E-BOOK

How Dynamic Routing Can Increase Delivery Speed by 27%

Route planning is difficult in that it is based on many dynamic variables. In order to more accurately and efficient route orders, AI/ML technology helps create faster, more efficient delivery routes.

Unearth Paths That Lead to Profitable Deliveries

Route planning is difficult, resource-intensive and depends on multiple variables from fuel efficiency, to vehicle type, to environmental regulations and more. To address these variables, many shippers and carriers are turning to technology to help create faster, more efficient delivery routes that lead to superior consumer experiences in the last mile.

Why Planning Routes is More Complex Than You Think

Planning efficient routes is not just finding the shortest distance from point A to point B. Businesses must consider factors like fuel costs, environmental regulations, driver productivity, and transportation risks, among others.

Fuel Costs

Fuel is a variable expense that has reached new highs recently. Research highlights that more than one-third of a logistics provider's cost per mile goes directly toward fuel. Hence, finding the most fuel-efficient route is absolutely critical to running profitable logistics operations.

Environmental Regulations

The growing concerns around global warming and unprecedented weather changes are driving governments across the world to bring about stringent norms. These regulations are compelling logistics providers to keep a hard check on their carbon footprint. So, planning fuel-efficient routes with optimum travel time is key.

Driver Productivity

The world is facing acute driver shortages. Data from industry associations claim that the shortage of heavy truck drivers is widespread in Europe, with a shortage of 400,000 in the EU alone. Therefore, ensuring high levels of individual driver productivity is necessary, as companies must do more with less.

Transportation Risks

According to the European Agency for Safety & Health at Work, heavy trucks account for 15% of deaths caused by road traffic accidents in Europe. Then in France, 77% of cargo thefts happen when vehicles are parked in rest areas. In Romania, on an average, there are five cargo attacks per million tons of goods. Another report highlighted that up to 60% of crashes are caused by left turns at intersections. These are shocking statistics that make considering the risk element imperative while planning routes.

Did You Know?

55% of customers would stop using a retailer after two or three late deliveries

22% of cargo thefts in France happen when vehicles are parked in rest areas

Solving Core Logistics Challenges By Using Route Optimization Tools

It's extremely difficult if not impossible to use traditional and manual routing processes to generate the most efficient and cost-effective routes. Hence, savvy businesses are leaving the complex task of planning routes to advanced route optimization software. Here are a few ways that technology is helping them:

Addressing the Traveling Salesman Problem

Finding the shortest route when delivering at multiple locations or cities is no cakewalk. That's precisely the traveling salesman problem--how to reach point A to point B to C quickly and cost effectively. Route optimization software can run complex algorithms and churn large chunks of data to help organizations plan highly efficient routes.

Making Same-day Deliveries

The popularity of same-day delivery is rapidly increasing in Europe. For instance, 45% of retailers in the UK now offer same day deliveries. A key to ensuring successful same-day deliveries is allocating the most efficient routes to delivery fleets and then keep optimizing them in real-time. Route optimization software can integrate with existing scheduling and dispatching systems and help delivery stakeholders proactively plan new routes, ensuring same-day deliveries can be made.

Solving the Inaccurate Address Challenge

Advanced route optimization software powered by machine learning (ML) algorithms have the ability to self-learn the 'correct' address just from delivery successes and failures in the past. It does this by converting written addresses into geographic coordinates (geocoding) as simple as latitudes and longitudes, which are used to mark positions on a map. Once a delivery is made successfully on any address, the system can then fetch the address internally for future deliveries so that the last-mile connectivity is faster and more accurate. By accurately mapping customer addresses, businesses can shrink nearly one third of logistics costs by reducing miles per delivery.

Lowering Total Cost of Ownership & Improving Mileage

Modern route optimization software generates routes by taking into consideration things like vehicle availability, schedule constraints, empty miles, and ETAs. Overall, this also reduces the time a vehicle spends on the road, which also reduces fuel expenses and maintenance costs, thereby reducing the overall cost of ownership. One global parcel service provider leveraged route optimization software and reduced its total miles driven by 45.8 million miles over the last few years. This helped the business slash 1,000 delivery trucks from their delivery fleet and reduced their fuel costs by 40% for each delivery.

Stats From Ground Zero: How FarEye is Helping Companies Win

Across industries, FarEye's route optimization and last-mile logistics platform is helping businesses to gain visibility of delivery operations, reduce transportation risks, improve productivity, and save costs.

