

Autonomous Vehicles for B2B Short-Haul Logistics

🕼 Gatik

Self-Driving Delivery Vehicle

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Industry leaders in self-driving car, robotics, machine learning

- Raised \$29.5M from world-class investors with deep expertise in AI, ML, supply chain, and automotive
- Live with Walmart in Arkansas, Loblaw in Toronto and other top retailers across North America
- Focus on structured autonomy Automating on-road transportation on known, repeatable routes
- Est. in 2017, based in Palo Alto & Toronto

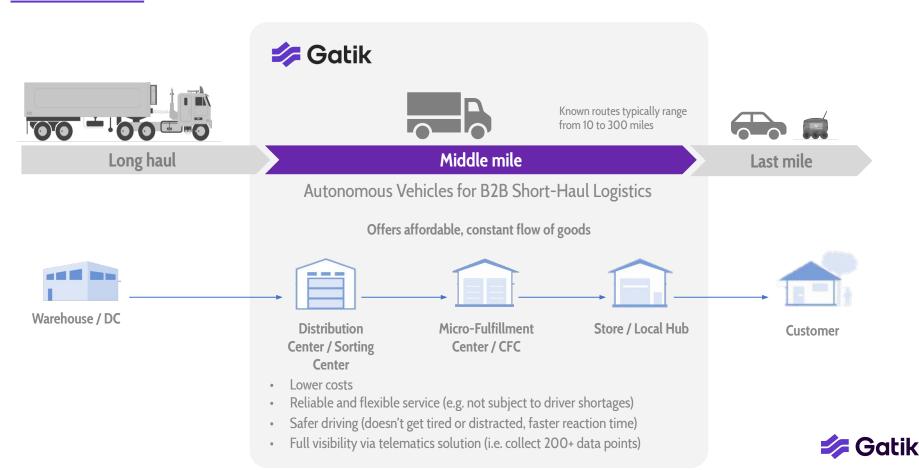








# Our Solution Solves For 'Middle Mile' Logistics



## **Problems To Solve**



#### **E-Commerce is exploding**

- Retail eCommerce is growing faster than the highest predictions
- Existing networks do not support growth
- New hubs closer to the customer are emerging

### Consumers expectations are increasingly demanding

- Faster delivery
- Improved product availability and order accuracy
- Free shipping 63% of cart abandonments in the US are due to extra costs for shipping



#### Capacity is constrained

- Driver shortages are worsening (60K+ openings)
- Driver compensation & retention is costly
- Hours of service restrictions (11-hrs per 24-hrs)

For retailers, supply & demand imbalances mean:

- Costs are rising
- Margins are shrinking
- Service levels are unreliable

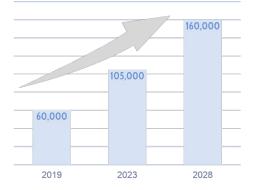


# AVs Offer Reliability, Efficiencies, And Safety



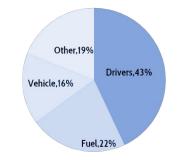
Establish reliable and flexible capacity

Driver Shortage



Mitigate against worsening driver shortages, protect capacity, and establish a constant flow of goods as online orders increase Increase Operational

**Trucking Cost Breakdown** 



Unlock significant long-term savings in driver costs and other efficiencies related to assets and fuel

<b>≠©</b> ))	Improve Safety
	Trucking Collisions
	<b>4,000</b> fatalities
	<b>90%</b> were caused by <b>driver error</b>
large	<b>330,000</b> trucks were involved in crashes in 2012 in the US alone

Protect against collisions caused by human error such as distracted and tired driving



### **Customer Partnerships**



### Long-Term Partnerships

- Partnered with Walmart, Loblaw and other top retailers across North America
- Flexible Agreements around number of predetermined routes, service, and vehicles

#### Flexible and Proven Operations

- Trucks run 12 hours a day; 7 days a week
- Over 45,000 autonomous deliveries completed to date
- Supports cold chain, dock height, and lift gate

### Value for Customers

- Upon removal of drivers, significant savings are achieved
- Service levels average 98.5%
- Cater solutions to align with strategic priorities (e.g. electrification, sustainability, innovation, visibility to operations)



## Technology



#### **Structured Autonomy**

• Allows us to constrain the challenge of autonomy - we use only fixed, repeatable routes to maximise the efficiency and safety of our technology.

### Hybrid Approach

- We combine Conventional Robotics, which is rules-based and involves instructing our vehicles to follow specific tasks, and Deep Learning, a technique that enables our vehicles to learn themselves by absorbing data through deep neural networks that function in the same way as the human brain.
- We break down these deep neural networks into much smaller modules which are restricted to a very specific task, enabling us to overfit our technology for the specific routes on which we operate.



# Working Closely with Policy Makers



#### Sharing Data

- Share detailed information on all aspects of operations with state authorities in jurisdictions in which we are live.
- Accountability and transparency is critical to the advancement of the sector.

### Informing Legislation and Programming

• We have had the opportunity to work with authorities to provide guidance and feedback on legislation and programming - we welcome these opportunities



## Impact of the Pandemic



#### **Increased Orders**

• Since March 2020, we've seen a 30%-35% increase in existing customer orders and signed contracts with new customers.

### Importance of Gatik's Use Case

- With the rise in E-Commerce, the middle mile has never been more critical to ensuring a robust supply chain, i.e. inventory pooling/management, availability of essential goods.
- Helping to meet an unprecedented expectation for contactless delivery, i.e. reduce the risk/impact of communicable diseases by reducing human intervention in the supply chain.







