

Chartering marketplaces

Dreadnought or dazzleship?

Vessel chartering marketplaces – déjà vu all over again?

The idea of a vessel chartering marketplace is a compellingly simple one. Rather than acting through brokers, both charterers and vessel owners come together on a single digital marketplace to charter vessels directly. In theory, this offers two advantages over the current model. Firstly, the commission charged by the broker is saved (although replaced by whatever pricing model the marketplace uses). Secondly a comprehensive marketplace should provide a more complete view of the opportunities available in the market (although whether this is an advantage for the owner or the charterer will depend on the current supply/demand balance).

So simple an idea, that it has been tried many times before. As Exhibit 2 shows, the dot.com boom saw a flurry of attempts to develop a marketplace, all of which disappeared within a few years. The mid-2000s saw a hiatus in new launches, but these returned in force by the mid-2010s with multiple launches of new platforms. This timing coincided with the rapid rise of Uber, and the subsequent hunt for an 'Uber of X' applied to numerous industry sectors.

Supporters of marketplaces rightly point out that previous efforts were hampered by the capabilities of the contemporary technology. Features that are often core parts of current chartering marketplaces, for example, AIS driven position lists or NLP driven parsing of emails, were not technologically possible during the previous marketplace boom. Now that technology is no longer the barrier, this raises the question as to whether any of the current crop of marketplaces will come to occupy the central place in vessel chartering? This is a vital question not just for investors in marketplaces and for the shipbrokers they potentially displace, but also for ship owners. One of the principal drivers of low cross-cycle returns in the shipping industry is the lack of differentiation among shipping companies and the commodity nature of the service offered in many cases. A dominant marketplace which controls the relationship between owners and charterers would potentially relegate owners to providers of capital.

EXHIBIT 1Dreadnought or dazzle ship?



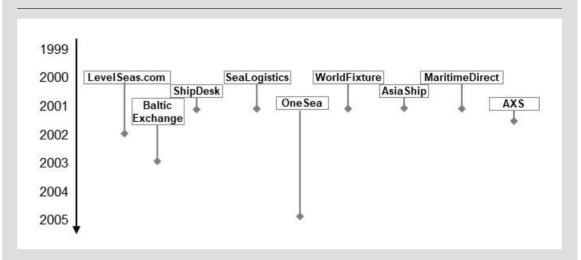


HMS Dreadnought rendered all existing battleships obsolete. Dazzle ships were camouflaged to obscure their range and heading. Will chartering marketplaces make the existing market structure obsolete, or will they prove to be a mirage on the horizon?

Strategy& | Chartering marketplaces

EXHIBIT 2

Dot.com boom chartering marketplace example lifespans



In total around 35 platforms were launched over this period, none of which gained significant traction. Note, timelines indicate period for which marketplace operated, some entities continue to offer other services.

Source: Strategy& research

Applicability of online platforms to vessel chartering

While there are many models for online platforms, of which digital marketplaces are one, they broadly work by bringing two types of party together to exchange some form of value. This is not always monetary, for example the value exchanged on YouTube or Facebook is content and attention (though there is typically a way for the platform to monetise the presence of both sets of users). However, the essential feature that platforms have in common is that they benefit from network effects – the presence of members of side A of the transaction makes the platform more attractive to members of side B, which in turn attracts more of side A, resulting in a virtuous circle of growth. This creates strong 'winner takes all' dynamics as the leading platform captures the majority of the market and becomes difficult for competitors to displace.

The most successful implementation of this model to date in the broader transportation sector has been Uber. Network effects can clearly be seen as the large number of customers attracts more drivers to platform, which both lowers costs (through higher utilisation) and improves the speed of ride availability, which in turn attracts more customers. However, as seen in Exhibit 3, very little of this model is applicable to the vessel chartering market.

