



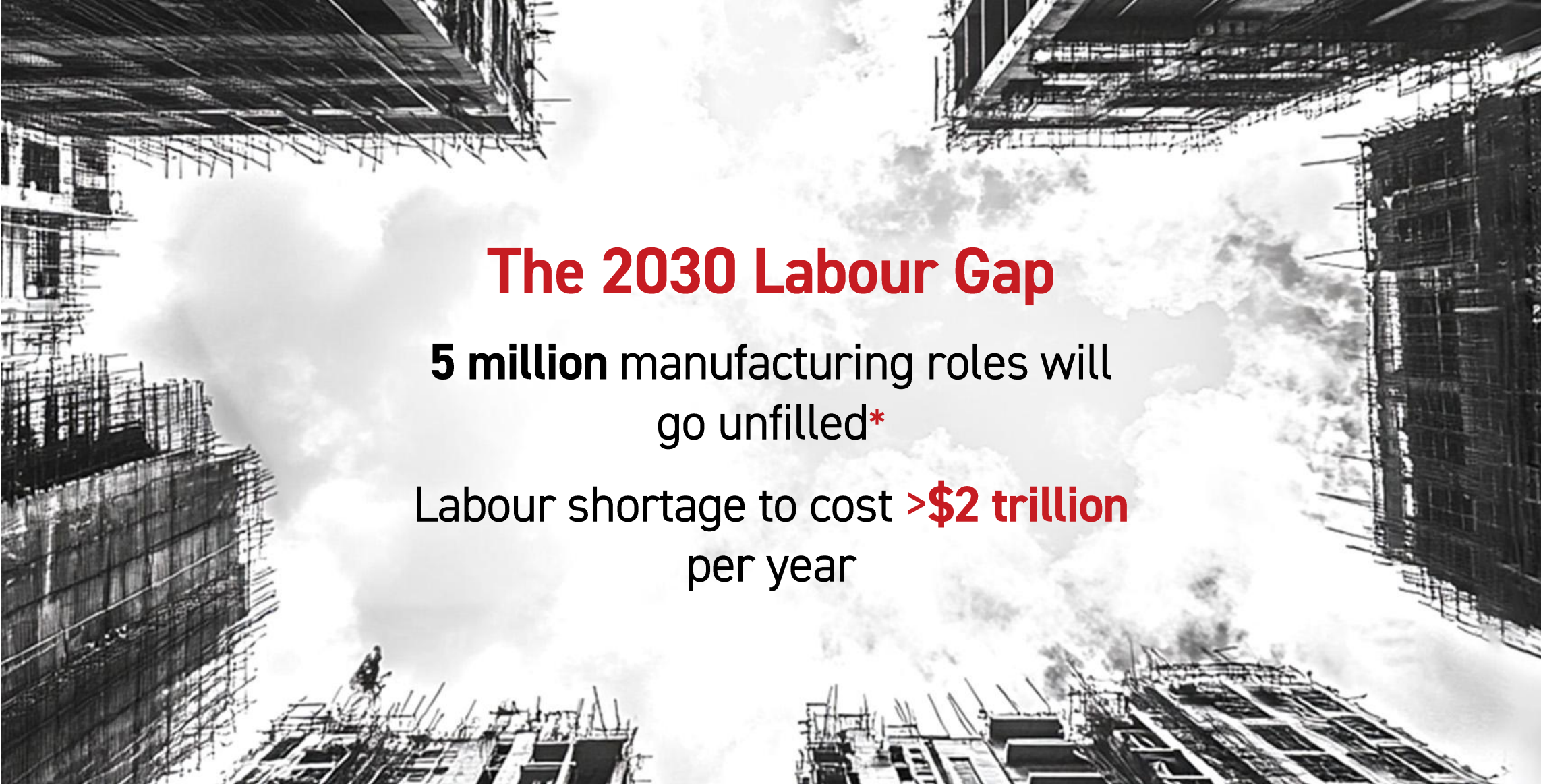
AIRA[™]

Artificial
Intelligence.
Real
Abilities.

