CYNGN

Avoids Obstacles

STOCKCHASER

Autonomous vehicle solutions
for industrial and commercial enterprises

Cautionary Note on Forward-looking Statements

This presentation of Cyngn, Inc. ("the Company") contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act and other securities law.

Words such as **"expects," "intends," "plans," "believes," "seeks," "estimates,"** and similar expressions or variations of such words are intended to identify forward-looking statements. For example, the Company is using forward-looking statements when it discusses its vision, the potential of its product, its strategy, market potential for its product(s), its paradigm, commercialization of its product(s), the benefits and use of its product(s), its product roadmap and anticipated adoption of its solutions by customers, anticipated pricing, the development of its solutions and product(s) in the manner and schedule anticipated by management, its product launches and corresponding revenue generation, its ability to attract and retain customers, competition and its future growth.

Forward-looking statements are not historical facts, and are based upon management's current expectations, beliefs and projections, many of which, by their nature, are inherently uncertain.

There can be no assurance that management's expectations, beliefs and projections will be achieved, and actual results may differ materially from what is expressed or indicated by the forward-looking statements. Forward-looking statements are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in the forward-looking statements. For a more detailed description of the risks and uncertainties affecting the Company, reference is made to the Company's reports filed from time to time with the Securities and Exchange Commission (the "SEC"), including, but not limited to, the Company's Annual Report on Form 10-K for the year ended December 31, 2023, and any subsequent quarterly filings on Form 10-Q.

Forward-looking statements speak only as of the date the statements are made. The Company undertakes no obligation to update forward-looking statements to reflect actual results, subsequent events or circumstances, changes in assumptions or changes in other factors affecting forward-looking information except to the extent required by applicable securities laws.

Cyngn Transforms Material Handling Vehicles Into Autonomous Fleets

Scalable, cost effective solutions for automating tuggers, forklifts, stock chasers and many more.

Supports indoor and outdoor facilities across manufacturing, logistics, automotive, defense and other major industries.

Delivers humanlike operation, through a continuously evolving AI platform.

Addressing a $268B+ market, our innovative approach gives customers solutions to labor shortages, safety enhancement, and rising costs.

Recent Milestones

Cyngn's Next-Gen DriveMod Kit Will Harness Nvidia AI Computers,
Jan 25, 2024

- This transformation will encompass the entire DriveMod lineup.

Cyngn Completes Initial DriveMod Tugger Deployment with Rivian,
March 19, 2024

- The deployment was at Rivian's Normal, IL manufacturing facility.

Cyngn Releases Hands-Off Automatic Unhitching Capabilities, Feb 07, 2024

- This new feature enables organizations to automate the entire tugging workflow.

Cyngn Receives Notice of Allowance for 20th U.S. Patent,
April 16, 2024

- In 2023, we were granted 16 U.S. patents.

RobotLAB Orders Initial Fleet of DriveMod Tuggers, March 14, 2024

- This collaboration expands the Cyngn Dealer Network.

Cyngn Joins John Deere Supply Base, April 23, 2024

- Cyngn will supply its DriveMod Tuggers to their operation in Dubuque, Iowa.

The Real Problem:
Manual Labor Comes at a Very High Cost

1. Bureau of Labor Statistics: "Employer Costs For Employee Compensation – June 2021"
2. Statista: "Number of Warehouses in U.S."
3. MHI Deloitte industry report
4. National Safety Council: "Work Injury Costs - Injury Facts"
5. Bureau of Labor Statistics: "Warehousing and Storage: NAICS 493"

Ever increasing cost of labor

- 900,000 material handlers, stock pickers, and industrial vehicle drivers in the United States.[1]

- Estimated $140 billion spent on human labor across 20,000 warehouses in the US alone.[2]

Widespread labor shortages[3]

- Over 50% of supply chain & manufacturing leaders rated hiring and employee retention as their biggest challenge.

- 73% said it takes 30+ days to fill open positions.

