Alec Laing, ACL Shipbrokers Ltd

European port tugs: Business models for the future

It is my pleasure today, to welcome you to the second ETA Autumn conference.

Business models for the future.

What will the thriving business models of the future be in the port tug industry?

I am here to set the scene for you; to introduce our speakers and glean as much as possible from them in the time we have on behalf of you, the audience.

Introduction

How and why particular business models will be the ones to thrive in the short to medium term future, in any given industry, is a complex and fascinating subject.

We are here today to understand how business models have had to adapt in other industries, how quickly they have had to do this, in what circumstances and what the parallels are with shipping.

Most importantly I am keen to investigate what the optimum business model may look like for the port tug sector in the short to medium term future. By this I mean the next couple of decades…

We have some very highly qualified and knowledgeable speakers today, who will give their papers from different perspectives on the topic.

Experts in disruption, shipping and transport infrastructure, and adoption of new technologies in the maritime sector.

After each of their papers we will have a chance to ask questions.

You can do this by downloading the app on this slide or the old-fashioned way by asking directly.

I will be asking for as much engagement from you, the audience, as possible so we can provoke some interesting discussions from the coal face.

Here are some instructions for you to follow for the app…..

You have to download the app to your phone or device….

Then enter the event code: #ETA2019 to join the event

You can give feedback…

There are also multiple-choice surveys which act as polls

You can also direct questions at specific speakers, which I will then read out on your behalf.

To give you some background to the discussion.

I will do this by quickly bringing your attention to my top ten buzz words to warm you up for this morning's topic….

They are as follows:

This is the back drop to today's discussions…

Consolidation

Trade war

Trump

Shore power

Greta

Sulphur cap

Grid capacity

Zero emissions

Amazon fires

Battery technology

The Plan

How I am going to do it:

3 parts:

1. Two case studies from other industries.

2. Factors which will influence the successful business model adaptations in the harbour tug industry.

3. The future, some speculation as to what the future will look like in our industry and the potential pace of change.

I will then conclude before we hear from our speakers

Part 1 – Two case studies from other industries

I want to give you an example of adaptation from another industry and also an observation with I feel highlights a common dilemma in the tug sector today.

My first short case study is from the coffee machine industry.

A coffee revolution has taken over our high streets. The traditional model of cafés and restaurants purchasing a big expensive specialist coffee machine has had to move with the times.

Italian market leader in top quality coffee machines, were losing market share.

Pop up coffee shops and small businesses who were unable to afford the high-priced top-quality machines, were opting for cheaper alternatives.

Suffering from a big drop in sales, despite the overall increase in market activity, this company realised that they had to reassess how they approached their core market.

Traditionally, the only option they offered was for their clients to purchase one of the various models of their machines.

However, they found that if they also offered the possibility to lease this equipment to their customers, instead of selling it, they broadened their client base substantially.

Counterintuitively, a more expensive way of selling coffee in the short term appealed more to the lower end of the market.

They started charging customers by the cup which allowed their product to be accessible at all levels, they regained their market share and maintained their top-class reputation.

An additional benefit was, leased with a service contract, they could manage and maintain the leased machines to their own exacting standards.

Combined with digitisation of the machines gave prediction of faults, less unnecessary maintenance, less machine down time and happier customers.

This also allowed them to sell on ex leased machines with confidence, minimising the depreciation of these assets.

Parallels to the port tug market are self-evident. From our experience, as independent shipbrokers, there is an increase of talk of power by the hour structures in the industry.

This concept if far from new, the term was trademarked by Rolls Royce in airline industry in the early 1960s and has since become well established in other sectors.

This may work for specific machinery onboard tugs as an attractive option for operators.

However, unlike, for example, for a ferry, where main engines and generators are run for a relatively high and predictable number of hours per day, port tugs have the disadvantage of low utilisation, which does challenge the power by the hour model.

Decision makers are faced with balancing the long-term cost benefits of owning and operating, with the short-term pressures of hitting bottom line targets set for them by their Board of Directors or Shareholders.

