

CARGO FLOW CHAIN

CFC: One-click cargo matching + supply chain finance, Integrated shipping platform



Joel Grau Co-founder & CEO



As a Managing Partner in JP Morgan key Shipping subsidiary, built an excellent reputation in the market place; Prior to that Joel worked during several years in Clarksons, world's largest shipbroker (now Clarkson Platou), where had a successful career as Director (Dubai and Geneva). +20 years experience.



Joel has Masters' and PhD studies in Maritime Law (Southampton, UK) and Shipping Business (FNB and Panama City). Collaborates as visiting Professor with top ranked European universities and attends regularly as Speaker the most well-known Trading and Shipping forums in the globe.

Our Team



Xu Dapeng Co-founder & COO

- Four years' sailing experience as Navigation Officer in oil tanker, bulk carrier and wood ship. Working in world shipping hub London and Hamburg several years. Growing from 10k HKD up to 500 million USD annual cash flow within 4 years. 20 years experience in shipping industry.
- Shanghai Jiao Tong University Financial EMBA.
 Postgraduate in Maritime Law from Southampton University.
 Bachelor degree for Navigation Technology from Dalian Maritime University.

Yue Dong Co-founder & CTO



- 15-year experience of overseas performance and management in Silicon Valley and Wall Street, including research and development, strategy consulting and investment banking such as Oracle HQ, Oracle Consulting, Royal Bank of Scotland and Interactive Broker.
- After returned to China, Mr. Dong worked in a number of famous and successful Internet start-ups as CTO for development of technical architecture and team management, including YHD.com, Lashou.com, Lvmama, SPI Energy Co.



WORLD SEABORNE TRADE

Dry Bulk 5.5 Bi Tons (2% growth y-y)

Crude Oil 2.1 Bi Tons (2% growth y-y)

Oil products 1.1 Bi Tons (3% growth y-y)

Containers 1.9 Bi Tons (4% growth y-y)

Others 1.7 Bi Tons (5% growth y-y)

Total 12.3 Bi Tons (3% growth y-y)

TONNAGE

Tankers 621 mi dwt (11%)

Bulkers 846.7 mi dwt (11%)

Containers 266.5 mi dwt (11.6%)

Others 176 mi dwt (12%)

World cargo fleet 1.910 Bi dwt (59,175 vessels)



IRON ORE (1.481 Bi Tons)

SUPPLY

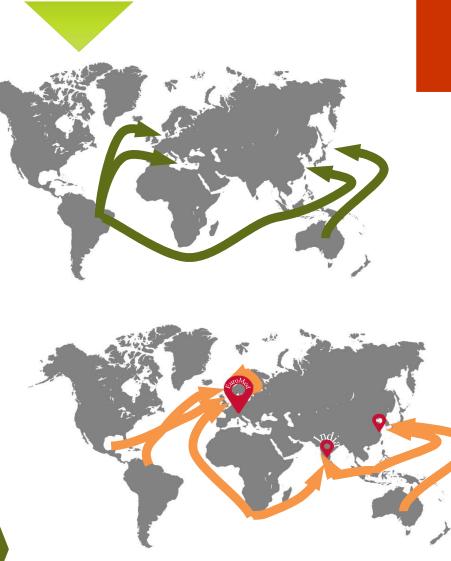
Australia - 862 Mi Tons
Brazil - 373 Mi Tons
Others: Canada, Safr

DEMAND

- China 1.1 Bi Tons
 Japan 125 Mi Tons
 Skorea 74 Mi Tons
- Others: ARA, Egypt

PLAYERS

VALE, RIO TINTO, BHP BILLITON, FMG, TRAFIGURA, CSN, ROYHILL, PMI...



PLAYERS

VALE, RIO TINTO, BHP BILLITON, ADANI, ANGLO AMERICAN, GLENCORE, MERCURIA, TRAFIGURA...



