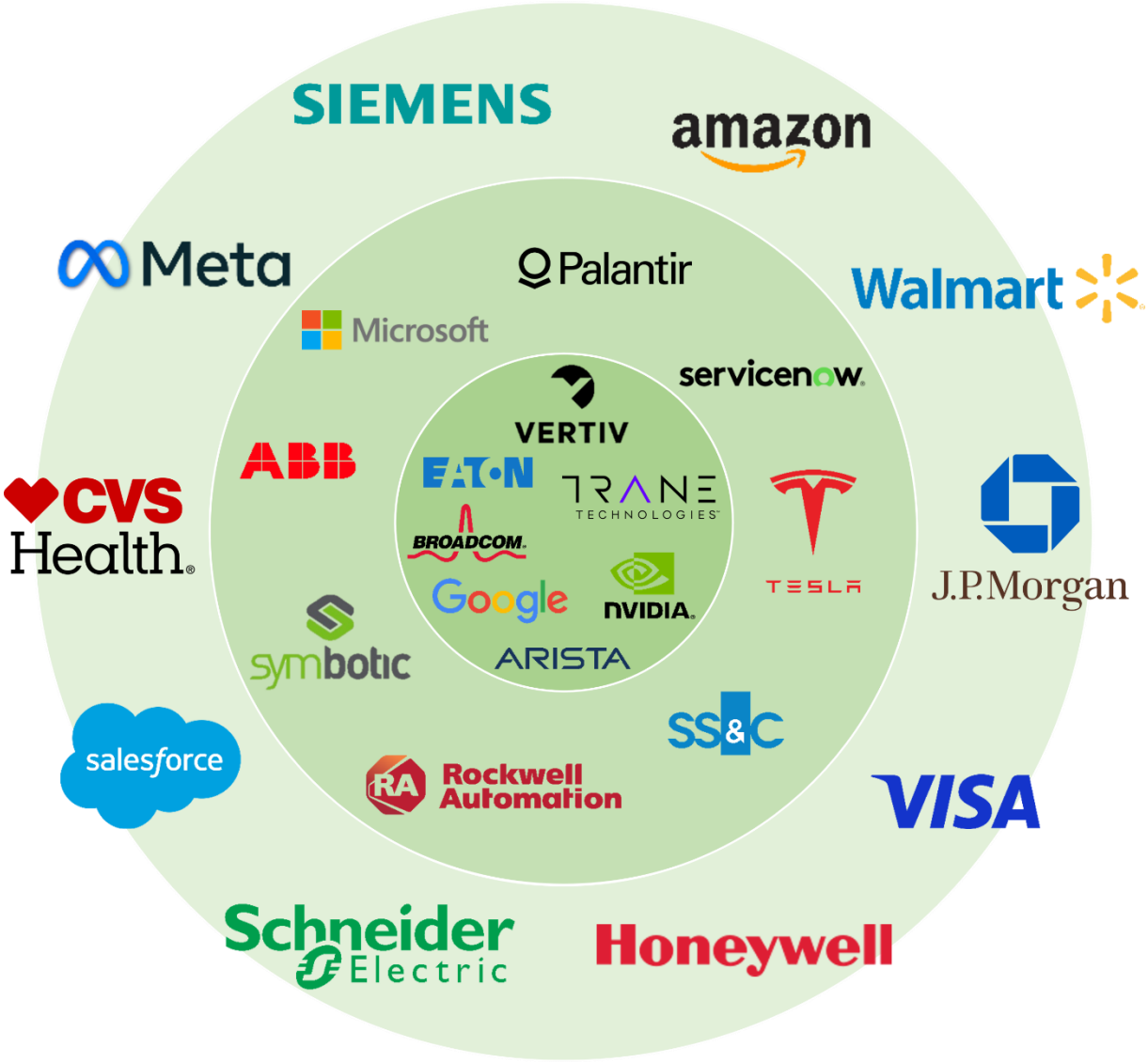
Where AI Delivers Operating Leverage Today: From hype to hard numbers across core industries

Maximizing Asset Efficiency in Heavy Industries: In manufacturing, energy, and transportation, AI drives leverage by optimizing physical assets and minimizing downtime. Predictive maintenance is a key driver, forecast to reach nearly $98 billion by 2033, allowing companies like Siemens to improve yield and Intuitive Surgical to maintain strong margins. Similarly, logistics leaders like UPS use AI route optimization to save over 100 million miles annually, while energy utilities deploy AI to balance grid loads and defer expensive infrastructure upgrades.

Automating High-Stakes Services: Healthcare and finance are using AI to automate complex workflows and scale decision-making without increasing headcount. Healthcare providers are seeing a 3.2x ROI by using tools like Nuance's ambient AI (Dragon Ambient eXperience (DAX) Copilot) to cut documentation time by ~50%. In finance, AI scales risk management; Visa blocks $40 billion in fraud annually, while JPMorgan reports 30–40% ROI growth from AI initiatives that automate tasks ranging from trading to compliance.



Optimizing Commerce and Consumer Demand: Retailers leverage AI to protect thin margins through precise demand forecasting, pricing, and inventory management. Walmart credits AI with saving ~30% in logistics costs and driving sales lifts via generative merchandising, while Amazon's personalization engines are estimated to boost sales by 10–30%. The sector is rapidly adopting these tools to prevent stockouts and maximize marketing ROI, with the market expected to grow 5x by 2030.

Securing and Managing Digital Infrastructure: As digital complexity outpaces human capacity, AI is becoming essential for telecom, cloud, and cybersecurity operations. Telecom giants like Nokia use AIOps to cut radio network power use by up to 50%, while cloud providers rely on AI to prevent costly outages. In cybersecurity, AI allows firms like CrowdStrike to automate threat detection across trillions of events, transforming security from a manual bottleneck into a scalable, automated defense.

*This presentation is for informational purposes only

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Where AI Is Expected to Deliver Operating Leverage Tomorrow: Emerging use cases moving from pilots to P&L

Revolutionizing Labor with General-Purpose Robotics: The manufacturing sector is shifting from rigid, single-task machines to versatile humanoid robots powered by vision-language-action models. Unlike traditional automation, these robots (like Tesla's Optimus) can learn new tasks instantly, promising to decouple output from labor costs. With the market projected to reach $38 billion by 2035, companies like NVIDIA are accelerating adoption by providing the simulation platforms needed to train these robots for real-world deployment.

Automating Unstructured Field Operations: AI is extending operating leverage into unstructured environments like agriculture and construction, where automation was previously difficult. In farming, John Deere's "See & Spray" reduces herbicide use by ~66% through precise computer vision, while autonomous tractors address labor shortages. Similarly, the construction industry is using layout robots to bridge a $1.6 trillion productivity gap, operating 10x faster than human crews to reduce rework and keep projects on track.

Compressing the Scientific Discovery Cycle: In pharmaceuticals and materials science, AI is drastically shortening the "design-build-test" cycle. By simulating millions of interactions *in silico*, generative models allow companies to identify viable candidates before physical testing begins. Leaders like Recursion Pharmaceuticals and Schrödinger are leveraging these "self-driving labs" to increase innovation output without a corresponding rise in R&D headcount or failure rates.

Orchestrating Decentralized Infrastructure: As energy and logistics systems become more complex, AI is becoming the essential orchestration layer. Virtual Power Plants (VPPs) are using AI to aggregate distributed assets like EVs and home batteries to balance the grid; a market expected to hit $20 billion by 2030. In enterprise operations, AI agents are evolving to autonomously execute complex workflows—such as supply chain routing—allowing companies to scale revenue without linear cost growth.

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