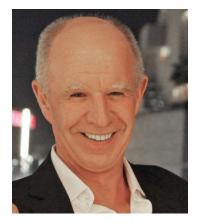


Servicing the future of the North sea by K.D. Marine



UK's oil and gas industry is at a crossroads, which is a cause for concern at all levels. Subsea intervention and commercial diving specialist K.D. Marine brought some of the industry's leading figures together to discuss the challenges and changes that lie ahead.

Hamish Petersen, Managing Director

Introduction

The recent and rapid fall in commodity price, on the back of a high cost base and declining exploration and production, has created an environment of genuine concern within the UK's oil and gas sector for what may lie ahead.

While there is no denying that the future of one of the country's most vital industries is experiencing a period of significant change, the immediate objective for those working within it is to use this time of rising costs and low production to evaluate and prepare; to consider current workflow, to identify inefficiencies and to determine how improved processes, evolved practices and better industry relationships can all work towards sustainability in such a challenging economic environment.

Subsea intervention and commercial diving specialist K.D. Marine has a 25-year record of providing the offshore oil and gas industry with safe, reliable and cost-effective underwater intervention and contactor services in the most demanding and challenging of environments.

The company felt the time was right to bring the industry together to discuss the practical day-to-day problems that North Sea operators and service companies face. To do this, K.D. Marine recently hosted a discussion event in Aberdeen to explore the issues facing the industry, and possible solutions to the present crisis.

Hosted by K.D. Marine owner and managing director Hamish Petersen, the select event gathered together key figures from the UK's oil and gas industry. Made up of representatives from both the operator and service sectors, the group set about discussing the best way forward for 2015 and beyond.

Everyone agreed that despite the very real challenges faced, the industry could do much better by improving the way it manages and runs itself. To quote one of the evening's participants: *"In every great difficulty there is opportunity."* Here is an overview of the key points from the evening's discussions, which took place under Chatham House Rule:

Projected production

The low oil price was a recurring topic for debate at the event – in particular how long the downturn would last before we may see a recovery. But despite suggestions that depressed prices could last up to three years, there was optimism that the corner would be turned much sooner, and that prices would again rise in the near future.

One guest presented a graph charting UK crude oil production in tonnes, from 1975-2013 and projections for 2014-2020. The graph indicated an increase in production next year, steadily increasing from 40 million tonnes of crude to 60 million tonnes by 2018. With this potential for increased UK crude oil production on the horizon, participants focused on the best way to maximise on the opportunity, most notably, the critical importance of using any current downtime to not only develop better

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working processes and practices in house, but to complete inspection, repair and maintenance (IRM) programmes now to prepare for such an anticipated upturn in activity in the near future.

Roundtable participants agreed that combined with safe and reliable practice, good maintenance was key to operational excellence. However, current cost cutting programmes meant some companies were shelving their IRM plans due to financial implications, which was regarded as short sighted and foolhardy.

"This is the time when we should all be looking to up our IRM work, so that we are ready and on the front foot when the inevitable upswing comes – but some people don't seem to be able to look that far ahead," said one operator.

All in the discussion agreed that although IRM comes at a cost, the industry can't afford to abandon its maintenance plans, especially if it wants to take advantage of a potential surge in production later on.

Attendees also noted a move towards 'three on, three off' rotation for offshore staff, which they saw as a significant cost saving over the traditional 'two and two' through reductions in helicopter flights, more continuity in terms of time spent on the job, and less travel time. 'Three and three' has been introduced by some operators in response to the decline in the oil price.

One operator described the idea of the installation-based crew as the 'holy grail' of the offshore industry but companies were reluctant to pursue this practice because of the potential industrial relations backlash that could occur.

Effective planning can save money and time

The increasingly reactive nature of the day-to-day work for some service providers proves a significant frustration and has only further highlighted the need for IRM to be a priority, alongside improved planning, workflow and the skillset in general.

