

THE PANDEMIC'S IMPACT ON DEFENCE



Matt Medley explains how the military has found the pandemic instrumental in bringing about efficient digital change

Military organisations have responded to the global pandemic by cutting back on bureaucratic processes and investing more in technology to ensure that operations can continue while implementing social distance guidelines. Technology has helped organise military personnel across various critical operations, ranging from deployment overseas to assisting in emergency relief and remote access for personnel at home.

For example, the Royal Australian Navy has commissioned research from a combination of academia, military and industry experts to assist the Hunter Class Frigate Program with developing new manufacturing technologies. The innovative programme is targeted towards optimising anti-submarine warfare by providing new frigates to replace the Anzac-class. By providing valuable integrated data insights across the entire supply chain, the programme signifies a shift in the way shipyards

could be planned and managed in the future. Additionally, the US Department of Defense is hoping to elevate military operations by trialling 5G technology to see if it can be used to assist digital infrastructure, such as augmented reality in MRO and training.

A recent interview with senior members of the UK military forces revealed that the recent investments in new technology have awarded great success, by allowing for an escalation of programmes in double time across the board. For the Royal Navy, the current pandemic has acted as a catalyst for digital transformation programmes without question. Naval leaders have described that the steps taken during Covid-19 have the potential to impact programmes relating to all areas of the force, from support systems for ships, to the estate and personnel. The Royal Air Force has also reported an increase in efficient operations as a result of its accelerated 3D Printing programme.

The recent restructuring of military operations, which has seen digital transformation take a crucial

newfound role is not an anomaly, but rather a pattern that is being replicated within organisations across many industry sectors. While the economic concerns that have spawned from the Coronavirus pandemic may not be credited entirely for this recent trend, there is no denying that it has expedited the process. Recent IFS research reports that in response to the pandemic, over 50 percent of respondents across multiple industries are looking to increase expenditure on digital infrastructure.

The Coronavirus pandemic has not only accelerated technology adoption, but certainly for the global military organisations, it has allowed time for a reflection on traditional practices and a re-assessment of current operations. In turn, there is no doubt that Covid-19 will deliver numerous advances for the defence industry.

In particular, four key areas can be highlighted to demonstrate how the economic and business effects of the pandemic are acting as the driving force behind the technology transformation within military organisations.

EMBRACING MODERNITY

Prior to the pandemic, flexible and remote working options were, for the most part, an unexplored and dubious prospect. In addition to a long-standing tradition of strict practices within the defence sector, there has been a distinct reluctance from higher-ranking leaders to embrace remote working due to the deeply ingrained bureaucratic system of in-person, direct management and leadership.

However, challenges created from the Coronavirus pandemic have meant that a new working paradigm is now crucial for survival. With remote and flexible working proving to be efficient means of operating, questions are being raised about whether traditional processes and policies within defence organisations have been hindering productivity in the past.

With processes once deemed necessary now coming under scrutiny in a post-Covid world for being forces of habit – new efficiencies are being explored. For instance, electronic signatures generated by automated workflows are quickly replacing the traditional method of requiring physical signatures on formal documentation – allowing wait time between approval stages and total throughput time to be drastically reduced. Additionally, many organisations are finding that lengthy approval workflow processes tend to disempower their employees to act. By reducing the number of total approval steps and raising authority thresholds for lower-level managers, the new measures have incentivised employees to act, while also freeing up valuable executive time to focus on more pressing strategic matters.

If the defence sector continues to embrace change and realise the benefits of non-traditional working, it can learn valuable lessons from the pandemic. The defence industry has the opportunity to further streamline processes and increase efficiencies across organisations – all while empowering the workforce to focus on results.

WORKFORCE PRODUCTIVITY

The belief that digital transformation and automation would lead to a cutback on personnel was another reason why many leaders within military organisations were hesitant to embrace new technological changes. This has been delaying the progress of administration and headquarter reform for years.

In practice, digital transformation actually optimised workforce efficiency as opposed to the previously feared personnel cuts. This has two main benefits. Firstly, with additional pressure to reduce company expenditure being exacerbated by the Coronavirus crisis, companies want to hold onto the personnel they have so heavily invested in. This preserves capacity for business to ramp back up as the crisis resolves – while protecting the livelihoods of their workers and families. Secondly, removing waste through densification of value-added work results in real time and cost savings that can be reinvested into other activities.