- By 2030, the impact of unfilled manufacturing jobs could cost the US economy more than $1 trillion.

Losses due to accidents

- An industrial vehicle accident, on average, costs $42,000, not including cost due to lost production.[4]

- The average American warehouse experiences 9 accidents per year.[5]

- The total cost of preventable workplace injuries in the US in 2019 was $171 billion.[4]

$140 Billion   **$1 Trillion**   **$171 Billion**

Cyngn's Opportunity Today

$268+ BILLION[1]

annual driver labor costs for material handling vehicles

- 3,751,546 vehicles x $47,674/year x 1.5 = $268B
- WITS- World Industrial Truck Shipments data- 2022
- Bureau of Labor Statistics, Indeed,com; Salaryexpert.

3,751,546
Relevant material handling industrial vehicle units based on Class 1-3 EV truck shipments assuming a three-year useful life.[2]
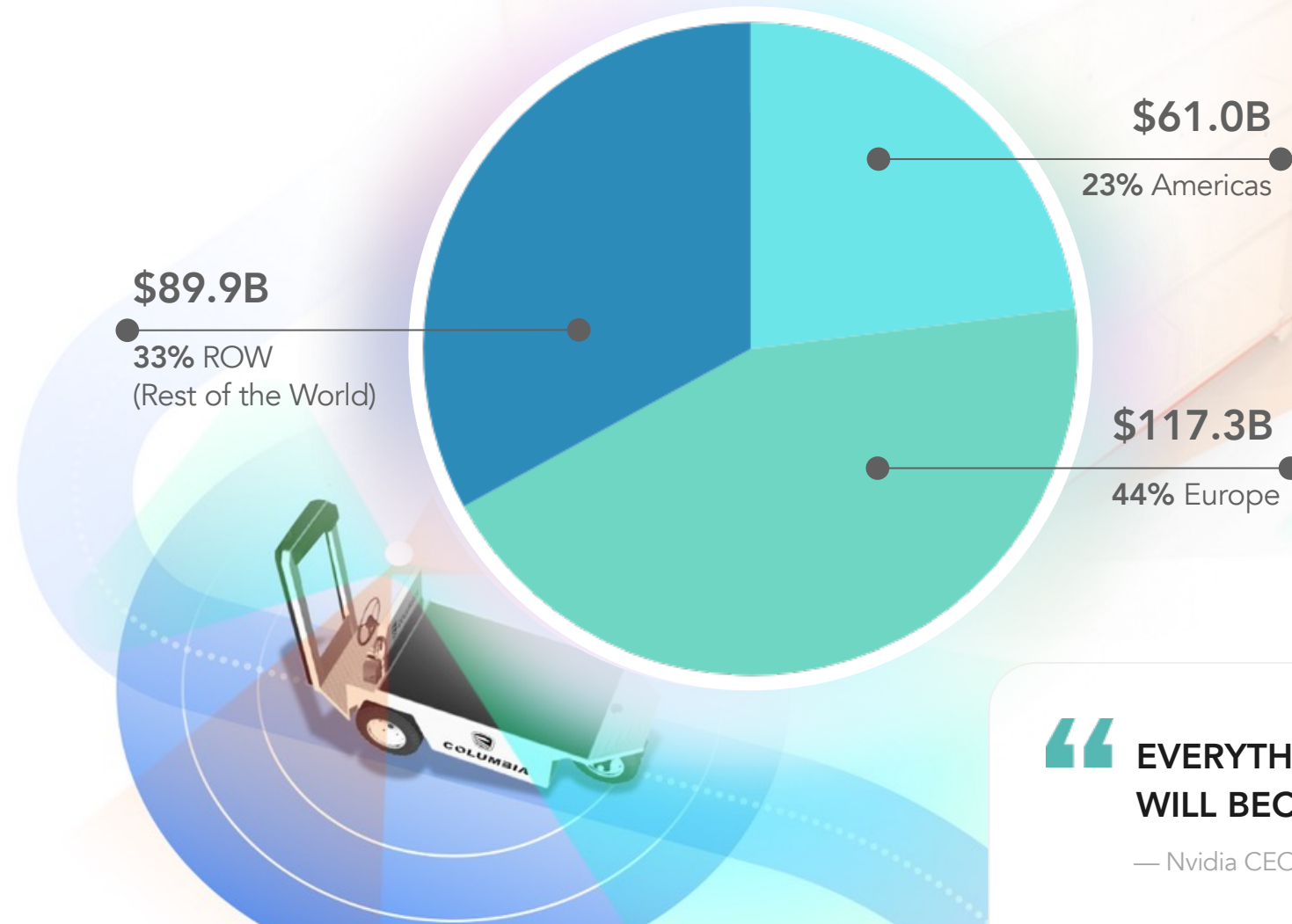
$47,674
Global weighted average total annual labor costs for transportation and material moving employees.

