Seafood Traceability: A Weighty Issue

Resolving the Conflict between Traceability Needs and Business Needs
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Introduction

If any of your activities include processing, packaging, labeling, storing, selling and/or shipping seafood products, then traceability plays a key role in your working life. The need for lot tracking backwards and forwards across the supply chain has never been more front-of-mind than today, in this era of growing pressure for fast, effective recalls – that pressure being applied by the government, your customers and their customers (consumers).

This white paper shares best practices on traceability and recall readiness – specifically around the management of product types unique to your industry such as catch-weights and by-products, and how technology can help you meet these unique requirements. (“Catch-weight” is also sometimes known as “variable-weight” or “random-weight” but will be referred to as catch-weight throughout this paper.)

The technology you select must demonstrate outstanding functionality in the traceability requirements unique to the meat and seafood processing business. Business software such as warehouse management (WMS) and enterprise resource planning (ERP) systems automate your vital business processes and gather the necessary data to meet traceability and recall requirements in the most timely and cost-efficient manner, but they must also feature industry-specific functionality.

Seafood Requirements

ONE SIZE DOESN’T FIT ALL

Never was a saying more truthful than in the instance of seafood processing and packaging – where products come in all different sizes, and not one weight, price or package fits them all. Of all the issues faced by seafood suppliers when it comes to traceability, catch-weight management is one of the trickiest.

CATCH-WEIGHT MANAGEMENT

Having varying weights of seafood products – both as inputs and outputs – adds a layer of complexity to traceability. The way to simplify catch-weight management is through the use of bar code scanning wherever varying weight products are touched – be that final product shipping to customers, consumption of seafood, or tracking seafood by-products that are used in other food processes, internally at your operations or sold to other companies. JustFoodERP – a business software system built for the food industry, offers the following benefits as they relate to catch-weight management:

- On a case by case level, you can see the actual catch-weight of each directly in your item ledger and warehouse entry transactions.
- You have the ability to record weights at time of purchase, or can offload that process until you ship the product.
- Catch-weight is visible on the item tracking page wherever item tracking is available in the system (e.g. all inventory transactions)
- You have the ability to do sales pricing by catch-weight, meaning even though you sell the item by case, the price that is used could be a per pound price that changes as the weight of each case changes.
• When receiving catch-weight items into inventory, the cost that hits the inventory is based on the actual catch-weight of the case. This is true for purchased products as well as manufactured products.

• If you are distributing landed costs to catch-weight items, you can do it by the actual catch-weight in order to get a more accurate cost distribution.

**BY-PRODUCT PROCESSES**

As seafood arrives at your processing facility, fat and other parts are trimmed off, to be re-purposed as by-products. This process opens a whole new can of complexity in the traceability realm. It is your responsibility to ensure these by-products are tracked as they make their way through various systems and stages of food preparation. It is equally important to ensure that the market cost allocation of these by-products is handled accurately and efficiently along the way.

The JustFoodERP system includes the Recipe Management module which, in addition to bill of materials and other features, includes the Units of Measure (UOM) functionality allowing for the support of static and dynamic UOM conversions including catch-weight. Coupled with the enhanced traceability and costing functionality, the JustFoodERP system meets all your seafood processing and packaging needs.

**Best Practices for Maintaining Traceability**

**CASE IS KING**

Seafood suppliers need to be able to establish a case-level product protocol that can be used for traceability by supplier, retailer, wholesaler and distributor in both normal conditions and in the event of a recall. A case is a discrete unit with its own unique serial number and unique weight. All levels of the product hierarchy must be traceable and tie back to the case level; for example, from the shipment back to the pallet, back to the case, and then back to the individual item.

**BATCH/LOT AND SERIAL NUMBERS**

At a bare minimum, a supplier must assign a batch/lot number for case-level traceability. A serial number is sometimes included in addition to the batch/lot number as a more refined product identifier within the batch/lot. This is especially true for catch-weight cases (where barcodes have limited data carrying capacity, as noted). Ideally both a batch/lot number and a serial number are included on the label of a case. A serial number will indicate what is in each case of meat or poultry, and all the cases are loaded onto a pallet which gets its own dedicated serial number.

