The Future Belongs to the Technologist

The UAE defence workforce must reshape a new talent strategy

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The talent we hire for the defence industry has never been more defining nor pertinent to the success of our national security measures. The technological race we live in today, is forcing us to rethink the workforce we need to employ and deploy, in order to best respond to the unpredictable opportunities and challenges presenting itself in this new era of hybrid warfare.

While we have long been recruiting and upskilling people across infantry, aviation, and naval domains, today the fast pace of digital transformation requires us to rely on those that already have deep cyber knowledge and technical know-how. Having some of the latest and most advanced technologies is no longer an advantage in itself for the defence industry. It is the competences and capabilities that can be leveraged to operate these new equipment and technologies, that matters the most.

New technology means acquiring new skill sets, and it is because of this that we must reshape a more relevant talent strategy for the defence industry. To enable a more secure future, successful workforce planning will need to revolve around training current personnel, hiring the best and brightest across a broad range of different skills, and understanding the new ways of working. This is true for most defence industries, but particularly so for a young nation like the United Arab Emirates (UAE).

Within the UAE, where the Emirati population is in the minority, we must be smart about embedding these advanced technology related skills at home to ensure a pipeline of talent for our future. To bridge the local technology talent gap, we must inspire the next generation of 'technologists' to think about contributing to our critical industries and the invaluable role they could play to protect our residents and citizens, and safeguard our national interests. With approximately 75 percent of the fastest growing occupations in the world today requiring people with Science, Technology, Engineering and Mathematics (STEM) skills[i], it is up to us to educate and engage young people to think of careers that are shaped by these disciplines.

As a nation, we are heavily invested in the technologies of the future, with our key strategies focused on technological innovation and advancement; to name a few, we have the UAE's National Innovation Strategy; the UAE Strategy for Artificial Intelligence; the UAE Strategy for the Fourth Industrial Revolution, National Cybersecurity Strategy 2019, and the Abu Dhabi Economic Vision 2030. Our infrastructure is being built to serve us for many decades to come, and so the talent we attract must follow suit.

As EDGE continues to support the UAE in creating a global hub for ground-breaking innovations and advanced technology development, we are in effect establishing a new academic ecosystem. One where diversity of ideas, experimentation, and creation using the most advanced technology is attracting highly experienced and new talent alike to the industry. In short, the future favours those specialising in modern technology.

In this dynamic landscape, our jobs are changing, and fast. In the defence industry, where hackers can do more damage than joint strike fighter jets, where radio-frequency jammers can misdirect missile targets, and where drones can create unimagined scales of damage, we must relook at our talent strategy. The military has always consistently developed and adopted the latest technology innovations. However, with the commercial markets setting an accelerating pace of change through discovery, reinvention, reduced cost and speed, defence forces are under pressure to act now. The industry is being challenged to build resistance and resilience to the newest types of threats and embrace emerging technologies. This digital era requires a new type of thinking, and a new approach to problem-solving.

The need of the hour is an agile defence workforce talent strategy, to ensure that we don't end up planning redundantly for a form of combat that no longer exists. We need to move away from linear thinking and be prepared for a world of complex adaptive systems - interactions that cannot be controlled or predicted. Technology has been creating waves of change, and talent has always been a fundamental driver to achieving successful transformation. Talent must be placed at the core of everything we do in this brave new world, because the future belongs to the technologist.

[i] https://www.dst.defence.gov.au/news/2019/08/13/defence-envisions-high-tech-future-based-skilled-workforce and 'Effects of integrative approaches among STEM subjects on students' learning', Becker, K. and Park, K., Journal of STEM Education Volume 12 – Issue 5 & 6, July-September 2011