

Case study:

Hermes nets contracts with traceability

Hermes

Hermes AS is a Norwegian freezing trawler company that operates in the North East Atlantic. It uses some of the most advanced technology in the industry. Each year, the company catches 5,000 tons of cod, other whitefish and shrimp which it delivers to production facilities in countries such as China, Lithuania and Poland. The seafood is then sold to supermarkets across Europe. Hermes generates approximately 9 million Euros or \$ 12 million US in annual revenue.

Forward-looking technology

Hermes is a leader in the fishing industry and proactively implements technology that enhances the quality and safety of its products. The company operates in a highly competitive sector and key to its success has been the loyalty and trust of its customers.

Over the past few years, the number of fishing regulations has increased. In addition, trawling companies are dealing with numerous claims for damaged, unsafe, or inferior products. Now more than ever, customers demand proof, certifying their products. Meanwhile regulators are demanding easy access to fishing records.

Hermes therefore made the strategic decision to be the first in the industry to offer online, product traceability using

Hermes freezing trawler. Photo by: Jan Arne Breivik



TraceTracker's Global Traceability Network (GTNet®). The objectives were to **reduce costs, increase profits and achieve a competitive** advantage.

Mapping out needs and creating a model

TraceTracker began with a needs assessment, investigating the data in the trawler's catch registration system and processing system. To enable product traceability, Hermes would need to fulfil several key criteria:

- Employ unique identifiers for each separate trade item.
- Record the identifiers in an internal data system.
- Be able to send recorded data to the supply chain partners in a recognizable format, such as XML.
- Employ Electronic Data Exchange or EDI for large amounts of data.

Hermes already had excellent internal traceability with all recorded data keyed to unique identifiers, but the information was not disseminated down the chain to customers. To send recorded data to supply chain partners, Hermes would need a system

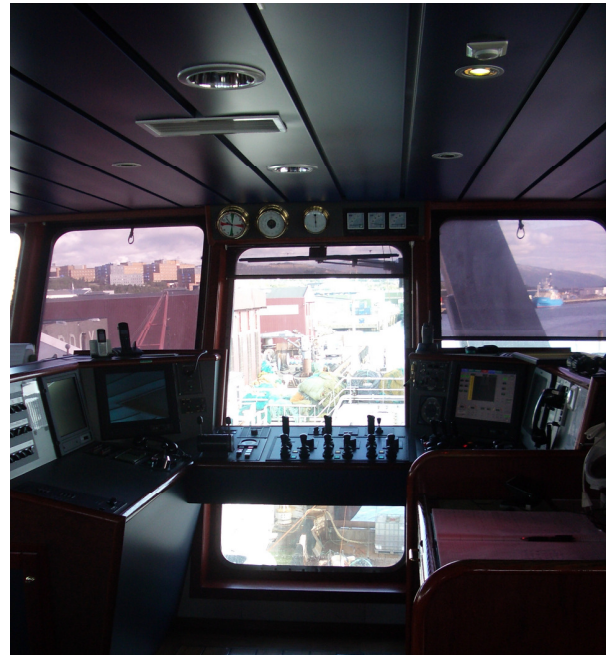
to bundle recorded product data in standardized electronic messages.

To meet this need, TraceTracker proposed implementation of the Global Traceability Network (GTNet[®]) with the addition of an online interface for customers, regulators and the general public. The GTNet[®] is a subscription-based platform that collects data from internal IT or ERP systems to enable critical business processes. Data from internal systems is fed into the GTNet[®] in an XML format, either automatically or manually. The data is then collected and stored in a traceability database, called a TIX. Most companies use a single TIX, however larger companies may choose to have separate TIX's for each business unit.

Each subscribing company accesses their own TIX and the data from other companies through an online interface called a TT Navigator. This secure, password protected interface, allows users to configure settings, manage data and access a wealth of product information. Users can search for individual trade units to see quality data, maps of the source, temperature graphs, dynamic supply chain charts, or even pdf copies of certificates and lab results. Since the TT Navigator is primarily an administrative tool, separate interfaces are used to share product information with the public.

Moreover, the system can be configured to suit companies of any size, in any industry. This flexibility would allow Hermes to determine what type of product data to trace, the level of granularity, and how it would be displayed to customers.

On board the trawler



Implementing the solution

To begin implementation, TraceTracker and Hermes worked together to define the type and amount of data to be collected for frozen fish blocks. Instead of just showing the catch location, Hermes decided to reveal all of the relevant product data on their internal catch system including:

- Species, latin name
- Unit type, size, weight
- The employees responsible for critical processes
- Freezing details: temperature, freezing time
- Catch details
 - Date and time
 - Type of equipment used
 - Relevant zones (FAO, ICE..etc.)
 - GPS location
 - Trawling time : Start time, end time, total time

Catch details, currently available in Norwegian

Hal	
En mengde fisk fra en trål eller tilsvarende	
Dato og tidspunkt for fangsten	01.03.2009
Fangstutstyr	1 trawl(s)
FAO sone	FAO 27
Fiskesone	NOR
ICE sone	IIa
Lokasjon	63°01'47.1"N, 5°38'55.68"E
Pollack	72
Saithe (= Pollock)	5904
Starttidspunkt tråling	12:24:29
Stopp tråling	16:34:28
Tråle tid	04:10

Then TraceTracker created information exchange models with the pre-defined parameters to test with historic catch data. Hermes received access to their own traceability database, called a TIX, where their data would be stores.

In conjunction with the TIX, a user-friendly interface was designed for Hermes' customers. Since the GPS locations were available, Hermes would be able to show their customers maps of the catch location as an added feature.