"Everyone knows there is work that needs to be done and we want to do it, but it all seems to be reactive and a last minute rush. Too much of our business is now reactive, which inevitably drives up costs and puts pressure on the supply chain. We try and extract all the information we can at the beginning, but the crucial information, the technical authority, the underwater skills, now you only get them the day before mobilisation. We would crack the planning issue if it was for 2016, but not for next month, next week or tomorrow." Others agreed, one service provider stating that they were "frequently working with a zero budget up until something breaks and needs fixed", and then the critical work needed to be done without a properly thought out plan.

"Due to a lack of planning and commitment upfront we are left grabbing what is on the table at the last minute – sweeping up – and from this we can see as much as a 25-40% waste on projects. It's very frustrating for us to see money being wasted like this at a time when the industry is supposed to be improving its cost consciousness."

Despite fluctuations in the industry over the past years, for many service providers their competitive landscape appears to have broadened, in some cases by as much as 300%. The roundtable participants agreed that there was a lot of *"industry cold calling"* currently happening from service companies. But this practice was criticised by attendees at the event. One operator representative noted a distinct shift in attitude, with many service providers trying to *"get into bed with operators"* to secure business.

"The people I couldn't even speak to two or three years ago are now knocking on my door looking for business. But I won't be working with anyone who is without a strong track record and not established. Opportunists are no good."

However, there was no doubt among the evening's participants that the current economic climate was one that would significantly reduce the number of competitors currently on the scene, with the potential for mergers and acquisitions, or for companies to fall by the wayside.

"For many, the current oil price is an



issue. The real risk is there for smaller operators and providers, and how long many of them can continue is anybody's guess."

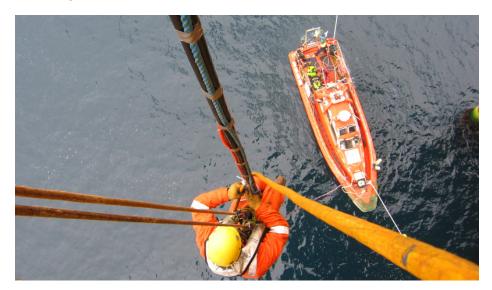
Everyone accepted the importance of robust health and safety policies and industry standards, but concerns were expressed that over regulation and ever changing policies hindered best practice, rather than helping it.

"The different types of organisations and obligations that we have to pander to is one the biggest challenges we face. We are asked to provide the most appropriate and competent solution to a problem. We get to a point where we think everything is ready to go, then we have to start from scratch again because another

The real cost of the skills shortage

Recent industry surveys have highlighted skills shortages as the biggest threat to the oil and gas industry globally, ahead of economic instability. An experienced workforce is ageing rapidly, and there is a limited supply of available experienced young oil and gas professionals, which are increasingly hard for companies to keep. For some time there has been an inherent inability within the oil and gas industry to address the need to encourage and support the next generation of talent.

Several of the evening's roundtable participants pointed to the shortage of qualified industry personnel as one of their key concerns, the overall feeling



organisation which doesn't know the best practice procedure throws in a new rule at the last minute.

"So instead of focusing on the project element of a scope of work, we are left trying to fit into a new process. These constantly changing variations in industry standards and HSE policies cause mayhem. They can lead to bad planning and organisation because no one feels able to make a decision, and that can be very harmful." being that although the topic has been widely discussed for some time, little has been done about it. Some entrylevel engineers in particular are still lacking in the essential practical skills required.

One operator stated: "It's all about people, and having the right people. But there are some that are being hired into the industry now who in reality don't know one end of a spanner from the other. Yes they have a degree, but when we have a technical discussion with them there is no real engineering base. It's like a language barrier."

Another warned: "There are a large number of developments happening, which will put significant pressure on the supply chain if it cannot develop quality engineers to handle the work."

At the roundtable one guest described this current lack of experience in the industry as "frightening", suggesting that this is an issue the industry has created for itself through a combination of poor on-job supervision, a lack of continued training and assessment, employers not investing correctly in the recruitment process and accelerated promotion without enough background and experience to merit it.

There was concern that the ongoing job cuts and redundancies that the industry is currently facing will further reduce the number of higher earning experienced personnel.