Of course, the fact that the Uber model does not work does not mean that there is no value proposition which will work for a marketplace in vessel chartering. But it does highlight several issues that chartering marketplaces face:

- 'Chicken and egg problem': Once the virtuous circle is underway it becomes a
 powerful growth driver, but how can marketplaces create sufficient critical mass to
 start this process?
- **Information availability:** vessel chartering is already a fairly efficient market with knowledge widely available to various participants
- Transactional complexity: vessel charter parties are much less homogenous than
 the implicit contract in a taxi journey, while the transaction value is orders of
 magnitude greater, justifying the use of a broker to ensure the smooth execution of
 the trade

The key selling point of the dot.com vintage of marketplaces was therefore about saving the cost of the broker commission. At 1.25% of freight this is not a trivial amount, but brokers add value in various ways to justify this, including providing market knowledge which might otherwise be hidden around the edges, broader advice and research, and smoothing the charter party negotiation. Unable to add value in the same way, these marketplaces struggled to build the necessary critical mass. In order to overcome this, many of the latest generation of marketplaces offer a much greater level of functionality, which aims to digitally replicate the value-add which brokers provide.

EXHIBIT 3Applicability of Uber value proposition in vessel chartering

	Key elements of Uber value proposition	Comparison to vessel chartering	Applicability
Suppliers (drivers/ ship owners)	Higher utilisation than traditional taxi firms enables drivers to earn more		
	Service is highly time perishable (i.e. time not spent serving customers is lost revenue)	While shipping capacity is also time perishable, there are typically far fewer 'journeys' p.a. (3-6 p.a. vs. hundreds for a taxi), giving more time to arrange charters	•
	Historically inefficient for drivers to connect to customers. Uber consolidates demand from many customers making it easier for drivers to find work	Already a reasonably well functioning market with good visibility. While there are pockets of hidden demand/ supply this is typically a deliberate strategy by market participants Much greater value of each transaction makes human intervention more economical to clear the market	•
	Utilisation rather than price is key driver of profitability	The opposite holds in tramp shipping where utilisation varies much less than pricing	•
	Scale of platform allows more flexible participation by casual drivers than traditional taxi company	Not applicable in shipping markets, as there is no underutilised pool of bulkers/ tankers for personal use	0
Consumers (riders / charterers)	Lower prices than traditional taxi firms		.5
	Higher utilisation (as above) enables lower pricing than traditional taxi services	As utilisation drivers do not apply (as above) there is no impact on pricing	0
	In some geographies, regulated supply creates high prices. Entry of Uber increased supply reducing prices	Low barriers to entry in tramp shipping markets	0
	While the extent of this is disputed, Uber has subsidised fares in order to drive market penetration	While this is possible, the scale of investment that would be required is likely to be prohibitive	•
	Increases availability of taxis at peak times by encouraging 'casual' capacity	Not applicable in shipping markets, as there is no underutilised pool of bulkers/ tankers for personal use	0
	Increases ease of finding taxi through simple app	In general not difficult to access the market through brokers Some owners may prefer the ability to access the market directly	•

Source: Strategy& analysis

This has led to three broad business models currently in play:

• Pure play marketplace: Marketplace connecting ship owners and charterers. Can be monetised either through a subscription model or through charging a percentage of freight

- Pure play software provider: Software for shipbrokers and/or charterers that assists with
 the process of chartering vessels. Examples of modules include email parsers, position
 lists, and charter party management. While on-prem models still exist the majority of
 providers now deploy a SaaS / subscription revenue model. Although these do not compete
 directly with marketplaces, they do compete with the hybrid model, and, as discussed later,
 we see the two markets as likely to converge over time
- Hybrid software provider and marketplace: Combination of both of the above, with varying degrees of emphasis placed on each. Marketplace can either be monetised separately or bundled as part of the overall software package

