

IN A MARKET THAT HAS AT BEST A TWO YEAR HORIZON, HOW DO WE ATTRACT AND RETAIN THE NEXT GENERATION OF TALENT, WHEN MARGINS CONTINUE TO BE SQUEEZED AND THE ARGUMENTS FOR FUTURE INVESTMENT IN PEOPLE AND EQUIPMENT BECOME HARDER?

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Abstract: Finding and retaining talent in the telecoms and cable laying industries is inherently difficult. Historically, the potential for higher earnings in the oil and gas sector and a rapid growth in offshore renewables has increased the challenges in the war on attainment and retention of fresh talent. Increasingly competitors rather than the industry as a whole, challenge attracting the right candidates in niche disciplines such as cable engineering and jointing.

Advancing technology is driving end user demands for faster and larger amounts of data, however as the demand for volume is growing, revenues are shrinking; with an ageing workforce and a widening skills gap in the telecoms sector, can the industry adapt quickly enough to meet these demands? Increasingly, the gap between the types of skills that are in demand, and the training and experience to build those skills, will need to shrink.

How can the telecoms sector work together to negate this negative downturn? Telecom stakeholders will need to appropriate new creative and collaborative approaches to influence recruitment, vocational training and graduate schemes with a view to long-term employability, in order to attract the next generation. This paper will discuss the industry wide strategies and initiatives that must be implemented to increase attainment and retention of fresh talent.

1. INTRODUCTION

There can be no illusions that one of the biggest threats to our industry is the continuing war on attracting and retaining talent. Whilst our foes have traditionally been oil and gas, the emergence of exponential growth in offshore renewables has added a new adversary in the battle to attract the brightest people to our sector. The reality is, nearly all businesses that require engineering and technical personnel are struggling to recruit and retain this vital commodity.

The UK Institution of Engineering and Technology (IET) 2017 skills survey showed that 61% of UK companies consider difficulties recruiting engineering and technical staff with the right skills as a barrier to achieving business objectives over the next three years.

Even more disturbing are the statistics that as recently as 2014, the average age of an engineer in Britain was 54, and only 6% of students in the UK were studying engineering or technology.

This paper will consider how telecoms and cable laying organisations need to adapt their strategies to attract, train and retain talent and moreover how as an industry we need to collaborate to create interest and pathways for new entrants.

2. CREATING THE RIGHT ENVIRONMENT WHEN THE RULE BOOK IS BEING TORN UP

The first thing for many organisations to consider, is that the rules of the game are changing. Previously a “career path” usually referred to the somewhat linear process of working for many years in the same organisation and waiting for the inevitable

promotions that came with experience. However, modern career paths are meandering, with people moving across jobs, roles and industries in search of better opportunities. The 21st-century career path is anything but a straight line to success, especially for generation Z, or those who grew up during the hardships of the financial crisis and subsequent 'Great Recession' in 2008-2009. There appears to be a general consensus that people within this age group have learned that a job might not always be for life. The fact that the economy doesn't always follow as predicted means that many will choose to go out and make their own opportunities, turning labour market behaviour on its head.

Consequently, our organisations will have to adapt, work harder and differently to attract the best talent from this new generation. To achieve this we need to consider the following:

- Creating flexible career paths. With traditional career linearity dwindling, creating opportunity and agility through continuous skills development, mentoring, coaching and learning is critical
- Developing a work environment where flexible working, career breaks and sabbaticals are part of the organisation's fabric and thinking
- Enhancing and developing digitalisation in the workplace both as an attractor for new talent, and a requirement to keep the next generation engaged

3. CHANGING PERCEPTIONS FOR THE YOUNG, AND FLEXING FOR THE OLDER WORKER

We can no longer rely on our traditional sources of personnel, we need to change

industry perceptions and our tactics to attract a wider pool of talent. This includes:

- Providing work experience opportunities for young people still at school
- Offering work experience opportunities for young people in Further education colleges
- Offering engineering or technical apprenticeships
- Providing work experience and internship opportunities for young people doing university courses
- Partnering with further education colleges or universities to develop courses and skilled graduates that are aligned with industry needs
- Working with schools or attending careers events to help young people understand and value engineering careers

According to the findings from a skills survey conducted in 2017 by the UK Institution of Engineering and Technology (IET), the above tactics were identified as some of the activities that UK companies were undertaking to address these skills shortages.

This survey also emphasized the need for all organisations to ensure that they offer good career paths and in particular a flexible approach to working especially for older workers. The upside of an older working demographic is that we can tap into this trend and utilise the skills and experience of an aging workforce if we bend and adapt to their working and career requirements.