"Recently we have had a situation of 'promote me or I'll leave'. There are serious issues with job title use happening here. It's not right that someone is only in the industry for three years and already being promoted to a senior engineer or project manager. If I challenge them on a basic area of engineering knowledge, they can't answer.

"It's an issue we have created for ourselves because we haven't invested consistently in new blood and the variation in competence of some of the people we deal with is quite staggering. We have seen engineers being promoted five years beyond their time because the industry has been so buoyant – but we are now seeing self adjustment coming into Aberdeen with the downturn in activity."

One participant stated that the engineering capability in Aberdeen was



currently so limited that they had moved this area of their business to Newcastle. Others have started utilising engineering firms in Liverpool, Norwich and London, citing higher capabilities and lower costs as the main drivers.

"Engineering costs here have increased in some cases up to fivefold, yet some of the engineers we are using now simply aren't fit for purpose. There is a big knowledge gap."

Transient culture

Several people in the discussion felt that a transient culture had set in across the oil and gas industry as a whole, which impacted on service delivery and standards.

"There is no consistency and that is very much people driven. The biggest challenge in our area as a service provider has always been having the right thing at the right time, and that's all about the culture, which takes a lot of want and will to achieve."

But the lack of necessary skills is not just limited to engineers. The general feeling from participants was that the North Sea industry had become "fat and lazy" in many areas, with a lack of planning and attention to detail at both a micro and macro level exacerbating current industry costs. One operator concurred that, over the years, he had witnessed the standards slip and felt the undeniable impact on overall project cost.

"In 1997 we could take a vessel out on a full IRM campaign and you would walk off that vessel with a report 95% complete. Despite everything now being automated, we can wait up to eight weeks for an error strewn report which we have to send back multiple times until we get the final one. If we have meetings there is no schedule, no minutes, no dates – no commitment. Now we spend most of our time fixing these mistakes."

It was agreed unanimously by the group that nurturing and developing the next generation of talent was very much the long-term responsibility of the employer, and one area where they were currently failing.

"The pressure on the supply chain and the escalating cost we are feeling is due to a lack of the right skills," said an operator.

As well as technical short falls, it was also noted that those involved in the supply chain and procurement process had often not had the mentoring and support they require.

"Supervision is essential, and we need to get these engineers and those working on the supply chain in particular, practical, hands on experience. It's not the individual's fault or responsibility - we have failed them and they are being asked to make important decisions that, frankly, they don't always have the experience to make."

Event host K.D. Marine has adopted a recruitment and training process whereby all newcomers to the business undertake a thorough competency test to ensure their ability to undertake their job in a safe and practical manner.

Another suggestion was bringing the initial hiring process back in-house and reducing the use of recruitment

agencies to source and place staff, in particular engineers who have a specialised skillset.

"The hiring process should be all about assessing competency, and a person in the external recruitment market may not be appropriate to assess an engineer's skills and experience."

Conclusion

While many participants were optimistic about the outlook for late 2015 and beyond, K.D Marine's discussion event demonstrated a clear concern around the challenges that lie ahead, and a real frustration at the way the industry is currently managed.

Reacting to the discussions, K.D. Marine managing director Hamish Petersen said: *"This high level debate provided a welcome opportunity to reflect on some of the more focused issues facing the industry and to come to terms with some of the challenges we've created for ourselves.*

"The frustrations around the current state of the industry were evident. We have an industry which had grown complacent having to come to terms with a much more difficult economic environment. We're not going to solve all our issues overnight, but I would hope that the outcomes from our discussion would act as the starting point to the establishment of more efficient processes. It's clear that the industry needs to work a lot smarter. The topics we discussed are of huge importance and I'd like to revisit them in six months' time - to see what changes we've been able to implement and to further review ways towards smarter working."



K.D. Marine Limited

Voyager house, 75 Waterloo Quay, Aberdeen, AB11 5DE, UK Tel: +44 (0)1224 705075 www.kdmarine.com | info@kdmarine.com