1.5x
Work shift operations factor.

$61.0B
23% Americas

$89.9B
33% ROW
(Rest of the World)

$117.3B
44% Europe

EVERYTHING THAT MOVES WILL BECOME AUTONOMOUS

— Nvidia CEO, Jensen Huang

Wide Adoption of Autonomous Vehicles Starts with Industrial Applications

Compared to open road uses (robotaxi & trucking), industrial applications involve:

More structured operation

Less complex routes

Lower speed requirements

Lower regulatory hurdles

More commonality from site to site

Predictable workflows

Controlled interactions with trained humans

Cyngn's AI Platform: The Enterprise Autonomy Suite (EAS)

Customer-Facing Products

Internal Toolkit

DriveMod

Full-Stack Autonomous Driving Software System

Cyngn Insight

Intelligent Control Center

- Fleet management system
- Human-machine interfaces: web, mobile, on-vehicle
- Operational analytics
- Teleoperation
- Real-time diagnostics

Cyngn Evolve

Data Optimization Tools

- Data pipeline
- Performance analytics
- Simulation
- Machine learning infrastructure

COLUMBIA

MOTREC®

BYD

EAS is Offered as a Subscription License per Vehicle

Pricing Factors

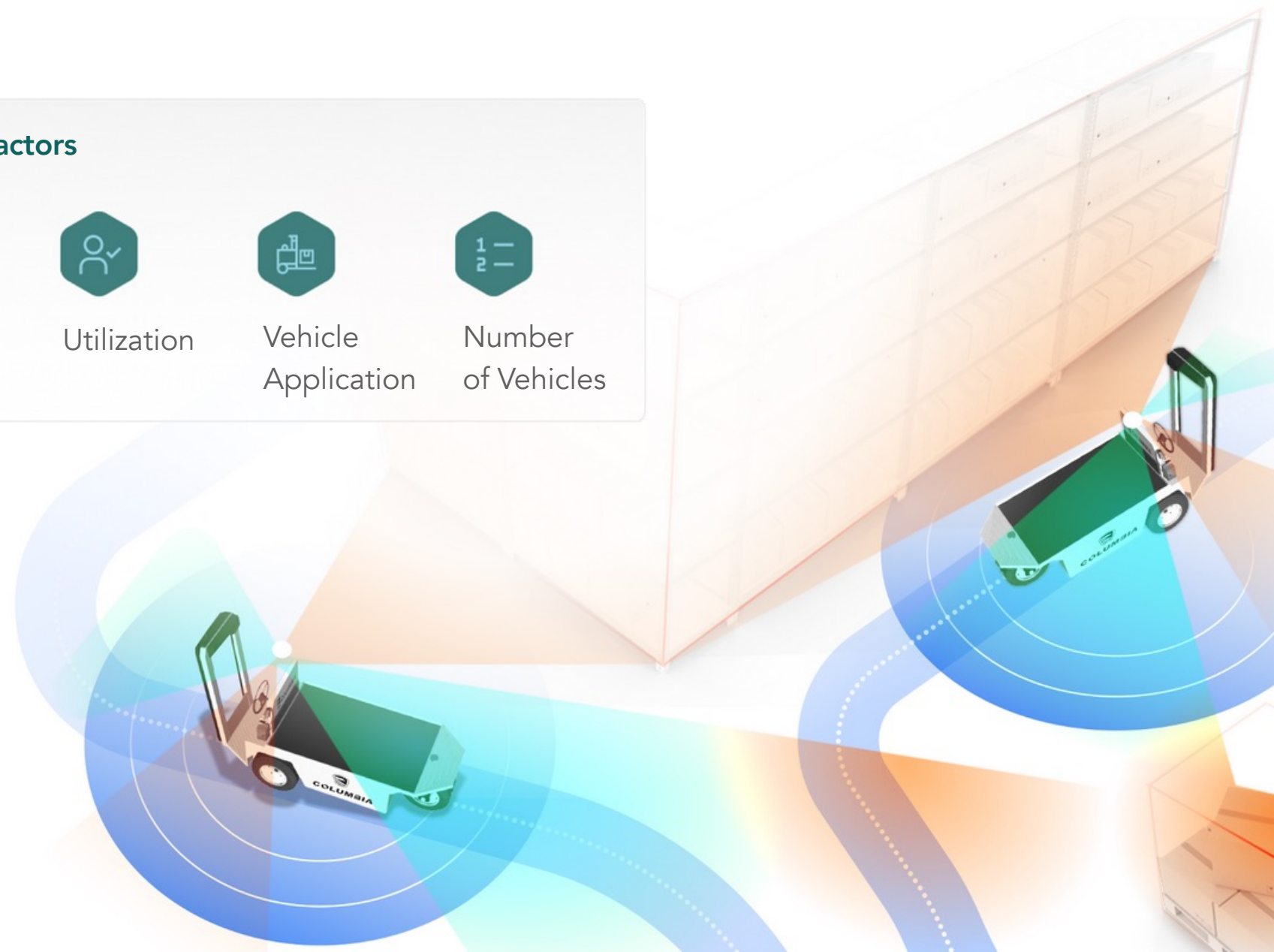Target Vehicle

Utilization

Vehicle Application

Number of Vehicles

Priced based on cost of a single driver.

Customers benefit from cost savings, productivity gains and increased safety.

AI-Powered DriveMod Tugger

Cyngn has partnered with Motrec International, a globally recognized manufacturer of industrial electric vehicles, to integrate DriveMod into their line of electric tuggers.

The partnership expands DriveMod to another vehicle type, offering more customer choice and demonstrating the flexibility of Cyngn's EAS software solution.

Recent Announcements:

- We have completed an initial DriveMod Tugger deployment with Rivian at their Normal, IL manufacturing facility.

