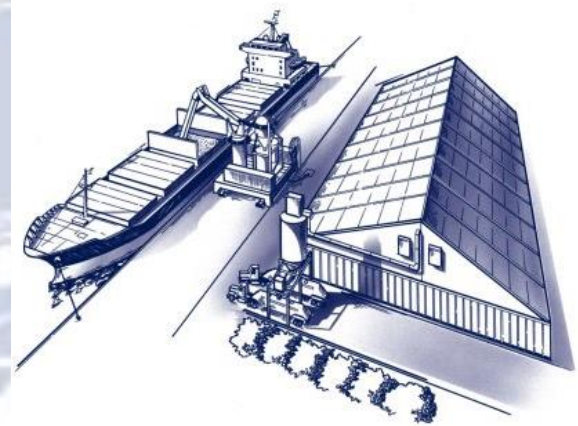


Ship scheduling & Contractual issues of cement shipping



Ad Ligthart
Cement Distribution Consultants





**Interaction between
terminals and shipping**

Interaction between terminals and shipping



1. Ship scheduling

- Ship too late at import terminal
- Ship too early at import terminal
- Waiting times at export terminal
 - Ships arriving at the same time
 - Insufficient cement stock

Interaction between terminals and shipping



2. Unloading

- Unloading time estimated too optimistically
- Delays because of poor organisation of unloading
- disputes on causes of delay
- Delays because of poor co-ordination with shipping company / ships crew

Interaction between terminals and shipping

3. Damages / Foreign objects

- Water damage of cement
- Foreign objects in cement
- Damage to unloader and terminal equipment



I) Shipscheduling

When can the import terminal receive its next ship?

Notice to cement plant and shipping company

Find a ship

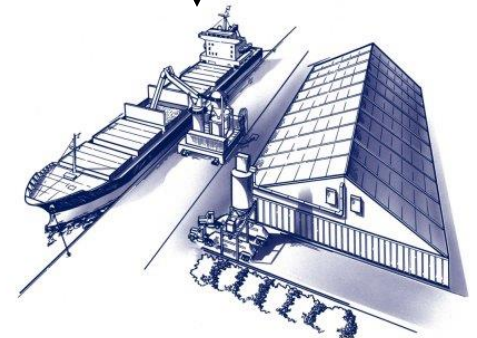
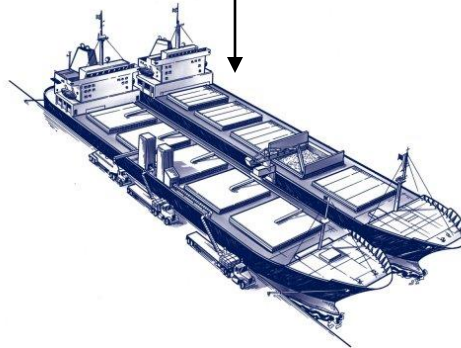
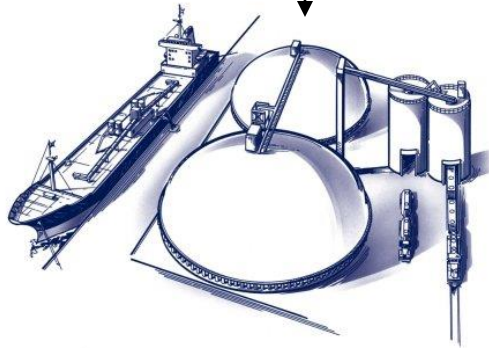
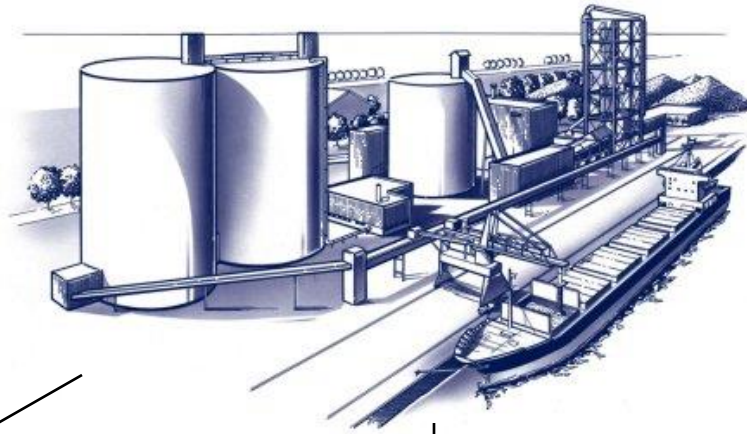
Sail to cement export terminal