On Demand Robot Workforce

Robotic Intelligence Deployed





The 2030 Labour Gap

5 million manufacturing roles will
go unfilled*

Labour shortage to cost **>\$2 trillion**
per year

*(<https://nam.org/2-1-million-manufacturing-jobs-could-go-unfilled-by-2030-13743/>) 2

The opportunity

- AI has mastered language and logic.
- Now it is entering the physical world.
- Physical AI will transform how products are made, moved, and handled — but only if it learns from the 'noisy' real world.



Autonomous robots for a manufacturing environment

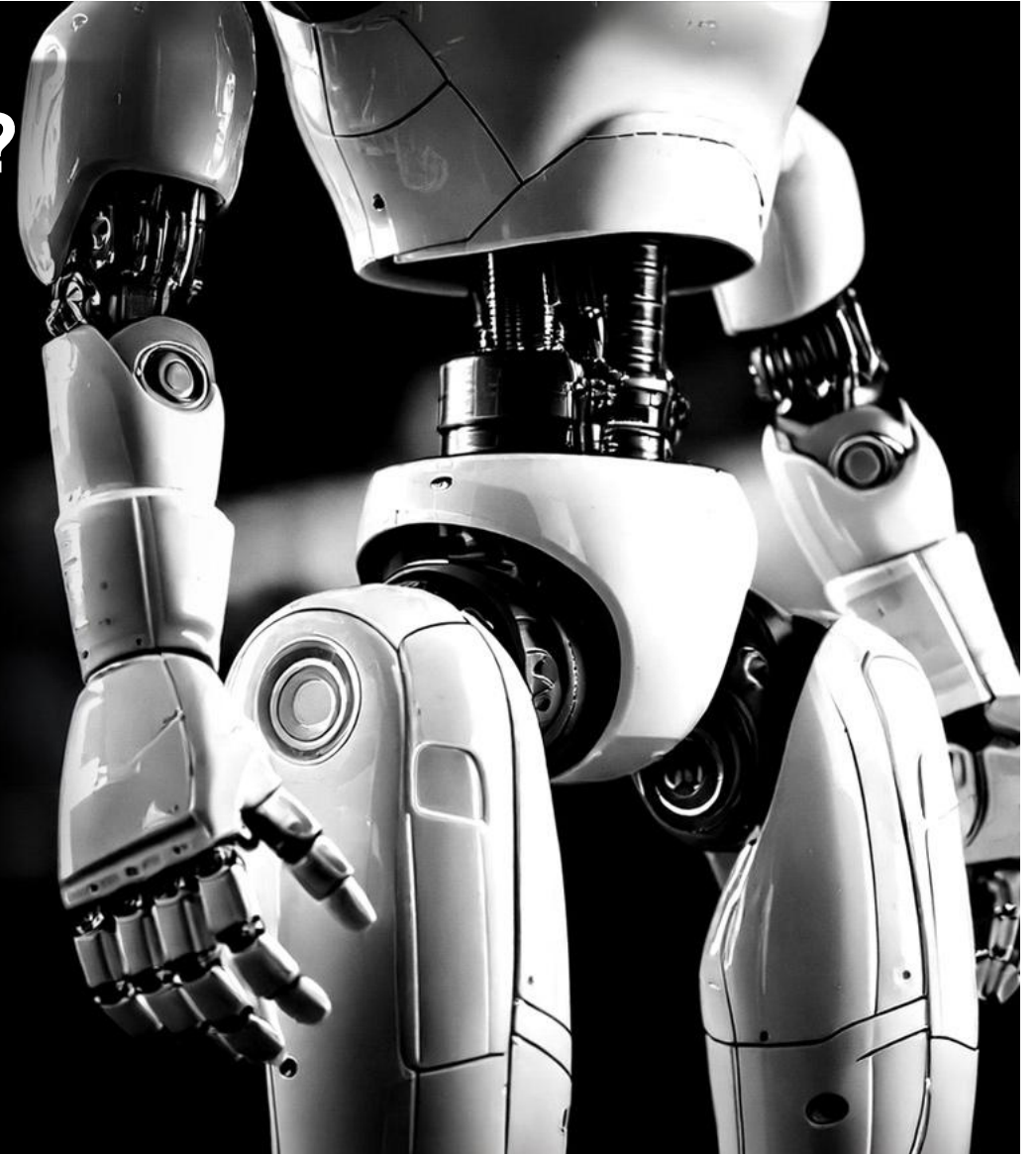
- A universal robot is **not necessarily shaped like a human** — it's a general-purpose robot designed to perform **human equivalent tasks**, often **working alongside humans**.
- It may operate on **wheels, tracks or stable bases** instead of legs.
- Equipped with **arms, end effectors, sensors and Physical AI** to identify and handle tools and components and execute processes.
- Designed to **integrate into existing production lines** without major reconfiguration.
- Capable of **manipulation, inspection and adaption** – similar to human operators.