- We have been chosen to supply our DriveMod Tuggers for industrial automation to John Deere's operation in Dubuque, Iowa.
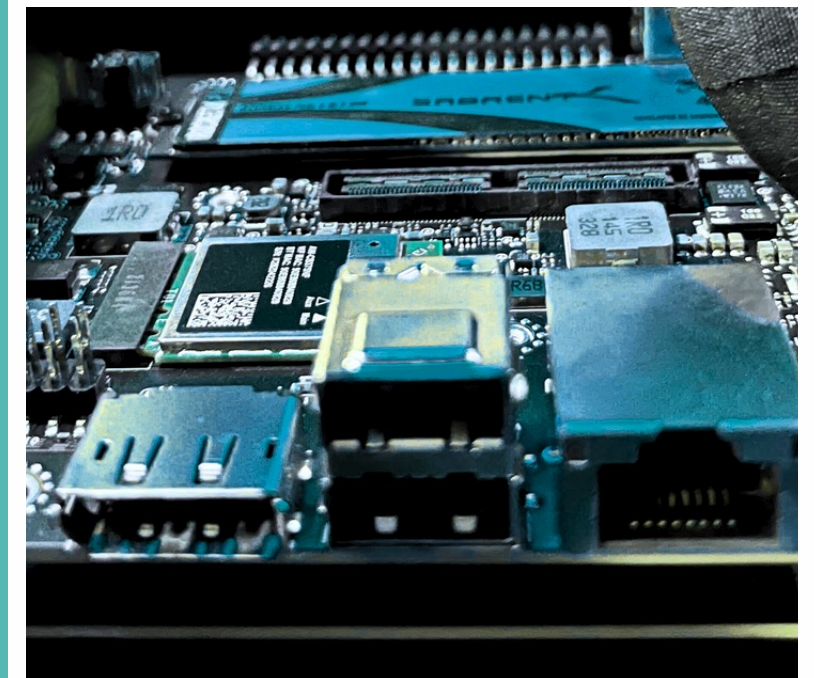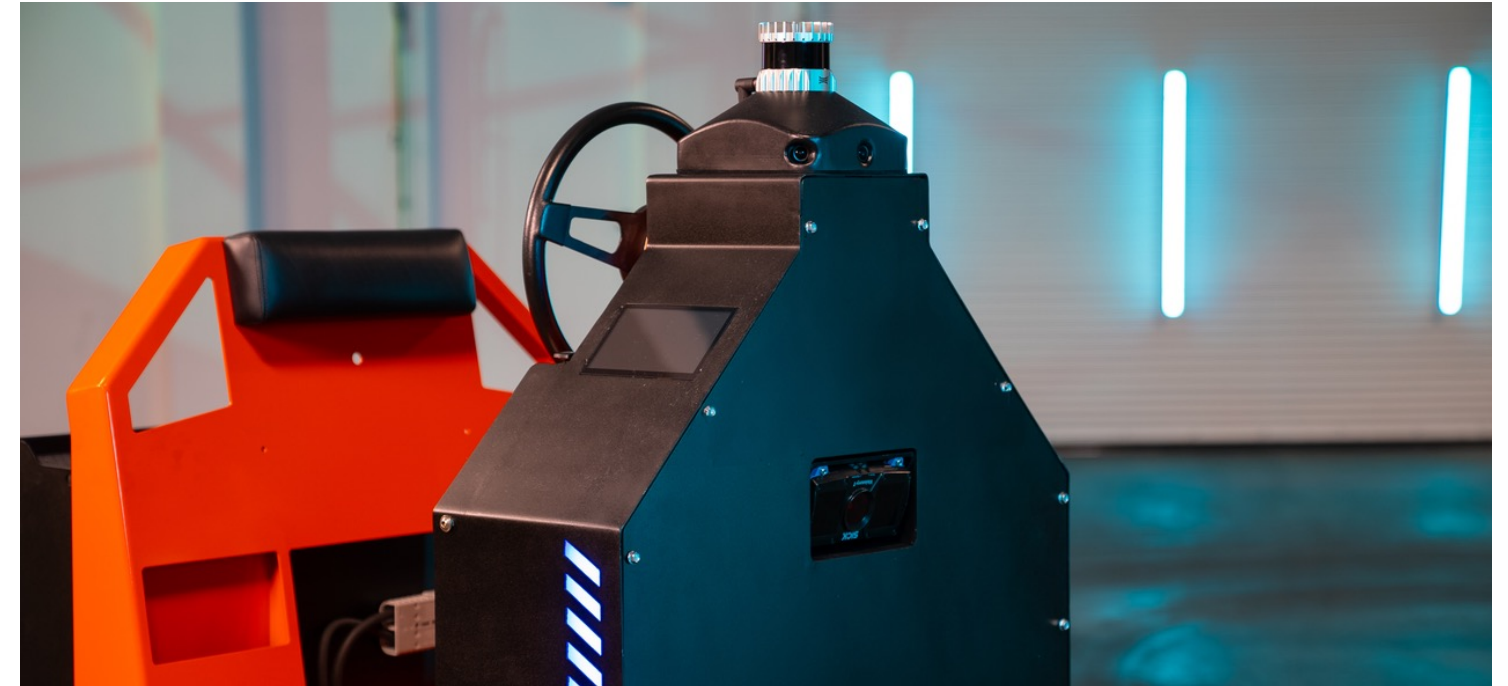
DriveMod Kit Next Generation

Cyngn's next-generation DriveMod Kit will transition from using Intel microprocessors to NVIDIA AI computers.