Activities businesses are involved in to increase skills supply into or within the business or into industry more generally

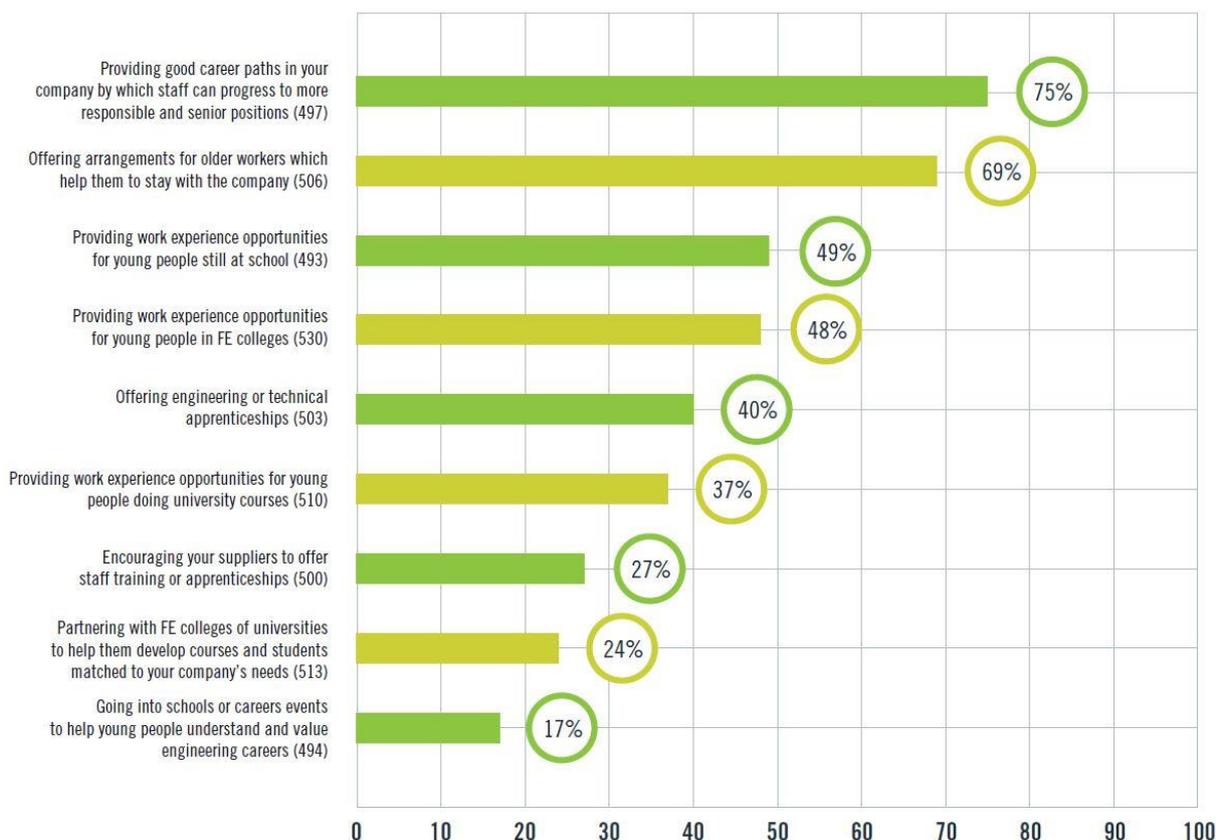


Table 1 – Addressing engineering skills shortages in the UK

4. WHY ENGAGEMENT WITH YOUNG PEOPLE IS CRITICAL AND CAN PAY DIVIDENDS

The career choices for young people have never been wider. Many jobs and careers today did not even exist 5-10 years ago. So our search for new talent is made even more difficult by the emergence of new technical disciplines such as ‘The Internet of Things’, cognitive computing; app development and robotics, all of which can have an incredible pull on new entrants who historically might have considered a career in our industry.

Thus one of the most important sectors worthy of wide and significant engagement is education. We must work with schools and colleges to inform young people about the exciting opportunities and career paths our

industry has to offer. At Global Marine we have seen how beneficial this can be.

Global Marine mentored a team of four, sixth form students to the 2016 Engineering Education Scheme (EES) National finals where they were crowned champions.

The team, comprising of students from the Brentwood Ursuline Convent High School undertook a six-month engineering project with the EES, a programme run by education charity, the Engineering Development Trust. At the 2016 finals, held at the Institute for Engineering and Technology in London, our team was announced as the overall winners, surpassing over 260 schools from across the UK.

The EES provides students with the opportunity to work on commercial projects

within a range of engineering companies; a rare and powerful educational experience for these young adults. Over a six-month period, the team designed, constructed and developed a tar cleaning device known as the ‘Tarminator’ which has been adopted by Global Marine and is expected to bring both time and cost savings during the maintenance of transatlantic communication cables.

