# The Argument for Embedded Logic at the Edge vs Centralised Large AI in Modern and Future Warfare Series

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Welcome to the Ambient Stratagem series bringing into view the contrasting applications of Centralised AI and Logic at the Edge in modern warfare. Over the course of this series, we will examine Resilience to Electronic Warfare, Real-time Decisioning, Sovereignty of Capability and Tactical Superiority. Each area of focus is broken down into six, easily accessible chapters. We hope this makes this fascinating and complex arena, digestible even for the enthusiastic layman.

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# Resilience against Cyber and Electronic Warfare (EW) Threats

### EW and cyber capabilities are now the first wave in peer conflict

Seen in Ukraine, across the South China Sea, and in hybrid campaigns from Russia and Iran.

### NATO commanders now plan on assuming denied, degraded, or deceptive environments

Requiring logic that can operate independently of cloud or central systems.

### Embedded logic at the Edge enhances survivability and mission continuity in comms-denied theatre

# Real-Time Decision Advantage for Human Operators

From tactical units to battlefield commanders, the ability to rapidly interpret and act on sensor data is a decisive advantage.

Western militaries are seeking AI that augments rather than replaces the soldier's judgment.

"Ambient Intelligence" that fuses context, mission logic, and sensor feedback is a growing area of investment.

## Executive Summary: Real-Time Decision Advantage for Human Operators

# Strategic Sovereignty and Technological Independence

**Europe's over-reliance on US-based hyperscalers and AI models is now a strategic liability.**

**As US focus shifts to the Pacific, nations are reasserting the need for sovereign AI capabilities**

Especially post-AUKUS and with the emergence of GAIA-X and the EU AI Act.

**Embedded logic allows partners to own, control, and audit decision pathways.**

## Executive Summary: Strategic Sovereignty and Technological Independence

**Chapter 9: Dependency by Design – How Centralised AI Undermines Sovereignty**

**Chapter 10: Embedded Logic and the Architecture of Sovereignty**

**Chapter 11: Ethical Alignment, Export Confidence, and Alliance Resilience**

**Chapter 12: From Dependency to Deterrence – Strategic Autonomy in the AI Age**

Conclusion and Call to Action: Strategic Sovereignty and Technological Independence

# Tactical Superiority in Contested Environments

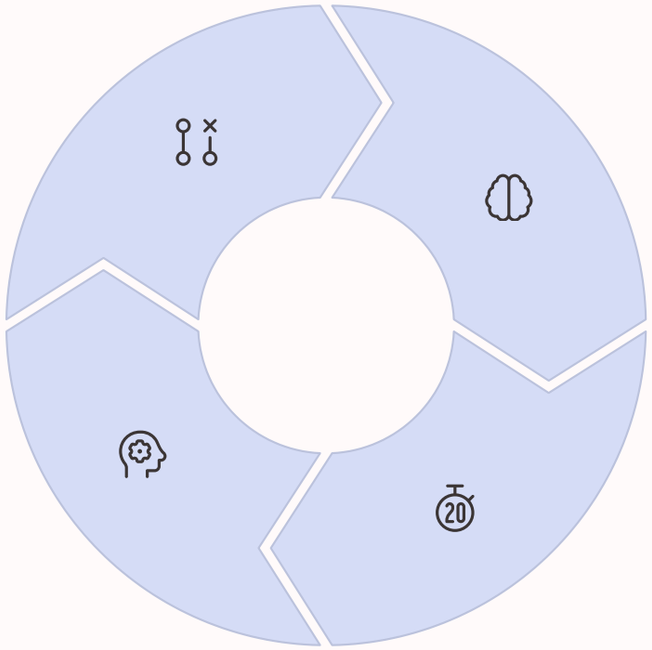
Direct kinetic overmatch matters, but it's increasingly tied to decision superiority and survivability in congested or denied battlespaces.

This is where Edge AI contributes to autonomy, swarming, adaptive targeting, and fire control—but as part of a layered decision architecture.

The focus here is not just lethality, but mission success under adversity.

## Executive Summary: Tactical Superiority in Contested Environments

**Chapter 13: The New Tactical Battlespace – Disruption as a Default**



**Chapter 14: Local Logic, Instant Advantage – Outthinking the Threat at the Edge**

**Chapter 16: Contested Dominance – Shaping the Fight Through Adaptive AI**

**Chapter 15: Survivability by Design – Graceful Degradation in Denied Environments**

Conclusion and Call to Action: Tactical Superiority in Contested Environments