This transformation will include the entire DriveMod lineup: the DriveMod Tugger, the DriveMod Stockchaser, and the DriveMod Forklift.

It will enhance both the efficiency and capability of our vehicles while also lowering costs by reducing the number of components in our DriveMod system.

AI-Powered DriveMod Forklift

Cyngn has partnered with BYD, a renowned global EV brand, to integrate DriveMod into their fleet of lift trucks.

Cyngn, Arauco and BYD have been developing the autonomous forklift since late 2022. It is expected to be commercially available in 2024.

- OEM partnership with BYD offers industry-leading load capacity of 10,000 lbs. and to a height of 14 ft.

- AV capabilities can be scaled to forklifts of all sizes.

- Pallet pocket detection works with pallets of any size.

Arauco Pre-Orders 100 Electric DriveMod Forklifts

The order from Arauco, an established wood products supplier with over $7 billion in revenue in 2022, refers to less than 10% of Arauco's existing forklift fleet but already represents up to $5 million in annual recurring EAS revenues once deployed.

The 100 DriveMod Forklift pre-order follows a successfully executed paid project in which Cyngn developed new autonomous forklift capabilities to address Arauco's application requirements that were previously unmet by other industrial automation solutions.

Start of delivery is aimed for late 2024.

Case Study: Increased Productivity for Global Logistics and Fulfillment (GL&F)

Deployment of the DriveMod Stockchaser at a Las Vegas 3PL facility yielded big results

64%

A 64% reduction in human labor costs when using Cyngn's Autonomous Stockchaser vs. using a forklift.

33%

A 33% increase in efficiency when using Cyngn's Autonomous Stockchaser vs. using an electric pallet jack.

Compound Value of EAS Adoption

Our vehicle-agnostic solution stacks more value for customers with each DriveMod vehicle, compounding benefits as EAS expands across vehicles and sites.