**MANAGING CATCH-WEIGHTS WITH SERIAL TRACKING**

When you go to ship product to your customer, you need to be able to identify accurately which cases were sent – since you are being paid by weight.

JustFoodERP supports the complexity of managing catch-weights using serial tracking in a couple of scenarios:

1. Capturing case-weights as product enters into inventory (whether at receiving or production) and tracking each specific case movement through the warehouse, picking and shipping.

2. Capturing total weight as product enters into inventory and only recording specific case weights at times of shipping.
Scanning the Horizon

In the seafood industry, human-readable product information is used in conjunction with electronic scanning (machine-readable information contained in barcodes). While many seafood companies still rely on human-readable product information (and there will always be a need for human-readability of consumer items), more and more American seafood companies are moving towards the inclusion of scannable information on labels.

Best practices for maintaining traceability include the capture of all traceable information and storage of this information within your business systems – such as ERP and WMS – by scanning the information directly from the case. The risk of human error is eliminated and the data capture timeline is dramatically shortened, compared to employees manually keying data into the system.

HICCUPS ON THE ROAD TO BARCODES

However, U.S. seafood suppliers are currently dealing with a less than perfect world when it comes to electronic scanning in their industry. Hurdles they face include:

• A lack of electronic capture of Critical Tracking Events data available for fixed-weight case or item product using certain types of barcodes.
• The catch-weight U.P.C. for seafood does not allow for tracking of product movement by supplier, nor does it enable the buyer to trace product back to the supplier.
• Limited space in the GS1-128 barcode.
• Costs involved in implementing real-time labeling solutions.
• Labor costs to change business processes to capture data during receiving and shipping.

A fully integrated ERP system, built with industry-specific functionality mapped to business processes, resolves many of the issues around labor costs, change management, labeling, and data storage, among other considerations for traceability.

Obviously, not every situation is equal in its need for as much product information as possible; there are core business processes – sometimes referred to as “Critical Tracking Events” – where the need to capture, store and retrieve data is urgent, such events as:

• Receipt of bulk seafood, ingredients and packaging
• Product creation
• Packaging /pallet configuration
• Picking and shipping

PHASED-IN BARCODE CONVERSION

Obviously, it is less than ideal if you have to change all of your barcodes at once; but that is, in fact, the case with some ERP systems on the market, which let you store only one barcode per item. Clearly, this would make the conversion to new barcodes a major disruption to the system. Within the JustFoodERP system, however, you can store as many barcodes as you like in a variety of formats. This allows your company to take a phased approach if necessary, and slowly start converting over items to the new barcodes, while still maintaining the old barcodes where necessary.
Summary
Gone are the days when seafood processors might make the claim that they cannot participate in industry standards, or technology adoption, because they are different than other food sectors. Technology advances now mean that solutions, such as those discussed in this paper, are available to address the tricky issue of seafood traceability and recalls. Sophisticated solutions such as the combination of single-scan pallet licensing and JustFoodERP Floor – a browser-based interface that extends the ERP system – along with handheld scanning and catch-weight management, are saving time, money, and headaches at seafood companies and one up/one down their supply chains.

Questions to ask ERP Vendors about Software for the Seafood Industry:
1. Does your software system include processes and tools for dealing with catch-weights? How do you define “catch-weights”?
2. Are catch-weights handled through the order to manufacturing to sales cycle?
3. Does your software include built-in functionality for traceability and recalls?
4. How fast do product recalls happen within your system? Is there integration with the contact management side of CRM to send out recall notifications?
5. Is the ERP system extendable across mobile devices at a lower licensing fee than the regular ERP license?
6. Is labeling functionality included within the ERP system?
7. Does the software offer single-scan inventory management?

Additional Resources
JustFoodERP Customer E-Book – An online resource detailing our customer success stories
JustFoodERP Community Blog – Latest updates about Dynamics, JustFoodERP best practices, and news in the food industry
http://www.justfooderp.com/community