Consumer Confidence and Traceability

Kevin Markey
SASTEK
Brisbane, Australia.

Today I'm going to discuss the issue of consumer confidence from a technical aspect, and that is "How do we achieve traceability?". issue of consumer confidence in its correct context I would like to give you a comment that was made to me recently by one of the majo in Australia.

He said, "I can reluctantly accept a customer telling us that the steak I sold them was a bit tough, what I cannot tolerate is a customer that the steak made them ill"

As suppliers of food we have a responsibility. One that we as an industry have been reminded of all too frequently by adverse media re such incidents as E.Coli, Salmonella, and Mad Cow Disease.

In clear concise terms, our responsibility is to supply wholesome and delicious meat to the consumer. There by giving the consumer no doubt its desirability as a food.

While I expect the reader of this paper to have some understanding of the concept of traceability, it is worth revisiting. Traceability invol able to track to contents of a retail pack right back through the processing and distribution chain to the live animal and its property Attached to this system may be a HACCP program which records the details of handling and storage processes and conditions throu processing and distribution chain.

I would hope to answer the questions that you as food processors, and those directly involved in the industry would be asking, namely th and commercial implications of yet another impost on processing procedures. I will pose to you another commonly asked question. "W current information systems are not enough to meet our responsibilities?" The answer is simple, most of these information systems do **full** traceability. Near enough is not good enough for the consumer.

From a pure technology perspective, the concept of traceability is not difficult to design. From a commercial perspective, however, the real of traceability is encountered where it is to be incorporated into established material handling procedures. It is our experience at SAS traceability implementations costs for processing plants where the materials handling methods have been designed with traceability in significantly reduced. No matter which paradigm we are facing the questions still remains to be answered by Investors and CEO's around - Will the money spent be recouped?

In the remaining time that I have I would like to cover three topics, the commercial aspects, system design, and the potential costs of not a the issue,

Commercial Aspects

What is often forgotten in the debate as to commercial viability is that where contamination is found, requiring withdrawal from the mark recall quantities can be negated and the logistics, and potential negative publicity, minimised. In a commercial world fraught with litig requiring insurance, traceability is a protective measure of commercial benefit. At the other end of the spectrum it has been said that and grading, as a measure for rebuilding consumer confidence, will add to the price paid by consumers. In my home country of Australia large food companies such as Arnotts biscuits and Kraft, which recently faced product recalls, have continually sold at premium pric dominate their markets, and like our industry have encountered falling consumption patterns.

System Design

Most food processing plants are designed and built for a twenty year commercial life span. It is in the first few years that many of th performance assumptions are challenged. Often the constraints upon a production system, are built in at the design stage long before demands such as traceback arise.

Lets now look briefly at some of the components that constitute an information system that is capable of delivering traceability for a meat p system from the live animal through to the retail pack.

Building on an Existing Information System

You can see from the above table that a traceability system consists of many components. Most of these components have an existing co application, for example, slaughter floor data capture and grading terminals. which generate data which is used for the calculation of generating producer feedback, and posting to a carcase inventory.

The processor has the option to build a traceability system using a staged modular approach or as a complete installation. SASTEK's is to offer the client a solution which suits both his information system needs as well as his budget.

Is a Traceability System Commercially Viable?

This is an interesting question because once you have the hard data to give the definitive answer you may already be out of business.

We see major news stories around the world surrounding food contamination scares caused both by raw material contamination and th intervention of an extortionist. How prepared are we to handle such an event?

Another interesting question that we must consider is "What is the current expectation of the modern consumer when it comes to ensuring

of contaminated meat is effective?" We may find that consumers simply expect that sophisticated systems are already in place.

The major retailers around the world are our best barometers of consumer opinions and in most cases are the meat and livestock industries' main interface with the consumer. These corporations have collectively invested many hundreds of millions of dollars in building up trading names and to some degree the maintenance of consumer confidence in them is tied to integrity of the products they retail. How long will it be before major retailers make this a further requirement? Retailers in some parts of the world have already held discussions with SASTEK to move towards this requirement.

Product liability insurance is a growing cost in many parts of the world particularly where consumer litigation is on the increase. What is the possibility of managing these costs by adopting an effective product traceability system?

At the start of my address today I posed the question "Will the money spent on a Traceability system be recouped?" I'll leave you to answer that questions for yourself, as well the further question, "Can we as an industry afford not to adopt traceability?"

System Requirement	How Achieved	Existing/ Proposed
Live animal identification	• Record vendor details on receival. • Maintain separation during holding. • Unique animal ID - barcode, electronic, human readable tag.	**Existing** **Existing** **Existing**
Carcase identification	• Link body number to vendor / animal ID (barcode reader , antennae, keyboard) • Record carcase details during slaughtering process (liveweight, tailtag, sex, age, health status, fat depth, & carcase weight) • Unique ID of carcase (barcode ticketing, hook ID)	**Existing** **Existing** **Existing**
Producer Feedback	• Capture carcase data in a database for costing and reporting • Produce feedback reports that evaluate carcases in relation to target specifications	**Existing** **Existing**
Relate Carcase ID to Carton ID	• Scan barcoded carcase tickets into boning room • Identify carcase ID to production lot no • Generate unique primal ID • Relate carcase ID to primal ID • Generate unique carton ID • Relate primal ID to carton ID • Record carton details in an itemised inventory • Record above data in traceability database	**Existing** **Existing** **Proposed** **Proposed** **Proposed** **Proposed** **Existing** **Proposed**
Relate carton ID to sale & shipment details	• Scan carton label • link carton ID to sale note number in the database	**Existing** **Existing**
Relate Primal ID / Carton ID to Tray Pack ID	• Scan primal ID / Carton ID • Scan preprinted unique ID on tray pack • Record relationship in database	**Proposed** **Proposed** **Existing**
Traceability Query Tool	• Traceback from Primal ID or Tray Pack ID to raw materials batch • Trace forward to all sales containing product from the suspect batch	**Proposed** **Proposed**