Why They Chose BleedIO

BLEEDIO TECH
Use-Case Driven Value Proposition
March 2026

BleedIO does not try to serve all of IoT. We focus on environments where **network failure has an operational cost** — refineries, ships, fire scenes, industrial floors, contested airspace — and where traditional wireless architectures (Wi-Fi, LoRa, cellular, hub-based) have already proven inadequate. Each customer below chose BleedIO because their existing solution failed. **No competitor offers decentralized, self-healing BLE mesh at sub-$100/node with >99.9% uptime.**

5	4	3+	0	<3s	50
ENTERPRISE CUSTOMERS	VERTICALS PROVEN	MONTHS LIVE (CHEVRON)	FAILURES IN PRODUCTION	SELF-HEAL TIME	FIRE DEPTS TARGET '26

Chevron — Oil & Gas Refinery

LIVE DEPLOYMENT

THEIR PROBLEM

"LoRa does not work in my refinery." Hub-based LoRaWAN couldn't maintain reliable sensor connectivity in a metal-dense, RF-hostile environment. Single points of failure meant mission-critical monitoring went offline. Competitors tried and failed.

WHY BLEEDIO WON

Distributed mesh with **no central hub** — every node relays data independently. Metal structures that block LoRa signals become irrelevant when mesh routes around them. **3+ months live, zero failures, >99.9% uptime.** Proven where LoRaWAN explicitly failed.

LoRaWAN: hub fails → entire network down

BleedIO: any node fails → mesh self-heals in <3 seconds

Lufthansa Industry Solutions — Cruise Ships

CHANNEL PARTNER

THEIR PROBLEM

Cruise ships need IoT for passenger tracking, safety, and cabin control — but **Wi-Fi is unreliable at sea**, cellular doesn't exist mid-ocean, and steel bulkheads block signals. Existing IT requires heavy wiring. No vendor could solve connectivity through steel at scale.

WHY BLEEDIO WON

BLE mesh works through steel structures, operates **without internet dependency**, and deploys with zero new infrastructure. LHIND's Maritime Solutions division chose BleedIO for their converged IT and location-based services platform for cruise lines. **Battery-powered, infrastructure-free.**

Wi-Fi at sea: dead zones, high power, needs wiring

BleedIO: works through steel, no internet, battery-powered

Snap-on — Industrial Tooling

PAID PILOT / OEM

THEIR PROBLEM

Industrial tool tracking across large facilities — garages, warehouses, manufacturing floors. **Wi-Fi doesn't cover the shop floor**, Bluetooth tags lose connectivity behind metal equipment, and cellular trackers are expensive and battery-hungry.

WHY BLEEDIO WON

Snap-on wants to **embed mesh connectivity directly into their products**. BleedIO's vendor-agnostic firmware runs on Snap-on's existing hardware via OEM integration. Every tool becomes a mesh node — **more tools = stronger network**. Inverse scaling, not diminishing returns.

Bluetooth tags: lose signal behind metal equipment

BleedIO: every tool is a relay → full-floor coverage

U.S. Fire Departments — Firefighter Safety

2 SIGNED / 50 TARGET

THEIR PROBLEM

Inside a burning building, **there is no network**. Wi-Fi is destroyed, cellular is blocked, radio gives voice but no data. Commanders can't see where firefighters are, can't monitor vitals, can't coordinate evacuation. **NFPA reports 60+ firefighter line-of-duty deaths annually.**

WHY BLEEDIO WON

Firefighters carry mesh nodes that **create their own network on entry**. No infrastructure required — the network deploys with the team. Real-time location, environmental monitoring (temp, O2, CO2), and accountability. **Portable, instant, infrastructure-free.** Ignite Conference April 2026.

Traditional: no data inside burning buildings

BleedIO: firefighters ARE the network — instant mesh on entry

Oracle Red Bull Racing — Motorsport Operations

ACTIVE ENGAGEMENT

THEIR PROBLEM

Pit operations require **ultra-reliable, low-latency sensor data** in environments with massive RF interference from broadcast equipment, other teams' systems, and venue Wi-Fi. Milliseconds matter — a pit stop is 2-3 seconds.

WHY BLEEDIO FITS

Self-healing mesh operates independently of venue Wi-Fi. **Low power, low latency (~ms), RF-resilient.** BLE frequency hopping across 40 channels avoids interference. No single point of failure during race-critical operations.

Defense & Drone Swarms — GPS-Denied Operations

EMERGING VERTICAL

THE OPPORTUNITY

DoD's Drone Dominance targets **$5K per drone** — but military mesh radios cost **$5K–$30K per node** (Persistent Systems, Silvus). DARPA OFFSET documented **"unreliable communications"** managing 250+ UAVs. The military needs sub-$100 mesh networking for attritable swarms.

WHY NETMESH FITS

Sub-$100/node, <50g, 10–100 mW power. Decentralized — no base station to jam. Self-healing in <3s. Up to 32,767 nodes. GPS-free relative positioning via RSSI trilateration. **$1B+ Replicator/DAWG budget. Navy adding $2.2B for unmanned FY2026.**

Military MANET: $10K–$30K/node, 300g+, ITAR restricted

netMESH: sub-$100/node, <50g, no ITAR, attritable at scale

Our Focus: Where Existing Networks Fail

We don't compete with Wi-Fi for office connectivity or cellular for consumer IoT. We win in environments that are **RF-hostile** (refineries, ships, buildings on fire), **infrastructure-free** (emergency scenes, drone swarms, remote sites), or **mission-critical** (where a hub failure

means operational shutdown). That's our lane — and in that lane, we have no direct competitor at our price point.

RF-hostile environments | **No existing infrastructure** | **Mission-critical uptime** | **Portable / rapid deployment**
Multi-hop through obstacles | **GPS-denied operations** | **Sub-$100 per node**