Inertion Dynamics™

Intelligent, Sustainable, Strategic, Aerial Systems for a Smarter Tomorrow.

Presenter: Sachith Dickwella, Founder & Chief Engineer

Built in Canada. Designed for the world.

About us

Vision

To become a global leader in autonomous aerospace robotics by developing high-performance fixed-wing UAVs that serve critical missions across defence, logistics, and environmental operations from remote Canadian terrain to off-world exploration

Mission

To design and build intelligent, resilient UAV systems that take on missions too dangerous, remote, or demanding for humans delivering precision autonomy with deep engineering, simulation-led design, and scalable deployment

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Modern challenges demand smarter skies.

Problem

Defence & ISR

Legacy UAV require constant human control, lack autonomous adaptability, and incur high operating costs in dynamic missions

Emergency Response

Responders lack autonomous aerial systems capable of navigating hazardous, large-scale terrains without risking human crews

Logistics & Delivery

Conventional drones can't meet the speed, range, and automation demands of 24/7, or rural delivery networks

Agribusiness

Farmers are constrained by outdated aerial tools that miss real-time insight, scale, and efficient data driven monitoring

Tech Limitations

Most current drones sacrifice endurance, autonomy, and scalability due to weak AI integration and inherent limitations of VTOL drones

Global Market Gap

There is no unified, modular UAV platform that meets long-range, intelligent, and cost-efficient mission needs at scale

One platform. Many missions. Built for tomorrow's skies.

Our Solution

Autonomous Intelligence

Real-time AI decision making with minimal operator input

Fixed-Wing Endurance

High efficiency long-range flight, superior to VTOL systems.

Modular Payload System

Swappable hardware for ISR, logistics, agri-data, and more

Simulation-Led Development

Accelerated design/testing using Unreal Engine and control co-simulation

Scalable Architecture

From single UAV to coordinated swarm ops with fleet control

Dual-Use Focus

Mission-ready for both defence and civilian applications

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Designed for diversity. Deployed where it matters most.

Cross-Sector Applications

Defence & ISR

Long-range patrol, border surveillance, tactical recon

Emergency Response

Wildfire mapping, disaster zone overwatch, search & rescue

Logistics & Delivery

Remote delivery of critical supplies, meds, or tools

Agribusiness

Crop health mapping, resource use monitoring, pest tracking

Industrial Inspection

Remote pipeline, infrastructure, and utility inspections

Environmental Monitoring

Wildlife tracking, terrain mapping, weather, emissions & forest watch

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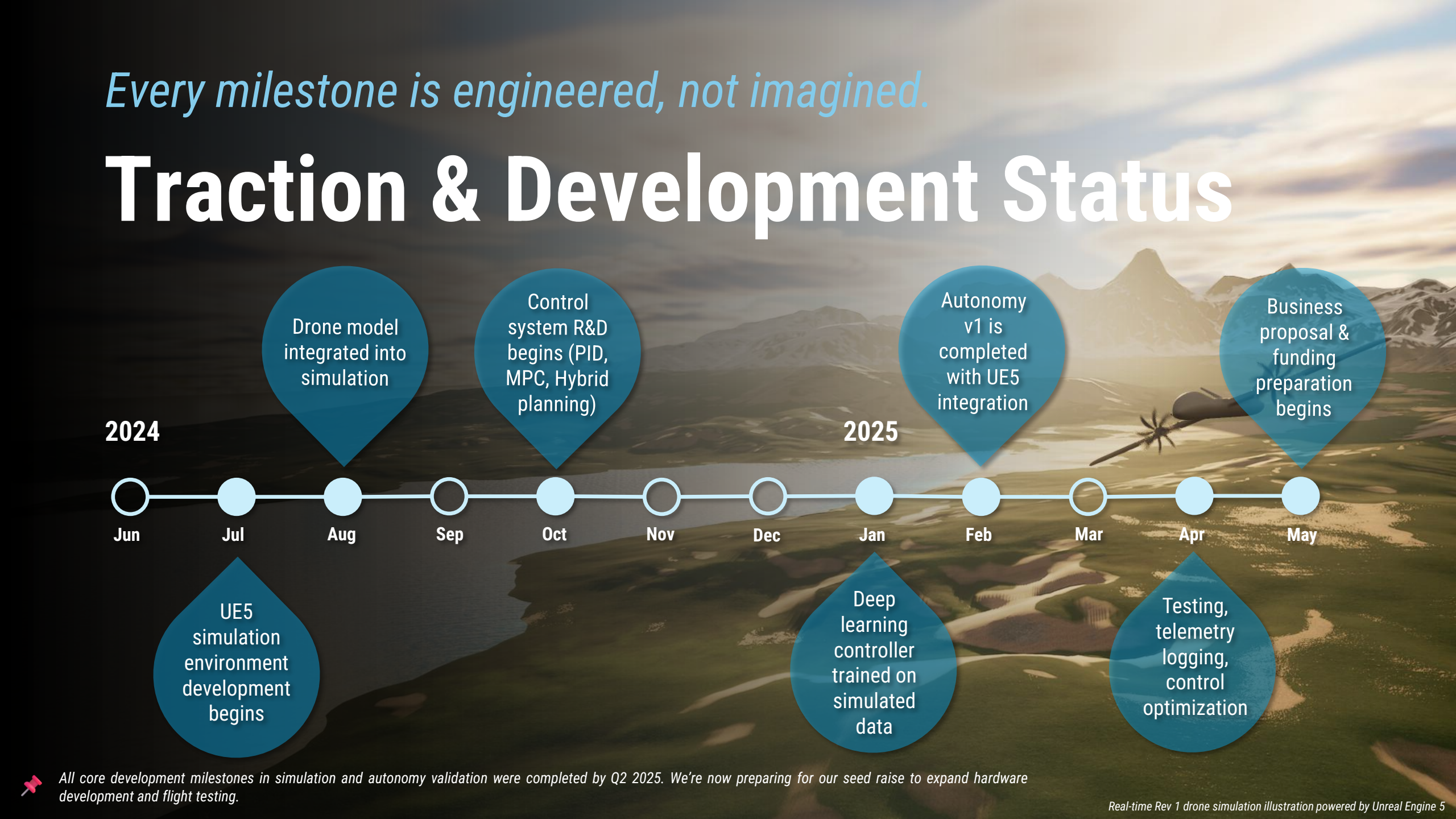
Every milestone is engineered, not imagined.

