Exploring food safety technologies

Context

Food Business Operators play a key role in the proper management of food safety. For this reason they are called to play an increasingly important role in management processes resulting in the need for specific technical knowledge.

In addition, an essential element for the success of a food safety management system is the creation a harmony between food business operators and the organizations involved in monitoring the effectiveness of the system. This relationship will be successful to the extent that the information is reliable and easily accessible from both subject, therefore, the need that all actors of a food safety control system are inserted within a communication network.

Safeaty proposes an innovative system that it allows you to have a safety management system Food able to meet the specific needs of each company and ensure a high level of hygiene of productions, constantly verified and certified.

The application of this system in complex organizations permits to build an evaluation system based on uniform and comparable information and therefore able to objectively define the overall level of hygiene productions and the reliability of the processes. The Safeaty solutions facilitate the application of procedures HACCP and are compatible with ISO 22000 for food security, thus boosting the success of Control methods.

Safeaty solutions will be accessible via web facilitating the auditing systems and introducing audits managed remotely, with obvious economic advantages and high reliability of the control system.

Safeaty solutions

Safeaty offers complete and integrated tools mutually connecting different phases of food safety chain controls, both in public and private sectors.

Safeaty solutions can support Food Business Operators and other actors of the food safety chain, in realizing their own control plans and the relating management.

The synergy among different control levels represents one of the cornerstones of European Food Safety Regulations, as well as the key of its success.

In addition to the product information management, Safeaty solutions allow a complete tracing “from farm to fork”. Furthermore, final consumers can access all information through the Web as far as the production territory or nutritional and organoleptic properties are concerned, as well as all information that producers want to publish.

The total traceability of the cold chain is also granted by using an innovative technology to check the storage temperature of products during the distribution process.
Food Business Operators: Advantages

Safeaty solutions enable Food Business Operators:

- to enter all necessary information to create their food safety procedures and processes;
- to keep the monitoring systems updating with reference to HACCP plan activities (training sessions, roles and responsibilities, products and processing, cleaning, revisions, and so on);
- to create and manage the company food safety control systems (data collecting and processing, risk analysis, effectiveness of corrective actions, updating control systems, and so on);
- validate and verify control procedures and processes;
- integrate public and private control systems, in order to allow data and result exchange;
- give consumers all information about controls and the product nutritional and organoleptic properties.

Competent Authorities: Advantages

Safeaty solutions enable Competent Authorities:

- to employ computer-based checks concerning the control plans created by Food Business Operators (including PRP, HCCP, ISO);
- to access the databank of Food Business Operator controls;
- to involve predictive microbiology techniques in order to identify health risks in advance;
- to monitor the effectiveness of Food Safety management by Food Business Operators, in order to implement monitoring plans;
- to create the official control plans according the risk definition;
- to create Animal Health plans (diseases eradication, controls of epidemic outbreaks, prophylaxis to prevent diseases, etc.);
- automatic laboratory results acquisition.

Our offer

Safeaty offers a complete information system to manage Food Safety by Food Business Operators, including the supply of application software, the provision of great value services and the supply of (multimedia) contents concerning Food Safety controls and activities.

Additional Services

- eLearning training for operators.
- Consultancy, organization analysis and development of inspection and control systems.
- Ad hoc manuals and reports to manage all the operations of the food safety processes.
- Training and tutorials for users and operators.
- Evolved Help Desk, employing also the use of the most common social network systems;
- Project and development of monitoring systems concerning all production processes, especially the cold chain.

Terms of delivery

Classic Supply, continuous delivery of systems and services (software, consultancy, support, technical updating and training).

“Pay per use” solutions: to be paid according to their effective use.

Hybrid solutions, possible creation of temporary or permanent joint ventures.

System functions

Content Management System (CMS)

The system foresees a content management (laws and regulations, good practises, specific topics, etc.) integrated to the application modules for HACCP management; the content protection can be customized according to different customer requirements.

Distance Learning

Specific eLearning tools are available in order to supply all the training courses necessary to Food Business Operators, including evaluation tools (tests, exams, statistics, etc.)

Food Safety Control System

Operators enter all useful information and are supported by the application throughout the control plan processing, by using a decision tree system.

The Food Safeaty System is made by constant studies and evaluations concerning hazards relating to food activities, finding more effective control methods in order to ensure the company economic sustainability, implementing procedures to manage control methods ensuring the evidence of their efficiency, analysing the system continuously, in order to update it and to keep it efficient in time.

Control systems are categorized in prerequisites (SSop, user training, structures, and so on) and Critical Control Points that shall be managed according to the schema foreseen by the system (training sessions, food supplier, hygiene and cleaning products and techniques, processing techniques, etc.).

The prerequisite management involves simple activities of regular checks (like, for example, checks for room cleanings or monitoring refrigerator and freezer working) or food bacterial and chemical analysis (like, for example, brucellosis tests in raw milk or tests for contaminants in animal feed).

The software also enables operators to manage the agenda of activities to be provided, the data collection methods, actions already made by operators after controls (like, for example, checking refrigerator temperature twice a day, detailing time and temperature, as well as the operator name, or number of milk samples sent to the laboratory, day and time of delivery, etc.).
Software features

Mobile friendly
Safeaty offers solutions that can be accessed by mobile devices (tablet or smartphone) or on the Web via browser on the most common platforms (Android, Apple iOS, Windows 10).