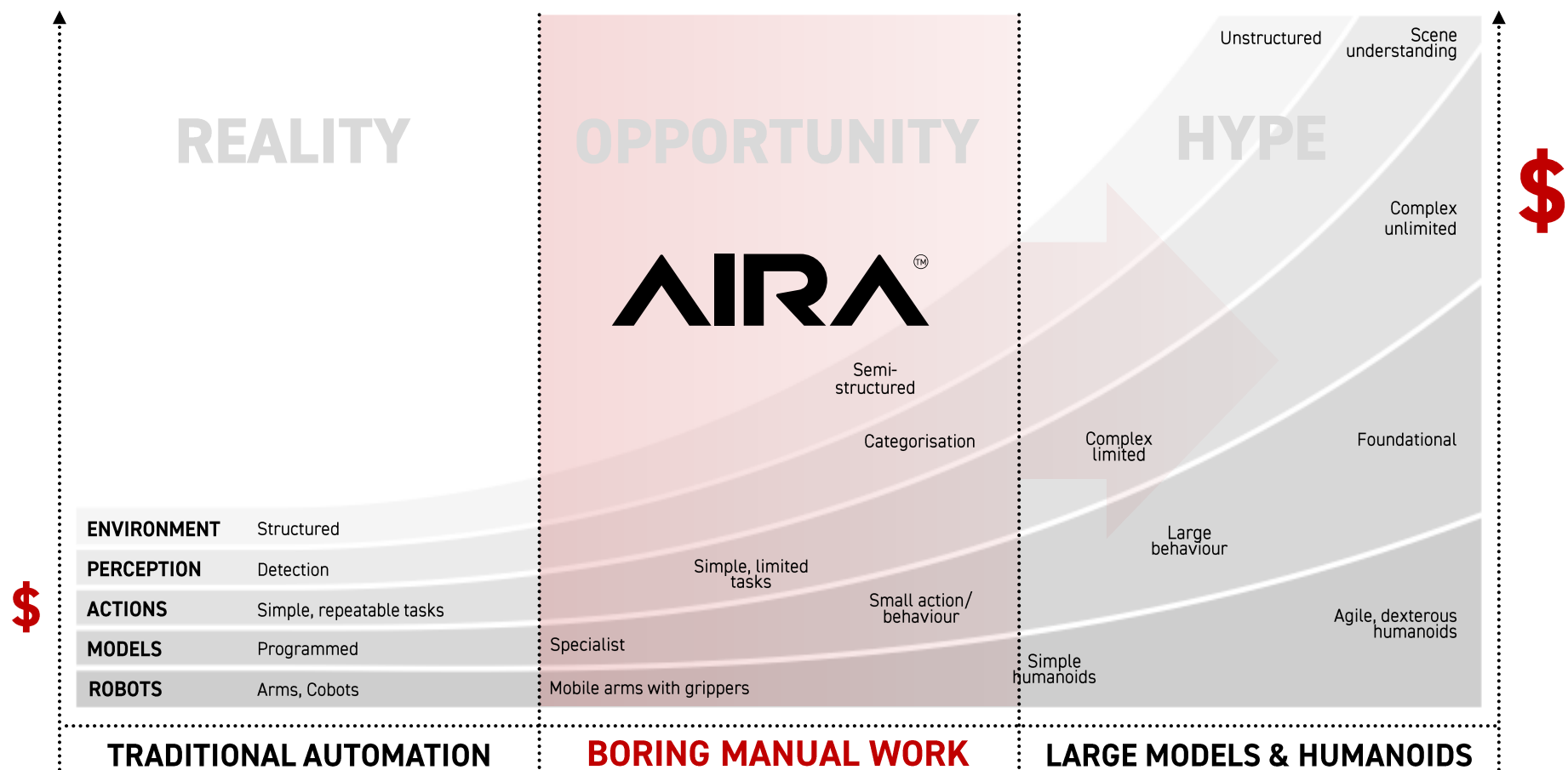
What makes a robot intelligent?

