QUALITAD

EDUCATIONAL CENTRE FOR FOOD SAFETY

FOSTERING A CULTURE OF CONTINUOUS IMPROVEMENT IN FOOD SAFETY AUDITS

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Why do we conduct food safety audits?

- Audits are not just a legal obligation or a certification requirement – they are one of the most powerful tools we have to identify weaknesses in the system, monitor compliance, and drive real change.
- Through an audit, we get a chance to look "beneath the surface" of daily operations and identify risks before they turn into incidents.

Regular and well-executed audits:

- increase awareness of the importance of food safety
- encourage consistent application of procedures
- create records for learning and continuous improvement
- directly contribute to reducing risks for both consumers and the company

Why do we conduct food safety audits?

A tool to uncover risks and non-conformities

An opportunity to enhance the system, not just a control measure

A way to build trust with consumers and regulators

AUDIT AS A LIVING ORGANISM, NOT A STATIC CHECKLIST

- **Instead of seeing an audit as a bureaucratic formality, let’s treat it as a dynamic tool that learns, adapts, and grows with the organisation.**

- **“Adaptive Auditing” – an audit that evolves and keeps up with reality.**

  An audit that leverages real-time data analysis, production trends, and employee feedback.

- Traditional audits often rely on static checklists, predefined forms, and limited evidence samples – which can lead to overlooking subtle but crucial risks that emerge between audit cycles.

- Adaptive auditing offers a fresh perspective: an audit as a living process that continuously adapts to real data, real events, and real signals from the production environment.

Key components of adaptive auditing:

1 Real-time data insight

- Instead of waiting for an annual review, the auditor uses available data from production, quality systems, lab results, and digital programs – so that the audit is focused on real, current risk hotspots.

If the system shows an increased number of cold chain interruptions,
the auditor can analyse this data beforehand and focus the audit specifically on that segment.

2 Trend-based focus

- The audit is based on analysing trends in non-conformities, complaints, near misses, and unplanned downtime – meaning each audit is dynamic and tailored to the actual state of the system, not just a static routine

An increase in microbiological non-conformities → the audit goes deeper into cleaning and sanitation practices, not just formal documentation.

Key components of adaptive auditing:

3 Employees as a sensory system

- In adaptive auditing, the opinions, experiences, and observations of employees become valuable input – through anonymous surveys, informal conversations, or a whistleblower system.

Packaging staff anonymously report that the night shift doesn't always follow the sanitation rules. The auditor plans a "surprise walkthrough" at night.

4 Audits that ask questions – not just assign scores

- Auditors aren't just inspectors; they're also investigators.

Key components of adaptive auditing:

Adaptive auditing involves questions like:

“What has changed since the last audit?”

“What new challenges are you facing?”

“Do you feel the system ‘works for you’ or ‘against you’?”

How can audits build – rather than break – a culture of trust?

People often see audits as a “hunt for mistakes.”

An audit can be a process of dialogue, education, and jointly finding solutions!
Let’s implement the idea of an **“audit as a mentoring tool”** – where the auditor not only asks questions but also offers insights based on experience from other industries.

Audit as a mentoring tool – from checking to inspiring

Traditionally, auditors are seen as neutral observers who evaluate compliance with standards.
But in a modern and more mature food safety culture, the auditor can have a broader and more positive role – as a mentor, facilitator, and source of knowledge.

What does “audit as a mentoring tool” mean?

It means that the auditor, in addition to asking questions and recording non-conformities, actively shares insights, examples of best practices, and recommendations based on experience from other facilities, industries, or sectors – all while maintaining objectivity.

1. From questions to suggestions

Instead of just asking: “Do you have cleaning validation?”, the auditor might say:

“I see you’re using the ABC method – in other similar facilities, they’ve used XYZ because it works better for hard-to-reach areas. You might want to explore that option.”

2. Sharing best practices

The auditor becomes a channel for transferring innovations and practical solutions across industries.

In one plant, the auditor noticed an excellent way of visually inspecting equipment using QR codes. They shared this idea with another site considering digitalising their HACCP system.

What does it look like in practice?

