AT&T Business

AT&T IoT cuts the waste in waste management

- **Business needs** - A way to help companies improve waste collection operations and divert recyclable materials from landfills.

- **Networking solution -** Equipping Enevo sensors with AT&T Global SIM cards automatically connects the devices to the network and transports actionable data to customers.

- **Business value -** Optimized collection frequency and route management, lower fuel costs, minimized environmental impact.

- **Industry focus -** Waste data analysis

- **Size -** 200 billion+ sensor measurements recorded to date

About Enevo

Enevo was founded in 2010 to use the power of data to optimize waste collection. The company has spent years and millions of dollars in R&D to provide customers with the best possible solution for improving their waste operations. It helps organizations from small independent recyclers with just a few trucks to multi-national Fortune 500 corporations with thousands of properties or fleets to manage.

The situation

The company founders created sensors that could alert companies when their waste containers needed to be emptied. However, Enevo needed a way to transport the data from customer locations to the cloud, where customers could access, collect, and analyze it.

Solution

AT&T IoT connectivity helps enable Enevo to deliver valuable data and analytics to its customers. Enevo can deploy and control connected devices using a single AT&T Global SIM that automatically and remotely connects to the network. Enevo staff use the AT&T Control Center, the premier SIM management portal of AT&T Business, to implement and operate the sensors.

## Sustainability and data-driven scheduling

Enevo provides the ultimate cloud-based software platform and sensor portfolio to help waste services companies, property managers, haulers, campus environments, and government entities manage their waste-related operations.

Fredrik Kekäläinen founded Enevo in 2010 to bring about an environmental evolution by giving organizations the tools to collect and analyze detailed data from waste containers. The goal was to optimize route management and improve recycling rates, thereby minimizing environmental impact.

While it was started in Finland, the company today is headquartered in Boston, with an international workforce. The employee-owned firm has been able to build more experience in the waste sensor industry than anyone else globally: More than 200 billion sensor measurements have been recorded to date. What's more, its customers have seen 20% to 50%+ reductions in dumpster collections thanks to data-driven scheduling.
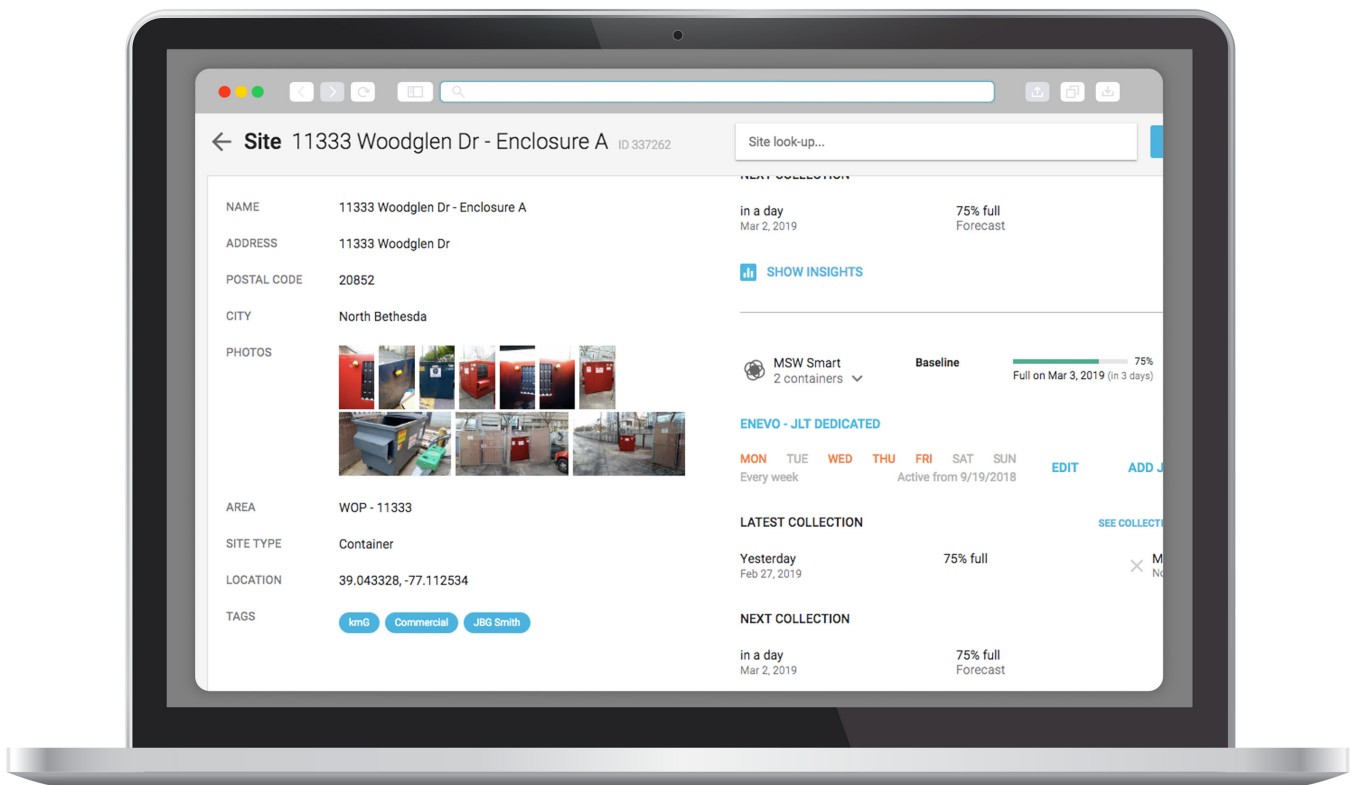
Brian Pompeo, Enevo Vice President of Sales and