The AI agent is the brain — the software that turns robots into intelligent, autonomous collaborators.

- A robot without a trained AI agent is just a programmable or entirely teleoperated machine.
- It can repeat but it can't perceive, adapt, or improve.
- AIRA's training frameworks develop, train and validate these agents on real-world industrial tasks.
- AIRA enables practical deployment, not just experimentation, with the appropriate robot for each task.
- Real world task data is key, it teaches the brain to deal with real world conditions.



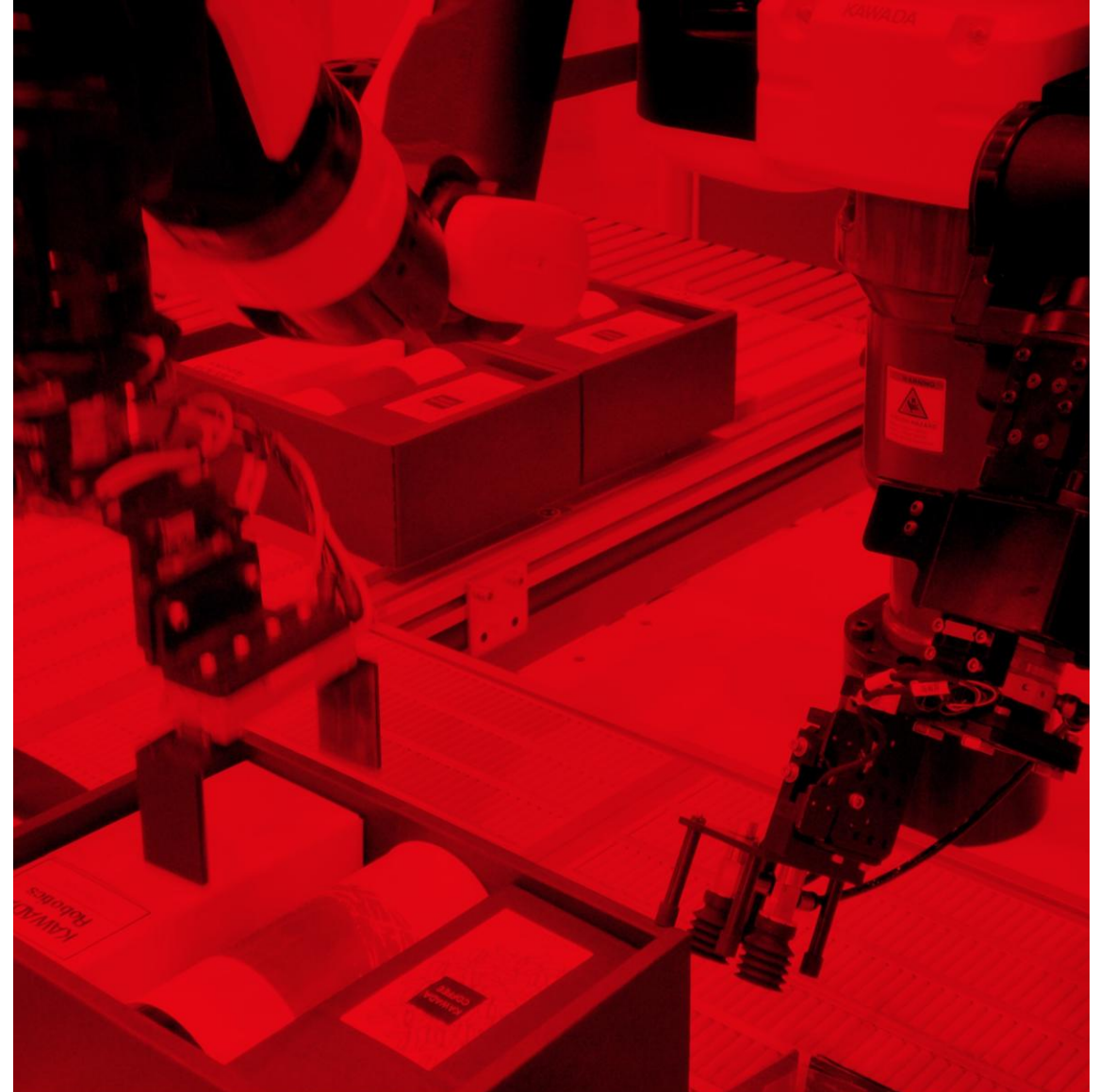
Robots useful today



Target use cases

High-impact use cases where general robots excel.

- Various Pick and Place Tasks.
- Assembly using fixturing, jigs and tooling
- Final assembly with variable tasks.
 - Machine tending (multi-machine, multi-shift).
 - Intralogistics (moving parts, components).
 - Visual quality inspection support.
 - Supporting roles in hybrid cells combined with human operators.



Why manufacturing environments are the ideal starting point for deployment of Physical AI

- Structured environments: known layouts, repeatable tasks.
- Defined tolerances, fixtures, and sequences = **easier learning and validation.**
- Digital infrastructure already in place (CAD, sensors, PLCs, MES, etc.).
- Predictable workflows reduce edge-case or unpredictable complexity.
- Unlike domestic spaces, factories are designed for structured behaviour — and AI thrives on structure.
- General robots (and later humanoids) can augment workers without the need to redesign the production environment.

Physical AI will land in factories way before it ever truly works in homes.

AIRA puts Robots to Work



We solve manual work with **Physical AI**

We source, train & deploy Robots to **get the job done**

We have 10+ years' experience in training and deploying Robots in manufacturing and construction

Hiring Robots from AIRA

- **Cost:** Reduce your labour costs, today
- **Scale:** Multiple shifts, no extra workers
- **Flexibility:** Vary output on demand
- **Focus** on product and production, not HR