Traction & Development Status



All core development milestones in simulation and autonomy validation were completed by Q2 2025. We're now preparing for our seed raise to expand hardware development and flight testing.

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Scalable revenue from mission-driven autonomy.

Business Model

Product-Based Revenue

Platform Sales

Sell autonomous UAVs to defense, logistics (e.g., DHL, SkyCargo), and industrial clients.

AI Software Licensing

License control and navigation software to OEMs in aerospace and UAV manufacturing.

Service-Based Revenue

UAV-as-a-Service (UaaS)

Offer mission-based drone ops to emergency services, agriculture, logistics, and mining sectors.

Custom Development

Build tailored solutions for government defense contracts and enterprise automation projects.

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Engineered for What's Next. Not What's Now.

Competitive Landscape

Feature/Capability	Our Approach	VTOL Drone Startups (e.g. Quantum, Wingtra)	Aerospace Giants (e.g. Boeing, Airbus, Lockheed Martin, Northrop Grumman)
Aircraft Type	Fixed-wing, fossil-fuel / hybrid capable	Multirotor / Hybrid VTOL	Fixed-wing (mostly military UAVs)
Takeoff & Landing	✅ Fully autonomous on paved/unpaved runways	✅ Vertical takeoff. ⚠️ Needs clear vertical space; sensitive to high wind.	⚠️ Runway-based, assisted or manual
Range & Endurance	✅ Long-range, 5+ hours of flight	❌ Short endurance, battery limited	✅ Very long-range, but at a significantly higher operational cost.
Autonomy Level	✅ High autonomy including runway takeoff, landing & routing	⚠️ Limited AI for close range	⚠️ High autonomy but typically requires a dedicated pilot/operator crew for command and control.
Cost & Operation Simplicity	✅ Field-optimized with modular cost depending on use case	⚠️ Simple UX but limited missions	❌ Expensive, complex ground ops
Scalability Across Civil & Defence Sectors	✅ Dual-use ready; civil + defence	⚠️ Mostly niche civil and defence applications	⚠️ Primarily defence-focused
Infrastructure Needs	⚠️ Operates from basic airstrips or runways, minimal logistics	✅ Needs only flat, open vertical space	⚠️ Runways, hangars, logistics crew
Regulatory & Export Readiness	BVLOS-ready, SFOC-aligned, export-compliant by design	✅ Agile, but range limits use	⚠️ Export-controlled (ITAR), slow to scale

Comparison based on public product specs, regulatory posture, and field adaptability as of 2025.