Engineer and scheme mentor Adrian Jarvis said,

“The students exceeded our expectations in developing a product that solved a real problem for us, with the added bonus of winning the national award. It has been a pleasure working with the students who have developed many new skills and grown into confident young professionals.”

Head of Physics at Brentwood Ursuline, Mr. Dif said,

“This represents a great achievement for the girls who have become role models to their younger peers at school where interest in engineering is growing.”

Fellow student, Alicia Trew also commented,

“The EES project has been an amazing experience. Before entering the project, I had an ambition to enter into a career in engineering. After finishing the project as national winner, I am one hundred percent certain that engineering is the career I would like to follow.”

Following the project’s success, the team went on to set up their own science, technology, engineering and maths (STEM) club at school, helping to inspire younger students and grow their passion for engineering further as they look to pursue their learning at university.

Projects like this have multi-faceted impacts; they engage with our local community and stimulate interest in our industry.

5. ADDRESSING UNDER-REPRESENTATION OF FEMALES IN OUR INDUSTRY

Our experience with the EES has a further facet in that the winning team we mentored were all female. In the UK under-representation of females in engineering is significant.

- Only 9% of the engineering workforce in the UK is female.(1) And only 6% of registered engineers and technicians (i.e. CEng, IEng, EngTech) are women(2)
- The UK has the lowest percentage of female engineering professionals in Europe, at less than 10%, while Latvia, Bulgaria and Cyprus lead with nearly 30%(3)
- 15.8% of engineering and technology undergraduates in the UK are female.(4) Compare with India: where over 30% of engineering students are women on engineering courses accounting for over 30% of the students
- Less than 2% of the seagoing workforce are women

According to a British Gas survey, almost half (48%) of young women do not even consider careers in STEM sectors, citing a lack of STEM knowledge (30%), a perception that the industries are sexist (13%), and a belief that STEM careers are better suited to the opposite sex (9%).

It is therefore imperative that all organisations wanting to increase their talent pool need to create employment and recruitment strategies, that will both deliberately attract and retain female engineers and technicians, by working with schools and colleges to encourage more girls to consider careers in industries such as ours. Above all, we need to counter negative

public perceptions and reinforce the message that our industry is neither sexist nor exclusive to men.

6. RETAINING THE BEST TALENT

Attracting talent is just one challenge, developing and retaining the brightest talent which form the backbone of any organisation is another. It is easy for us to forget this especially when training budgets are typically the first thing to be cut when margins are squeezed. However, companies can adopt a number of initiatives that don't necessarily cost the earth. At Global Marine, one of our most successful initiatives has been a 'Mentoring Scheme' which has been designed to complement our other training and development policies and activities. It reflects our belief in the development of all our people and is based on the following principles:

- Encouraging self-development in a way that maximises the contribution the individual can make to the organisation's productivity and success
- Encourages people to seek support and guidance from those who are experienced and who can share their knowledge and understanding in a way that is supportive and generous
- Provides a structured approach to staff development that embraces a number of opportunities for people to learn and develop their skills and knowledge

The purpose of this mentoring policy is to:

- Position mentoring as a key activity within the organisation's overall approach to staff learning and development
- Differentiate mentoring from other developmental activities such as coaching and training
- Provide information on an individual's progress and development within the organisation that is additional to that

given within the performance review process

- Establish what skills and experiences are needed to develop an individual's career
- Provide opportunities to learn from someone with a greater or different understanding of the organisation
- Provide the individual with an objective and alternative source of advice and information
- Provide opportunities for the development of all staff through the mentoring relationship, either as mentor or mentee.

7. MULTI-SKILLING

The saying goes "jack of all trades master of none", or does it? This saying actually got cut short and originally said, "A jack of all trades is a master of none, but oftentimes better than a master of one." Unlike what the adopted version would lead you to believe, having multiple interests but not being an expert in anything could actually prove advantageous.

In an environment where career progression can be challenging due to budget limitations for extensive training or simply a lack of available positions adopting a multi-skilled approach can actually be invigorating and rewarding for an employee, as well as being beneficial for an employer. The workplace has become more digitally integrated and the ability to multi-skill a tech savvy generation compared to a decade ago has never been easier. Organisations are not necessarily faced with high training costs or absentees to attend courses, as training can be undertaken with internal expertise.

