Food & Grocery Guide – How to Buy Last-mile Delivery Technology

Create cost efficiencies and satisfied customers



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About This Guide

Food & grocery is one of the fastest growing categories for online delivery. Like many food and grocery logistics professionals, you have likely experienced volatile supply chain activity driven by rapid growth in online grocery shopping and delivery amid inflationary pressures, geopolitical complexity and economic uncertainty. This has undoubtedly created challenges in your logistics network, particularly around last-mile delivery where your brand connects directly with the end consumer.

As we'll explore, the last mile is one of the most critical legs of your customer-centric supply chain. Not only is it the most important leg, it is dynamic, costly and complicated. Solving last-mile challenges in the food and grocery space can create long-term efficiencies such as reduced risk and cost, and translate into superior delivery experiences for your consumers.

Perfect deliveries cannot be accomplished without the strategic use of last-mile delivery technology. Software platforms today can untangle the web of variables that every last-mile delivery accounts for, optimizing shipping, tracking, executing and routing, and ensuring the delivery experience exceeds consumer expectations. Manual and outdated processes are inefficient and are no recipe for a competitive advantage.

This guide will help you understand how last-mile delivery technology can address your challenges and meet your business's needs and goals. We'll examine whether building solutions in-house or buying last-mile delivery solutions work best for your company and uncover what to look for when purchasing last-mile delivery technology for the food and grocery industry.

Let's ensure all of your deliveries reach their destinations every time, on-time, accurately, efficiently, and as sustainably as possible.

And let's make it simple.

Last-mile Delivery

Products move by the millions daily across supply chains, often moving thousands of miles between manufacturer and final destination. The last mile is crucial as it's where the end consumer and product finally meet. This can look different across industries: for online grocers and food delivery, the last mile is likely hyperlocal and includes the journey from the grocery store or restaurant to the consumer's home. For a food distributor, the last mile likely includes the journey from distribution center to a grocery store or an institution such as a school or hospital. For meal-kits, last-mile delivery means bringing meals to the consumer's home.

The last mile is the most complicated leg of the supply chain because of its unpredictability and inherent requirement to cover large footprints quickly. Unlike the first and mid miles – which move products between a few known locations on a cadenced basis with a few stops – the last mile involves loading vehicles across multiple nodes quickly and efficiently routing them to multiple destinations. This makes the last mile inefficient, unsustainable and prone to risk. For companies to achieve superior delivery experiences, they must build adaptability and resilience into their delivery networks.

Superior Big and Bulky Delivery Experience Defined



Fast

Speed of delivery a major consideration for consumers



Free

Low or no cost delivery is a top consideration.

High delivery costs a barrier to purchase



Flexible

Offering multiple delivery destinations and windows

Allowing consumers to modify deliveries en-route



Visible

Giving consumers visibility to order status

Real-time ETA and delay alerts



Sustainable

Allowing consumers to view the emissions impact of meal-deliveries



The Last-mile Challenge: Barriers to Superior Deliveries

Lack of Visibility and Transparency

As consumers in the food and grocery space await delivery of groceries, meal-kits and meals from restaurants, they want to know exactly where their food is. Ninety percent of consumers actively track their food and grocery orders online. Complete and accurate order visibility can be lacking for food and grocery deliveries and for grocers awaiting deliveries from distribution centers.

Hyperlocal Delivery

Consumers in the food and grocery industry require fast and free deliveries for same- and next-day deliveries. This can be challenging due to lack of speed, scalability and a fleet to keep pace with same-day and next-day deliveries.

Poor Inventory Management

For food and grocery providers, a lack of real-time visibility leads to an inability to manage inventory on the fly.

Consumer Demands

Consumers demand fast and free delivery for same- and next-day deliveries of meals and grocery items. Consumers also demand meals and groceries be delivered fresh and in their chosen delivery time slot windows.

Inefficient Omnichannel Fulfillment

Food and grocery providers offer fast and flexible deliveries but it is expensive and complex to deliver quickly and efficiently to a large number of drop off points. While omnichannel fulfillment methods can add flexibility, they can further complicate last-mile deliveries and can generate inefficiencies.

