

# TANKEROperator

## Technology, management and risk- discussions at Tanker Operator Athens conference May 9 2018

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Dimitris Lyras, director, Lyras Shipping, chairing the session, said that shipping companies were managed for millennia with what we call 'common sense'. Now shipping companies are looking at bringing common sense back.

But all of the discussion about bringing autonomous ships into operation, or having companies run by artificial intelligence, and other advanced technology, is clouding the discussion, because it leads people to believe that the future will not need human management at all, he said.

It is also a major distraction for senior management, who are not usually technology experts themselves, and so not necessarily in a position to make a judgement about what exactly AI is capable of, and whether it can really add value.

### **Technology assists people**

Michalis Pouris, head of HSQE department, Intership, said that his company recognises that the role of technology is to assist people, not to control people.

Among other factors, people do not like to be controlled by technology. "We need to have people on our side," he said. "We consider that people are the great asset for our business, we need to focus on this." The idea that people might one day be phased out "is the wrong approach, now we realise it"

All of the 'innovative designs' being promoted for shipping, such as computer autonomy, "cannot survive by themselves without people," he said. "You may have unmanned aeroplanes, but I believe unmanned ships is a dream, with the severity of the sea. Unless we are prepared to lose ships in the middle of the ocean. People mean everything on the ship."

## **Direction, leadership and tools**

Martin Shaw, managing director, Marine Operations and Assurance Management Solutions, and a former VP technical with BP Shipping, said there are three things company managers should do – provide direction, give leadership (including developing company culture), and actually manage the company.

Management tools and systems are only part of the third of these, but perhaps take up a much larger amount of managers' time. The other elements, including leadership, creation of culture and focus on people, "have been missing of late," he said.

And some companies are "not totally clear on direction". "If you have a company that's got a very strong set of management systems, and has a very unclear direction, it is just going to get to the wrong place very quickly."

"Finding the balance between direction, leadership and management, to me, seems to be the right thing. You can't do without all of them, you've got to have the right tools to deal with the right problems."

## **Risks of AI and autonomy**

Dimitris Lyras of Lyras Shipping suggested that the current high levels of interest in the shipping industry in advanced digital technology, such as AI and autonomy, could be providing a dangerous distraction. Senior managers, who have no particular technology expertise, are suddenly getting very involved in discussions about them.

Respected shipping industry leaders are saying in conferences that "AI will replace people," Mr Lyras said. Someone in this frame of mind will struggle to have a clear idea about how to lead a tanker company in today's business environment.

Another shipping company Mr Lyras knows recently applied for a bank loan, and was forced to reply to questions from the bank about why automated ships weren't going to take over their business.

The bank staff had bought into the idea of autonomous ships, which would be operated by a shipyard that built them. In their view, there would be no need for a shipping company, because they saw the core competence of a shipping company as organising people on ships, who would be no longer required, Mr Lyras said.

This was perhaps the last thing the shipping company wanted to think about at a time of cash flow struggles. "We have to ask ourselves if the leadership can or should actually cope with this barrage of discussion about technology," he said.

Company CEOs are typically focussed on where the company makes its money. Since no shipping companies make their money from technology, CEOs usually don't pay it much attention. Yet CEOs are being asked questions like 'why don't you have unmanned ships,' he said.

Martin Shaw noted that there has been talk about technology replacing people every 5-10 years over the past few decades. One question nobody seems to ask is, whether it would be a good thing for society, considering that there are predictions of another 2bn people on the planet, and entire

country economies (such as the Philippines') have big dependence on revenue from human maritime work.

Mr Shaw said that the talk about autonomy in shipping is largely driven by equipment suppliers, not the needs of shipping companies. "Technology has its place but it should be technology in service of the organisation, the leadership of the organisation," Mr Shaw said.