- **Retain skills,** no need for repeat training
- **Improve** safety, variety & job satisfaction
- **Reduce automation costs** by up to 40%



The Strategic Consequence of GPR Deployment

When labour availability is no longer the constraint, the economics and design logic of manufacturing change.

- Production can run across 3 shifts with minimal incremental cost
- Lines can be smaller because output is delivered through runtime, not peak hourly rate
- Automation becomes simpler as GPRs absorb handling, inspection, and support tasks
- Traditional error-proofing for manual operations can be reduced
- Factory footprints can shrink as line length and support space reduce
- Welfare, parking, and people-related overheads become less significant
- Site location becomes less dependent on dense labour markets
- Output becomes more repeatable through trained robotic execution
- Capacity expansion becomes faster and more flexible
- The factory becomes a smaller, smarter, more scalable asset

GPRs do not just lower labour cost — they enable a fundamentally better factory model.

What you get

AIRA delivers full-stack robotic automation — tailored to your environment.

- Pre-trained general robots ready to work.
- Integration into your workflows, HMI, and logic.
- On-site commissioning
- Continuous remote monitoring and Tele operational support.
- Adaptive systems that perceive, learn and improve.
- Full safety validation.
- Cybersafe seamless integration with existing IT infrastructure



Why AIRA ?

We're not a robot vendor — we're your AI deployment partner.

- Built from the ground up for Physical AI.
- Hardware agnostic – we choose the right robot hardware for the job (reach, accuracy, uptime, payload, dexterity)
- Deep manufacturing and robotics domain knowledge.
 - AIRA's Physical AI training framework is based on 10+ years of training and deploying robots into the real world.
- Proven data-driven training methodologies.
- Real-world testbeds and simulation expertise.
- We aim to reduce labour rates for each task.
- Designed for safe, scalable deployment.