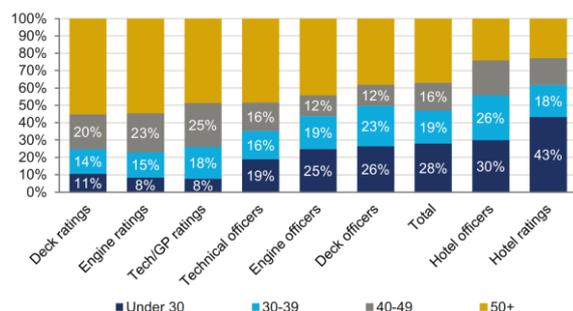
Training in new areas provides employees with an opportunity to gain new skills to aid career progression and without question helps to keep teams motivated. It also makes teams more adaptable, this is key if your organisation needs to adapt to new processes

which is now the norm as we become digitally integrated organisations.

Lastly, in a customer facing environment the value of a high functioning multi-skilled team can be priceless. As senior managers it not only makes our job that much easier but imparts confidence in our customers.

8. OFFSHORE PERSONNEL

We often forget that without survey vessels and installation vessels there would be no subsea cable industry. The investment cycle for our sector simply tends to follow an old for new strategy. A recent report from the International Chamber of Shipping has forecast an alarming global shortage of maritime officers; 92,000 by 2020 and 147,500 by 2025. Table 2 also shows that as an industry we have an ageing workforce and with it an impending problem.



Source: Oxford Economics analysis of UKCoS manpower survey

Table 2: Age of seafarers working in UK shipping

Whist at Global Marine we work with government and maritime training academies to take on officer cadets, the same report cited above suggests that the leaving rates for deck and engine officers and ratings tend to be greater for seafarers under 30 than for those in the middle age group. It is suggested that this may be because some younger seafarers either decide that they are not well suited to a career at sea or simply wish to settle down ashore.

Another problem is the lack of career progression. If a fleet is not expanding and

companies adopt a like for like recruitment and promotion strategy, then we risk young seafarers moving to other companies or leaving the sea, noting they could have a 15 year lead time to get to a senior position and significant expense for training to reach these positions. More often than not this is something that employers are unwilling to pay for, but without this you lose the experience. When you consider that many of the people working onboard the global fleet of cable ships have over two decades of experience, we have to ask ourselves what happens when this is gone?

Going to sea has an image problem, the romanticism of a career at sea is arguably gone. In today's mobile society, where people have more opportunities to travel for leisure as well as for work, there are more ways to "see the world". Combine this with a lifestyle where seafarers are usually away from home for long-periods of time, working seven day weeks and often with intermittent access to digital communications and you have a hard sell to the most connected, consumerist generation in history.

9. A BLUEPRINT FOR IMPROVEMENT

This analysis draws us to conclude that the war on talent has widened, not just to our traditional foes within oil and gas, and newcomers like renewables, but of more concern are the new "sexy" career opportunities in IoT, and robotics, that are far more attractive to the Gen Z engineers and technicians of the future.

Massive shortages in engineering and technical talent exist worldwide, whilst many other industries have been able to attract engineering talent and in particular more woman to fill the gaps, progress in our sector has been somewhat glacial in this area.

So what, as an industry, can we do? Here is a blueprint for improvement.

1. As an industry we need to work together to do much more to provide education on the importance and variety of careers in our sector.
2. Both collectively and individually we need to engage with the education system, and encourage our industry role models to work with schools to nurture and embolden bright young talent into our organisations on experience days, and programmes like those we have championed at Global Marine with the Engineering Education Scheme.
3. We need to influence the educational system to encourage young people to pursue the STEM subjects, and above all provide routes into our industry through apprenticeships, work experience and sponsorship.
4. In the same way as we invest money for R&D, we need to similarly invest in our partnerships with schools, colleges and universities, matched by investment for increased levels of apprenticeships, and graduate intakes.

10. NURTURING AND DEVELOPING FEMALE ENGINEERS

Our biggest untapped resource is female engineering talent. Once more we need as an industry to tackle this individually and collectively. Engagement needs to begin in schools, but equally important is the need to create environments and role models that will act as a beacon to bright female engineers and technicians. To do this our organisations need to take steps such as:

- Your CEO and Senior Leadership need to make it clear and explicit that attracting and retaining more women to do skilled technical work is a priority for your organisation

- Your Hiring Managers need to understand this goal, and ensure that everything is done to remove gender bias in your hiring processes
- Organisations need to find and champion female role models. Do not be afraid to over compensate by pushing a female agenda
- Consider gender parity in apprenticeships and graduate programs

11. SUMMARY

In summary, whilst we have challenges in terms of attracting and retaining new talent to our industry, there is much we can do collectively and individually to address this. The key takeaway is that change will not happen on its own, and proactive action, planning and investment are required. Our industry is exciting and offers great career opportunities, but we have to communicate this message more effectively by engaging with the next generation at an early age.

Equally, as modern careers and opportunities become more flexible and mobile, creating clear career pathways and options that are not restricted by age or gender is more critical than ever.