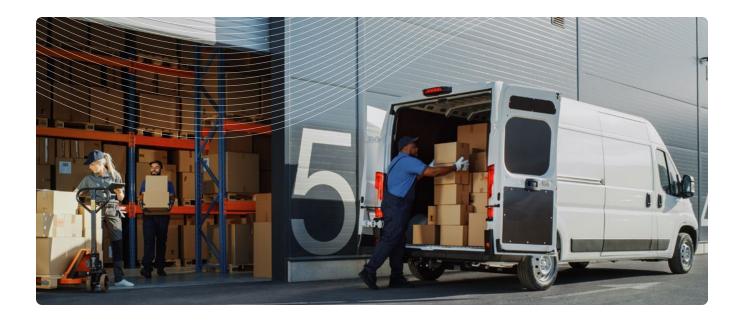
Why Every Company Needs Last-mile Delivery Technology

The rise of e-commerce giants have convinced consumers they can have any product delivered to them instantly. Grocery and food and beverage providers must ensure they deliver superior consumer experiences, picking up orders from anywhere and having them delivered everywhere – to homes, businesses or stores.

The magic that makes all of this possible is last-mile delivery technology. Technology allows any company to automate and perfect last-mile deliveries, including food and grocery deliveries that can yield increased consumer loyalty and future sales.

Today's last-mile software tackles complex problems with artificial intelligence, machine learning and automation with easy-to-use, low-code interfaces that can integrate easily with existing processes.

To remain competitive, grocery, food and beverage providers must perfect the last mile. Today's last-mile delivery technology has come a long way, and makes simplifying the last mile possible.



Solutions



Consumer Experience

Offer real-time order tracking, branded delivery experiences, flexible scheduling options and same-day delivery services



New Revenue Streams

Unlock online food and grocery delivery with enhanced service levels that drive sales growth and increase brand loyalty



Speed to Deliver

Exceed increasing consumer demands for fast grocery delivery with carriers, including own fleet, gig-fleet, and crowd-sourced solutions



Route Optimization

Automate and optimize the routing of your own fleet



Omnichannel Fulfillment

Unlock new fulfillment options to provide additional flexibility and speed



Visibility & Tracking

Track deliveries from order-to-door and provide visibility to all stakeholders

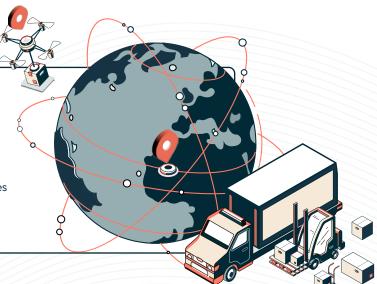


Sustainability

Reduce the carbon emissions impact of your delivery operations with green fleets and emissions reporting

Technology enables food & grocery logistics teams to gain power and influence within their companies:

- $\,\blacktriangleright\,$ Free up resources and time to focus on core competencies
- ▶ Achieve competitive advantages through superior deliveries
- ▶ Turn logistics and supply chain functions into profit centers



Benefits

Increased:

- On-time delivery rate
- ✓ Delivery success rate
- ✓ Consumer satisfaction and NPS scores
- Driver productivity
- Amount of delivery options
- Service level agreements (SLA) and scheduling options
- ✓ Vehicle capacity utilization
- Special delivery types (cold and hot storage deliveries)
- Payment types accepted
- Cost-effective and intelligent resource planning
- Ability to scale rapidly by intelligently outsourcing delivery
- Real-time updates on delivery status for customer visibility

Enhanced:

- Delivery tracking, visibility and ETA transparency and accuracy
- Consumer experience
- Demand forecasting and planning
- Carrier integrations
- Driver management
- Capacity planning with order management
- Optimized delivery routes

Reduced:

- Carbon emissions
- Calls to customer-service centers due to failed/ missing delivery
- Loading and transit time
- ✓ Last-mile cost [fuel usage, operational costs, labor cost]
- ✓ Errors and leakage in last-mile
- ✓ Fake/fudge attempts
- ✓ Overall delivery time
- ✓ Dwell Time
- Lost or failed deliveries

Who this impacts

- ✓ Consumers
- Drivers
- Dispatchers
- Managers
- Executives

With the ongoing integration and enhancement of automation across retail logistics networks, technology will continue to be a disruptor in how products move within the last mile, further separating those who deliver superior consumer experiences and those who do not.

The Big Question: Buy vs. Build

We have identified the key challenges companies have in achieving superior last-mile deliveries and uncovered how technology platforms can solve them. Now for the big question - do you build the platform inhouse or buy an existing platform from a vendor?

Some key questions to examine as you make your decision:

- Does the platform exist? Is it easy and fast to deploy?
- Do I have the resources to build and maintain a platform in-house?
- ▶ How much does it cost to build and maintain versus buy?

Existing Platform Available to Buy	In-house Resources Available to Build	Cheaper to Buy	Decision
No	No	N/A	Outsource
No	Yes	N/A	Build
✓ Yes	No	Yes	Виу
✓ Yes	No	No	Виу
✓ Yes	✓ Yes	Yes	Виу
✓ Yes	✓ Yes	No	Buy*

^{*}Long-term cost analysis favors buy over the lifetime of platform use. See below for more detail.