A tug which promises an overall cost reduction over, say the first 20 years of her life, but comes with a higher upfront capital cost, could prove to be a hard sell to the powers that be in these uncertain times, especially when this time frame may be well outside the current CEO's tenure.

One would expect the price of professional coffee machines to be the main driver in the coffee industry, due to this ultra-competitive market, similar to that of tug sales.

However, short term cash flow, reduction in exposure to risk and overall convenience, in terms of servicing, seem to outweigh the price advantage of outright purchase.

My second case study is more of an observation from the automotive industry.

I am well aware that this is a common comparison in our sector.

However, when preparing for today, I was looking for an example that all Owners can relate to, not just the biggest players in the market.

Talking to Clients on my travels, this analogy struck a chord with Owners of all fleet sizes.

As a driver of an aging diesel car I am faced with the same dilemma with this vehicle as they are with the older tugs in their fleet.

Similar to port tugs, statistically on average cars are only used for approximately 5% of their lifetime.

When I bought the car ten years ago, consumers were being encouraged to turn to diesel as the best environmentally friendly solution.

Now as we approach the second decade of this millennium the tables have turned.

What should be my next move???

From April this year to drive into certain parts of London in a diesel car I have to pay a weekly charge, unless the car was built from 2015 onward.

From next year this will become a daily charge and combined with a congestion charge in town it will cost GBP 24 per day. (approx. 28 Euros) Which is nearly GBP 9,000 per year.

In the news this week I read that privately owned diesel cars have been banned from Bristol city centre, in the South of England.

Similar charges and bans are being applied in other European cities.

In the UK there is no incentive to scrap older diesel cars.

They tend to be cheap to run and usually paid for themselves years ago.

Much as I want to emit less carbon, I am not ready to give up car ownership completely; I don't want to buy an electric or hybrid car at a premium just to do my bit, and for the type of driving I tend to do, the benefits don't seem to add up of either electric or hybrid for the price.

Similar to the tug Owner who has a long run out to the end of their estuary to pick up tows to their port, where the steaming time on battery power from hybrid tugs currently available on the market doesn't seem to match their operating profile. Additionally, they will not be paid more for this towage job just because they are using a green tug.

It basically comes down to profit margin at the end of the day.

According to the latest EU paper on the subject, waterborne batteries tend to be 10 times more expensive than other transport modes. Due to lower economies of scale, higher production cost, safety certs etc…

From my discussions with Owners, these are the vessels in their fleet which are proportionally the most profitable for them.

The big difference between the car and tug analogy is the lifespan of the tug compared to that of the car. If you consider modern tugs can be expected to operate in the European environment for 25 – 30 years, before being sold for use in second or third world countries, this takes us up to 2050, the year that European governments are targeting all transport to be 'net zero' in emissions.

Who knows how a standard diesel tug will be perceived within this lifetime?

Is this a risk Owners can accept?

In my mind, the only thing that would persuade this type of owner to invest in newer, cleaner and more efficient tugs for their fleet would be:

1. A green tax break/subsidy

2. Cheaper fuel/power compared to diesel

3. Subsidised infrastructure to support a new high-tech tug.

Part 2 – Factors which will influence the successful business model adaptations in the harbour tug industry

The shipping industry as a whole is renowned for its traditional values and conservative approach to change.

I would argue that the tug industry is no different, mainly due to the high capital expenditure required.

How the tug industry adapts in the next couple of decades in this dynamic world will undoubtably influence its position in the supply chain, and the perception held of our ports.

The roots of the modern shipping industry date back to a time when machinery and other equipment was built to last a lifetime.

On the whole this is still the case with the tug industry.

Although one can find examples of tugs built specifically to satisfy, say, a ten-year contract with little thought to the subsequent sales value of the vessel, this is almost unheard of in Europe and Owners who I have spoken to in other parts of the world who have done this have regretted it and will not repeat this mistake.

There are no signs of a reduction in the quality of build of tugs in the newbuild market, especially with the well-respected shipyards and designers. Therefore, we are not seeing a shift away from longevity of build to satisfy a more rapidly changing market.