Indonesia – 431 Mi Tons.
Australia - 391 Mi Tons.
Others : USA, Colombia, Safr and Baltic



India - 243 Mi Tons.
China - 226 Mi Tons.
Japan - 186 Mi Tons.

COAL (1.284 Bi Tons)

AGRIPRODUCTS (0.7 Bi Tons)

SUPPLY

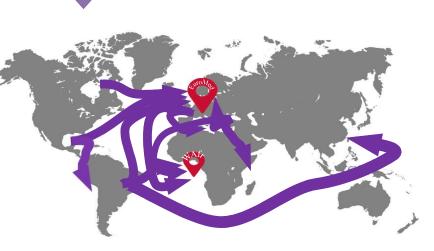
- ♦ USA 125 Mi Tons
- ✤ Brazil 107 Mi Tons
- Rusia 52 Mi Tons
- ✤ Argentina–45 Mi Tons
- ♦ Ukraine 41 Mi Tons
- ✤ Others: Canada, Australia

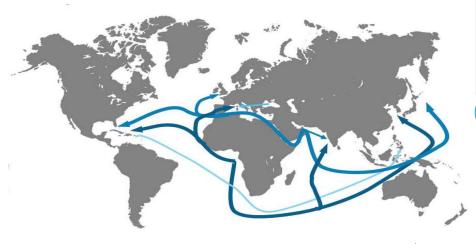
DEMAND

Asia - 214 Mi Tons Africa - 66 Mi Tons CA/WCSA - 60 Mi Tons

PLAYERS

CARGILL, BUNGE, DREYFUS, ADMI, COFCO, GLENCORE, OLAM, MARUBENI, WILMAR, GLENCORE, TRANSGRAIN, MITSUI...





PLAYERS

VITOL, MERCURIA, TRAFIGURA, GLENCORE, KOCK, CARGILL, GUNVOR, BP, SHELL, EXXON...

SUPPLY - Mi Barrels

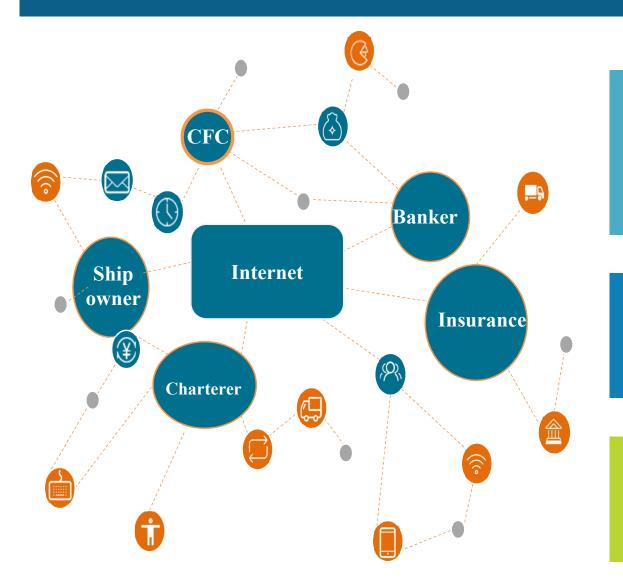
MEA - 31.4 (-1%)
USA - 17 (11%)
SA&CA - 6.5 (1%)
WAfr - 4.5 (-1%)
NAfr - 3.4 (0%)

DEMAND

✤ ASIA, EU-5, LATAM

CRUDE OIL

Abstract



The philosophy of CFC, which stands for CARGO FLOW CHAIN, is an inspiration from years of sailing and trading experience in shipping and logistics industry, where the digitalization is a must for the industry to catch the pace of human's civilization.

By utilization of Internet, AI and Big Data technology, we created CFC platform in order to try to solve some of the present problems in the shipping industry.

State of the art technology to disrupt the industry creating a selfdriving ecosystem to improve key Shipping processes Huge market: International shipping is a huge traditional market which create value of nearly 500 billion US dollars every year and grow stable and rapidly.



Platform mode: The CFC platform makes possible precise matching and intensive management, and in consequence it reduces shipping cost and improves the efficiency.