The solution is available in different languages according to the operator needs (Chinese, English, Kazakh, Russian, Arabic, Urdu, etc.), it manages different alphabets.

On line consulting
The software is integrated with the most common social networks in order to manage live on line consultancy (for eg. answering questions, advices, clarifications, etc.) and to send broadcasting videos aimed at science communication.

Integrated processes
Safeaty fosters the creation of system logics, among all subjects involved in the activities, within the control process.

Processes are not only connected to single responsibilities, but are integrated in order to optimise results.

Technology
Safeaty solutions have been designed and implemented for mobile devices, aimed at realizing products for easy and simple use.

Collecting self-control data, consulting the single activities status, technical and scientific documenting, e-learning training, they are all available features for mobile devices (smartphones and tablets). Furthermore, geo-location allows to automatically identify the exact point where the activities took place through a given device and by a given operator.

The functions for initial system registration and settings can be only used by designated computers.

Where possible, open source software platforms were chosen, in order to reduce licence costs. In particular, for document management the environment Alfresco Community version was chosen, J2EE software modules and Moodle platform for the e-learning.

More advantages
Thanks to this synergy, public authorities can constantly access controls data (registered both by Food Business Operators and Farmers), while updating the monitoring process to the real system situation, thus improving all aspects connected to effectiveness and efficiency.

Food Business Operators can benefit from important technical-scientific contents in real time and in a simple way: information concerning techniques to improve food processing and distribution safety, videos, training and evaluation for the employees, etc.

Companies that are partners in product protection associations can register important events or random controls concerning their production processes directly in the field, by using mobile devices.

Document verifications can be replaced by automatic software controls, by realizing a paperless system.

Constant monitoring of control systems enables customers to reach their health and territory control goals dynamically.

Thanks to the application available on the Cloud, Food Business Operators can easily access the system functions without being connected.

Also small and medium enterprises can take advantage from a technical and specialized service in the field of food safety controls, available at any time and without having designated employees.

Our customers
Our customers are public and private organizations working in the food sector, both in Italy and abroad:

Regional Administrations have the technical responsibility to apply and to manage services aimed at food safety through Local Health Units – in particular the public services in charge for Food Safety are the Italian Veterinary Service (for animal origin food) and Non-animal Origin Food Service.

Product protection associations and consortium (DOC, DOCG, IGP etc.), i.e. associations of producers of one or more specific products.

Foreign Agencies and Government structures in charge for food safety monitoring.
Projects

The Abu Dhabi Animal Identification & Registration System
Supply of a complete software solution for Animal Identification and Registration system (2 Million Sheep, 30,000 cattle, 300,000 camels identified) and of a mobile solution integrated with RFID readers for field work. Hardware and maintenance services during the guarantee period. Consulting on identification devices and technologies and training for all products and services provided.

Veterinary Health System for Italian Friuli Venezia Giulia Regional Government
Supply of the Regional system of Veterinary Public Health: disease surveillance and eradication. Planning and reporting of veterinary interventions, eradication actions. Vaccination planning, inspection planning and staff allocation. Health risk management.

Veterinary Health System for Italian Sardinia Regional Government
Supply of the Regional system of Veterinary Public Health. Largest livestock heritage in Italy: more than 3.5 Million of ship and goats, semi-wild breeding, semi-desert climate, harsh environment split in 8 provinces, 1.6 Million inhabitants. More than 20 years of ICT technical assistance and cooperation with regional government. Planning and reporting of veterinary interventions. Eradication Actions. Vaccination Planning. Inspection Planning and staff allocation. Health risk management.

Animal National Databank in Hashemite Kingdom of Jordan
The creation of the Animal National Databank in the Hashemite Kingdom of Jordan. Software and Hardware and maintenance services. Consulting on identification devices and technologies and training for all products and services provided.

Chinese-Italian centre for Food Safety (CSISA)
The centre was founded in 2009 in the Veterinary Science Department at the University of Pisa; it works in the field of training and research relating to Food Safety, together with Tuscany competent Authorities. The centre fosters support projects in the field of Food Safety, together with Chinese Institutions and with the Chinese Popular Republic University. In addition, the centre boasts great experience in the training and support field as well as high level training for Chinese technicians and managers employed in the Food Safety area.

Who we are

Safeaty Srl was born out of the project involving three different companies, associating their expertise, in order to implement innovation software and technological services with high value in the field of Food Safety controls.

Department of Veterinary Science of the University of Pisa
A prestigious centre of didactic and research with an interdisciplinary and multidisciplinary approach to the veterinary sector. The department collaborates with private and public bodies at international, national, regional and local levels in the main areas of the veterinary science and the research activities are part of a worldwide network.

GPI Group
GPI Group is an IT and service provider for health and social care solutions since 1988. The extensive knowledge of the domain allows the Group to qualify the offer with specific design, development and consulting services. GPI Group is constantly expanding in terms of innovation, pursuing excellence and showing a constant quality service enhancement.

Thanks to specific experience and competence, GPI Group can meet different needs of the social and health world with high quality and excellence.

The Business Unit Sferacarta develops ICT Solutions for Public Veterinary Health and Food Safety, i.e. the Veterinary Health systems for the Hashemite Kingdom of Jordan and the Kosovo Republic, and the Animal Databank in Abu Dhabi (United Arab Emirates).

In particular, the Animal Identification Department of Sferacarta provides systems, services and know-how for the identification of productive livestock.