3. Understanding before evaluating

A true mentoring auditor doesn’t just look at whether something is properly documented, but why the team does it that way – and offers feedback that encourages improvement, not just a “tick the box” approach.

4. Open conversation

An audit isn’t just a formal interview – it’s a space for sharing experiences, challenges, and potential solutions.

The auditor might ask:
“What are your biggest obstacles in implementing these measures?”
“Have you had any innovative solutions recently that have helped you?”

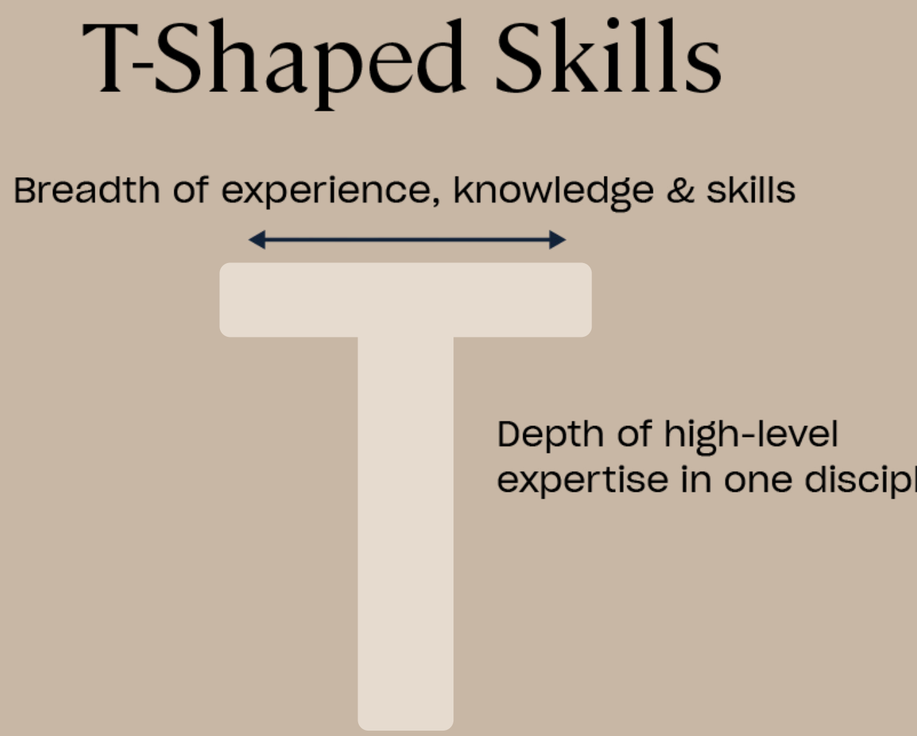
WHY IS THIS BENEFICIAL FOR THE ORGANISATION?

- **Greater acceptance of audits by staff** – because they no longer see auditors as “controllers” but as collaborators
- **Faster system improvement** – because suggestions come from real, practical examples
- **Connecting industries** – learning from other sectors and transferring best practices

"A good auditor knows what to ask. A great auditor knows what’s worth sharing."

“T-SHAPED AUDITOR” – THE AUDITOR OF THE 21ST CENTURY

- A concept where the horizontal bar represents the breadth of understanding (processes, people, culture), while the vertical bar represents depth (standards, analytics, technology).
- Not just an expert in HACCP and standards, but a person with technical knowledge, empathy, communication skills, and an understanding of team dynamics.
- In today’s complex and fast-paced industrial environment, an auditor who only knows how to interpret standards is no longer enough.
- For an audit to be a tool for real change, the auditor must combine deep knowledge with a broad understanding of the business context.



“T-shaped Auditor” – the auditor of the 21st century

Vertical bar – depth of expertise

(What an auditor must know in depth to be competent in their field)
The auditor’s technical foundation – their specialisation and technical skills:

- Deep understanding of standards (e.g., ISO 22000, BRC, IFS)
- Analytical skills – interpretation of lab results, process control, identification of trends
- Technological knowledge – understanding equipment, digital tools, IT systems, SCADA, sensors
- Knowledge of legal requirements and regulations

Horizontal bar – breadth of understanding

(What an auditor needs to understand to ensure their findings are accepted and implemented.)