Every company involved in last-mile delivery has nuanced challenges. This alone may drive companies to consider creating their own custom solution. There may be enough internal resources to create a solution in-house and the cost may at first seem lower than purchasing off the shelf. However, the benefits fall apart long-term.

Digging Deeper: Why Buying May be the Right Choice Over the Long Term

1 Speed of Deployment

Creating in-house solutions can take a long time, whereas existing solutions can be implemented and deployed rapidly.

Companies want to realize competitive advantages quickly, and superior technology solutions can fast-track success.

Pace of Innovation

Building an in-house solution requires time and effort, as does keeping it updated with current technology. Although you may be able to build a solution, keeping your solution on pace with changes in your company, industry and technology can be a long-term hassle. Free-up your company's resources to focus on operational development, agile configurability and creative problem-solving, not software development.

3 Customization

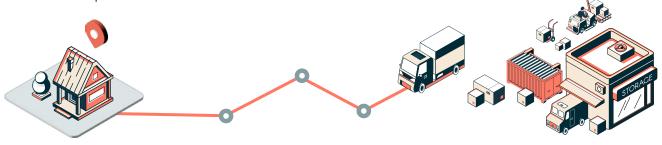
An in-house platform offers the chance to better tailor solutions. However, if poorly designed for the long term, an in-house solution can quickly become a burden that cripples an organization's ability to scale and adapt. Current last-mile technology vendors have the scope and flexibility to customize existing solutions to the needs of your business - and adjust to dynamic, evolving consumer preferences.

4 Cost

Using a software provider helps you spread out and control the development and maintenance costs of the technology over time and across business units as an operating expense (OPEX) rather than a large up-front capital expense (CAPEX) that adds risk and uncertainty. Sometimes, the cost of purchase may seem high initially, but the added benefits, scalability and efficiencies that an existing platform provides can ensure lower costs over the long term and higher lifetime value.

5 Carrier Network Access

Existing last-mile software solutions typically include access to large carrier networks. If you build a solution and you plan to outsource some of your deliveries, you will need to contact multiple carriers individually and then integrate with them in order to create your own carrier network. Instead, grow your global delivery footprint by working with a leading last-mile software provider that offers a large, built-in delivery network to extend your reach and serve new customers in new locations. This approach will enable you to create a more scalable and resilient last-mile delivery network much more quickly and cost effectively.



Typically, companies that purchase last-mile delivery solutions agree with the below criteria:

- Building software is not a core part of its business
- ▶ There are solutions in the market that address relevant business challenges
- Internal resources are limited, and they need to focus on core competencies, not software development
- Fast deployment is a higher priority than a fully customized product

In the short term, working with a last-mile solution provider will allow you to deploy a solution quickly and at low cost. In the long term, the provider can customize the solution to your needs and update it as those needs change. With today's low/no-code last-mile delivery platforms, integrating with existing processes and APIs has never been easier.



What to Look For and How to Choose?

Purchasing last-mile delivery software can seem daunting, with many technology providers to choose from. Here, we'll break down the key solutions to common last-mile delivery challenges and provide a list of capabilities you should look for when making a purchase decision.

Evaluating potential solutions

As emerging technologies continue to transform logistics, last-mile solutions are critical to success. Here are some pointers to look for while evaluating potential solutions:

- Does the software solve for pain points of each key stakeholder?
- Will the software be able to solve any potential pain points?
- Are IT data standards met?
- Does this software have all essential integration points with existing systems?
- ▶ Is it a robust all-in-one solution which can take care of any expansion I might have in the future?
- What are the upfront investment and onboarding costs?
- Does the solution provider already have experience working with companies with similar needs and business model as yours?
- Does the software provide ongoing operating efficiencies and margin enhancement?



Evaluating Features and Capabilities

Each of the below key last-mile delivery platform capabilities currently exist in the market. Which do you currently have and which do you have a need for that potential vendors can provide?