THE ROYAL AIR FORCE HAS REPORTED AN INCREASE IN EFFICIENT OPERATIONS THANKS TO 3D PRINTING

In comparison, defence manufacturers face the predicament of personnel cuts daily. Despite rapid advances in Industry 4.0 technologies, these companies must still retain large human labour forces that cannot work from home and are often hired to support specific programmes. Those skilled labourers must often be delegated to other programmes or let go to preserve cash when programmes are delayed during times of uncertainty such as Covid-19, budgetary shortfalls or other severe disruptions. The companies best able to match their labourers to value-added work have the best chance of retaining them, preserving critical skillsets and the right technology solutions can help highlight those opportunities for workforce realignment.

The pandemic has been a vital period for global military organisations to resolve previous concerns surrounding the management of increasing pressures to decrease workforces and the reduction of admin costs. The adoption of digital transformation and automation within an organisation streamlines administrative tasks and means more efficient back-office processes. Consequently, more resources can be reassigned to the operations that matter – moving resources from non-value-added processes so core operations can increase efficiency with no net change in force size.

REMOTE ACCESS

Planned and unplanned are the two forms of connectivity and bandwidth issues that can face both civilian and defence organisations. Most organisations experience planned or unplanned outages on occasion for system maintenance, natural disasters, physical damage or hardware failure, and in the case of defence organisations, physical attack. On these occasions, organisations will have contingency response plans for these scenarios and can be quite efficient in restoring their networks afterward.

What makes defence organisations unique is the need to perform prolonged operations, often in unfriendly territory, with no connectivity due to the lack of forward infrastructure to maintain secrecy. In this scenario, a critical feature of the operation is a robust Disconnected Operations solution – capable of distributing and consolidating data and technical records when connected and operating autonomously when not connected.

Questions are now being raised about whether traditional processes have actually been hindering productivity

Connectivity has become more complicated as the demand for remote work across the world has increased. Remote data access and the ability to continue working while offline and later reconnect and resync will now be sought out by not only civilian companies, but also military organisations. As a formal risk mitigation technique, organisations need to harden their network solution with a true Disconnected Operations mode. Robust Disconnected Operations capabilities can capture, store and resync asset and workforce data regardless of connectivity. Even with workforce and assets globally distributed, robust Disconnected Operations could be the difference in a military's ability to not just recover from planned or unplanned outages, but rather continue operating seamlessly throughout.

PRIORITISING COMPLIANCE

While in the past compliance was associated with regulations and red tape, now it has the potential to determine the defence sector's recovery in a post-Covid world. Compared with the rapid decline and slow recovery underway in commercial aviation, government defence spending has remained relatively stable, with large multi-year contracts still being awarded for major new programmes – placing defence organisations in a secure position to recover from the current global crisis. Only those competitors with the right combination of demonstrated excellence across a variety of compliance areas such as ITAR, FedRamp and CMMC are in a position to compete on certain contracts.

By understanding the critical focus on regulation, defence organisations must keep compliance top of the priority list if they are to transfer to remote operations

on a more permanent basis. Therefore, remote operations require flexible software architecture and filing to adhere to regulations. Compliance is also the reason that many A&D organisations are wary to adopt cloud-only ERP deployments. A recent IFS webinar attended by key decision makers within aerospace manufacturing revealed that only 3 percent of respondents deploy their ERP software only using the cloud – whereas 64 percent said they use their software either on-prem only or a mixture of on-prem and cloud-based deployments.