- This is what makes a great auditor practical and adaptable:
- Understanding human factors – communication, resistance to change, plant culture
- Understanding process dynamics – how work procedures actually happen, not just how they’re written
- Knowledge of organisational culture – how decisions are made, the role of management, what motivates people
- Empathy and soft skills – an auditor who can listen, encourage open conversations, and inspire reflection
- This is what an auditor must understand to ensure their findings are accepted and implemented.

“T-SHAPED AUDITORS DON’T JUST CHECK COMPLIANCE. THEY CONNECT PROCESSES, PEOPLE, AND PURPOSE.”

WHY IS THIS IMPORTANT?

Better insights – a “T-shaped” auditor sees the bigger picture and identifies hidden causes of nonconformities

Better communication – knows how to deliver messages to different levels (from workers to management)

Better collaboration – can work in multidisciplinary teams and understand others’ perspectives

Greater trust – acts less like a “police officer” and more like a partner who understands system challenges

APPLICATION IN PRACTICE:

- During internal audits, can quickly understand how the production department perceives “quality issues”
- During external audits, can adapt their approach to the organization’s culture
- In conversations with workers, can listen and interpret what’s really happening

Multidisciplinary audit team – why don't we (yet) have it?

Audit Design Thinking Team?

Creating audit teams that include representatives from different sectors (production, engineering, HR) increases the accuracy of findings and the chances of implementing corrective measures.

- The concept of an **"Audit Design Thinking Team"** represents an innovative and proactive approach to audit planning – where design thinking principles are used to better understand risks and the audit context before the audit even begins.

This is a multidisciplinary team within the organization (or together with the auditor if it's an external audit), which gathers before the audit to:

- analyse risks from different perspectives (production, maintenance, quality, logistics, HR, IT..)
- map possible "blind spots"
- identify where there may be a gap between theory and practice
- consider an audit approach that uncovers root causes, not just symptoms

It's similar to how design thinking is used in product development – but here, it's used for designing the audit itself.

Audit Design Thinking Team"?

How does the team work?

- Meets 1-2 weeks before the audit

Uses tools such as:

- Risk mapping (Risk Map)
- “What if?” analysis
- Empathy map (what people see, feel, know, do)
- SWOT analysis of the audit system

Asks questions:

- What were the most common nonconformities in the past?
- Where is there operational pressure that could cause deviations?
- What are the new processes the auditor might not fully understand?

"Audit isn’t a surprise test – it’s an opportunity to think deeper, cross-functionally, and ahead of time."

FROM CORRECTIVE TO PREDICTIVE ACTION

Most action plans focus on “fixing what’s wrong.”

However, an audit can be a trigger for predicting risks by connecting findings to analytics and trends.

Goal: Use data from past audits, inspections, and non-conformities to help the system learn patterns of repeated errors, identify root causes, and predict where the next risk is most likely to occur.

Why is this important ?

1. DATA COLLECTION	• History of non-conformities (internal and external audits) • Production parameters (e.g., temperature, humidity, line speed) • Human factors (number of workers, shift changes, training) • Maintenance and breakdowns • Type and severity of non-conformities • Time and location of occurrence
2. MODELING	• The model learns which data combinations most often precede non-conformities. • Algorithms like decision trees, random forest, etc., are used.
3. PREDICTION	The system analyses current data and predicts: • Where the highest risk for the next non-conformity is • Which processes and teams are “hotspots” • How serious the potential problem could be

EXAMPLE FROM PRACTICE

Company X analysed data from three years of internal and external audits.

➡ The ML model identified that labeling non-conformities almost always occur when:

- There is a shift change after 6:00 PM
- The line is running at >85% capacity
- A labeler breakdown was recorded in the past 7 days

RESULT

The company now introduces additional label checks after shift changes, strengthens maintenance, and optimizes staff scheduling.

Non-conformities have decreased by 35%.

From Corrective to Predictive Action

“Machine learning won’t replace auditors – but it will make them smarter, faster, and more forward-looking.”

