

PAPER – its time is up!

Paper-based safety and quality management systems are costly, inefficient and can be a prime cause of stress in the workplace



Food processors have to work smarter and more systematically in order to sustain profitability and ward off predators in the increasingly competitive global marketplace. The competitive edge goes to those enterprises which produce products of utmost safety and highest quality while maximising production efficiency.

It's not possible to have that competitive edge when you're using a paper-based safety and quality management system. Because of the availability of new affordable technology, a better, more cost-effective way is being adopted by market leaders – tamperproof digital systems deployed on low cost, PDA handheld computers.

Food Sentinel™ from Shire Systems is a computerised, state-of-the-art, HACCP-based food safety and total quality management system. It enables you to comply with regulations, ensure product quality, shrink operating costs and please your staff, customers and insurers alike. You can use it to implement all your strategic requirements, including Prerequisite Programs, monitor and control compliance with external and internal standards, drive continuous performance improvement, minimise risks and effect strategic change. It's an investment that

can pay for itself in weeks – a truly amazing ROI.

The savings from guaranteed efficiency gains and waste reduction can be used to undercut the competition, fund essential R&D or invest in new facilities and automation - all crucial elements in securing an enterprise's long term future. Or you could just pocket the savings as profit!

This whitepaper examines why paperwork has proliferated in the food industry and discusses some of the issues at stake.

Challenging times for the food industry

The challenges the food industry has faced in recent years are unprecedented. The industry has had to weather the onslaught of increasing government regulation, satisfy demands of diverse watchdog associations, food assurance and labelling schemes and acquiesce to the price and quality pressures of the powerful multiples and global food giants. Until just recently, consumer food prices were rising at less than the cost of inflation and the presently escalating cost of energy is adding to the ordeal of those defending meagre margins.

On top of all this, many manufacturers in the UK risk losing out to lower cost producers in the extended EU and beyond. This was unimaginable just a few years ago. Despite the consumer's preference for UK-produced food, shelf price is paramount. The major retailers know this and, with their aid - and the increasing complicity of brand owners - processors in the EU and other points east are positioning themselves to grab a slice of UK food manufacturing's £70bn annual turnover. However, consumers' growing interest in food miles may reverse some of the adverse trend.

The turbulence and economic pressures faced by the industry are considerable but, without doubt, the issue of greatest concern to everybody is **food safety**.

A very risky business

The food industry is labour-intensive with production facilities generally less automated than in other areas of manufacturing. That means more things go wrong more often as a result of wrongful human acts and omissions: pervasive human errors and mistakes and all too frequent malicious tampering. Adding to the nightmare, nationwide and transcontinental supply, production and distribution networks

make biosecurity an increasingly arduous challenge – and, topping it all, there's the appalling and very real threat of bioterrorism. The safety and quality of food production is constantly at risk. If there's a breakdown in an organisation's compliance control, the seriousness of the repercussions is just a matter of luck. When control measures fail, the consequences can vary from irritating a customer, at the very least, to expensive product recalls, or even harm to consumers' health on a massive scale - with all such a catastrophe means for the organisation and its management team. Because of the public sensitivity to these food safety issues, one incident can wipe out a brand and destroy a food manufacturing business almost overnight.

To minimise the chances of unsafe or off-quality products reaching the consumer, a tight system of management systems surveillance and operational control is needed. To discharge their duty of care - due diligence responsibilities - management must put in place and maintain a rigorous program of compliance auditing and in-process monitoring to reduce operational risks to acceptable levels. That traditionally has meant a paper-intensive quality management and control system – and, as we're all well

aware, paper-intensive means labour-intensive.

Efficiency is key

Quality control and assurance programs are costly to support and soak up the precious time of key people. In some food organisations more than 10% of total employment costs are attributable to these activities – and yet they're non value-adding!