- Labor cost savings
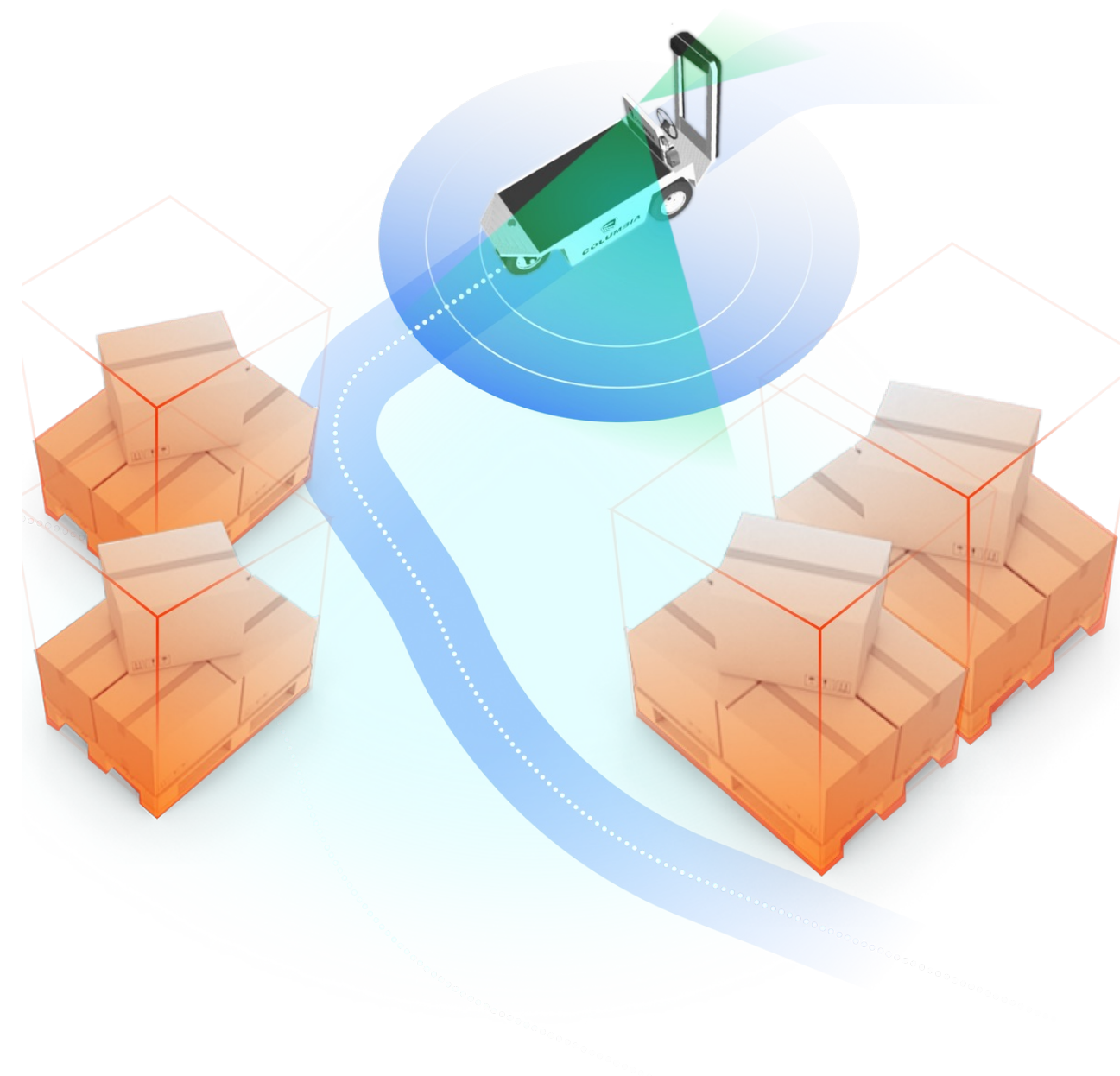