



Beyond Fast Followership: Why Small States Should Build Adaptive Capacity

Kelvin T. Y. Goh



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Beyond Fast Followership: Why Small States Should Build Adaptive Capacity

By Kelvin T. Y. Goh

SYNOPSIS

Fast followership – acquiring mature defence systems after larger powers absorb the risks of frontier development – has long been a rational strategy for small states. However, in rapidly iterating domains, operational advantage is increasingly determined by adaptation speed rather than acquisition alone. Small states should therefore develop a minimum viable adaptive capacity.

COMMENTARY

For decades, small states have managed military modernisation through fast followership. The logic was straightforward: allow larger powers to absorb the cost and uncertainty of frontier development, then acquire mature systems once technologies, doctrines, and supply chains stabilise. For states with comparatively small defence budgets, shallow industrial bases, and low tolerance for failure, this approach was rational, cost-efficient, and sufficiently effective.

This logic has been effective under conditions where technological development and operational deployment were sequential and separable. However, in areas such as unmanned systems and electronic warfare, systems are no longer static artefacts that are developed, fielded, and then operated. They are continuously modified with use. The result is a collapse in the distinction between development and deployment: operational environments are now sites of ongoing system iteration.

Fast followership remains appropriate across much of the defence spectrum but may no longer be sufficient in domains where advantage is increasingly determined by adaptation speed. In such areas, small states should seek to develop or maintain the capacity to rapidly adapt and re-field selected systems.

When Iteration Outpaces Absorption

The proliferation of low-cost computing, modular hardware, and dual-use supply chains has enabled iteration cycles that compress into days or weeks. The Russo-Ukrainian war illustrated that frontline units, engineers, and manufacturers can form tight feedback loops, generating [continuous adaptation](#) under fire.

Small unmanned aerial systems, particularly FPV drones, are frequently modified in rapid response to adversary countermeasures, adjusting payloads, frequencies, software configurations, and [operational tactics](#) in near real time. Improvised configurations have produced [material improvements](#) in lethality or survivability. Even modest improvements add up quickly with short iteration cycles.

Cybersecurity offers [key lessons](#): vulnerabilities are continuously discovered in use, and defences are patched on an ongoing basis. Here, advantage is derived not from the static superiority of any given system, but from the speed at which actors detect, respond, and reconfigure.

When iteration cycles are shorter than procurement and integration cycles, the frontier *is* the battlefield.

Basis of Advantage at the Frontier

In traditional military modernisation, advantage was relatively durable and could therefore be assessed at discrete points in time.

This does not hold in fast-iterating domains, where capability is produced and eroded quickly across successive cycles of adaptation and counter-adaptation. Differences in adaptation rates may produce non-linear capability gaps that compound over successive iteration cycles, each one further compressing an adversary's window to observe and respond.

Under such conditions, operational advantage is no longer determined primarily by what systems a force acquires, but by how quickly it can convert operational experience into system change under real conditions.

Capability in such domains is better understood not as stock, but as flow – the rate of adaptation.

Changing Consequences of Fast Followership

Fast followership has always involved accepted trade-offs. These trade-offs may have been accepted on assumptions that no longer hold in every domain. Risks that once seemed manageable may now have different implications.

Three risks merit particular attention.

Roadmap dependence. Foreign systems should not be seen as static tools, but products iterated towards the doctrine, geography, and threat environment of their

primary users. As successive iterations tighten this fit, divergence becomes increasingly likely for secondary adopters operating under different constraints (e.g., great power competition versus constrained geography).

States are no longer deciding whether a system fits their requirements, but whether an evolving system, whose trajectory they cannot fully anticipate and may only lightly influence, will continue to fit over time. The build-buy calculus must therefore account not only for present suitability, but sustained alignment and the costs of discovering a misfit after dependency has set in.

Institutional atrophy. The capacity to evaluate frontier technology atrophies when the capacity to build and iterate it is lost. When a military primarily purchases finished systems, it may gradually lose technical intuition and judgment. This is not just an industrial problem, but an epistemic one: a force that has lost this intuition will be slower to sense important shifts, more dependent on vendor framing, and less able to identify critical vulnerabilities in the systems it operates.

What has changed is that the floor for competent evaluation has risen. Unlike physical systems, where failures tend to be legible, software-intensive systems can fail silently, conditionally, or only under specific operational conditions, in ways that only developmental literacy can detect. That literacy can only be produced through building.

Coverage failure. In earlier eras, relevant military innovation was concentrated within a small number of defence primes and state laboratories, making the frontier legible to any well-connected procurement apparatus. Today, [critical capabilities emerge from diffuse ecosystems](#), startups, open-source communities, and non-traditional actors, many of which lie outside formal procurement and alliance networks. States relying solely on established channels risk not just being late to relevant capabilities but developing blind spots to entire domains of the frontier.

The thread connecting all three risks is the shifting locus of adaptation. In each case, the state is no longer operating within a stable fast-follower model in which it observes, selects, and acquires mature systems. Instead, it is embedded in a continuously evolving ecosystem where the systems it depends on, the knowledge required to evaluate them, and the sources of innovation themselves are all moving targets.

When the adaptation loop is externally governed in this way, a state does not merely lag – it progressively loses the ability to shape how its forces evolve in response to experience. That is a qualitatively different condition from traditional dependence, and one that fast followership, as traditionally conceived, was never designed to address.

Minimum Viable Adaptive Capacity

Fast followership remains appropriate across much of the defence spectrum. For capital-intensive, slow-iterating systems, such as submarines and advanced fighter aircraft, traditional procurement models may remain appropriate.

While small states should not reach for self-sufficiency or attempt to replicate the full innovation ecosystems of larger powers, they should seek to achieve a minimum viable adaptive capacity: to generate or maintain the ability to sense, modify, and re-field selected systems.

The precise institutional form this takes will vary. [Recommendations](#) drawn from defence innovation and reform literature include: (a) embedding technical and engineering capacity closer to operational units; (b) creating rapid experimentation pathways outside standard procurement cycles; (c) retaining authority to modify software-defined and modular systems; and (d) sustaining continuous test-learn-adapt loops in which capabilities are fielded early and iteratively improved rather than fully matured before deployment.

Rather than prescriptive solutions, these are better seen as diagnostic questions: is any version of this present, and if not, why not?

Conclusion

Most militaries conduct adversarial testing intermittently through exercises, red teaming, or formal evaluations. In fast-iterating domains, adaptation cannot remain episodic; it must be continuous, as observed in cybersecurity operations.

This requires embedding structured adversarial loops directly into operational systems. Red teams should not only assess static configurations, but actively probe and degrade live systems, testing evolving tactics, exploiting firmware, and surfacing weaknesses under conditions that approximate an adaptive adversary. Blue teams should respond not through documentation cycles or delayed procurement processes, but through rapid system modification and re-deployment where feasible.

The objective is to institutionalise co-evolution: compelling systems and organisations to learn under sustained pressure, building adaptive capacity in advance of external conflict rather than in response to it.

Kelvin T. Y. Goh is a venture-backed technology founder and independent researcher working at the intersection of emerging technologies and national security. He has a background in science communication and public engagement from the University of Edinburgh.

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