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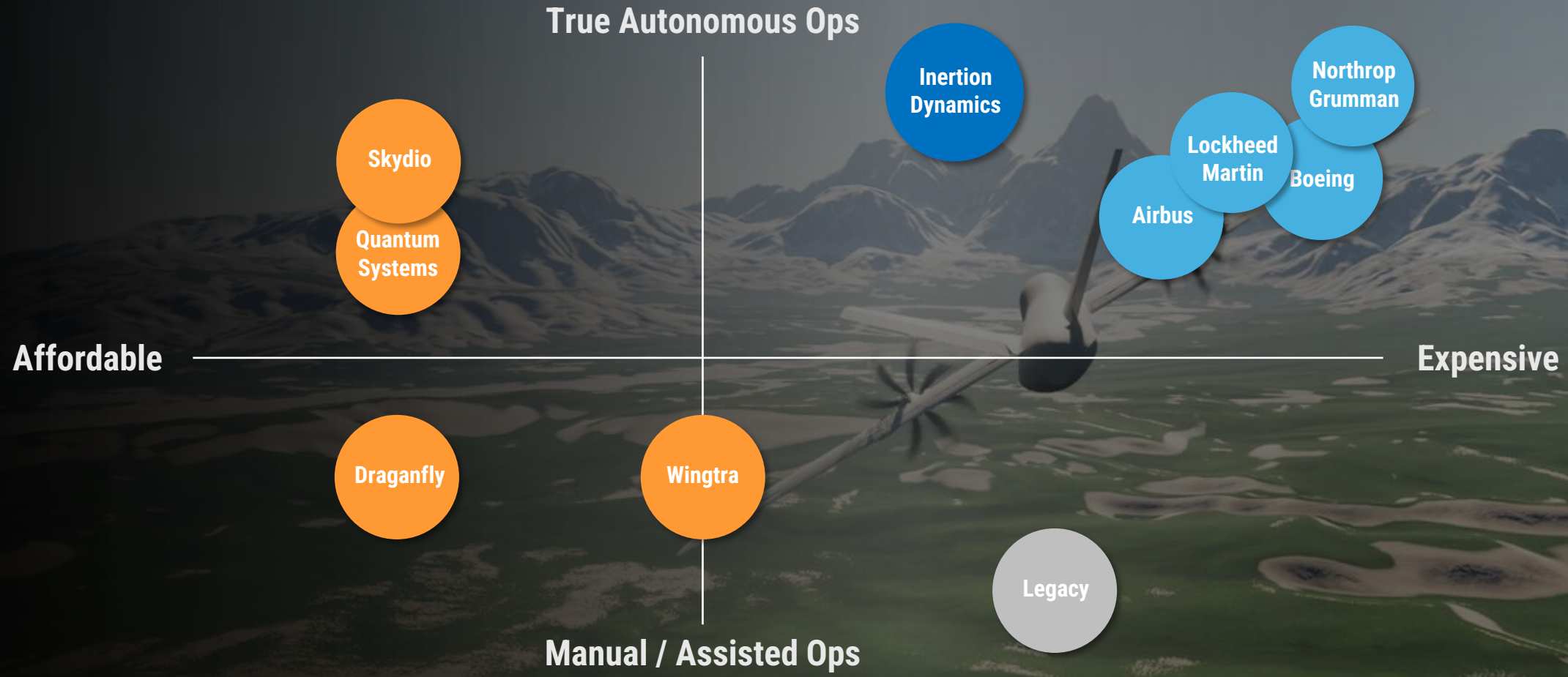
Leading the Shift: From Complex Systems to Seamless Autonomy.

Competitive Landscape



Us *Aerospace Giants* *VTOL Drone Startups & Mid-Market Companies* *Outlier Group*

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Built by engineers. Backed by execution.

Team & Leadership

Founder & Chief Engineer
Sachith Dickwella

- MSc in Artificial Intelligence
- Specializes in autonomous UAV systems
- Strong foundation in control theory and deep learning
- Experienced in simulation-driven development
- Focused on sovereign aerospace platforms
- Technical lead across airframe, compute, and AI stack
- Builder of scalable, modular architectures
- Mission-focused on regulatory-ready systems

Planned Technical Team (2025–2027)