Load

Sail to import terminal

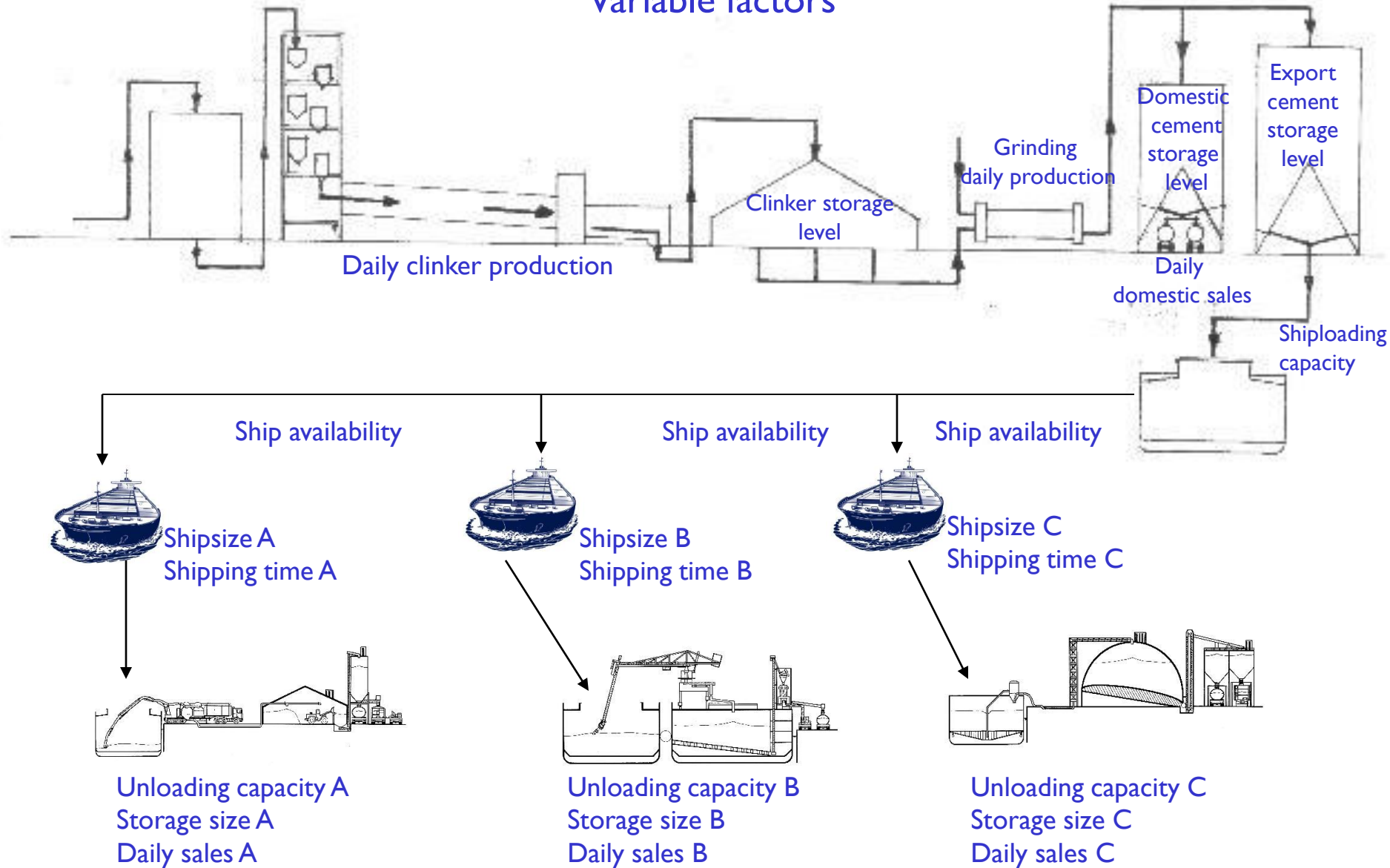


Perspective of exporter



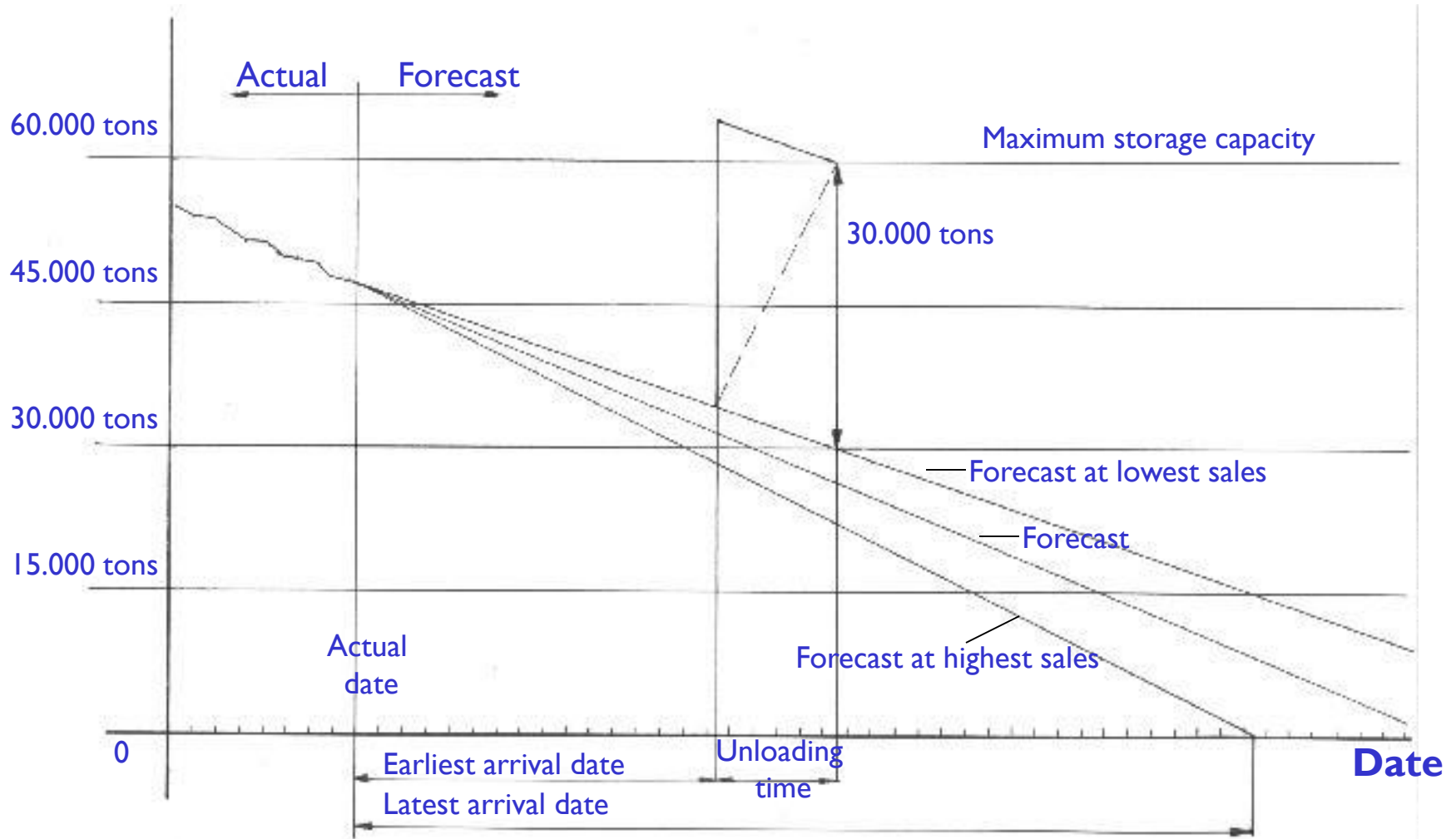
Complete distribution system

