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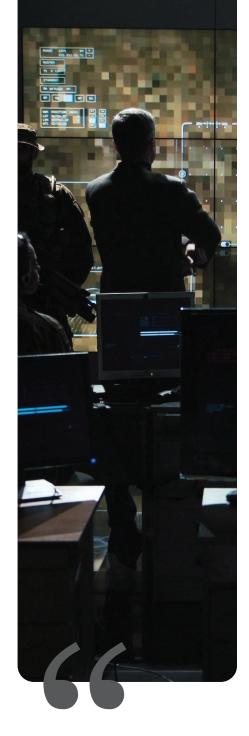
## The AI opportunity for defence and security

GCC defence and security forces need to grasp the artificial intelligence (AI) opportunity. Although some are integrating AI already, they could adopt AI more widely to enjoy the full benefits in terms of information superiority, such as for operations, and for improvements, such as logistics and predictive maintenance. GCC forces could select their AI pilot schemes, build experience and expertise, and change their operating model to enable broader AI deployment.

Al has two advantages for defence and security, thanks to the computing power it uses to process vast amounts of data and analyse complex patterns for informed and quick decision making. First, AI enables information superiority, which is the ability to meet the information requirements of supported forces with greater timeliness, relevance, accuracy, and comprehensiveness than an adversary, as recent experiments with AI in fighter jet dogfighting have indicated. That strengthens command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) capabilities. Second, AI produces efficiency gains in logistics and maintenance, such as by reducing wastage of personnel hours and spares.

Al has had an impact already in defence and security. Al-enabled platforms have conferred notable advantages in operations around the world in recent years. In the GCC, Dubai Police have used Al to anticipate crime, engage with the population, and reduce paperwork for minor traffic incidents. Dubai recorded a 25% drop in serious crimes during the first quarter of 2023 compared to a year earlier, while reports to the police from the community nearly doubled. Dubai Police saved staff time through Al solutions for the reporting of minor accidents.

The challenge for GCC forces is that AI can feel overwhelming as it can apply to every sector and task. Therefore, GCC forces need a path into AI adoption that allows them to build their capabilities. GCC forces should start with pilot schemes. The most appropriate initial use cases are in human resources and management, predictive maintenance, and logistics. Within these areas forces can select pilot schemes according to three criteria: strategic relevance, ease of implementation, and scalability and interoperability.



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GCC forces could launch pilot schemes with a baseline assessment for each use case. That allows them to understand what requires improvement and where AI can help. Then they could elaborate a road map which guides how they adopt AI for some tasks immediately and prepare other areas for short-term AI introduction if the pilot schemes succeed. Simultaneously, they could monitor other AI opportunities and observe for technological disruptions that could affect AI deployment.

However, GCC forces cannot install AI as if it were a new piece of equipment. For AI to work, the machine learning algorithms and analysis need lots of data and history. GCC forces should ensure their systems are connected and generate data of the necessary quality. That is particularly relevant for predictive maintenance. GCC forces operate large fleets of unique and complex platforms, such as armoured vehicles, warships, and fighter jets. Properly collected, the data from these platforms can yield insights leading to efficient maintenance and design improvements, as Formula One teams have managed with their unique cars.

Further, GCC forces would need to change their operating model to fully exploit Al. A part of that change would be to institute a governance structure to oversee the pilot schemes and wider AI introduction. Given the novelty of AI in defence and security, that means an empowered Chief Information Officer (or Chief Al Officer) with top-level support, such as from the Chief of Staff or Minister of Defence.

Because of the cost of Al programmes, GCC forces may require additional funding beyond their usual budgets. As these projects involve national security and sovereignty, they can argue for financial support from sovereign wealth funds, organisations that are deeply involved in GCC countries' transition to becoming leading digital economies. Any plan to build indigenous AI capabilities should be consistent with national digital development and digital workforce programmes.

Finally, while integrating AI is vital today, it is important to remember that we are at the beginning of the AI revolution. The nature and use of AI will change over time.

Although GCC forces currently purchase Al from foreign suppliers, they should develop domestic Al capabilities. GCC forces can require that their AI suppliers assist with building these capabilities. It is vital to start building those collaborative partnerships with suppliers now. The stronger the domestic AI capabilities, the better the GCC forces will be at defining the supplier relationship to yield actionable insights, rather than simply collecting vast amounts of unusable data, as has happened to the US Air Force.

Al is revolutionising entire sectors. It is changing defence and security. GCC forces must act swiftly to take advantage.

Per-Ola Karlsson Partner per-ola.karlsson@strategyand.pwc.com haroon.sheikh@strategyand.pwc.com ritesh.v.verma@strategyand.pwc.com felix.w.wiedenhaupt@strategyand.pwc.com

Haroon Sheikh Senior Executive Advisor Ritesh Verma Principal

Felix Wiedenhaupt Senior Manager

www.strategyand.pwc.com/me