Martin Shaw noted that Maersk Line is fitting technology on some of its container ships which it calls 'autonomous', but it is designed to help navigators with a range of sensors, not remove people. Maersk has been clear that they are not planning to reduce the number of people onboard ships, but trying to provide better inputs to the human navigator, he said. "Similar periods in the past left so many unanswered questions about why technology failed in its barrage of promises."

### **Technology and efficiency**

Michail Malliaros, fleet personnel manager with Euronav Ship Management (Hellas), said he is a fan of technology, and it has enabled companies to achieve big reductions in manpower from 100+ people in the past on each vessel to around 24 now.

Technology has enabled shipping companies to work more efficiently, but it has not managed to eliminate people, he said. And overall, the shipping industry "occupies more human resources than ever before."

Theophanis Theophanous, managing director, Bernard Schulte Shipmanagement Greece, agreed, saying that technology "is an extra tool to do our job more efficiently." However Mr Theophanous is open to the idea of shipping companies having tools like Apple's Siri available to them, giving immediate answers to questions, including questions from company staff and customers.

### **Andrew Cassels, OCIMF**

Captain Andrew Cassels, director, Oil Companies International Marine Forum, noted that while people are blamed for about 80 per cent of accidents, nobody counts the number of times that a person does something almost intuitively which prevents an accident from happening.

Often, people "can feel something wrong. They change the process, potentially outside the procedures, and it stops an incident happening. That's never recorded," he said.

On the issue of unmanned ships, Captain Cassels noted that ship engine rooms are often unmanned for 8-9 hours overnight, but they are long way away from being totally unmanned. When the crew start their day shift in the engine room, they find that there has been things going wrong overnight which need fixing.

For navigation, one issue will be the dangers of having both autonomous and non-autonomous vessels sharing the same waters. Perhaps richer companies will go for autonomous navigation, with their vessels sharing waters with poorer companies who can't afford it, he suggested.

Today's seafarers are continually reminded, as Captain Cassels was, when at sea himself, that at sea there's no fire brigade or rescue services, "you're out there on your own."

"We've got a little bit more help with internet connectivity. [But] I feel we'll always need the human being on the ship to get us out of trouble."

And also bear in mind that "if we have an incident [with an autonomous ship] where oil is released in massive quantities, we will not be forgiven."

"So I think there's a lot of progress, a lot of efficiency, but there's that point I don't think we can get beyond, which is, 'take everybody off the ship,'" he said. "It might be OK for a small ferry on a predefined route where you can manage all the ships around it. Anything longer trading than that, I don't think it's going to happen in my lifetime."

### **Nautical advisors**

Jennefer Tobin, general manager at marine technology company id2 and a former seafarer, said that in the past, shipping companies had someone in the role of "nautical advisor." This person was usually a former seafarer, who represented the interests and perspectives of seafarers to company senior management. This person also acted as a leader to the seafarers.

"That role has long since gone away," she said. "I often look and think, who is actually directing the quality of, and giving leadership and management to, seafarers? A person who they will follow because they hold him in high regard for his achievements at sea and in the company? It isn't the financial, technical, operational director, all of them are dealing with a very specific aspect of the technical delivery.

"The idea of having a leadership role, which includes mentoring, understanding the wider responsibilities onboard, has become obsolete, dissipated, or gone away."

It means that officers and crew in the fleet do not have a clear way to understand the responsibilities they have accountability for, and how they should demonstrate that they have done the job.

Martin Shaw noted that the "Designated Person Ashore" (DPA) in theory is someone whose role is to represent seafarers, who they can take their concerns to. But this person's role is not necessarily to take care of crew.

### **Training leaders**

Theophanis Theophanous, managing director, Bernard Schulte Shipmanagement Greece, said that one of the main points in the classic book "It's Your Ship", by US Navy Captain Michael Abrashoff, is the importance of getting to know your people.