Role	Focus Area	Target
Flight Systems Engineer	Aerodynamics, control surfaces, actuator tuning	Q1 2026
Simulation Developer (Unreal Engine/Omniverse)	Simulation, digital twin integration	Q2 2026
Simulation Developer (Physics)	Custom flight physics, backend modeling	Q2 2026
AI Research Engineer	flight control, edge model optimization	Q2 – Q3 2026
Embedded AI / Robotics Engineer	Jetson/Orin integration, real-time inference	Q2 2027
Avionics & Payload Engineer	Telemetry, payload interfaces, comm systems	Q3 2027
Regulatory & Testing Lead	BVLOS certification, test campaign oversight	Q4 2027

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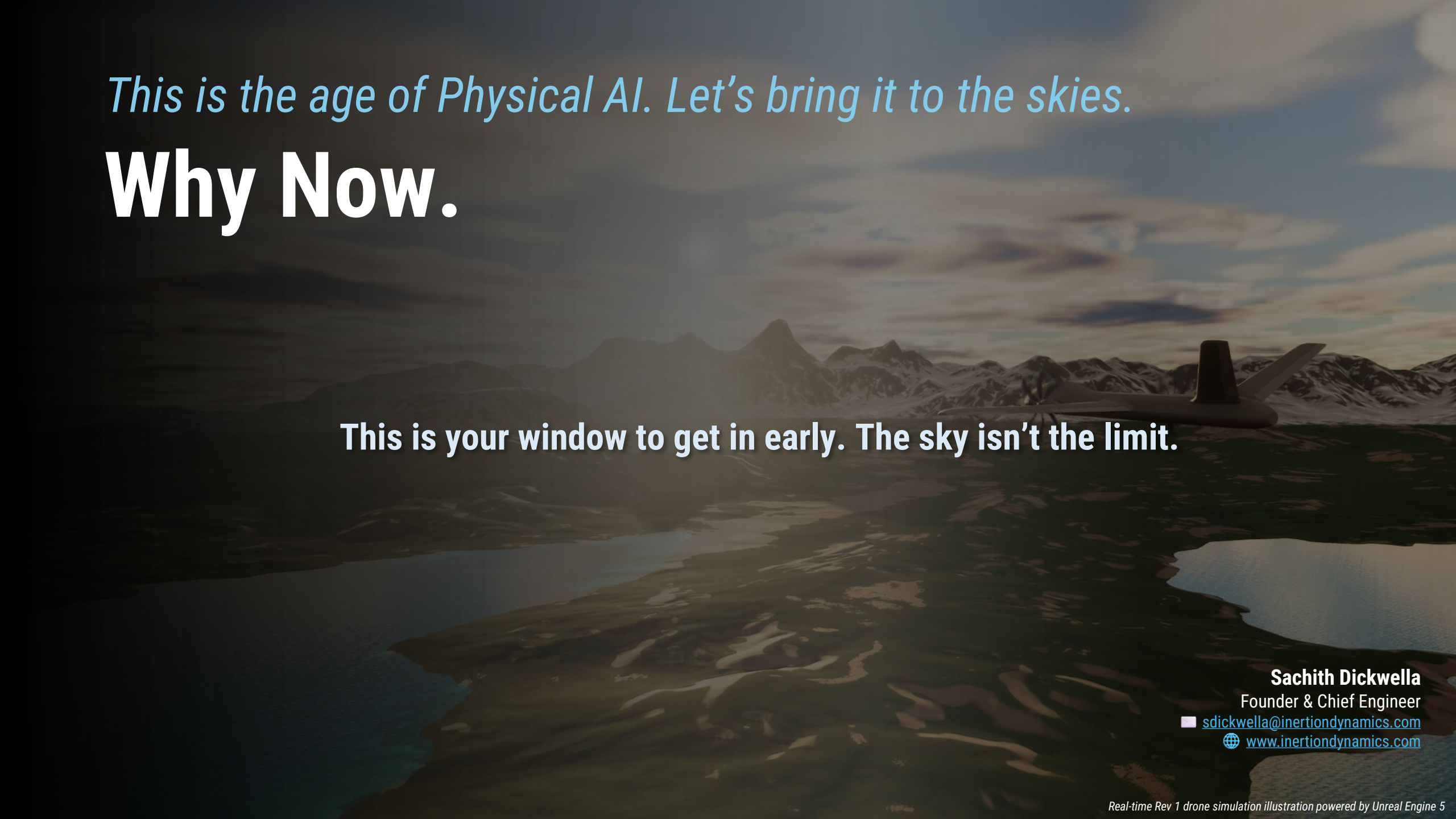
This is the age of Physical AI. Let's bring it to the skies.

Why Now.



This is your window to get in early. The sky isn't the limit.

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