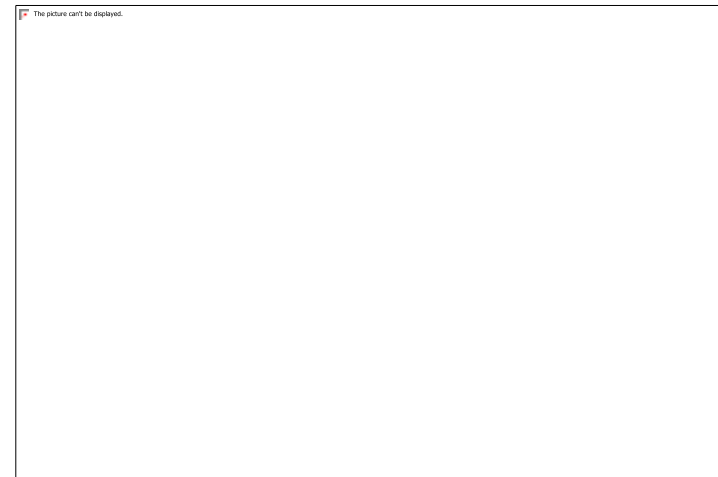 Identification of monitoring methods

  Analysis

- Reporting : to what extent outcomes have been realized

- Belgium Food Safety, Animal Health and Plant Health Barometer

- Since 2007

- 30 quantifiable indicators consistent over time (flexible)

The picture can't be displayed.

Conclusions

- Risk-based inspection concept showed superior results compared to the traditional spot checking

- Engagement of businesses and transparency proved to increase compliance

- Digitalization in governmetal agencies is often in early stages

- Quality data and machine learning can provide useful evidences to sharpen inspection targeting

- Well chosen and flexible indicators, over time, provide strong evidences and point out areas that need further engagement.