Variable factors

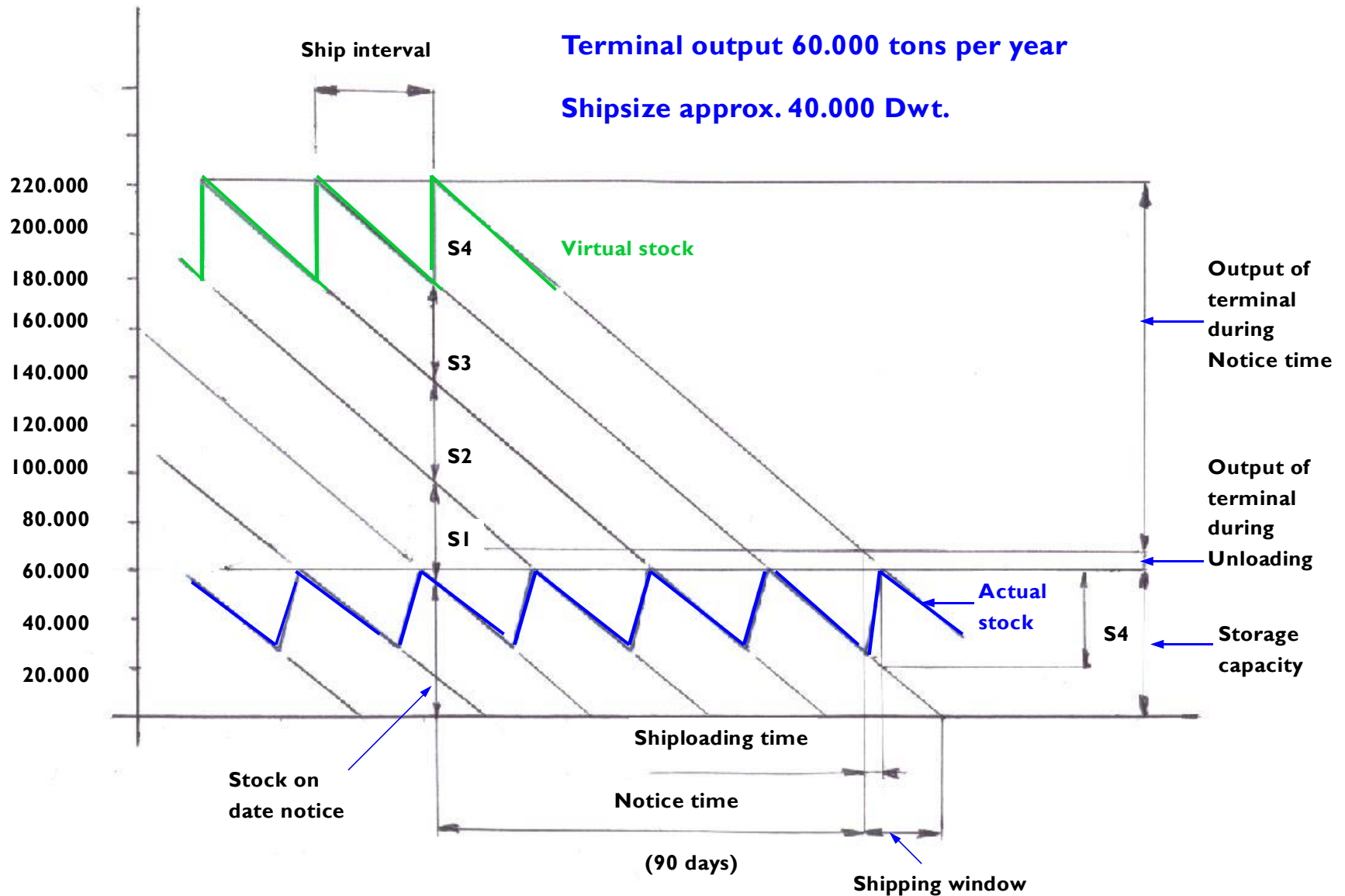


Perspective of importer

Cement in stock



Import terminal logistics



Moment of ordering the next shipment



Stock on date of notice = storage capacity +
output of terminal during ship unloading +
expected output of terminal during notice
time - shipsize to be ordered - shipsize(s)
already ordered