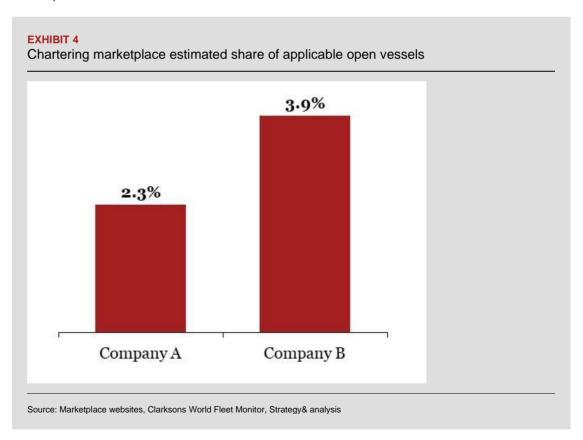
For both the hybrid and pure software providers the provision of software solves many of the problems identified above. For example, software can in theory replace some of the value-add provided by brokers. At the same time, building up a customer base of both owners and charterers on the software side then provides a ready-made pool of participants for a marketplace, potentially overcoming the 'chicken and egg' problem.

Fleet review – current landscape in chartering marketplaces and software

At present marketplaces appear to have achieved only a modest degree of traction. We have identified six active marketplaces, although at least one of these appears to be in an early beta stage, with another potentially moribund.

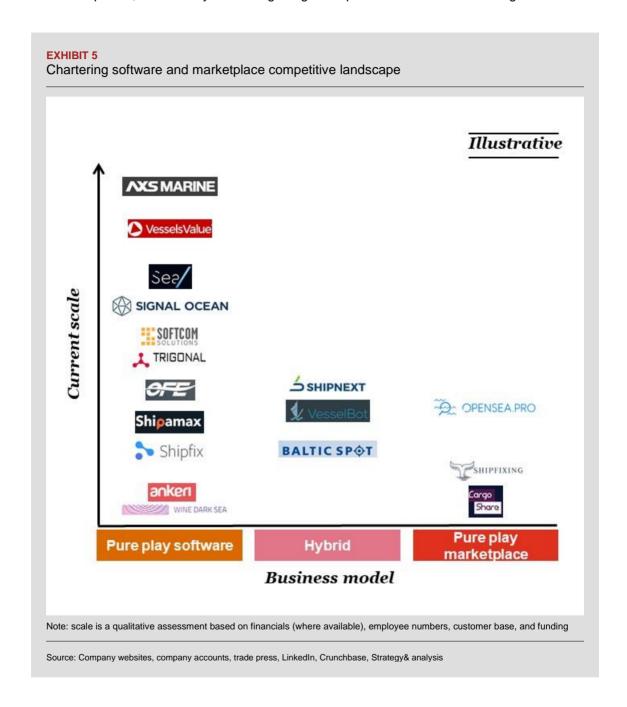
The remaining marketplaces appear to account for a relatively small share of the total open vessels in a given period. The two marketplaces for which we could compile data (see Exhibit 4) have 2-4% of the estimated open fleet showing on their marketplace. While data was not available for the remaining two marketplaces, analysis of web traffic shows a smaller number of visits than for the first two, potentially suggesting an even smaller share of the global fleet available.

Furthermore, it is likely that some proportion of the vessels listed end up being fixed through other channels. It is therefore reasonable to assume that at present a relatively small proportion of fixtures is happening through marketplaces. This conclusion is further supported by analysis of the financial performance of the larger shipbrokers; these have maintained their market share in recent years, indicating that there is yet to be any material loss of business to marketplaces.



However, as Exhibit 5 shows, this contrasts with a relatively well established market among the software providers. In addition, to a number of long-standing software providers, the last few years have seen several startups, as well as companies in adjacent sectors (such as vessel valuation) entering. While financial data is available for few of these companies,

various other metrics indicate that these companies are of a substantially greater scale than the marketplaces, and already have a high degree of penetration into their existing market.



Plotting a course – how will this play out?

