SHIPBROKING AND TECHNOLOGY ADOPTION

Krishna Prasad

Mr Krishna Prasad is currently Managing Director of M/s Aster Marine Cargo LLC in Dubai.

His contact email address is kprasad2000@gmail.com

Abstract

Technological developments are penetrating every aspect of life. New developments are also being implemented in ship chartering, an age old business practice. Shipping is considered slow in adopting to technological solutions but nevertheless the impact of the application of modern technology in the industry is being felt. Shipbrokers, an integral part of world trade, are also not immune to these changes.

This paper attempts to look into some of the modern tools being offered to shipbrokers and their impact in industry practices. It is also found that some section of shipping commerce, the dhow trade, is still following the systems set hundreds of years ago, efficiently and effectively.

1.0 Introduction

Nearly 90 percent of the world trade by volume uses water transport. Be it raw materials such as iron ore, coal, minerals, fertilisers, grain, crude oil or finished products, ocean transport is the vital link in the supply chain. This shows the importance of shipping in world trade. Most of the water borne cargo is moved or the 'contracts of carriage' is done through intermediaries called ship brokers. These intermediaries not only find 'ships for cargoes and cargoes for ships' but also serve(s) a variety of other functions.

In the initial days of commercial shipping, the traders owned the ships and carried their own cargo from one place to another. In later years the functions of ship owning and trading got separated. The trader no longer owned the ship but offered his cargoes to ships owned by others through the intermediaries. The shipbrokers played a vital role not only in the early days of commercial shipping but also in the modern day commerce when the contracts of carriage are finalised on a smartphone.

Shipbrokers found the match between the cargoes and ships and also assisted in the negotiations, contract preparations, voyage operations and dispute resolution. The ship broker also played the role of 'information source' to their clients - the ship owner or the charter.

The profession of ship broking is changing fast particularly with the modern means of computing and communication. This paper attempts to highlight some of the changes in the profession of ship broking as result of computerisation, internet based communication and artificial intelligence.

2.0 The shipping industry

In the initial days, world shipping used to be 'one type of ship for all cargoes'. The dhows which are in service since over 5000 years are seen even today in some parts of the world, do not have any significant variation in their construction. However, with industrialisation, the need to move multitude of cargoes across nations became a necessity. A wide variety of ship designs and cargo operations emerged facilitating movement of cargoes with different characteristics. Tankers for liquid cargoes, bulk carriers for bulk, containerised ships for carrying a potpourri of cargoes in the same voyage, roll on roll off ships for vehicles and wheeled cargoes, specially designed ships for LNG and LPG are only a few types of ships that serve the industry.

Each of these types of ships and the cargoes they carry can be classified as a market segment: the dry bulk market, Tanker Market etc. The trade practices, cargo operations and factors that affect the trade vary widely between each of these sectors. Intermediaries called shipbrokers serve the trade in all the market segments.

3.0   Shipbroker's role in the shipping industry

Shipbrokers who serve the ship owners primarily find employment to ships or on the other hand find ships for the merchants trading in commodities. Traditionally the most important factor in ship broking profession was the contacts which the shipbrokers possessed. At a time when there were no telephones or other means of long distance communication, the brokers dealt with their clients on one-to-one basis. Later when telephone and telex became available the ship broker's contacts, an important factor governing the business, started spreading to distant locations.

Chartering, in the past, was predominantly carried out in few major chartering centres such as New York, London, Tokyo, Hamburg, Rotterdam, Singapore, Sydney, etc. Prominent charterers, ship owners and brokers (the main practitioners in chartering business) had their offices in one of these locations or had contacts with brokers located in the main chartering centres. With the coming of internet this practice is slowly but steadily transforming.

Ship-brokers, are no longer required to be located in any specific 'Chartering centre'. Where-ever in the world they are located, the internet and modern communication means link the practitioners to one another, instantaneously. This has also resulted in some of the prominent shipbrokers, ship-owners and ship-operators opening offices in different parts of the world, particularly in the emerging business centres such as Shanghai, Mumbai, and Dubai, to name a few, thereby giving a 'local flavour' to their business. The modern communication tools enable the organisations to have control and competence in day to day business between various offices located worldwide. For ship brokers, communication is still a very key factor in effectively servicing the clients- ship owners and merchants.

Ship brokers keep their contacts, the most important factor in their business, close to their chest. Hence entry barrier into the profession was very high.