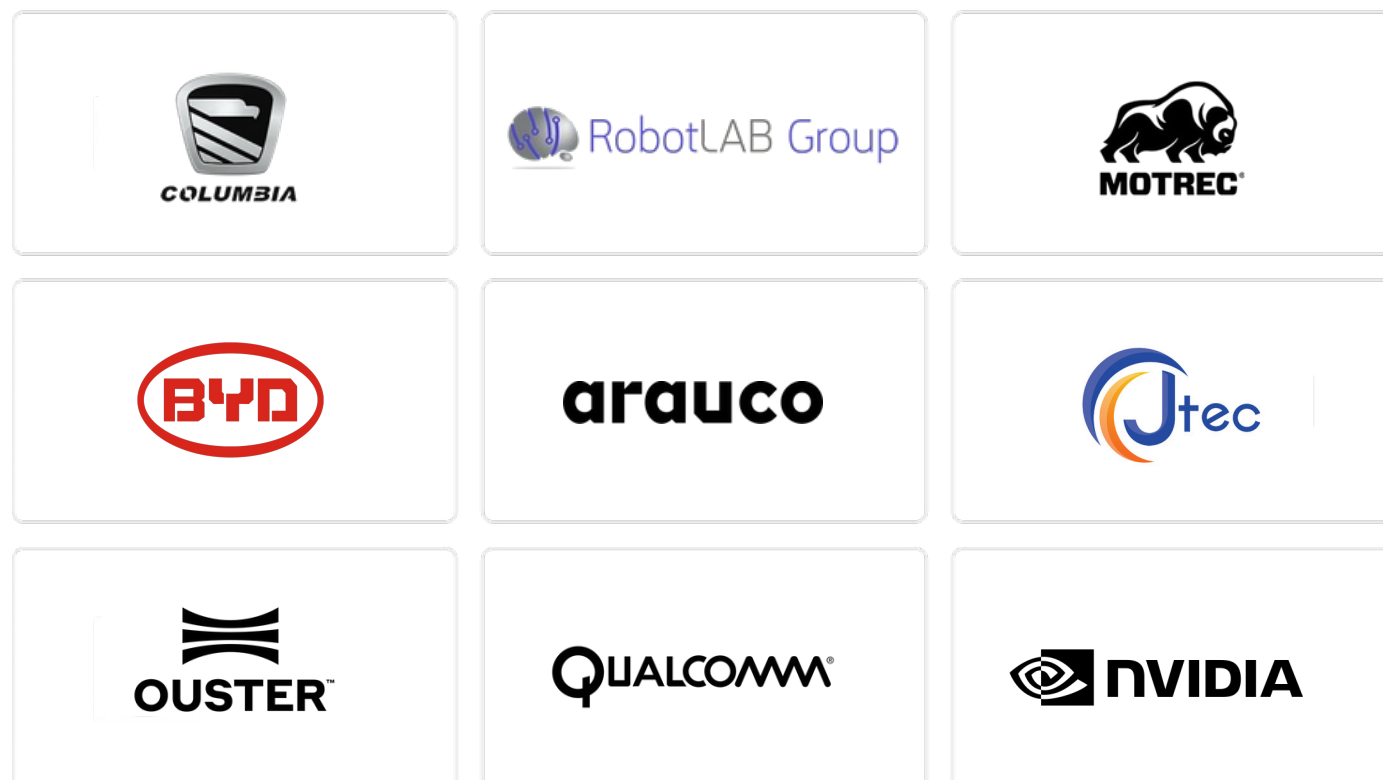- Improved consistency
- Enhanced safety

