

Effective traceability means safety, quality and competitive advantage

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Product recalls and contamination issues in any part of the food industry always tend to make headlines and as demands for product safety continue to grow, this puts even greater pressure on companies to comply with increasingly stringent standards and regulations.

Nor are these merely isolated incidents. The European Commission registered 1,803 products risks for health and safety in 2011. At the same time in Australia, the number of recalls increased by 8.5% compared to the previous year. In the Netherlands, on average one product per week is recalled.

Recalls and product safety issues cost money too. It has been estimated that every year cases of product liability incur costs of more than \$900 trillion. And just as worrying as the financial implications for any company is the long term damage that can be caused to its reputation.

The horsemeat scandal in the UK in 2013 is still a very recent memory of the furor that can surround product safety and recall issues. It was equally significant for its demonstration of the rising power of the consumer.

Consumer awareness

Complaints from consumers have always been part of the retail sector, but with the arrival of social media, they now have easy access to a loud and very public channel through which they can vent their anger and frustrations. Equally true, the horsemeat and other food contamination problems and recalls have heightened awareness of food safety among the general public. As a result, consumers are much more interested now in the origins of food products and want more information as to exactly where their food has come from – and they now have the means to demand these details and share their concerns with others.

All of this underlines the vital importance of a comprehensive traceability system. If companies do experience problems, they need to have the means to deal with these



The latest traceability systems are able to link to external consumer databases.

as quickly and efficiently as possible to minimise any cost implications or damage to brand reputation. And in the event of a complaint or incident that is not of their making, they must be able to demonstrate clearly and transparently that their operation was not at fault.

Of course, traceability is not a new phenomenon – it has been an important part of the food and meat sectors for many years. The western world is one of the most highly legislated in terms of ensuring the safety of the end consumer. With the EU there are countless directives and regulations that have been implemented over the years covering areas such as animal origins, ingredients, temperature management and packaging materials. And as recently as December last year, the Food Information to Consumers Regulations (FIC) established new rules on how foods should be labelled and what information is mandatory as well as the presentation, style and positioning of this information.

Furthermore, in today's global markets, companies need to be equally aware of the regulations of countries outside Europe. The Global Food Safety Initiative (GFSI) has defined a series of binding international standards based on the requirements of the BRC Global Standard for Food Safety, Global GAP (Good Agricultural Practice), HACCP (Hazard Analysis and Critical Control Points), IFS Food (International

Featured Standard) and SQR (Safe Quality Food). Food safety systems are subject to independent tests based on these standards, and certified by GFSI.

Integrated IT system

The point is that, today, traceability has to be even more transparent. The good news is that, rather than being another burden for companies to bear, used positively it can help to give them a competitive advantage. For example, investing in the best state-of-the-art technology that allows detailed information and open communication with consumers will highlight a business as an ethical and responsible operation.

Equally important, the same integrated IT system that is able to deliver this high level of traceability can also play a key role in a company's sustainability programme.

The system can provide valuable information on areas such as raw material usage, energy consumption, carbon dioxide emissions and water consumption throughout the supply chain, and provide integrated functions to ensure these are minimised and used to their best effect.

And if the IT system can ensure that processes are in line with GFSI standards, this immediately gives a company access to global markets.

Above all, effective traceability further

enhances a quality management system, which substantially contributes to achieving legal security and limiting risks, and helps a business to establish and maintain consumer confidence.

Quality management and traceability are therefore interrelated – full traceability is an integral part of quality management; reliable traceability requires quality management throughout the entire business and across all relevant divisions.

Product flow

Every traceability system will be different and tailored to the specific requirements of individual businesses, but the starting point for any solution is the need to ensure that the physical flow of goods throughout an operation and onwards to the end customer is fully linked to the related flow of information.

Goods must be clearly identified and the associated data shared with each other and stored in an archive. Key transaction and master data needs to be collected from external suppliers as well as internally, and then communicated throughout each stage of the operation.