Strategic Partnerships, said Enevo at one point functioned as a waste service provider to prove that the founders' vision could work. After a few years when Enevo had demonstrated its value proposition, the company transitioned to a technology provider, supplying both the hardware and software platforms to help its customers improve efficiency, save money, and operate more sustainably.
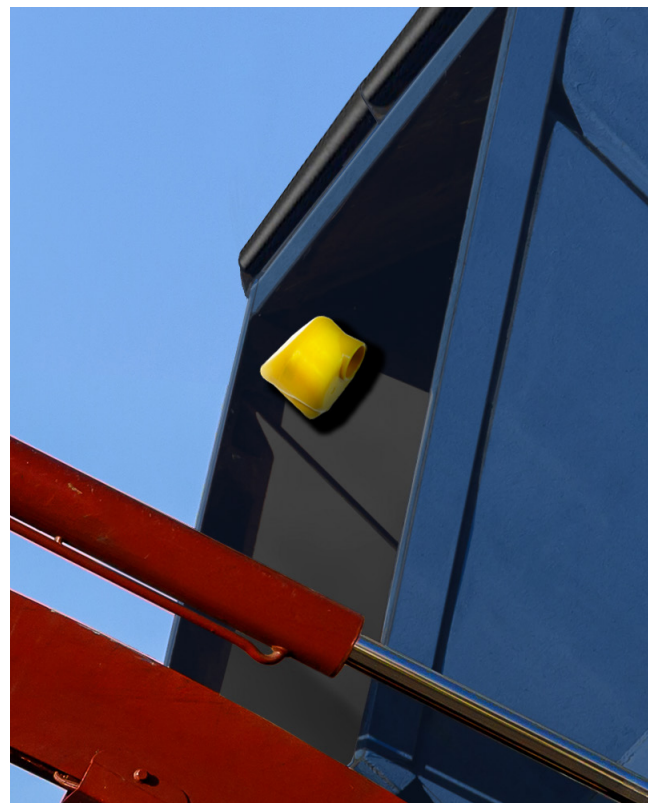
"We don't have to worry about outages or inconsistent connectivity with AT&T Business. That's what I love about it."

Brian Pompeo
Vice President of Sales and Strategic Partnerships
Enevo, Inc

Site 11333 Woodglen Dr - Enclosure A   ID 337262

NAME	11333 Woodglen Dr - Enclosure A
ADDRESS	11333 Woodglen Dr
POSTAL CODE	20852
CITY	North Bethesda
PHOTOS	
AREA	WOP - 11333
SITE TYPE	Container
LOCATION	39.043328, -77.112534
TAGS	kmG Commercial JBG Smith

NEXT COLLECTION
in a day — Mar 2, 2019 — 75% full Forecast

SHOW INSIGHTS

MSW Smart — 2 containers — Baseline — 75% Full on Mar 3, 2019 (in 3 days)

ENEVO - JLT DEDICATED
MON TUE WED THU FRI SAT SUN
Every week   Active from 9/19/2018   EDIT   ADD J

LATEST COLLECTION
Yesterday — Feb 27, 2019 — 75% full

NEXT COLLECTION
in a day — Mar 2, 2019 — 75% full Forecast

Better ways to control waste operations

The heart of Enevo is a sophisticated cloud-based software platform and sensor portfolio that helps organizations improve their waste-related operations. The sensors measure inside the containers and deliver the data to the cloud, where customers can access, collect, and analyze it.