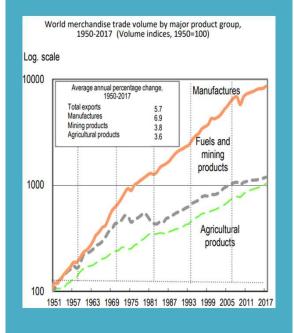
Exact match: Big data-based **AI algorithm** system accurately matches the ship owner and the cargo owner, serving the customer (ship owner / cargo owner) 24 hours a day.



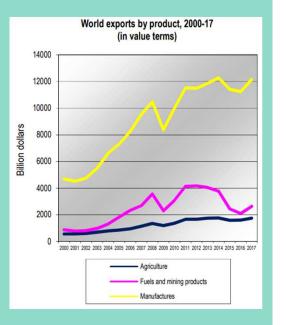
Deep empowerment: Through the systematic reengineering of shipping process, **the shipping business** can be **deeply endowed** to help cargo owner and ship owner to make profits.



Professional team: The team include the shipping industry elite and high-tech experts.



Continue trade volume growth due to globalization progress plus demographic upwards trend.



Solid trade value of global trading activities within the different sectors and geoareas. World Seaborne Trade

Despite economic turmoil World Seaborne Trades keeps healthy.

aditional but dramatically growing market: shipping and logistics

Clarksons Research broadcasted that the world seaborne trade reached to about 11.6 billion tons of cargo carried by commercial vessels with a global sea freight market value well in excess of 200 billion USD by 2020.

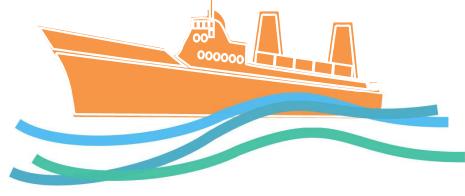
Sea-going market

Shoillion tons

1SD 200+

World Cookerne Trade		%Chg				
World Seaborne Trade	2015	2016	2017	2018	2018/17	
Crude Oil	1872	1949	2004	2060	3%	
Oil Products	1022	1067	1098	1133	3%	
Dry Bulk	4835	4903	5109	5251	3%	
Containers	1661	1733	1821	1914	5%	
Other	1435	1488	1568	1657	6%	
World Seaborne Trade	10825	11139	11599	12015	4%	
y-o-y growth	2%	2.9%	4.1%	3.6%		

(above figures from Clarkson Shipping Intelligence)



- Shipping is linked to human civilization and has been servicing trade flows for the last 400 years.
- Since its initial conception, Shipbroker has been an **active player in the industry**, mainly on information exchange and transmission.
- However, in today's **Internet era**, the impression that **the harm outweighs the benefit** is always deepening in the industry.



Actual Main Problems I

SOLVED by CFC!

COMUNICATION PROBLEMS Lack of transparency Lack of data accuracy Lack of efficient communication Lack of documentation authenticity Potential frauds

SNOIL

SOLI

HUMAN NTERVENTION PROBLEMS

Multiple middleman involved

INDUSTRY PROBLEMS Industry roles rotations Lack of favorable trust mechanism Great necessity of rebuilding processes to reduce manual intervention Transparency documentation/ communication

Increase speed of transaction

Process standardization

Actual Main Problems II

SOLVED by CFC!

EFFICENCY

Flattened demand growth: Industry consolidation forcing freight rates down No competition -> Oligopoly Negative for charterers leading higher prices and poorer services

ENVIROMENT

Meeting fuel emission regulations

RISK

Lack of early risk warning system

Scarce reliable independent data providers

SOLUTIONS

More Cost effective

Optimizing trade routes

Independent real data Reports

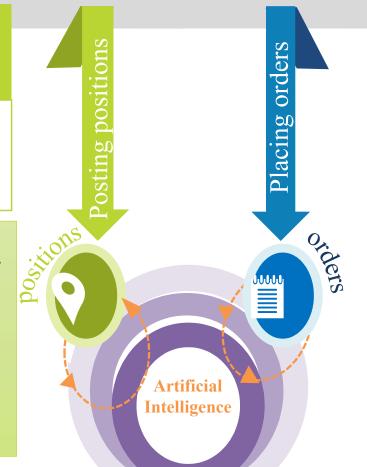
Communication with Insurance / Legal Cos