At this stage it is still too early to say whether any of the current generation of marketplaces will come to dominate the chartering market. However, there are a number of strategic developments which we see emerging in the next few years which will shape the marketplace landscape

1

More 'hybrid' competitors will emerge

- While software players often emphasise that they support rather than threaten the current market structure, more of them are likely to go down the hybrid route and create marketplaces in the longer term
- The Total Addressable Market (TAM) for broker/charterer software is perhaps \$50-100m p.a. based on the current pricing models of companies in that area. This compares to a TAM of \$1-2bn p.a. for broker revenue from chartering
- In addition, the creation of a dominant marketplace would cannibalise the need for chartering software, making entry to this market a defensive measure

2

Wider JVs across the industry

- 2019 saw both the spinoff of Maritech as a standalone entity within Clarksons and a partnership between Signal Ocean and shipbroker SSY
- Going forward, we expect to see more partnerships between marketplaces and software providers on one side, and shipbrokers, charterers, and owners on the other, as the former attempt to build scale

3

An opportunity for more venture capital funding

- The last 5 years have seen c. \$1.5bn (\$150m excluding Flexport) of VC funding into digital freight forwarders, who address a similar role in container shipping (i.e. connecting shippers and owners). This compares with just c. \$15m into bulk chartering software / marketplaces
- While the TAM is significantly larger at c. \$80bn p.a., this still suggests room for more funding to drive growth

4

Building scale in niche subsectors

- Most providers to date have logically focused on the largest markets i.e. dry and wet bulk chartering
- However, some recent startups (e.g. Wine Dark Sea in LPG and Ankeri in container vessel chartering) are concentrating on specific smaller sub-sectors
- Existing providers in dry and wet bulk may need to think about segmenting these markets to grow in individual niches as a route to achieve overall scale

5

Diverging complexity

- In some segments the limited number of routes and consolidating charterer and owner bases is making contract standardisation easier reducing the need for brokers
- At the same time other trends (e.g. proliferation of fuel types, vessel types (e.g. eco vs. standard), trade lanes, and new legal jurisdictions) complicate the negotiation of charter parties potentially increasing the need for human intervention

Key questions for market participants

Given the huge changes which the growth of chartering marketplaces would create in the shipping industry, there are significant strategic implications for all participants. While not exhaustive, below are some of the key questions which different parts of the industry should be asking.

Marketplace providers

- Given the crowdedness of the software market is the hybrid model right or are there other strategies to grow scale?
- Which partners in the broader ecosystem could help to accelerate growth?
- Which revenue model will maximise longer term returns (e.g. subscription vs. percentage of freight)?

Software companies

- Is being a software provider a viable long term model or will this market be cannibalised by marketplaces?
- Given the crowded market and, in many cases, similar functionality, how do we differentiate from other providers?

Shipbrokers

- Should we acquire or partner with marketplace/software providers? Would this accelerate growth or reduce neutrality?
- Where is there value-add in the chartering process that marketplaces can't replicate?
- If the key attraction of marketplaces is cost reduction, how can we take cost out of the existing chartering process to neutralise this threat?

Ship owners

- Will marketplaces lower commission costs or is there a risk of creating a dominant intermediary who can raise commissions?
- Does a transparent marketplace reduce owner power in otherwise advantageous markets (excess of demand over supply?)

Charterers

- Do marketplaces risk creating transparency about trading strategies?
- Does a transparent marketplace reduce charterer power in otherwise advantageous markets (excess of supply over demand?)

About the author

David Smith advises clients in the maritime and logistics industries for Strategy&, PwC's strategy consulting business. He works with shipping companies and maritime service providers, and specialises in corporate strategy and commercial due diligence. Based in London, he is a Director with PwC UK.

.



© 2019 PwC. All rights reserved. PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity. Please see www.pwc.com/structure for further details. Mentions of Strategy& refer to the global team of practical strategists that is integrated within the PwC network of firms. For more about Strategy&, see www.strategyand.pwc.com. No reproduction is permitted in whole or part without written permission of PwC. Disclaimer: This content is for general purposes only, and should not be used as a substitute for consultation with professional advisors.