



INTRODUCTION OF AUDITING ON FOOD SAFETY AND QUALITY

Yao-wen Huang

Fellow, IA FoST and IFT

Chair Professor

National Taiwan Ocean University

AUDIT IS WIDELY USED

- Food safety and quality audits are used widely in the food industry for various reasons
- Nowadays, the increased interest of consumers on food safety and quality matters, triggered mainly by recent food scandals, has enabled the public and private food sectors to develop a variety of food safety and quality standards

WHAT IS AUDIT?

- The word “audit” comes from the Latin “auditus”, which means hearing. The audit procedure usually incorporates documentation review and conduction of checks and interviews to confirm compliance with a standard
- Traditional inspections evaluate the structure and construction of the sites and visually assess the state of cleanliness, although these may not always be the best indicators

REASONS FOR AUDITING

- Essential part of the process of obtaining a certificate
- Evaluation of the management system or prioritization of management actions.
- Objectives of commercial nature. Evaluation of suppliers or fulfillment of customer requirements.
- Evaluation of incidents occurring at other facilities/organizations.
- Regulatory or contractual requirements

HISTORY OF AUDITING

- Although auditing procedures have been available for a very long period of time, the formal auditing process has been used for a relatively short period
- During the industrial evolution, companies realized that there was a need to develop mechanisms for detecting fraud and establishing financial accountability
- Only *after* the stock market crash of 1929 that auditing became obligatory in the U.S. Specifically, the Securities and Exchange Act of 1934 formed the Securities and Exchange Commission (**SEC**)

- The responsibilities of **SEC** included the formalization of *accounting standards* and the formal establishment of *auditor* oversight functions
- The **SEC** was also responsible for enforcing the mandate that publicly traded U.S. companies would need to periodically submit a number of *reports* to the agency within certain time frames
- To facilitate the **SEC** processes that ensured that these reports were generated following *generally accepted accounting principles (GAAP)*, *public accounting firms* were eventually obliged to issue specific *assurances* about the information

(Byrnes and others 2012)

MANY COMPANY'S CATEGORY OF AUDIT

- (1) **external audits**, which are audits conducted by a **third-party** organization
- (2) **internal audits**, which are audits conducted by internal auditors that **work for the organization**

- Most external auditing processes involve detailed assessments in which the companies frequently *focus principally on passing the audit*.
 - This way of approaching *external* auditing has resulted in the conduction of misunderstood or underutilized internal auditing.
- Instead of approaching the *internal audits* as a necessity to *pass* an external audit, they need to be seen as *an important tool of quality management systems (QMSs)* that can contribute to the *continuous improvement* and *validation* of the *food safety systems*

(Driscoll 2012)

CATEGORY OF AUDITS

- (1) **First-Party Audits**: A *self-assessment*, that offers *internal verification* that procedures and management strategies meet the requirements of a standard and represent the business objectives.
- (2) **Second-Party Audits**: Also commonly known as *proprietary audits*, these audits assess the performance of *suppliers* or *contractors*.
- (3) **Third-Party Audits**: These audits involve the conduction of audits by *independent auditors* that are *not* employed by the auditee and often lead *to certification*

IN THE fiELDS OF FOOD SAFETY AND QUALITY...

- Working on the *British Retail Consortium (BRC)*, the Global Standards first began in *1996*, when it was accepted by *retailers* that there were significant advantages in sharing experience and cooperating in the development of *robust systems*
- The introduction of the *BRC Global Standards* was principally driven by the need to ensure that *legislative requirements* were met. They were quickly established though, since their benefits to the suppliers of U.K. retailers started becoming apparent. What retailers expected were *legal, technical, and financial advantages*

THE CREATION OF GLOBAL FOOD SAFETY INITIATIVE (GFSI)

- Before the creation of **Global Food Safety Initiative (GFSI)** in **2000**, the requests for audits from major buyers within the food supply chain had increased significantly. Different retailers used to apply specific food safety requirements for different products and suppliers had the obligation to prove that they were able to comply with all these specifications, mainly through allowing a number of audits in their facilities
- The **supply chains** became significantly more complex and globalized, highlighted the need for standardized, internationally accepted food safety plans. GFSI, an international committee founded in May 2000 and coordinated by The **Consumer Goods Forum**, responded to this need by creating a system whereby particular **food safety schemes** are *benchmarked against certain criteria*.

CERTIFICATION TO A GFSI-RECOGNIZED STANDARD

- A certification to a GFSI-recognized standard, such as *FSSC (Food Safety System Certification) 22000*, *Safe Quality Food (SQF) Inst.*, or *BRC*, provides the necessary reassurance to customers that a certain level of food safety and quality is established, thus offering the certified company a beneficial position in the marketplace as a trusted source.
- Food safety certification not only increases the *efficiency of transactions* in the supply chain, but also *renders the food safety audit process more efficient*, by allowing businesses to significantly *reduce the number of supplier audits*

(GFSR 2016)

THE AUDITING PROCESS

- (1) Planning
- (2) Execution
- (3) Corrective and preventive action
- (4) Verification
- (5) Audit evaluation

(GFSR 2016)

PRO AND CON

- People supporting the role of third-party audits claim that they can *ensure food safety*, even when the economic resources are limited
- People criticizing external audits and inspection, though, claim that although they are useful tools, their results represent only a *snapshot in time*

MORE...

- The audit processes used are reviewed and improved at frequent intervals. Furthermore, third-party audits, being **only 1 performance indicator**, usually need to be supported by *microbial testing, second-party audits of suppliers and the organization's ability to analyze the results and outcomes of audits and inspection*
- Audit systems incorporating **unannounced visits** in combination with supporting information are more effective and cover *internal audits-records, regulatory compliance, laboratory results, and raw material certifications*

AUDITOR

- The standard audited can greatly affect the way an audit is conducted as well as its outcome. However, another very important factor in the auditing process is the auditor. The competence degree of an auditor is of paramount importance and can vary depending on several factors.
- The personnel responsible for developing and managing the audit programs should determine in advance the **criteria** and **requirements** in relation to auditors and their **competencies**

SUMMARY

- Auditing has been extensively used worldwide to ensure food safety systems and programs are compliant and effective. *Internal auditing* has been a very important tool for the majority of food safety standards, but in recent years there has been a significant increase in the requirements of both *second-party and third-party auditing* within the global food industry
- Quality assurance is now an essential element within the global food industry. Based on requirements of the public sector, private safety and quality standards are being generated and *implemented extensively*.

- Within this process, compulsory standards such as **HACCP** have become a *prerequisite* for acceptable food safety systems.
- The **standardization of quality** has become a factor of paramount importance, especially when *supply chains* with high number of producers and a high degree of fragmentation are considered.
- Quality assurance though can greatly affect the market structure and creates additional costs. The food industry's response to food scandals was the development of *new quality assurance systems*, on top of public regulations

- Due to the global nature of the food industry though, the effects of these systems on the market have been **2-fold**:
 - (1) there is a benefit to consumers in terms of availability of *more and safer food*
 - (2) the suppliers to the food industry have been indirectly enforced to apply numerous assurance systems, which are *expensive* and their *effectiveness is often questionable* (Trienekens and Zuurbier 2008).
- The type of the standard implemented, the skills of the auditors, and other factors may affect the outcome of an audit and the effectiveness of a quality and food safety standard
- **Quality standards** such as the standards of the ISO 9000 series, and **food safety standards** (for example, BRC, FSSC 22000, IFS, HACCP)