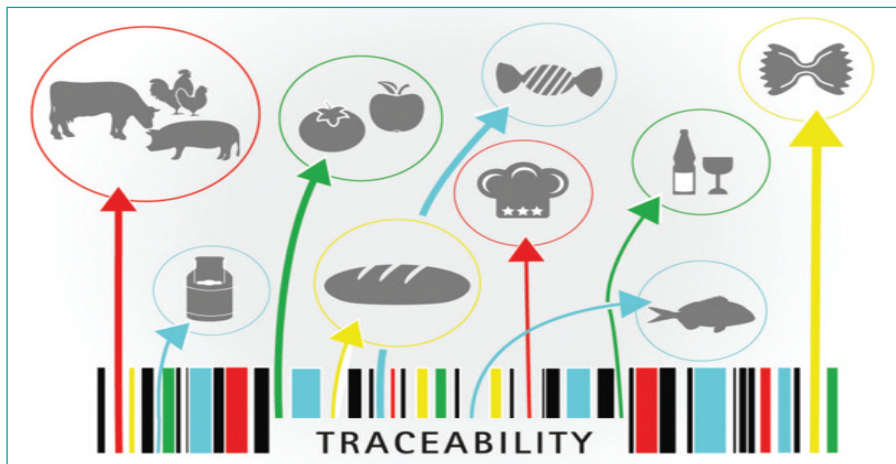
Central to any system is the use of lot numbers to link all parts of the production and supply chain. Starting with goods receiving, where the lot number is first assigned, this number is used to monitor and confirm the progress of products through all the various processing and packing stages and onward delivery.

The system links equipment, such as weighers and weigh price labellers, and finished packs, as well as storage facilities. The posting of information about the identified units is carried out in goods receiving, inventory, production and sales.

RFID and barcode readers enable information to be readily available throughout the process for checking and amendment as required.

As a result all goods movements throughout the logistics chain are captured

Traceability provides comprehensive information on the internal and external flow of goods.



Integrated corporate data capture documents each individual processing step and ensures full traceability.

at batch level and posted exactly to the relevant cost centre – from goods receiving and intermediate storage through production, packaging, finished goods storage, labelling or weigh labelling, and finally picking and despatch.

The system can cope with different types of production. For example, where a single raw material is used, the lot number stays the same. Where several are processed together, such as for mincemeat, a new lot number is created which links information of the various different products.

Following production, products are automatically entered into the finished goods inventory, including all identification data. In shipping, the ordered items and related finished goods are then allocated to their respective customers. This helps to create a more efficient logistics programme, with faster order picking, and information sent out to carriers in advance to enable them to plan loading requirements and delivery routes.

Taking into account the heightened power of the consumer and the arrival of social media, the latest traceability systems are also able to link to external consumer

databases such as fTRACE and mynetfair, enabling consumers to use their smart-phones to scan a barcode and access information to check the authenticity, history and origins of the products they are purchasing. Ultimately the implementation of an effective traceability system means that at any time throughout the production and distribution process, a direct link is established between the products and their origins.

A traceability system can also contribute to minimising costs and resources. An integrated system helps to reduce manual information inputting and this leads to enhanced accuracy and control of production, with online capture of data directly at source, which in turns minimises the costs of documentation and labelling.

Similarly, equipment that combines the functions of packaging, weighing, weighing labelling and picking in a single step can simplify procedures and eliminate the need for time consuming and cost intensive double entries.

Seamless traceability

Seamless traceability is today not merely an obligation, but a means of establishing a vital competitive advantage. It provides comprehensive information on the internal and external flow of goods for quality assurance and can help to support a company's sustainability initiatives; it ensures all industry standards and regulations are adhered to; it enables fast access to relevant information in the case of a complaint and means any recall can be more efficiently managed; and it provides full transparency to the end consumer which can boost confidence in a company and its brands.

The important thing to remember is that there is no 'one size fits all' approach and it is essential therefore that companies seek out a suitable supplier with the ability to deliver a solution tailored to their precise requirements.