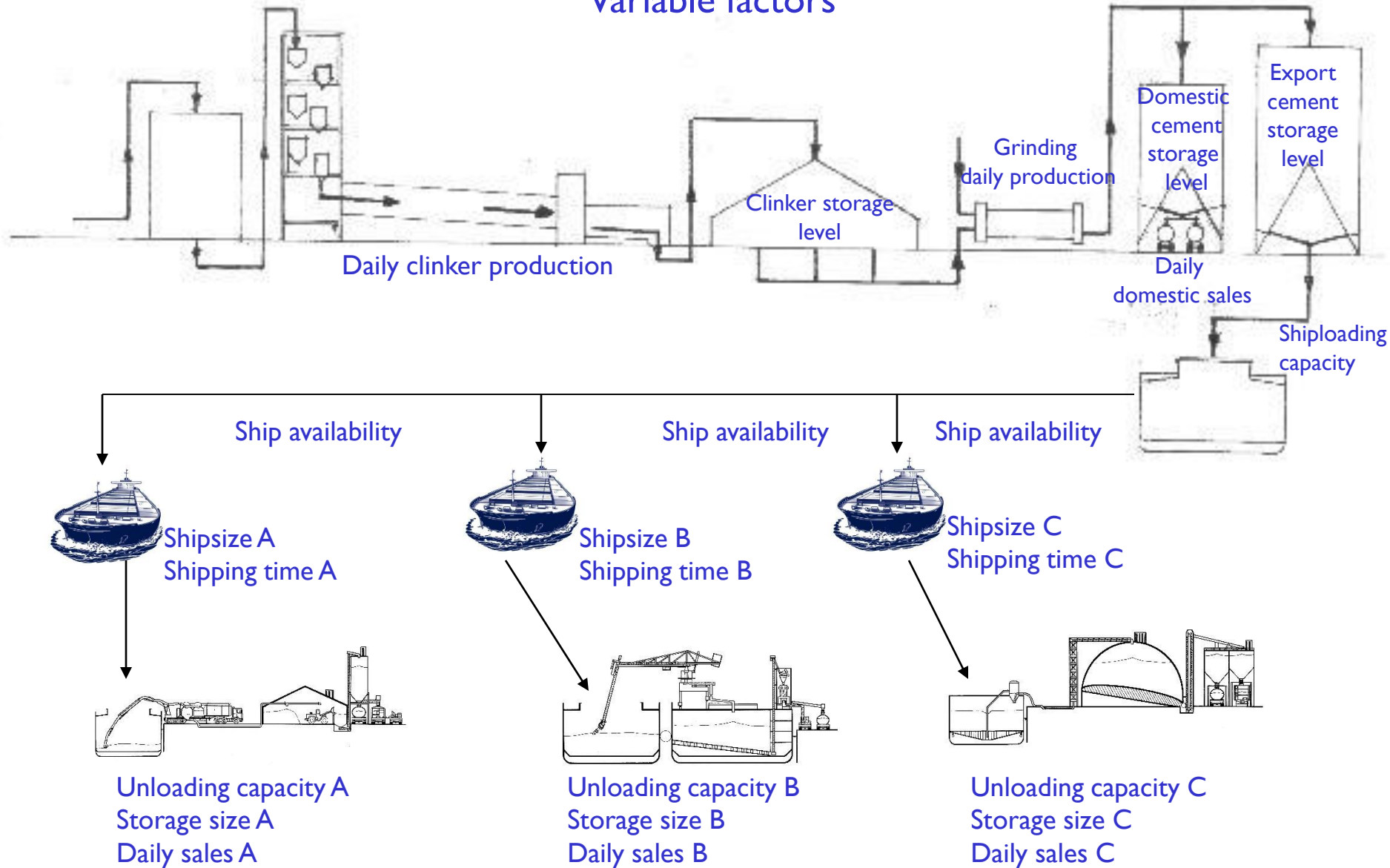
Improve ship scheduling

Combine export plant, shipping
and import terminal in
one system of supply chain
management