The primary purpose of compliance programs is to detect failures and system deficiencies - so, if an organisation had a 'right-first-time' capability, they wouldn't be necessary. However, given the present nature of the industry, that's a practical impossibility. Even though a compliance auditing and checking program is 'waste work', it remains an absolute necessity for good governance - but it should be minimised consistent with needed effectiveness. The answer to the question: 'How much control is enough?' requires very careful judgement and there's little scope to reduce costs without increasing risk.

The opportunity to optimise the cost of a compliance program lies not in what is done but how it's done. Like all operational activities, compliance

programs should be carried out in the most efficient way possible. It is in the methods used for collecting and processing essential information that the opportunity for increased efficiency and reduced cost lies.

Drowning in paper

Quality assurance and control programs consume huge amounts of paper - and *trees!* The 'if it isn't documented it didn't happen' premise of quality management systems has turned many organisations into paperwork factories completely awash with the stuff. Despite the traditional paper-based way of recording, storing and retrieving information being highly inefficient and costly, it's still used by the majority of organisations. On the bright side, this deficiency also presents these organisations with their best available opportunity to increase working efficiency and reduce operating costs.

Just as paper's introduction made parchment-based information, and before it clay tablets, things of the past, technology has continued to move on. The present amazing affordability of computer technology means that the time to eliminate paper has arrived.

We're in the high speed information age and 19th century solutions are not appropriate for our 21st century circumstances. Shuffling paper - form filling, filing, looking up and retrieving paper-based information - is time-wasting and expensive. Paper-based systems constrain an organisation's performance because of their slowness and unreliability.



There's a better way

Paperwork should be eliminated from operations wherever possible by use of electronic information systems deployed on handheld computers. Thanks to this now highly affordable, easy-to-use technology, field surveys and data collection using paper forms and clipboards are set to quickly become a thing of the past.

Consider all the time that's wasted trying to keep on top of a paper-based system - what could the time of each of those involved individuals be used for if they didn't have to shuffle paper? Would certain roles even be needed, and couldn't the cash resource be better invested elsewhere - in product development for instance?

It's not just the sheer manpower inefficiency of administering a paper-based system that's the problem. In the high speed information age, paper hampers the smooth running of the enterprise. It's difficult to assure data accuracy, completeness and security; it's difficult to distribute, copy and share, retrieve, store and preserve paper information. And, paperwork is one of industry's top stressors - keeping the paper mountain under control can be intensely harassing.

It's all too easy to remain complacent and avoid facing up to the fact that paper shuffling does not add value in the business, but you'd better be wary. Alert players in the industry have already figured it out, so the wake-up call should be heeded.

An electronic safety and total quality management system, like Food Sentinel™, is neat and practical, easy to

use, accurate and secure. When an external auditor asks to see a particular record you can have the information at your fingertips within a few clicks of a mouse. No more hours, possibly days, searching in over-stuffed filing cabinets and rummaging through box files in dark cupboards – only then to discover that the record you need has been removed by persons unknown, or is useless because it was incorrectly filled in.

The Regulator's opinion

The UK Government's Food Standards Agency (FSA) has the following to say about food safety/quality management systems:

“IT based systems have been introduced in this area to give greater accuracy and control of information while reducing transcription errors and reducing time taken by 90% compared to paper-based systems.”

This is a powerful endorsement of digital systems and grave criticism of their paper-based forebears. It shouldn't be ignored. The FSA goes on to state:

“Paper records can be lost, spoiled or rewritten, while well-configured computer systems cannot. IT driven

recording systems create unalterable data and time verified records, whether they were recorded remotely or by an operator keying in data. IT systems therefore reduce opportunity for information to be entered incorrectly or fraudulently (particularly where machine readable identification systems and remote sensing replace human data entry). Data entry can also be linked to personnel since user identification is recorded against data entry. The level of system access can also be restricted by user identification. IT driven record systems also encourage the management of compliance to standards as a continuous process, since there cannot be a panic completion of all the missing records for the last year on the day before an audit or inspection.”

(Taken from: *Traceability in the Food Chain*, The Food Standards Agency, March 2002).