There are some examples of modular designs being introduced which could facilitate a degree of future proofing, but on the whole tugs are being built on the basis of adapting existing hull designs.

This is as opposed to the Teslar approach of building the car round the battery and electronics rather than trying to fit these components into an existing design.

How long will it be before we see this model in our industry?

If this is true, it is not the asset or the vessel herself which is to adapt but the business model behind her.

Our approach to Ownership, finance and maintenance is what will have to change to facilitate the necessary adaptation.

This is happening in the personal car and bike sector, with innovative solutions from the likes of our friends at Pon Power. Instead of employers offering a company car to employees they give them a card which gives them access to the whole range of alternatives from bicycles and E bikes to electric cars and vans. I believe we will see a lot more of these creative approaches in sharing. While the asset may remain the same the utilisation of each bike or vehicle goes up dramatically.

In these increasingly uncertain geopolitical and economic times, the mindset of Owners, Boards and Investors, seems to be shifting to one of risk mitigation, even if this does not appear to be the most cost-effective option in the short to medium term.

For tugs, this shift is manifesting itself in an increase in bareboat and time charters.

In some cases which we have come across recently, organisations which rely on tugs for their operations but do not want the burden of owning, crewing and operating are looking to long term charter solutions.

This is particularly prevalent in larger organisations where harbour towage is not their core business.

I reported at the autumn conference last year that the percentage of so-called green tugs was approximately 1% of the European fleet.

There have been some additions since then but no substantial jump in numbers.

If government subsidies were forthcoming for greener tugs and or greener sources of fuel or power and the essential infrastructure, which is required to utilise these units; would this be the trigger which sets off big change in the industry?

Taking a step back, undoubtedly, we must think from the end consumers perspective? The public are getting ever more aware of the green credentials of their goods. Is this actually reality or just media hype? Marten, who specialises in transport and infrastructure research. will be able to answer questions on this theme.

If green credentials are as important as we are led to believe, our consumer probably thinks of the supply chain as a whole, not of the specific parts, and may make their purchase on the basis of this information.

I would hazard a guess that to most consumers the use of port tugs does not cross their minds.

When a market switches suddenly, does the solution which prevails have to be readily available at the time the change happens? Historically, how has this occurred in other industries? This is something we will explore further with Ewout, our disruption expert.

There has to be a mindset change at a higher level.

The largest operators of ships in the market have to admit to the risks involved. EU Consortia Block Exemption, which sets the rules for alliances between container lines, will be reviewed next year.

If tug rates continue to be squeezed and safety is compromised, the cost of a large-scale accident in a large port, particularly accessed through a channel, could be astronomical to the European economy as a whole due to the cost of disruption to the supply chain.

Tugs often seem to be forgotten about in the mix of vessels being discussed when governments are talking about going green.

Infrastructure in the ports is a large part of the problem. There may be the desire to move to greener propulsion solutions but if the cost of the infrastructure installation can be prohibitive, the green ideas hit a dead end.

We have seen a number of examples of this in the last few months, where even in an LNG terminal, the barriers to bunkering with LNG have resulted in use of conventionally powered tugs,

And even the sale of specifically built LNG dual fuel tugs which were built for the facility but could not be used!!!

This is despite this cleaner fuel being at hand.

The charging of battery powered tugs and other vessels brings with it additional challenges.

The first is the infrastructure required to charge it. Secondly the speed of this charge, and whether the battery power available to the captain of this tug is sufficient for the job he has to do?

How far are we from scalable and workable solutions for electric and hybrid tugs and how far are we also from hydrogen infrastructure being a reality? Pictured is the solution proposed by OSD-IMT and Nedstack.

This is a subject I will follow up with Arnstein of DNV GL, to hear his views on how soon this technology will catch up.

Part 3 - The future, some speculation as to what the port tug industry may look like and the potential pace of change

This is called the Necker Cube (pictured on slide), this illusion was first published in 1882.

Maybe, it is not so much a case of thinking outside of the box but reshaping the box that we already have to adapt to the challenges we face.

You may remember that at last autumn conference the focus was on the safety and the environment.