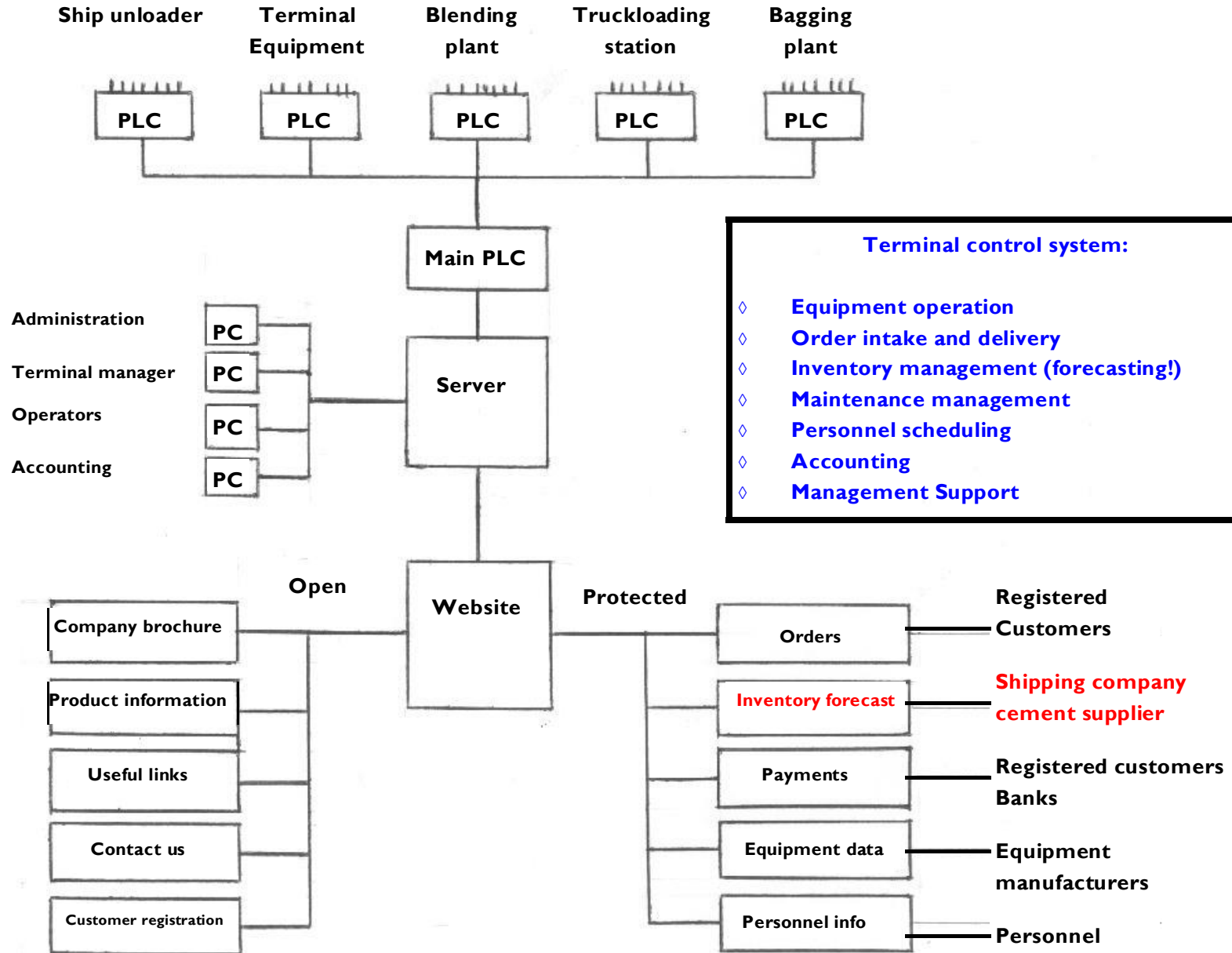


Complete distribution system

Variable factors



Terminal control system



2) Unloading time

- Equipment performance
- Organisation of unloading operation
- Co-ordination with ships crew



Equipment performance

- Maximum capacity
- Efficiency
 - Depending on type of equipment
 - railmounted
 - mobile on tyres
 - barge mounted
 - fixed (ship has to move)
 - Depending on skill of operators
 - Depending on condition of equipment



Organisation of unloading operating

A large cargo ship is shown from a high-angle perspective, sailing on the water. The ship's deck is visible, showing various structures and equipment. The water around the ship is slightly choppy, and the overall scene is presented in a light blue, semi-transparent style.

- Organise that operators and clean up crew are available at the required time
- organise that sufficient cleanup equipment is available at the required time
- Prepare for problems

Plan well ahead!

Co-ordination with ships crew

A large cargo ship is shown from a high-angle perspective, sailing on the water. The ship's deck is visible, showing various structures and equipment. The water around the ship is slightly choppy, and the ship's wake is visible. The ship is oriented towards the top of the frame.

- Full agreement on unloading sequence of vessel.
- Availability of ships crew for opening hatches, moving the ship, lifting cleanup equipment, etc.
- Agreement on division of final cleanup

WHEN IS THE SHIP EMPTY!!

A large cargo ship is shown from a high-angle perspective, sailing on the water. The ship's deck is visible, showing various structures, railings, and equipment. The water around the ship is slightly choppy, and the ship's wake is visible. The overall image has a light blue tint.

- Shovel clean or machine clean

No further cement can be reached by a front-end loader and manual shovels

- Broom clean

Cement cleaned from behind frames, ladders, etc. and sides and tanktop of hold fully swept with brooms

- Agreed quantity that can be left behind

Damages / foreign objects



- Water damage to cement
 - Cement unsuitable for sales
 - Delay in unloading / terminal operations
- Foreign objects
 - Caused by holds not being clean when loaded
 - Entered the holds with the cement
- Damage caused to unloader or equipment of terminal
 - Direct damage
 - Consequential damage

How to avoid problems and disputes



- Optimise sales forecasting of import terminal as well as ship scheduling procedures with cement exporter and shipping company
(Become part of complete supply chain management)
- Be realistic on required unloading time
- Take care of proper definitions in charter party in respect to responsibilities of ship owner / operator and terminal operator and make sure that these are adhered to
- Organise the (un)loading operations well and well in advance
- Document the unloading operations
(keep a logbook)
- Prepare for problems
(most of them have happened before and solutions are known)