"You need to speak to people, face to face meetings, whether you are a captain or managing director ashore," he said. For example, BS Schulte senior management make a point of visiting ships. "That's the reason we train all our people on soft skills, to know how to manage people and get the best out of their people. "

Mr Theophanous said that he sees management as "doing things right" and leadership as "doing the right things". Under this definition, only a leader can work out which direction to go in. "We don't

need managers, we need leaders,” he said. “You can train people to become leaders.” For example, most CEOs read a lot of books, to learn something new.

BS Shipmanagement has 620 vessels, so there are too many seafarers for the CEO to have a personal relationship with them all. But the company does have company wide meetings for officers. The fleet is split into smaller companies, for example 40 vessels are managed from Greece, which means that Mr Theophanous can personally meet all the chief engineers in the Greece managed fleet, when they visit the office.

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## **Do our risk assessment processes work? discussions at Tanker Operator Athens conference May 9 2018**

*A discussion session at the Tanker Operator Athens forum on May 9 looked at today's risk assessment and management procedures, whether they are too complex, or create a false sense of security*

A true risk assessment needs to take into consideration the context the work is being done in, for example how tired people are. It is not something that should be done once and then put into a file, said Dimitris Lyras, director of Lyras Shipping.

And people have been doing risk assessment ever since people existed, and probably doing it well because it was their own lives at risk. But somehow when it became a procedure, the way of doing it changed.

Risk assessments are a “sort of snapshot of what’s on people’s minds at the time, and something which creates a discussion.” But “what’s on people’s minds at the time might not be reality.”

### **Targeting behaviours**

Michail Malliaros, fleet personnel manager with Euronav Ship Management, said that the company has seen good results when it aimed to give people reasons for changing behaviours, rather than just telling them what to do. This might mean showing them how the safety methods are linked to specific risks, for example that they should take a helmet when they go to a certain place.

The company also aims to show people what might go wrong and how they can prevent it from going wrong, rather than just telling them about the consequences of an accident.

The company helps crew understand different risks with management and superintendent visits onboard. This is something of a cultural change for companies. ““This for us is quite challenging – it’s not easy,” he said.

One result of the work is that people are far more likely to ask for safety equipment, such as life vests and helmets, before they start work. They have more belief in the different risks and the importance of safety measures.

### **Dangers of risk assessment**

Michalis Pouris, head of HSQE department, Intership, said that the term “risk assessment” can be dangerous, if people feel that because they have assessed a risk, they are now safe, and then they have an accident.

Each person understand a situation differently, and assesses it differently. So we cannot rely on a subjective opinion of the captain or chief engineer or chief mate for a specific issue. We are advising to have a risk assessment team,” he said.

The purpose of the risk assessment is “to trigger a discussion between senior staff on the ship on what may go wrong,” he said. “It is not a full analysis. It depends on the individual people, what they may see or may not see.”

Chris Pastelidis, director of Beacon Marine, said that perhaps what is needed is a simple identification of risks. “We have to gauge in our minds what could possibly go wrong or have an adverse effect on performance,” he said. “Then having identified those factors, try to evaluate the impact of each and every single one on our overall objectives.”

### **What can go wrong?**

Captain Andrew Cassels, director, Oil Companies International Marine Forum, said that perhaps the best form of risk assessment is a discussion between people before doing something, to try to work out what might go wrong.

OCIMF itself adopted this approach when it launched TMSA3, gathering the team together to discuss what might go wrong. The discussion highlighted “a bunch of things that could go wrong,” Captain Cassels said. “We put quite a few fixes in place beforehand before we re-evaluated”. “When it was eventually launched and rolled out, it went fairly smoothly.”

“I think we’ve overcomplicated it on ships,” he said. “There are some risk assessments where you need HAZOPS (a comprehensive hazard and operability study) and a lot of people who understand the fine detail.

“[But mainly] you want seafarers who are going to risk assess a very standard operation before doing it. We’ve got to make it very simple so it is something they are quite happy to do. It’s got to be fit for task, so that it becomes ‘just the way we work around here’.”