Benefits for auditors:

- Better audit focus – they know where there is a “silent threat” and where to ask deeper questions
- Proactive CAPA plans – the auditor and quality team can suggest preventive measures before a problem even occurs
- Connecting the seemingly unrelated – e.g. correlation between lack of training and equipment breakdowns

- **CAPA** stands for **Corrective and Preventive Action.** It’s a term widely used in quality and risk management systems.
- **Corrective action** – Action taken to **eliminate the cause of a detected nonconformity** or other undesirable situation to prevent it from recurring.
- **Preventive action** – Action taken to **eliminate the cause of a potential nonconformity** or other undesirable situation to prevent it from occurring in the first place.
- In audits, a **CAPA plan** is a structured way to respond to findings and **address both immediate fixes and long-term improvements.**

Auditors who can say “why” – not just “what”.

We must develop the need for auditors to cultivate a culture of investigating root causes, not just recording symptoms.

In the world of food safety, audits often turn into checklists and surface-level insights:

- “The equipment is clean.”
- “The documentation exists.”
- “The employee knows the procedure.”

But what happens when something goes wrong?
The right questions often arise only after a non-conformance has occurred.

That’s why we propose a shift in the auditor's mindset – from merely noting down symptoms to actually exploring the causes.

The "5 x Why" (5 times Why) method comes from Lean and Six Sigma tools.

Auditors who can say “why” – not just “what”.

Non-conformance: Incorrect labeling on packaging

Why? – The worker applied the wrong label.
Why? – He did not check the product code before starting the shift.
Why? – The procedure didn’t clearly cover that control.
Why? – The last update didn’t include the new packaging.
Why? – The product development team didn’t inform the quality department.

Result: The root cause isn’t the worker – it’s the lack of team integration in product changes.

Auditor's Recommendation:
✓ Revise the product code verification procedure to include the new packaging.
✓ Ensure that all product changes (new products, packaging updates) are properly documented and promptly communicated to all relevant teams (R&D, Quality, Production).
✓ Consider creating or strengthening a "Management of Change" process that involves all sectors.

Auditor's Comment:
Although the immediate cause was a human error, the analysis reveals that the systemic cause lies in the lack of information sharing and team integration. It is important to address communication channels between R&D and operational teams to prevent similar issues in the future. Emphasizing a culture of “interdisciplinary collaboration” can significantly reduce operational risks.

Let the audit report answer WHY, not just WHAT.

Where to integrate this?

- During the audit itself – when the auditor identifies a deviation, they can initiate a mini “5 x Why” investigation together with the team.
- In the audit report – every significant nonconformity should include a brief “root cause” analysis. Not just describing the symptom, but also reflecting on the cause – even if the solution is developed later.

Why is this important?

It encourages critical thinking among auditors and audited teams

It reduces the repetition of the same nonconformities across audits

It builds a culture of accountability and open communication

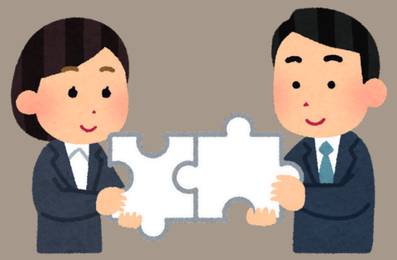
It helps create CAPA plans that have a long-term impact, not just “putting out fires”

“Don't audit for compliance. Audit for clarity.”

FUTURE CHALLENGES: A LACK OF PEOPLE, MORE RESPONSIBILITY

In the context of workforce and budget shortages – how can auditing be optimised, digitised, and personalised?
How to audit smartly when there's a lack of manpower and budget?

- One of the concepts is **"Audit-as-a-Service"** – the use of external, multidisciplinary teams on-demand, especially for small and medium-sized enterprises (SMEs).



Many companies, particularly SMEs, face challenges such as:

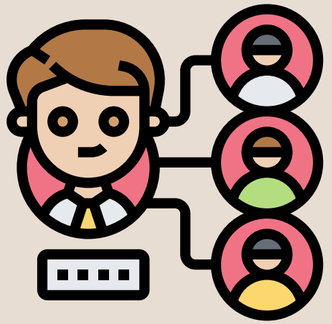
- No adequately trained auditors within the company
- Limited budgets that do not allow for frequent travel, training, or specialisation
- Internal teams overwhelmed with daily operational tasks

What is “Audit-as-a-Service”?