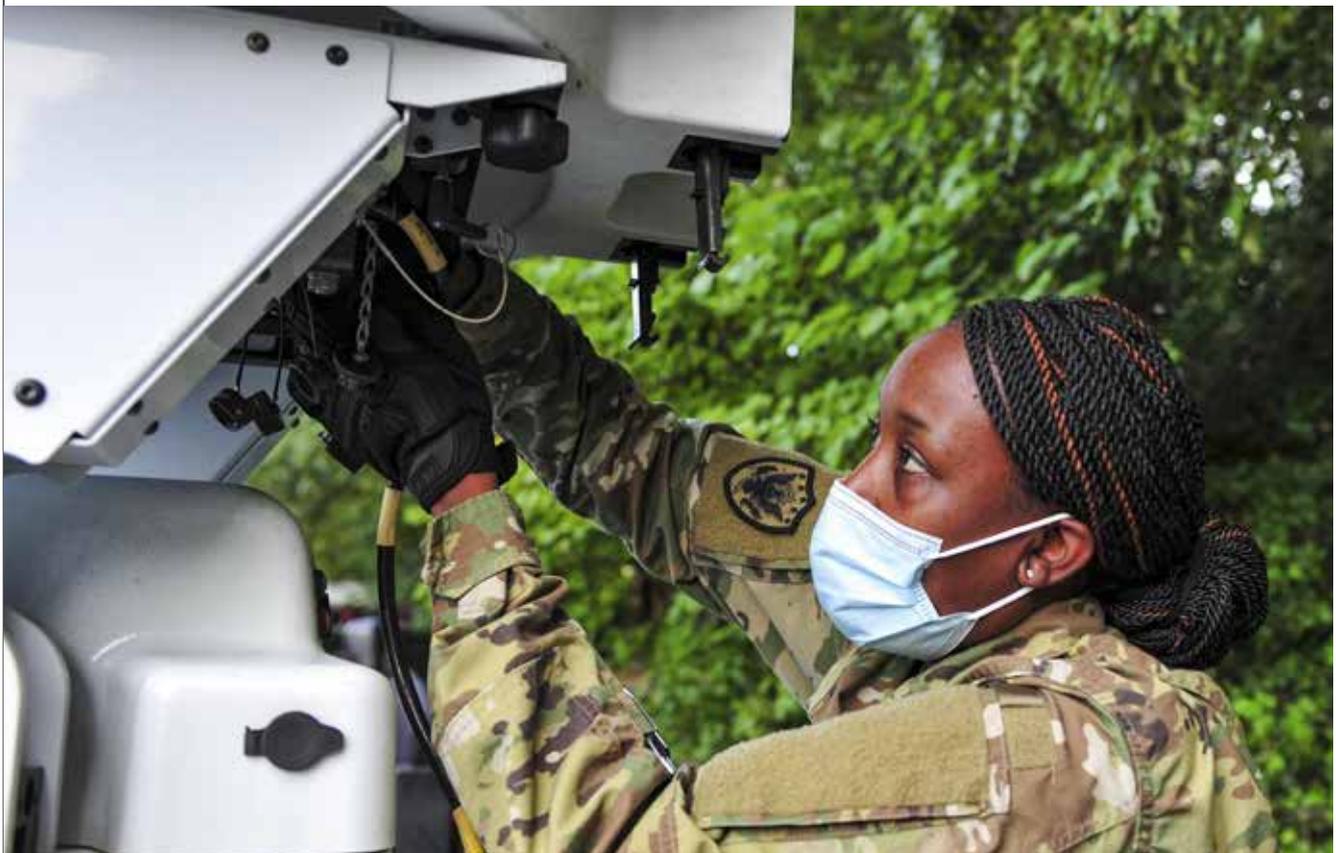
For defence organisations to continue to embrace remote working and unlock further efficiencies while remaining compliant they need a tailored solution. With a managed cloud or secure hybrid enterprise software environment for critical compliance areas such as ITAR, organisations can explore remote capabilities knowing compliance is not an issue.

THE PANDEMIC HAS ALLOWED TIME FOR MORE REFLECTION ON TRADITIONAL PRACTICES

For an industry often identified by its long-standing traditions and rigid processes, the Coronavirus pandemic has accelerated the speed in which defence organisations have actioned transformations that were previously only blueprints. This acceptance of digital transformation, with the support of capable enterprise software solutions, will bring extensive benefits to the industry for years to come. For military organisations, the increased efficiencies, flexibilities and streamlined processes, will be benefits that they will continue to reap long after the Coronavirus pandemic has ended ●

Matthew Medley, senior product manager, ensures IFS solutions meets the demanding needs of defence service and support organisations, defence manufacturers and defence operators and helps bring these solutions to market.

A new working paradigm is now crucial for survival



Picture credit: US Dept of Defense