Even in a year, I am sure you will agree, the momentum of the environmental debate has picked up pace affecting all parts of society.

Technology no doubt has a big part to play in the future of the industry but, as we discussed last year, a large part of the efficiencies and savings will come from a change to your mindset at all levels within your organisations, from CEOs to deckhands.

It has been suggested recently that the fastest and most effective way to reduce emission is to invest in the latest technology – this will have the biggest impact.

Here is a pertinent quote from Bill Gates….

"We always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next ten. Don't let yourself be lulled into inaction."

Bill Gates

As you all know a tug's primary role is one of safety. This is something the authorities have to accept and support. The consequences of squeezing rates to breaking point are catastrophic for wider economy not just for the operators involved in a future accident.

As with the debate to reduce polluting vehicles on our roads, the main drive to go green has to come from a governmental level, and cannot be led by the individual owner operating in one or multiple ports.

The kudos gained of owning a hybrid tug is not enough.

As I see it, these subsidies and incentives are needed to pay for three key areas:

1. Innovation and acceleration of technological advances for green tug solutions
2. Infrastructure needed to support these new vessels and fuel types
3. Relief from the devastatingly low rates, which will allow tug Owners to prioritise safety, as well as reducing the environmental impact of their fleet

In Europe, the ETA is the voice of the tug owners.

It is the ETA's role to lobby the European Union on these issues. The more vocal and engaged the support is from Owner members, the louder the voice and greater the influence the ETA has in its negotiations.

Every seven years a review is conducted by the maritime subsidy commission. One such review is coming up and therefore this is a golden moment for the industry.

In a period where the pace of change is accelerating it is of utmost importance that this opportunity is grasped with both hands.

The ETA is part of the maritime cluster group called 'Waterborne'

Their aim is to lobby for funding for research in innovation in the maritime sector.

Differences in speed of change of the regulation versus the slower practical and technical advances will no doubt be ironed out over time, but the key element is to secure subsides for our industry at this pivotal juncture.

It will be interesting to hear Marten's views, on this subject.

As alluded to earlier, I am always conscious of the difference in challenges faced by the large multinational tug operators and the smaller family or niche players.

On a positive note, in some ways the smaller organisations are in a more flexible position to adopt change in regulations and take up green incentives.

With a smaller fleet the change of one vessel could represent a large percentage of their overall profile. Therefore when this switch to greener solutions happens,, WHICH IT WILL our industry may be surprisingly quick to react.

We already see a shift in attitudes taking place in parts of the globe, such as in South America, that previously had a more laid-back approach to environmental issues.

Corporate responsibility is on the increase. The demand for manufacturers to be held to account for their carbon emissions and those of their subcontractors, is only going to increase as we get closer to the deadlines set by the UN and IMO, such as 2050.

Conclusion

To conclude

The business model of a successful tug operator is evolving. It has always had to evolve in the past, however it seems evident that in the coming decade we will see an acceleration in the speed of change outside the norm for this industry.

In recent years it has not been unheard of for a good quality tug, particularly at the smaller end of the market, to be sold for the same actual price she was purchased for when new, decades earlier. It seems unlikely this will continue and I wonder whether the second hand market will suffer accordingly.

Whether disruption or innovation will come from within, driven by the current market players or from an outsider adapting technology from another industry, remains to be seen.

Tugs will remain one of the most visible ships within ports, particularly where they are situated in Cities. The perception of how green they are will continue to be of high importance to the general public, regardless of the level of utilisation.

As a whole it seems evident the with the encouragement of green solutions and the subsequent knock on effect on business models, the drive must come from a governmental level. This will go some way to the avoidance of future rate wars and ultimately improve the safety in our ports.

I am very much looking forward to hearing what our speakers have to say this morning.

To understand what we can learn from other industries who are pioneering this type of change and what common lessons can apply to our industry.

How will these lessons affect owners and operator's business models in the short to medium term and also the relationship they have with their core assets, their tugs.

I will finish off with a quote from Charles Darwin…

"It is not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change. "

Charles Darwin

Thank you!