DATA

SOLUTION: CFC

Tonnage Providers

- Legitimate legal entity
- Could be any type of transportation Company
- 1. Receive contract from charterer
- 2. Consult with charterer and sign the final contract
- 3. Receive freight from charterer through CFC network
- 4. Pay commission to the CFC network



Cargo Interests

- Legitimate legal entity
- Could be any type of Cargo Owner
- 1. Create a contract
- 2. Consult with ship owner and sign the final contract
- 3. Pay freight to ship owner through CFC network

CFC Recording the shipping documents, contracts and freight transactions...

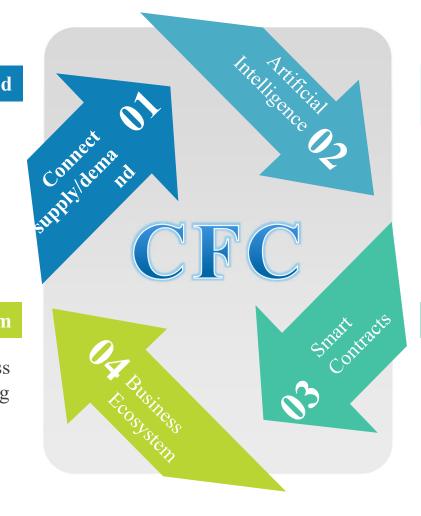
SOLUTION: CFC Platform Features

Connect supply / demand

Use the Internet to connection supply / demand

Business Ecosystem

CFC builds a closed-loop business ecosystem: connection – matching – data -- financing



Artificial Intelligence + Big Data

AI matching based on big data realizes the optimal scheme of mathing ship and cargo

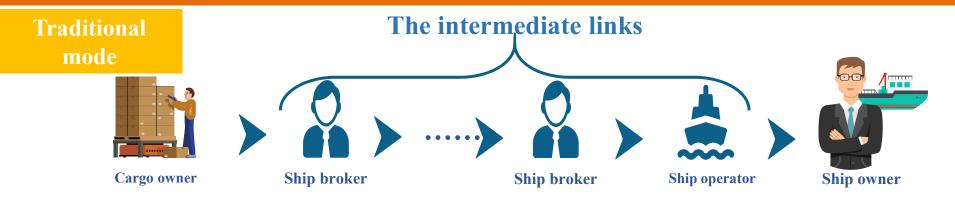
Smart Contracts

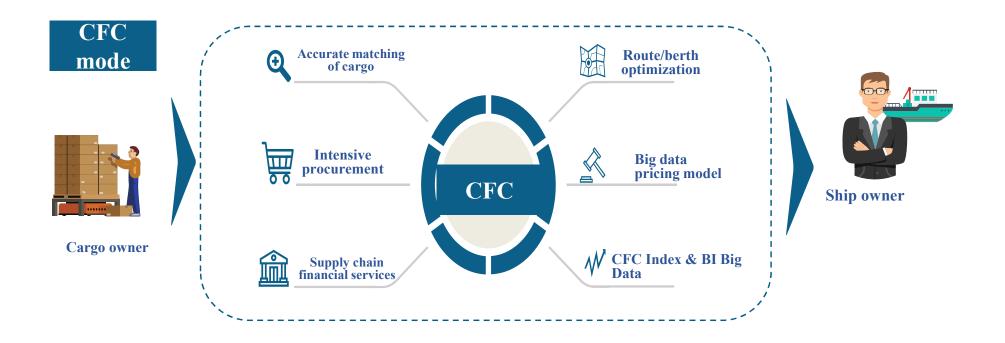
Smart contracts make information real and reliable, and build global shipping archives