- Consistent user experience
- Single set of training materials for workforce

- Minimal marginal costs for new/expanded deployments
- Global data aggregation for operational improvements

Aligning with a Solution-oriented Ecosystem

We don't reinvent the wheel. Our focus on software enables relationships and partnerships with manufacturers, technologists, consultants, and dealer networks.

Management Team Experienced in Commercializing Innovative Technology

Management

Lior Tal
CEO & Chairman of the Board
Facebook, Snaptu

Don Alvarez
CFO
QuVa Pharma, Tatum

Sean Stetson
VP of Engineering
Seegrid, Google

Ben Landen
VP of Business Development
DeepScale, Maxim Integrated

Felix Naveen Singh
VP of Engineering Services
Brain Corp, Qualcomm

Board of Directors

Karen Macleod
Independent Director
Korn Ferry, Tatum

Colleen Cunningham
Independent Director
Zoetis, AT&T

James McDonnell
Independent Director
Vispero, Honeywell

Our Competitive Advantages

Advanced autonomy

- Developed for robotaxi capability by using leading technology like AI, sensor fusion, and abstract decision making.

- Takes advantage of sensor and computing advancements that are driven by high-volume, high-quality automotive industry.

Multiple applications

- DriveMod can be deployed on a wide range of vehicles, creating a unique offering to support multiple applications across sites.

- EAS collects data that can expand capabilities within the application and grow into adjacent applications.

Your vehicle powered by our software

- DriveMod can be retrofitted onto existing vehicles to accelerate adoption. Retrofitted vehicles can still be driven manually.

- We partner with vehicle manufacturers that are trusted incumbents.

- Customers can take advantage of established distribution and support networks.

Material Handling Is Just the Beginning

Industrial and commercial autonomous applications share fundamental technological building blocks.

Cyngn developed these building blocks and integrates them across diverse autonomous driving solutions.

Our current focus

Solutions for moving and towing materials are commercially available and deployed with customers

Our technology

Our technology already applies to additional industrial uses and vehicles, expanding to new actions like lifting

In the future

In the future, we can expand our offering to public roadways and additional outdoor domains