FarEye's Impact:

- **32%** Reduction in loading, transit and unloading turnaround times
- **15%** Increase in productivity for delivery drivers
- **6%** Increase in on-time in-full (OTIF) deliveries
- **27%** Reduction in delivery times
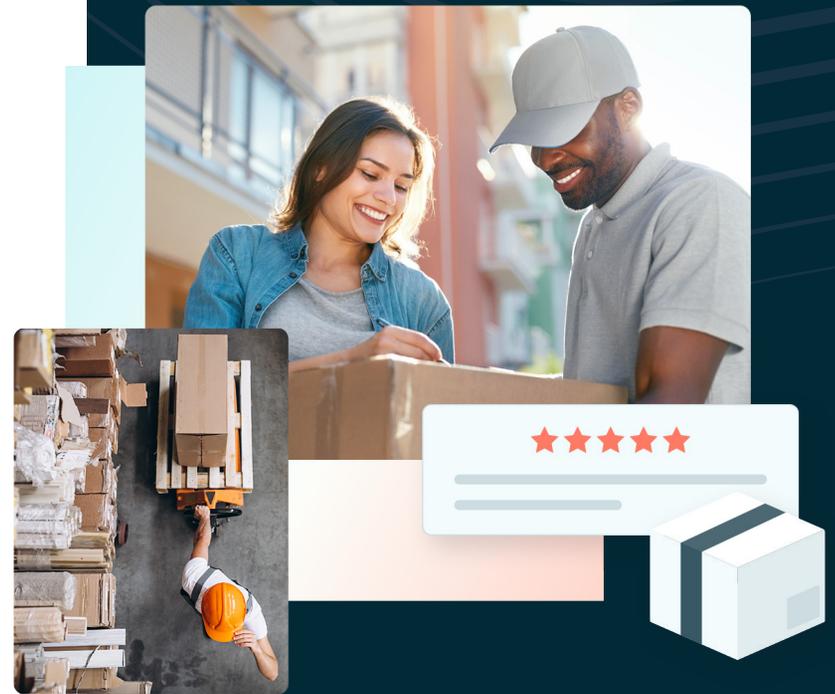
Did You Know?

→ 40% overhead fuel expenses per delivery can be eliminated by route optimization software.

→ 16 Minutes of vehicle idling per day can result in wastage of 3.8 million gallons of gas.

→ 400,000 the estimated shortage of drivers in Europe.

Delivering Last-Mile Logistics Excellence With FarEye

Retailers and logistics companies must be able to deliver superior customer experiences and make deliveries profitable. FarEye is helping companies achieve through these key features:

✓ **Auto-routing**

1-click route planning through automated engine that prepares routes and factors in multiple constraints

✓ **Dynamic Routing**

Roll out changes to your routing dynamically in real-time

✓ **In-App Routing**

Empower your drivers with mobile app-based routing for easy navigation

✓ **Geofencing**

Empower your managers to assign routes based on geo-fences

✓ **Address Geocoding**

Intelligent address resolution through machine learning capabilities

✓ **Real-Time Tracking**

Monitor adherence to planned routes through real-time tracking
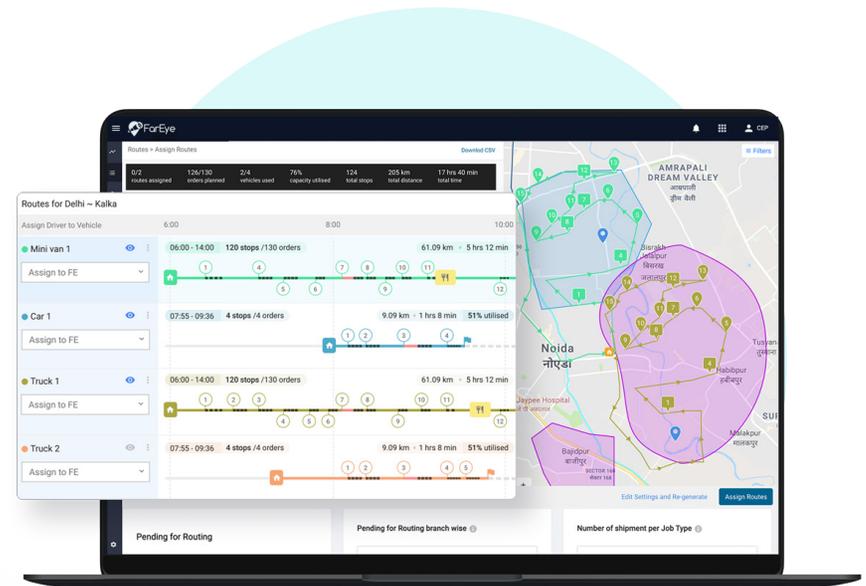
FarEye's advanced route optimization solution is built to address evolving logistics challenges, empowering businesses to transform supply chain and logistics operations into more profitable and customer-centric functions.

First Choice for Last Mile

About FarEye

FarEye's Delivery Management platform turns deliveries into a competitive advantage. Retail, e-commerce and third-party logistics companies use FarEye's unique combination of orchestration, real-time visibility, and branded customer experiences to simplify complex last-mile delivery logistics. The FarEye platform allows businesses to increase consumer loyalty and satisfaction, reduce costs and improve operational efficiencies. FarEye has 150+ customers across 30 countries and five offices globally. FarEye, First Choice for Last Mile.

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