



# Voyage Estimator

Estimation  
Time  
Charter  
Operation  
Planning  
Decision  
Accuracy  
Cost  
Summary  
Profitability  
Financial  
Business  
Comparison  
Plan  
Analyze

# 1. Introduction

## Introduction

Voyage Estimator is the most advanced decision support solution to evaluate the accuracy of voyages. It calculates profitability based on the estimated figures. The ship owner / charterer can estimate the voyage for different vessel for the different cost.



The estimation calculation is done based on the Business Plan, Schedules, Load and Discharge Ports, Proforma details including Vessel Cost, Commodity, Cargo Capacity, Vessel Speed, Bunker Consumptions, Port Expense and the Average Type and Size of Ship under the same market conditions. Voyage Estimation is used to compare the revenue with the total costs of the same voyages for the different vessel and to find which vessel is the most profitable.

## 2. Why do we need Voyage Estimator?

Voyage estimation is vital to the profitability of liner business. So why rely on manual methods, spreadsheets or over-complex systems when you could be using an automated system? Voyage estimator is not only faster and more accurate but also makes it simple to compare all the options.



Voyage estimator minimizes the manual intervention to reduce the error and provides quick information about the proforma detail with total moves, productivity, distance, speed, bunker type, canal crossing and pilotage details in single click, which is fetched from the proforma schedules for the particular service. Multiple ports can be included in single proforma. Based on the proforma parameters; the vessel departure date is estimated from the arrival date.

The accuracy of total voyage expenses can be achieved by providing the exact port expenses cost, bunkering cost, port and pilotage (cost calculates from the bunker rate for the current year), charterer hire amount, canal crossing cost, and insurance cost (if applicable) from the database in a single screen. The multiple vessels can be added for comparing the vessel expense variation. From the costs estimation, charterer / ship owner can plan for optimal sized ships, which can reduce the overall voyage cost.

The ship owner / charterer can estimate the total revenue from cargo details or data as received from cargo owners. Freight rate can be calculated for different charge basis example metric ton, kilos, pounds, lane meter (based on surface allocated on the ship) & revenue per ton (depends on volume or weight whichever is higher in value) of each cargo. The users can also select the different terms of shipment such as Free In / Out, CY / CY and Stowage, Liner, Free In & FAS (Free Along Side), Free In & Free Out, Liner In, Free out, Free In & Liner Out for commodities.

The cargo handling cost is defined based on the port cost and the activity involved such as loading / discharging. Demurrage (leaving beyond agreed ship time to stay in port) / Despatch (leaving before agreed ship time to stay in port) cost of ship is calculated by the system.

For the ship owner / charterer who need to make the right voyage estimation decisions and make the optimal use of their fleet, Voyage Estimator provides a quick and intuitive system to compare different vessel and help ship owners / operators to fix the most profitable voyages.



### 3. How better results can be achieved with Voyage Estimator?

Accurate voyage estimation is very important to every ship owner and charterer. Voyage estimator can improve the accuracy of estimation and improve the customer satisfaction by understanding the following concepts.

- Estimation of daily operating costs, individual operation cost and route calculation
- Provision added for planning the bunker ports related to both bunker cost and cargo maximization
- Comparisons with different vessels for the voyage
- The cargo freight rate charges calculation based on the various parameters as metric ton, kilos, pounds, lane meter and revenue per ton
- Financial summary with voyage details, revenue, cargo handling cost, vessel cost, voyage result and KPI (Key Performance Index) for Profit and loss analysis



Estimation analyzes any combination of vessels, cargoes, load, and discharge operations on a voyage and / or Time Charter (TC) basis. The estimator allows unlimited numbers of ports and cargoes per voyage and displays all key information on a single screen.

## 4. Impacting the Bottom Line



When dealing with estimates, the voyage analyst team deals with issues of accuracy in cost estimation. The high accuracy of estimation is reached with voyage estimator, which calculates the multiple consecutive voyages and combinations and analyzes the outcome of voyages, potential profit or loss before arrangements of transportation.

Solverminds is the leading software provider for Liner companies and developed the Voyage estimator solution; the solution helps in better planning, chartering decisions, increased operator productivity, higher fleet utilization and automated invoicing and streamlined processes between chartering, operations, and accounting.

## 5. Unique Features

- Accurate voyage estimation
- Different cargo and vessel combinations and seeing commercial outcome
- Ability to calculate the expense for every port based on the bunker type
- The cargo freight rate charges calculation based on the various parameters such as metric tons, kilos, pounds, lane meter and revenue per ton
- The cargo handling charge calculation based on the various terms such as Free In/Out, Free In/Out and Stowage, Liner, Free In & FAS, Free In & Free Out, Liner In, Free out, Free In & Liner Out
- Provision added to calculate the Demurrage / Despatch cost
- Integrated system with proforma service and bunker management modules to reduce the manual intervention of the information
- Ability to view financial summary with various cost and KPI (Key Performance Index) for profit and loss analysis
- Canal transit times and cost calculation (Panama & Suez)