CFC Platform

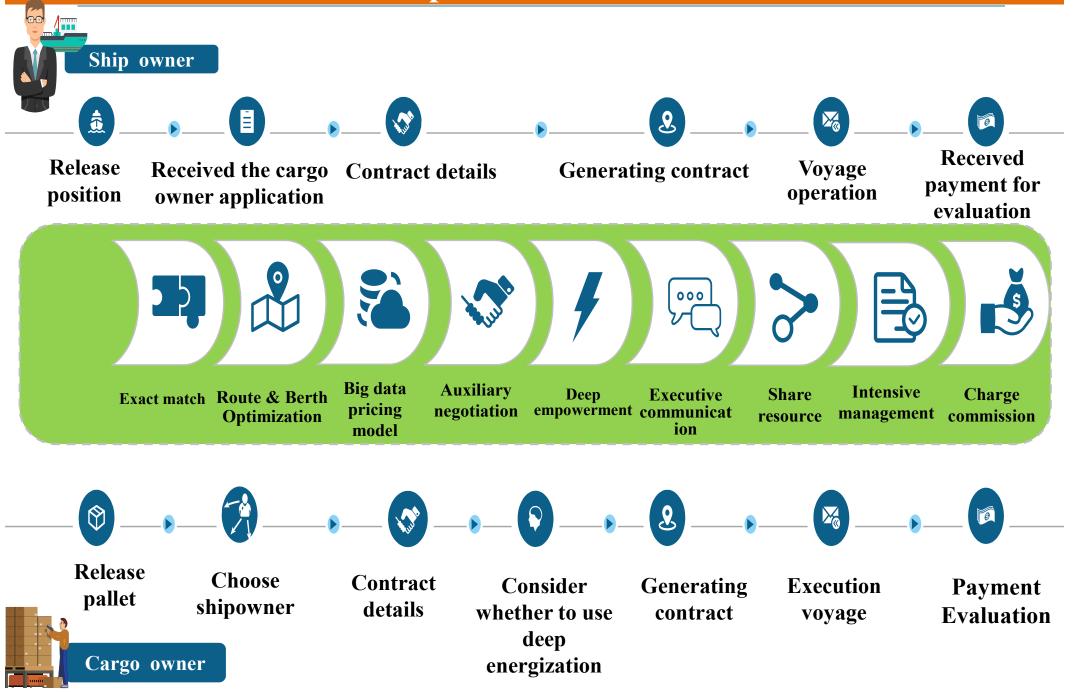
Eliminate intermediate links and coordinate upstream and downstream industrial chains to improve the efficiency and reduce the