The company's founders understood that detailed data from waste containers would enable customers to take the correct actions for better controlling their waste-related operations and improving recycling rates.

As they began engineering their prototype sensors, the founders searched for a provider that could deliver the connectivity to transport data from customer locations to the cloud.

A strong and steady data flow

Enevo looked no further than AT&T Business when it came to delivering connectivity to the company's innovative sensors. "We worked with AT&T Business right out of the gate for our sensors in North America," Pompeo said. "The sensors get installed throughout the U.S. and Canada, some in remote locations, so they needed to be plug and play."

Pompeo continued: "We also needed our customers, our staff, and our partners to be able to focus on the data that gets generated, and not on the maintenance of the hardware in the containers. So obviously that's only valuable if we've got strong and steady data flowing through those connections."

The company's technical documents let customers

know that Enevo relies on the AT&T network to deliver their data. "People know AT&T Business as a leader in the industry, so we get instant credibility," Pompeo said. "That's been great for us. We do lean on that as a really important selling proposition."

> "AT&T Business has long-standing relationships with federal and state governments, and plenty of expertise in understanding the important requirements of these clients."
>
> **Brian Pompeo**
> **Vice President of Sales and Strategic Partnerships**
> **Enevo, Inc**

Enevo's powerful algorithms build dynamic trends to give customers insights on hourly fill level readings and collection events, enabling them to know exactly when the containers need to be collected for optimal service quality. Its advance-alert system also provides near-real-time fill level readings on all containers. This enables customers to respond swiftly to quick build-ups and unforeseen events such as theft or fire.

Customers can use Enevo's automated dynamic routing engine and in-cab driver tools to generate continuously optimized service routes. They can also forecast future vehicle capacity needs based on fill level data, trends, and seasonal variations.

Working toward a greener Earth

Always innovating, Enevo continues to upgrade and add features to its groundbreaking sensors. "From a credibility standpoint, we want to enhance the fact that we've been around for a long time," Pompeo said. "We really are the pioneer in the industry, and we have more sensors installed in the field than any of our competitors. That experience is crucial and translates to significant value for our partners and customers."

The sensors have helped organizations to better understand their waste-related operations. Providing the right tools to collect and analyze detailed data enables them to take the correct actions for controlling waste disposal better and improving recycling rates and environmental impact.

"When companies refer to net zero waste initiatives, they're really referring to the percentage of their overall 'waste' that is being diverted away from landfills," Pompeo said. "That has finally become a norm for most companies, within their sustainability strategy. We can provide valuable site-by-site transparency that is used as the starting point for their benchmarking efforts."

Pompeo continued: "We provide the information so that our partner haulers, brokers, and direct end users can make better decisions, save more money, be more environmentally conscious, and report much more accurately than they could in the past."

Highly reliable and secure connections

Pompeo said Enevo and its customers count on the reliability of the AT&T Business connections that deliver their valuable data. "When I'm supporting our partners and talking to the end users, we rarely bring up the connectivity side. We just don't have to focus on it because it's stable. We don't worry about outages or inconsistent connectivity with AT&T Business. That's what I love about it."

Customers trust Enevo to keep their data secure. "It's not a prevalent topic for the majority of folks that we talk to, but we send information on encryption levels as part of the technical information we share," Pompeo said.

Pompeo believes security will be an important consideration for some government agencies who are interested in working with Enevo. "They have a different level of concern. Thanks to our collaboration with AT&T Business, we were able to explain how we would meet their mandate of an additional level of security," he said. "We did a beta deployment, and we were able to put that required encryption in place. And the assumption is that if we move forward on a larger deployment, we'd certainly be able to meet those requirements at scale."

Scalability and expertise

Enevo believes the stability of the AT&T IoT connectivity is the biggest benefit Enevo enjoys from its relationship with AT&T Business. "We've won customers because competitors' connections weren't stable enough," Pompeo said. "All the benefits we offer, like the

optimization and reporting capabilities, can't be trusted if you don't have that steady connection."

He likes that AT&T Business has expertise in a wide range of markets. "AT&T Business has long-standing relationships with federal and state governments, and plenty of expertise in understanding the important requirements of these clients," he said.

Scalability and the ease with which the company can deploy devices are also selling points. "Enevo currently has thousands of devices deployed through our AT&T IoT Control Center platform," Pompeo said. The platform makes it easy for Enevo to scale. "There's no fear that the platform can't handle the continual growth we are experiencing," Pompeo said. "The structure and the processes are in place. And that's been invaluable to us."

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Brian Pompeo
**Vice President of Sales and Strategic Partnerships
Enevo, Inc.**