



## Content

- What is traceability?
- Two types of traceability
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- Application of traceable information

## What is traceability?

Example from a supermarket to illustrate this:



Which gear type is used to catch the fresh fish?

Which production method is used?

What is the catch area?

How can the supermarket get access to this information?



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## Documentation

- This information is recorded at different places in the supply chain
- How is it possible to document this information?
- Can traceability be a tool to make this information available for the supermarket?



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## What is traceability?

Traceability is a tool  
to trace  
product and process  
information  
in a systematic way



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## What is systematic way?



We record information received  
from the vessels

We record information  
during the production

We send information to the  
customers

Information must be recorded and linked together ➡ Able to find again at a later point

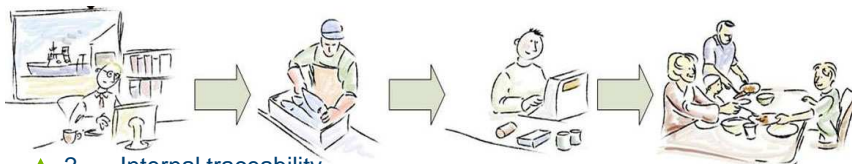
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## Two types of traceability

### 1. Chain traceability



### 2. Internal traceability



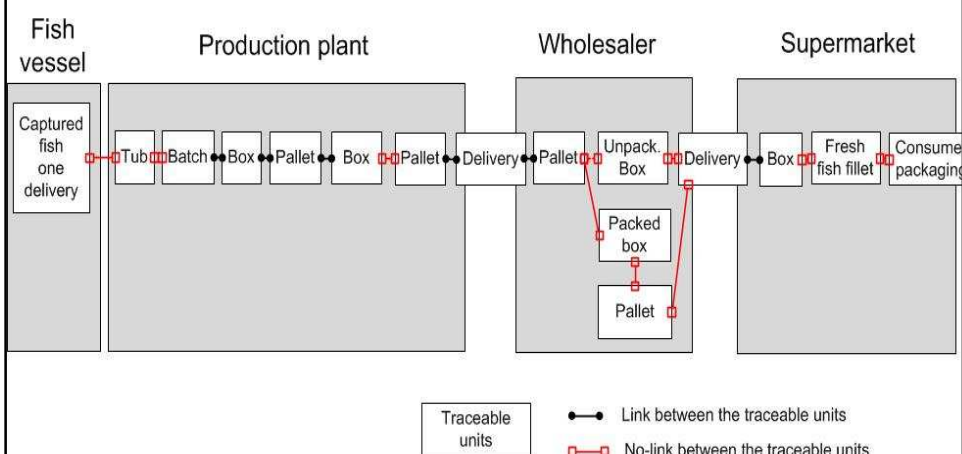
Ability to trace information through a supply chain

Ability to trace information within a company



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## Case study: Implementation of electronic traceability



The information of the catch did not follow the fish, and it did not reach the supermarket or the consumer.

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## Findings



- Such implementation is complex
- Different architectures and traceability schemes are available
- A number of critical success criteria were identified - human factors are central
- Motivation is extremely important to succeed with implementation of electronic chain traceability
- A big challenge was to find optimal practical solutions
- The benefits of doing the extra work must be clear to all the actors in the chain

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## Different motivations

- Supermarket wanted to get access to more information about the fresh fish they were selling
- The wholesaler wanted to keep his customer happy
- The wholesaler and the supermarket saw traceability as a tool for improved documentation of the cooling chain:
  - simpler to identify the cause of low quality, and then responsibility could be assigned
  - Better control of the material flow to achieve shorten lead and storage time of the fish
- The weakest link in this supply chain was the production plant. Can target harvesting be used to increase the motivation?

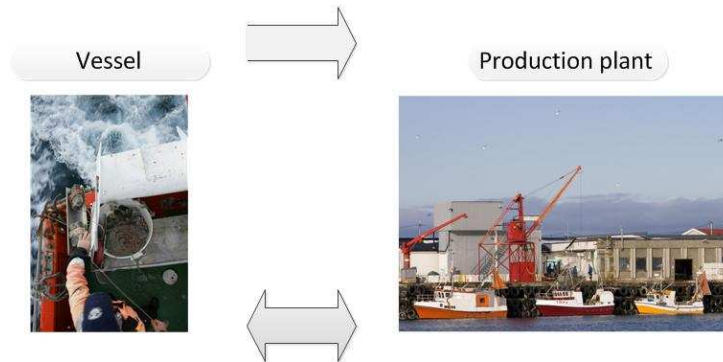
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## Target harvesting

Exchange catch information



Coordinating the activities

The aim of target harvesting:

- To increase the profit for both links (Margeirsson, 2008)
- Traceability can be a tool to get access to relevant information



## Which information to trace?

- Depending on the application of information
- Important questions:
  - Which information is relevant to trace in-house (internal traceability)?
  - Which information is relevant to exchange to the suppliers and customers (chain traceability)?



Decision: Which entity (quantity of fish) to trace?

- All traceable information must not be available to all actors in a supply chain



## Two examples

- 1) Documentation of gear type:  
Fish caught with long line must be kept separated from the fish caught with other gear types.
- 2) Documentation of catch date:  
Fish caught on different catch dates must be kept separated.



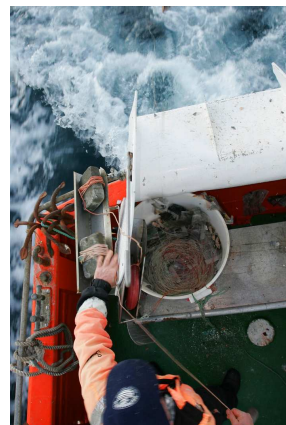
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## Summary

- Documentation of quality and sustainability - useful or not?
- Probably not useful for everybody - it depends on the application of information
- Traceability is only a tool to get access to relevant information



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MARGEIRSSON, S. (2008) Processing forecast of cod - Decision making in the cod industry based on recording and analysis of value chain data. Thesis. *Faculty of Engineering. Reykjavik, Iceland, University of Iceland.*