costs





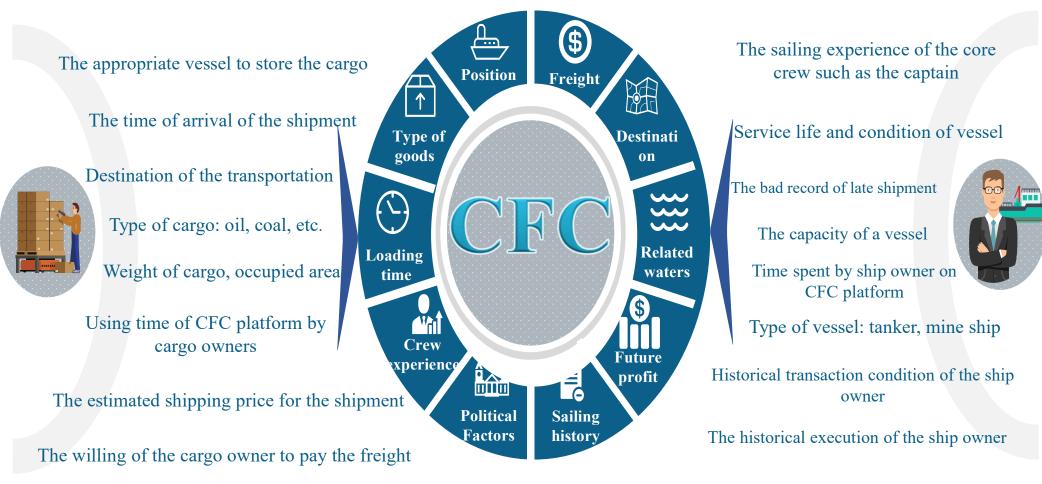
CFC Platform Operation Process



CFC Platform Ship Matching

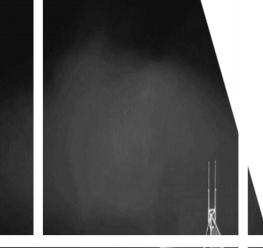
Intelligent shipping matching, 24 hours operation, offering the shipping contract documents and the shipping fee

The speed of vessel and the ability to resist severe weather



Big data AI intelligent matching system





Mission - To transform significantly the Shipping industry by implementing the latest disruptive technology to its old fashioned standard processes. Live parties communications, reliable contract tracking and full transparency ecosystem are in our gens.

Vision - For the human society to provide a full range of one-stop transport logistics, supply chain finance online platform.



Four steps:

I. Internet platform – connecting

II. AI platform – matching

III. Big Data platform – intelligence service

IV. Financing platform – Comprehensive service logistics industry

Deep Empowerment Service

Based on the ship-to-goods docking business, big data was prepared to empower the industry

Intensive purchasing

Fuels fee is a large portion of the shipping costs, and by the unified purchase, bargaining power were rose and costs reduced including the port fees, material fees and crew fees, etc.

Route management and berth optimization

Shipping intelligence obtained from the big data can provide an optimized route to users, Thus, berth was majorization and demurrage was avoided.

CFC index

Basing on big data, various trade products, routes and voyage were induced to establish credible data for international trade,

ship financing, and the shipping industry.



Resource sharing mode

Professional legal assistance, insurance claims assistance, inspection team.

The platform provides free consultation, loss warning and other services to reduce accident losses. At the same time, it reduces the management cost and freight.

Supply chain financial services

The traditional credit system in use have some shortcomings, such as the complicated first-phase procedures, the low trust.

By obtaining the historical data of the cargo owner, the cost of collecting information was induced and assured services were provided.

Big data-pricing model

Route quotation was obtained based on the voyage cost by analyzing of historical quotes, historical trends, and transaction records, and adjusting the information dynamically such as climate and distance.

BI big data

Based on ship information, shipping information, three-party data and market information, the process of procurement and production was facilitated.

Business Model



Accurately matching the ship owner and the cargo owner, charging the commission. Interest acquired by the freight paying on the platform.

User pools generated on the platform through transactions. Third-party services provided to customers such as legal aid and insurance services. Fees collected by charging customers for guidance.

Business Model Intensive Purchasing

Fuels fee is a large portion of the shipping costs, and by the unified purchasing, bargaining power were rose and costs reduced including the port fees, material fees and crew fees, etc.

Traditional mode

- In the traditional mode, the ship owner directly purchases fuel from the supplier, and the bargaining power is weak.
- The manual procurement model has no secondary audit verification and is prone to operational errors.



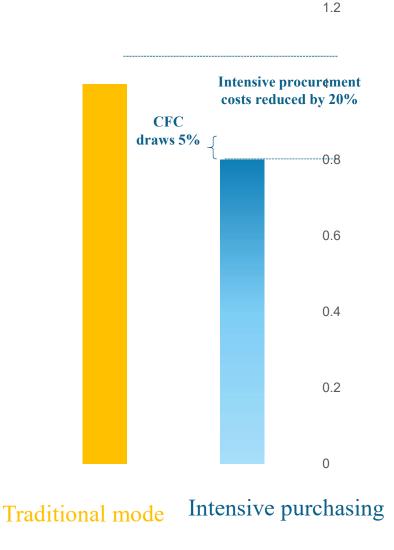
Ship owner direct purchase

Intensive purchasing

- Under the mode of intensive procurement, shipowners uniformly apply to CFC to select the fuel and materials they need.
- CFC purchases the fuel from suppliers uniformly, with large order amount and strong bargaining power.
- Machine-based ordering and manual auditing reduce error rate and reduce the frequency of operate miss.