- Audit-as-a-Service is a concept where companies engage external, multidisciplinary audit teams on demand – similar to how they use external IT services or legal advice.

How does it work?

- Digital audit preparation
- Selection of specialists
- On-site or hybrid audits
- Personalized report + mentoring



- Instead of just listing non-conformities, the team suggests improvements based on experience from other companies.

TREND REPORT STATISTIC

Benefits for small and medium-sized enterprises:

- Saving time and money
  Access to top experts without permanent hiring
  Greater objectivity and learning from different sectors
  Flexibility – only the needed modules are selected
  Faster response times

CLASSIC AUDIT	AUDIT-AS-A-SERVICE
Fixed auditor team	Team tailored to industry needs
Focus on checklist	Focus on problem-solving
One auditor fix all	Team: technologist, microbiologist, IT, QA
Once a year	Continuous, modular, hybrid
High costs	Scalable cost (per audit or subscription)

"Auditing is no longer a one-size-fits-all process. It’s time to make it on-demand, smart, and tailored."

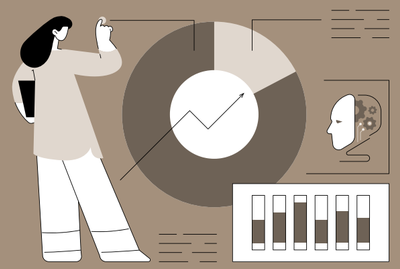
CONCLUSION

LET'S MEASURE THE VALUE OF AN AUDIT NOT BY THE NUMBER OF NON-CONFORMITIES FOUND, BUT BY THE AMOUNT OF KNOWLEDGE IT BRINGS.

Redefine the purpose of the audit: it's not the end of the process, but the beginning of learning!

"HOW DO WE USUALLY MEASURE A SUCCESSFUL AUDIT?

1. Number of non-conformities
2. Number of closed CAPA actions
3. Compliance with standards



BUT... 👉 IS THAT ENOUGH?

- **Audit is not a tool for finding mistakes.**
- **Audit is an opportunity for learning, development, and prevention.**

CONCLUSION

- **Let’s shift the focus:**
  From “What’s wrong?” ➡ to “What can we learn?”
  From closing non-conformities ➡ to opening conversations
  From ending the audit ➡ to starting improvement

IMAGINE THE AUDIT AS…

A mentoring tool – where the auditor shares insights, not just seeks evidence

A risk sensor – helping the company see what’s not visible every day

A knowledge engine – engaging all departments in the process of continuous improvement

EVEN AS WE TALK ABOUT IMPROVING AND MAKING AUDITS EASIER, LET'S NOT FORGET ALL THE BENEFITS THEY BRING US:

Strengthening trust

Instead of being seen as "control," the audit becomes an opportunity for open dialogue between auditors and the team. This strengthens trust within the organization and creates a culture in which everyone shares responsibility for safety and quality.

Developing competencies

Through dialogue and knowledge sharing, team members develop their skills – not just in terms of standards, but also in understanding risks and effective solutions.

Reducing risks

When the audit is seen as a "risk sensor," the organisation can identify weaknesses early and prevent incidents before they escalate.

Continuous improvement

The audit becomes a driver for improvement initiatives – it doesn’t end with “closing non-conformities,” but encourages teams to think about how to make the system even better.

Increasing engagement

When the audit is used as a tool to involve all departments, employees feel part of the process, which increases engagement and motivation.

Supporting strategic goals

Management can use the insights from the audit to make decisions aligned with long-term goals (e.g., reputation, sustainability, product/service

“AUDIT IS NOT ABOUT FAULT-FINDING. IT’S ABOUT FUTURE-PROOFING.”

I invite you, next time you hear the word ‘audit’, not to think immediately of stress, control, or criticism.

Think of dialogue. Of reflection. Of the opportunity to improve, not just to prove.

Of the chance to learn – not only for ourselves, but for our whole team.
It’s time for all of us to redefine the audit – not as the end of an inspection, but as the beginning of a culture.

A culture of knowledge, collaboration, and safety.

THANK YOU!

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