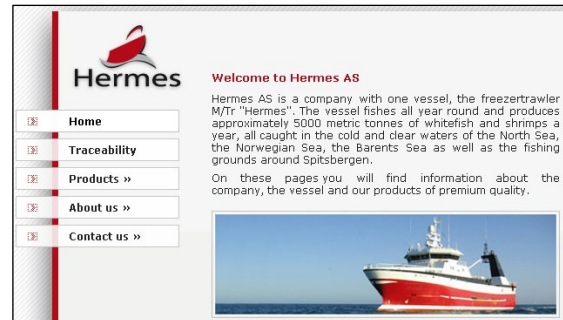
In terms of costs, Hermes paid a one time implementation fee and agreed to monthly GTNet® subscription fees. The GTNet® fees are scaled, based on the size and turnover of TraceTracker's customers. Hermes expected a 6-month return on investment, based on process optimization and higher market prices.

Showtime

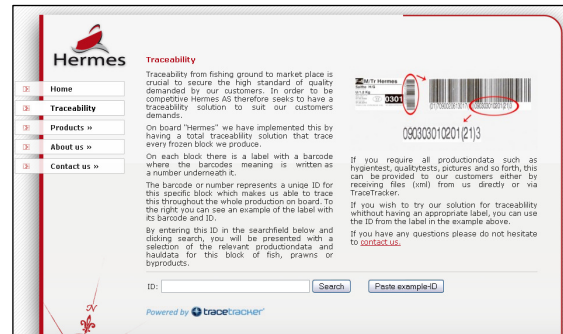
In September, 2008, Hermes unveiled a new page of their website giving customers direct access to traceability information. By entering an ID number from a frozen fish block, website visitors can now see catch and processing data from the trawling vessel.

Google maps embedded in the page show the exact location of the catch. Moreover, all of the catch data from Hermes' TIX is available in a standardized format, which can be easily shared with downstream supply chain partners.

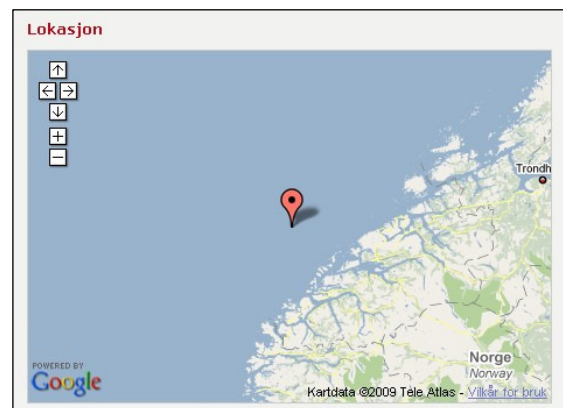
Hermes' website: www.hermes-as.no



Hermes' traceability page where website visitors can enter an ID number found under the barcode on each block of fish.



A map of a catch location. Website visitors can zoom in to see a closer view.



Benefits for Hermes

For Hermes, the benefits were evident soon after the traceability system was launched. In February of 2009, Hermes secured a contract with Scanfish Norway and Espersen amounting to half of the trawler's total revenue for the year. Both Scanfish and Espersen emphasized that traceability played a role in their decision to work with Hermes.

"The traceability of the fish products was the main reason why we chose to work with Hermes. IUU (Illegal, Unregulated and Undocumented fishing) is a major concern for us and it is extremely important that we can see evidence showing exactly where each product is coming from and how it was processed," said Palle Nimb, Vice President/Co Procurement, Espersen.

"Our customers want to look behind the product, all the way to the source. So, they are requiring more and more documentation about every step in the supply chain. We chose Hermes because they are one of the few companies offering a traceability service for their products," said Rune Mikalsen, Sales Manager, ScanFish.

In December of 2009, Hermes received additional positive feedback. A large EU traceability project, called TRACE, recognized the success of Hermes' traceability system from TraceTracker. TRACE, a 5-year project funded by the European Commission, included an analysis of Hermes' traceability efforts. A final report from the project¹ concluded that the GTNet® improved market access, enabled more stable and better prices. The TRACE findings reaffirmed that

¹ D.8 Trace Final Report.
<http://www.tracetracker.com/cgi/doc.cgi?id=266>

Hermes had achieved excellent electronic traceability, which included the ability to send data in a standardized format, automatic uploading of product information on the company website, and online integration with TraceTracker's GTNet® system.

The report also noted employee satisfaction. Because traceability had been 'sold' as a success story, Hermes' staff felt motivated to participate. They experienced no increase in workload related to the new data recordings. As a result of the recent focus on product documentation, the employees experienced an increased awareness of quality matters.

Thus, the GTNet® met the original objectives **reducing costs, increasing profits** and creating a **competitive advantage**. "With this system we not only save cost and time associated with quality matters, but we also build our reputation with partners and customers which strengthens our position in the market," affirmed Jan Roger Lebuht, an owner of Hermes. Since all of the traceability data is available online, customers can easily access sourcing details for every block of fish that they purchase, creating trust and transparency.

Benefits along the supply chain

Traceability has the potential to impact the entire fishing industry. Webjørn Barstad from Fiskebåtredernes Forbund, a Norwegian fishing vessel association, agreed: "We are pleased to see that Hermes leads the way to an effective exchange of product documentation. This is very important for building trust in the industry and we recommend that other trawler companies



also consider implementing electronic traceability solutions”

Mission accomplished, and more

Looking forward, Hermes plans to work with its customers to extend the service down stream to manufacturers and retailers so it can track products all the way to supermarket shelves. Various extensions of the original implementation are possible including tracking product temperature, increasing the automation of quality control systems, and linking the website information to pallet identifiers.

Visit www.tracetracker.com for more information.