CFC empowerment intensive procurement



Business Model Route And Berth Optimization

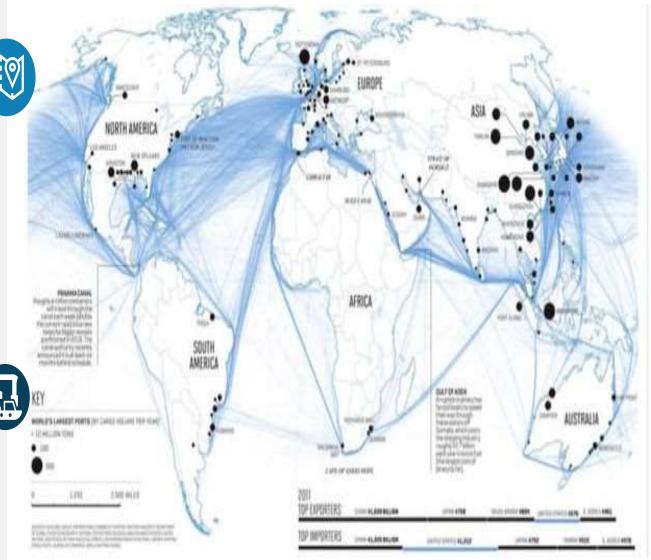
Shipping intelligence obtained from the big data can provide an optimized route to users, Thus, berth was majorization and demurrage was avoided.

Route management

- According to the big data algorithm, the hydrometeorology and route condition are analyzed, the routes are managed, thus, the route is optimized based on the AI operation.
- CFC helps vessels to develop "strange ports" that they are reluctant to go to due to their unfamiliarity with the geographical environment, goods and other factors and thus form a modeling textbook named "CFC routes" so as to popularize the shipping market on a grand scale and avoid regional monopolies.
- We cooperate with ports in order to lead vessels to unload in the preferential ports, thereby reducing the logistics costs

Berth optimization

• On the basis of the current situation of the port and the vessels on the nearby routes, the AI recommendation was used to guide the vessels to the nearby empty ports in coordination with the cargo owner, greatly reducing port congestion and reducing costs by 5-15%.



Business Model Big Data Pricing Model



CFC pricing model

Providing guidance and quotation for routes through big data analysis

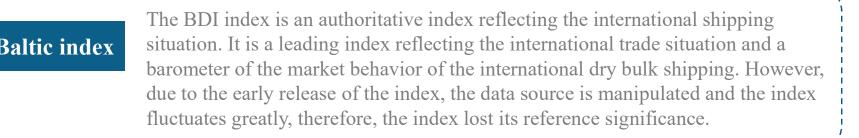
Making the pricing system of shipping more transparent and open

Allowing cargo owners a wider choice of vessel.

Business Model CFC Real-Time Index

On the basis of CFC **real-time big data** and analysis of routes and voyages, it provides timely and reliable foundation for international trade, ship financing and supply and demand of shipping industry.

CFC INDEX



Platform data collection

Carrying out the full statistics of the shipping data on the platform and obtaining the core data.

Platform external data

Colleting the industry data, including data on the supply and demand relationship of transport capacity supply data and international trade growth Guiding the construction of shipping industry

Index can accurately reflect the rise and fall of the current shipping market, so as to guide freight capacity investment and freight management strategy.

Business Model Supply Chain Finance

Through the historical transaction data of CFC, voyage operation are monitored. The user's creditworthiness can be promoted and they can be provided supply chain financial services through the cooperation of CFC with financial institutions.