The industry practices evolved over the years was suited to the communication methods in vogue. In the telex days standard contracts of carriage were formulated for each business. The stakeholders discussed only the changes in the standard format. The practitioners also extensively used abbreviations to save cost and time.

The internet revolution brought in the most significant changes in ship broking. Reliable long distance communication became possible at affordable cost. Smartphones broke the 'location specific' barrier in communications. It is no longer necessary for the stakeholders in a contract of carriage to be in their offices to participate in negotiations. They could negotiate and conclude contracts while on the move. Instant Messengers and web based platforms enabling voice and video calls over internet protocols and the capability to transmit large files at very low cost facilitate effective negotiations.

4.0 The role of modern-day shipbrokers

The drastic changes brought in by computerisation and communication has resulted in not only convenience and comfort but also more challenges in the practice of ship broking. Some of these challenges are:

4.1 Entry barrier into ship broking profession

With internet based communication and access to information from anywhere in the world, the traditional entry barrier into the ship broking profession has crumbled. If the strength of the traditional shipbroker was in his contacts within the industry, in today's world it's no longer a dominant factor. With an internet connection and with knowledge of the industry practices, almost anyone can become a ship broker. Having strong contacts among the stakeholders is still an advantage, but it is no longer as important as it used to be.

Alongside very large ship broking houses with offices around the world, we

can also see smaller firms, some of them even one man entities operating from remote locations.

4.2 Multitude of communication channels

While a traditional shipbroker practiced his profession mainly through telex, the modern day shipbroker has multitude of communication channels at his disposal: mobile phone, Skype, Whatsapp, email and so on. These add to the convenience and reliability of communication but the challenges have also increased. It is not uncommon to negotiate one charter business using many communication channels. In such cases it is very difficult to keep track of the sequence of messages and the ship broker needs to be very careful in linking each bit of negotiation while formulating the contract of carriage.

4.3 Charter Party

The contracts in chartering called the charter party varies with the trade, cargo, trade route etc. Nipponcoal Charter Party, Red Sea Phosphate Charter Party, Austwheat charter party are some examples of standard contract forms used in chartering. Until the advent of internet based communication the charterer and the ship owner used to make minimum possible changes in the standard shipping contracts (charter parties). The offer for a ship charter used to have only few short points and all the aspects of the contract were as per the standard format. Modern day communication changed this practice completely. The practitioners are making their own clauses in the contracts. We can now see offers with 50 or 60 contract clauses, some of them long and complicated.

The standard contracts are drafted by professionals with legal background and the wordings in the contracts are correct and precise. With the shipbrokers, charterers and ship owners drafting their own contract clauses, the situation has become difficult for the intermediary. The shipbroker who is expected to prepare the contract finds it very difficult to merge the agreed contractual terms into the standard format.

4.4 Information overload

Ship chartering is affected by many factors: political factors, weather and climatic changes, government policies, world trade and so on and so forth. Critical information on any of these can affect ship chartering and freight rate. In the pre-internet days availability of information was the challenge. To get the right information on time was not an easy task. With the Internet becoming

available far and wide we are now fed with a deluge of information in the form of news feeds, reports, opinions and whatnot. Managing these efficiently is not an easy task. Let us not forget the fact that the shipbroker is also a source of information to his clients – the ship owner and the charterer.

5.0 Artificial Intelligence and its impact

The latest buzzword in the technological front is artificial intelligence. Machine learning and artificial intelligence has made huge strides in the last few years. Applications to perform specific task at a dependable level not easily achievable by humans are being implemented every other day. Although slow in adopting technology, commercial shipping is also seeing the impact of these changes.

5.1 Utilities offered by artificial intelligence based systems.

The practice of ship chartering and ship broking is changing by systems using artificial intelligence. Some of the utilities offered by the AI based systems are:

5.1.1. Email management – An active shipbroker may get hundreds of emails everyday giving ship positions and cargo orders. Matching the ships with the cargoes used to be a humongous task. Some of the new email management systems provides utilities for matching ships and cargoes. At the click of a button the system filters the data as per the users' wish even though the incoming data, hundreds of ship positions or cargo orders, is not in any specific format.

5.1.2 Distance tables - Inbuilt distance tables giving many options to the users such as avoiding piracy areas are being offered by some of the systems.