Food Sentinel™ offers users all the advantages lauded by the FSA. You can use the machine-readable capability to speed up data collection, increase accuracy and provide proof-of-presence at each of your audit and monitoring control points.



Computerise for good order, efficiency and profit

Computerise your safety and quality management system and throw away your paper forms and clipboards. All that information can be handled with a PDA-based electronic system. You can cull your paperwork and its associated paraphernalia - notebooks, lever arch files, box files and filing cabinets – whilst assuring more accurate, complete, accessible and secure

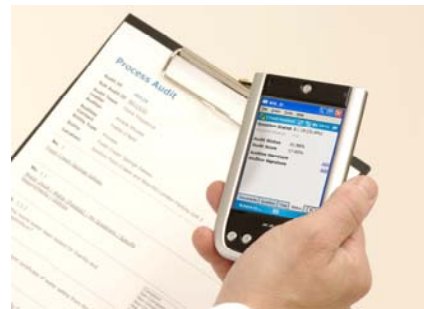
information. Individuals referencing and collecting data in the field will no longer be burdened with cumbersome paperwork. If you wish, you can even operate your system in real time using wireless connectivity.

A computerised system like Food Sentinel™ averts human error and tampering. There are no more transcription mistakes because, with a PDA-based data acquisition system, handwriting interpretation and typo glitches are eliminated. All entries are time and date stamped and records can have digital signatures. The ownership of recorded data is irrefutable and individual responsibility is assured. Data is not ‘missed’ during data acquisition - you can ensure all essential data is collected because the system can prompt for and enforce required entries.

Centralising data by replacing paper forms increases personal and organisational efficiency. The information gap between operations and decision-making is closed because complete information on operational performance can be made immediately available to managers. The quality team and management gain a true view of the enterprise’s current performance because the auditing and monitoring

program delivers accurate snapshots of what’s going on in the workplace.

Being on top of everything frees up the time of key people for continuous improvement projects - and everyone will experience less stress. Profits go up.



Food Sentinel™ provides the solution

Food Sentinel™ is a state-of-the-art food safety and total quality management system. You can use it to implement and deploy all your strategic requirements, monitor compliance with protocols and performance targets, and drive the continuous performance improvement of your organisation and suppliers. It’s a universal QA, QC and CI tool – you can use it to achieve an Integrated Management System.

Food Sentinel™ helps you to manage your HACCP program and corrective

action protocol with more ease and thoroughness. You can build a graphical flowchart for each of your products from raw material consignment through to despatch and beyond. On the flowchart you can identify and mark up control points and Critical Control Points. For each process step, you can attach hazards, corrective action instructions for out-of-limits occurrences, survey questions – and any number of other reference documents you wish. You can plan and schedule audits and monitoring surveys, upload checklists to multiple PDAs, carry out physical inspections and system surveys and then download the results - it’s quick and easy. All history and documents stored in the system - including photographs, voice-files and any video clips you may wish to add - are instantly retrievable. EFSIS and other BRC inspection and certification authorities will love it!

Besides HACCP, you can plan and schedule verification inspections and audits for Prerequisite Programs - personal hygiene, pest control, facilities, etc. As Food Sentinel™ is a multipurpose system; it will also handle your fire, safety, environmental and general product quality checks. You can also assure that the right person is assigned to each task using the system’s

personnel competency and training tracking capability.

Food Sentinel™ provides a comprehensive and highly affordable solution to the need for demonstrable compliance with the food safety and quality requirements of government, standards organisations and the major food retailers. Food Sentinel™ can be used by all organisations in the food chain from farm to fork – from the largest to the smallest. You can configure Food Sentinel™ to suit your particular needs, deploying and using multiple food and other external standards – BRC, ISO22000, ISO9001, diverse assurance schemes, plus any other internal standards and best practices you wish to work to in any area of your business.

Food Sentinel™ can give you the competitive edge, helping you move beyond compliance onto a higher plane of performance and profitability.

Food Sentinel™ – **keeping a watchful eye – protecting from farm to fork.**

Find out more...