The traditional credit system

- At present, the main problems of the credit system of the shipping industry lie in the high cost of early communication with Banks and the harsh conditions and the complicated procedures.
- Due to lack of trust between ship owner and cargo owner and financial pressure, the whole payment process make slow process. Usually, some cargo owners are only willing to pay the freight when the vessels are about to reach the destination, thereby increasing the financial pressure of ship owners.

Big data empowerment credit rating

- We conduct big data analysis by collecting a large amount of historical shipping information on the platform of ship owners, access to financial institution data and establish the credit scoring system of ship owners according to the scientific risk control model in order to perform factoring for freight, improve the capital turnover of the shipping industry and promote the rapid development of the industry.
- The settlement of international trade on CFC abandon the traditional letter of credit. On the basis of the visualization platform of CFC, the international trade operating system of Tech-Fin can be realized.

Business Model Resource Sharing

Loss warning

According to the data of the platform, the vessels and fleets of the customers are evaluated by big data, the exposure and risk of users are calculated in time and professional reports are provided. Meanwhile, the operation process is monitored. If there is a predicted loss, adjust the vessels in time.

Professional inspection

Pre-shipment inspection, draft inspection, fuel inspection and PSC in the during voyage operation can be provided some recommendations and professional guidance by CFC to improve the global safety management standard.



Insurance claims

For the customers on the platform, the visualization platform and professional voyage management greatly reduce the transportation risk of properties. According to the insurance principle, the premium can be significantly reduced, at the same time, the satisfaction of a claim can be accelerated.

Legal aid

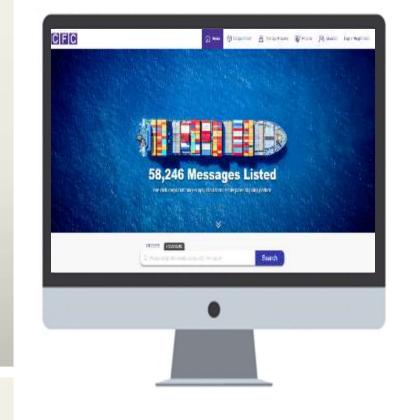
The platform hired a group of experienced lawyers and professional teams from the Maritime Arbitration Association to provide free consulting services to customers so as to avoid losses.

Free consultation

24-hour global service reduce time lost and personal property losses due to the traditional poor communication.

Helping shipowners streamline management teams and reduce operating costs

CFC Platform and Web



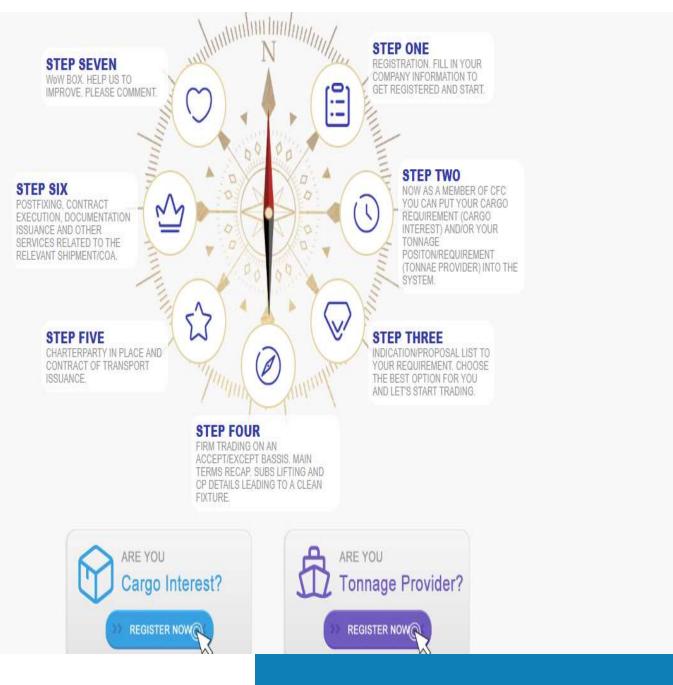






CFC Platform Interface Display

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Web Main Page



CARGO FLOW CHAIN

CFC, Integrated shipping platform