AIRA team & mission

- Robotics, AI, and manufacturing experts.
- Building Physical AI infrastructure.
- Backed by automation leaders.
- Your key partner that provides real-world deployable AI Robotics.

The Team



CEO: Tom Lipinski, 3rd time founder (built & deployed robots on 5,000+ construction jobs at Q-Bot, developed products and built manufacturing automation at Ventive). Tom won 20+ awards and a **scholarship from Cambridge University**. <https://www.linkedin.com/in/tom-lipinski-854b0130/>



CPO: Maddy Clifford, 15+ years' experience in Product Owner roles in Technology Industry, including 8 years as Product Lead at Q-Bot. Maddy has two MSc degrees (Physics) and won a **scholarship from Imperial College London**. <https://www.linkedin.com/in/maddy-clifford-9a443878/>



CCO (UK and ROW): Nick Field has **20+ years' experience in manufacturing automation** and is an expert in deploying robots & cobots in industrial settings. Nick holds a Manufacturing Engineering degree from Wolverhampton University. <https://www.linkedin.com/in/nick-field09/>



CFO: Nick Simmons, exited founder, a strategic CFO/COO with over 25 years of experience across VC-backed scale-ups, FTSE 100 groups, and international corporates. Nick is fluent in French and German with exposure across UK, EU, and the US. <https://www.linkedin.com/in/nksimmons/>



CCO (US): Ali Seyedahmadian, 10+ years' experience in advanced manufacturing technologies & robotics, working with leading construction firms and research institutions. Ali holds a Master of Architecture from the University of Michigan. <https://www.linkedin.com/in/ali-seyedahmadian-04818982/>



Head of Data: (Dr) Ashley Napier, expert in Robotic Perception, AI & ML, with several publications and patents in **robotics and autonomous systems**. He built a 30TB dataset for Q-Bot robot training and holds a **PhD in Robotics from Oxford University**. <https://www.linkedin.com/in/ashleyanapier/>

Typical Business Model

Y1 monthly breakdown per Robot deployed

Rollout (10+ Robots)	1 Shift	2 Shifts	3 Shifts
Customer			
Monthly Raas/Robot	£2,895	£5,390	£7,385
Monthly BAU/Human	£3,420	£6,840	£10,260
Customer Savings %	15%	20%	28%

Y3-5 monthly breakdown per Robot deployed

Rollout (100+ Robots)	1 Shift	2 Shifts	3 Shifts
Customer			
Monthly Raas/Robot	£2,600	£4,400	£5,500
Monthly BAU/Human	£3,420	£6,840	£10,260
Customer Savings %	24%	35%	46%

The Project Model

- Onboarding fee per task of £10,000 - £45,000 per task (one off cost, up front)
- Typically, payback within months not years
- Robot as a Service (RaaS) model (1,2 or 3 shifts per day)
- RaaS cost applies from deployment onwards
- Contracts Typically 24-48 months +
- RaaS cost includes everything. - You pay and forget.
 - Hire of the Robot
 - Remote Support including Teleoperation
 - Continuous Learning
 - Warranty
 - Spares
 - On-site support if and when required

“The ChatGPT moment for robotics is coming”

Jensen Huang, CEO, Nvidia, Jan 2025

- **Physical AI** – AI deployed into real-world tasks via robots – enabled by training on 3-dimensional real-world data, through millions of physics-based simulations.
- Those who seize this opportunity today will emerge as the leaders of newly formed industries, empowered by AI.
- But how can you get involved?

2012 ALEXNET



Perception AI

Speech recognition
Deep recsys
Medical imaging

Generative AI

Digital marketing
Content creation

Agentic AI

Coding assistant
Customer service
Patient care

Physical AI

Self-driving cars
General robotics





**The current manufacturing
model is unsustainable**

**AIRA unlocks change by
decoupling output from
labour**

AIRA unlocks the true value of robotics with productive deployment in manufacturing



Let's define your first robotic deployment



We're ready to bring Physical AI into your factory.

- Start with a scoped use case.
- Try before you scale.
- Partner with AIRA to shape and empower your future workforce.
- Roll out quickly across your manufacturing environments