

Maritime Futures Programme - Skills



Background

The Maritime Futures programme seeks to understand the future shape of the UK maritime sector through the exploration of a broad range of drivers of change, ascertaining which areas will have the greatest impact. Then, having formulated a vision of what the future holds, the programme will establish what the sector needs to do to respond to and capitalise on such a scenario. Change factors that the programme will examine include urbanisation, water, climate change, convergence, demographics, food, oceans, poverty, energy and waste. The initiative will also make use of existing research, like the UK's Government Office for Science's Foresight project regarding the future of the sea, and outlook projects led by Maritime UK members – for example, British Marine's futures project or the British Port Association's.

Future Skills Workshop

The programme's first workshop was held on 23 November 2018, looking at future skills. The workshop aimed to understand the future skills and people challenges arising from the Fourth Industrial Revolution and start to develop a Futures Agenda for the Maritime UK Skills and People Forum.

The workshop included presentations from

- Richard Westgarth BMT Head of Campaigns
- Ade McCormack Founder Digital Readiness Institute
- Wilson Wong CIPD Head of Innovation
- ABB Marine & Ports Capt. Eero Lehtovaara

Discussion

We have seen significant changes in industrial sectors, faced with the technology revolution, we see increasing uncertainty and stability as the rate of change accelerates, this is reflected in the rise of the "digital corporations", industries faced with automation and robotics and the need to generate growth and increase productivity resulting in new organisational structures, the changing nature of work and the challenges faced by an ageing population.

We have ongoing socio-demographic change: skills shortages, shorter at sea careers and a greater reluctance of people to serve on vessels (away from their social media), the nature of work is also changing, driven by both technologies, the strategic shifts and new economics of the Fourth Industrial Revolution.

It is anticipated that the future will see an increased demand for shipping, shipbuilding, marine equipment manufacturer, and related services. The challenge for the industry is seen as an attractive industry for people with these skills to consider.

As this technology-driven disruption impacts the maritime sector. The UK, as a major maritime nation, now needs to position to take advantage of this growth through investing in critical skills, business and technology aspects to underpin social and economic growth and prosperity.

The need for change

As maritime work, skills and workforce requirements evolve we need to look at what this means for employment in the sector. Policy changes are required to ensure education and training helps people across the sector take advantage of these emerging opportunities and attracts people into the sector. The shift to digital is driving change across all industries, the competition for these skills will become intense – the so-called war for talent.

The impact on the nature of maritime work will be profound, the pace of change is accelerating, driven in by a shortage of skilled seafarers and pressure to reduce operating costs. At the recent Maritime UK future skills workshop, the speakers talked about the need to change the way we think about careers, about the role of HR and the broader implications on seafarer training, highlighting the challenge in delivering training to meet the requirements of STCW, but also extending it to provide the skills required for Digital / Smart Ships. One key issue is the need to overcome the industrial mind-set that does not recognise the “value of people.”

While it is unclear how roles will evolve, there are some clear pointers indicating the direction of travel. We see a greater emphasis on the augmentation of existing jobs and the creation of entirely new ones. The analysis seems to suggest that increased demand for new roles will offset the decreasing demand of others. But this indicates that there will be a “skill differential”, we will need to re-skill large proportions of the workforce over the coming decades.

This is borne out by the WEF Future of Jobs Report 2018, which recognises that we have to develop a better understanding of the potential of new technologies and the associated need to create new high-quality jobs, open up opportunities for new ways of working, new tasks, new livelihoods. At the same time managing a reduction in the number of workers required for specific “traditional work”. WEF suggests that over 50% of employees will require re-skilling by 2022, largely around technology competencies, together with critical human skills such as creativity, originality and complex problem-solving.

Over the next couple of decades, more than a third of the core skills for most occupations will be skills that are not currently considered crucial to the job today and many people will work in jobs that don't exist yet. Technology-enabled innovation will transform what work needs to be done, how, by whom and where. It's not too far-fetched to say that future seafarers may not ever go to sea. We need to understand what this means for existing career pipelines within and around the maritime sector.

We are also faced with an ageing, multigenerational, more international and diverse workforce, a growing gig-style economy and innovative labour models. Unless we change our approach to capability planning a “demographic time bomb” will leave us facing severe skills shortages over the next 20 years which could overtake any efforts to maintain the UK status as a leading Maritime Nation.

Actions for consideration arising from the Future Skills Workshop

The challenge is we need a Sector-wide approach to the capabilities that we require for the future which encompasses new and emergent technologies, new production methods (for example robotics), a changing

industrial base focussed on rapid innovation, arguably driven by highly agile and responsive organisations many of which will be SMEs. The future isn't a straight line; we need to build a resilient and agile workforce capable of responding to changes.

Further investigation is required by the People and Skills Forum members in the following areas and recommendations to be incorporated into the Maritime UK Skills Strategy to meet this challenge:

- The training syllabus (STCW) is not fit for purpose; it is not dynamic to meet the needs of the advancement of technology. We need people with great flexibility and adaptability for the future, addressing both seafarer and non-seafarer roles.
- The skills in demand will be highly transferable, and we predict that the war for talent will be global and across industries. We need to understand maritime career paths and ensure that we enable people to transition to meet future needs, while not impacting upon current requirements. We need to define the challenges for the sector and collaborate to determine a more unified view of these challenges and be more proactive in horizon scanning.
- Regulation standards need to be challenged, and the pace of change increased, this has global industry implications, the UK has the opportunity to be a global leader. We need to consider the legal and service industry needs.
- Technology can be game-changing, but technologies on their own do nothing. It is a combination of people and technology that makes things happen whether in an organisation or across the sector. We need to develop formal methods for the review of training, and develop continuous learning within the sector, linked to emerging career pathways and skills requirements.
- We need to address ways of demonstrating the “corporate value” of people and their skills by encouraging industry to invest in future-proofing skills, view people as an asset, not a cost. This includes the need to address productivity in the sector creating value from the human input, by improving the interaction between technology and humans.

The next workshop – Technology enablers

Having focused on the skills challenges in the first workshop, the second workshop will focus on Technology enablers covering area such as Seabed mapping, Block chain, Port Automation, Communications and DNA marking. This workshop will seek to understand the future shape of the UK maritime sector through the exploration of a broad range of technology enablers, ascertaining which areas will have the greatest impact and where the opportunities lie for the UK maritime sector.

Further information

Alastair King, Programmes Manager | Phone: 020 7417 2876 | Mobile: 07843 224292