5.1.3. Voyage estimates and Laytime Calculations. Cloud-based voyage estimation utilities with inbuilt distance tables and lay time calculation softwares are available easily. These systems are also able to give inputs based on past voyages.

5.1.4. Recap of main terms: In a ship chartering negotiation, drawing recap of main terms is an important step. Some of the systems facilitating charter negotiations incorporates automated systems to prepare the recap.

5.1.5. Preparation of charter parties- Some systems allows preparation of charter parties. Because of the complicated manner in which charter negotiations carried out using long offers and counter offers, the ship broker's close scrutiny is required in the finalisation of the charter party while using such systems.

6. Will the ship broker become redundant?

Given the technological changes and user-friendly systems available now, it is pertinent to ask whether the ship broker will become redundant. Some of the recent practices in the industry may be pointers in this direction.

6.1. Reverse auction

Some large charterers have switched over to reverse auction for their charters. Unlike in the traditional chartering process where the terms of the contract is negotiated from deal to deal or from party to party, in the reverse auction method the terms are kept standard and the ship owners bid online to secure the contract of carriage.

There are many online platforms offering bidding facilities for freight contracts, most of which quite stable and reliable.

6.2. Reach to tonnages and cargoes

In the pre-internet days information on ships or cargoes was limited to the ship brokers involved in the business based on one to one communication. Today, as soon as a ship's position is known or a cargo is out in the market, hundreds of stakeholders are informed of it almost in a flash. Mass emailing systems, some of them equipped with automated transmission capabilities, facilitate the fast dissemination of information.

Some ship owners and charterers prefer to work only through their preferred ship brokers. But there are also many who use the internet based systems to trace ship owners or cargo charterers and approach them directly.

6.3. Can Technology replace ship broking?

Technology is improving at an unbelievable speed. As much as the dependability and reliability of the new systems, the affordable cost at which many of these technological solutions are available makes these attractive to the potential users.

Some aspects of ship broking maybe automated. But it is believed that ship broking is a personalised one- to- one business relationship and therefore machines may not easily replace completely. It is pertinent to note that, although the world's best medical consultants are available through telemedicine for many years now yet the traditional visit to the doctor continues.

It is interesting to note that within the shipping industry the dhow trade works in the age old fashion. Even well-established commercial practices, leave alone technological solutions, have still not penetrated the dhow trade. The process of

cargo movement in dhow trade works on trust and not commitments made through written contracts.

Commercial shipping practitioners will not believe that the dhow trade does not use bill of lading. In dhow trade, the cargo is carried from origin to destination on the basis of trust and not documentary proof. These days the dhows not only carry the traditional low value items such as salt, but they also carry high value cargoes such as electronic goods, vehicles, and a variety of other finished goods. Even then no proper document confirming the receipt of goods for the ocean carriage or a document of title is used. The system still works effectively and the stakeholders are happy and continue(s) the traditional practices existing for hundreds of years. The ship brokers in the dhow trade have also not changed their commercial practices. It is only very recently that written contracts are signed for the cargoes loaded on the dhow.

7.0 Conclusion

Ocean shipping and ship broking follow age old business practices but the use of modern technology is making inroads in the practice of the profession. The changes are not as drastic and evident as seen in other industries but nevertheless the impact in the use of modern technology is being felt. The adoption of new technological tools and utilities is slow but more and more stakeholders are turning towards better technological solutions to ensure reliability and save costs. Ship broking as a profession may not get wiped out but efficient systems driven by modern technology will have its followers in the industry.

References

1) L Gorton, R Hire and Sandevarn; Ship-broking and Chartering Practice 5th edition, LLP
2) N Pisanias and L Willcocks Understanding slow internet adoption: ' infomediation in shipbroking
markets' – Journal of Information Technology (1999) 14
3) Krishna Prasad -Changing Role of Shipbrokers- A study of the impact of modern
communication in practical ship-broking – ; Digital Ship
4) Sardis, M., Maglogiannis, I., 2007, in IFIP International Federation for Information Processing, Volume 247, ArtificialIntelligence and Innovations 2007: From Theory to Applications, eds. Boukis, C, Pnevmatikakis, L., Polymenakos, L.,(Boston: Springer), pp. 175-185.
5) Krishna Prasad - Business Process Outsourcing - A shipping industry perspective- ; Institute
of Chartered Shipbrokers – BIMCO Conference proceedings