Capability	Description	Have	Need
Cloud-Based	SaaS-based product hosted on a multi-tenant cloud, that is highly scalable		
Platform Accessibility	Low-code development environment with customizable UI/UX		
Visibility & Tracking	Tracking deliveries from order-to-door is integral to delivery success. Most important, the visibility you have translates to visibility for consumers to communicate delivery ETAs Intelligent ETA predictability Logistics control tower Multi-modal visibility Pickup and delivery visibility Order-to-door visibility Intelligent Alerts, Notifications, and Exception Management Visibility dashboards		
Carrier Network	Network of carriers globally that you can integrate with and manage		
Driver Crowdsourcing	Easy driver onboarding regardless of demand fluctuation: ✓ Driver onboarding & management ✓ Driver mobile application ✓ Shift planning		

Capability	Description	Have	Need
Routing	Loop optimization with hybrid routing capabilities that reduce manual route planning: Address geocoding Loop optimisation Hyperlocal routing Real-time automated routing		
Workflow Creation	Business Process Management (BPM) engine enables you to create a workflow that maps to their operational strategy via a drag/drop interface		
Platform Optimization	AI/ML optimization that leverages pre-built templates with the no-code engine to reduce golive times		
Integrations	Enable fast integrations using pre-built integrations and connectors: ✓ API-based ✓ File-based		
Access Management & Security	Ensure safe, secure access with tools like: Single sign on (SSO) Role-based access control (RBAC) Log Retention		
KPI Dashboards and Reporting	Customisable dashboards that showcase data and help management analyze and make better decisions		

Capability	Description	Have	Need
Project Implementation	Implementation activities such as configurations & development, internal testing, demos and customer feedback		
Support Policies	24x7 support available across time zones with priority-level incident resolution		
Sustainability Measures	Carbon emissions dashboards to measure and act upon environmental impact. Create sustainable routes and partner with eco-friendly carriers		
Machine-learning Intelligence	Machine learning (ML) algorithm learns from previous data and builds logic to enhance the operations		
Global Solution	Highly scalable solutions that can be implemented in any geographical location		
Support 24/7 Deliveries	Able to support delivery operation which is happening 24*7 or in multiple slots (roster based)		
Multiple Payment Option	Solution can support multiple payment options		
Driver Debriefing	Managers can check on delivery failures and successes and the reasons associated with each along with the reconciliation of collected amounts		

Capability	Description	Have	Need
Omnichannel Notification Support	Notification network to connect manager, drivers and the customer for ease of communication		
Multiple Order Creation support	System supports multiple methods for the order creation 1. Manual order creation 2. Bulk or Excel upload 3. Api integration with client OMS system		
Support Multiple Order Types	System can support both scheduled deliveries and on-demand deliveries	0	
Support Manual and Auto-Assignment	System can support manual as well as auto- assignments (in case of scheduled deliveries)	0	
Branded Customer Experience	System allows companies to brand the product and interface as their own		
Master Datastore	Datastore feature that can save customer data for pickup store location and uses this data in building operational logic		
E-billing	Digitizing the billing process	0	
BOPIS and Curbside Pickup	Customers can place orders online and drive to the local store for pickup		
Chain of Custody	Easy transfer of order custody from one stage to another		

Pricing

When purchasing any technology from a vendor, it can be difficult to estimate costs. Industry, region, transaction amount, current delivery model, customization, level of support required and specific modules purchased all play a role in determining the cost to your business. You should consider the costs associated with implementing the technology, the short-term cost using the technology in your current business model and the long-term costs that may change as your business evolves.

Typical Pricing Models

Flat Rate

- Easy to budget for
- Easy to communicate internally
- Not proportional to services consumption
- No financial incentives for increased consumption
- Higher financial commitment irrespective of usage

Price per Transaction (all modules)

- Higher commitment offers financial incentives
- Better for cost and bill of material (BoM) Analysis
- Difficult to budget and plan for
- No transparency of module-based pricing

Price per Module with Transaction Volumes

- Easy to budget for
- Easy to communicate internally
- Not proportional to services consumption
- On the state of th
- Higher financial commitment irrespective of usage

Look for few specific terms that are favorable to your business:

Commitments

Start with lower commitment in first year and move to higher commitment in future years to get better pricing

Price Bands

Check for tier-based pricing to get incentives for higher consumption

Contract Durations

Long-term contracts offer financial incentives

Billing

Advance billing offers additional financial incentives and some freebies

The Integration Process

When purchasing last-mile delivery technology, you need to integrate your processes and technology with the vendor's platform. This requires connections, or APIs, between both parties to allow them to communicate with each other. Personnel and resources will need to work together to write the necessary scripts to the requisite APIs. And then they must be tested and validated.

This can take time, especially for smaller companies with limited resources. Although quality integrations are more important than integrating quickly, you don't want to spend months waiting to be up and running. Speed is crucial here, and fast integration processes can ensure greater speed-to-market and allow you to realize competitive advantages more quickly. Typically, integration timelines range from a few days to a few months.

Understanding the integration process and timelines needed are key considerations you should ask potential vendors, as are your own processes and capabilities.

Common Causes of Delay During the Integration Process:

Be sure to discuss these with vendors and internal stakeholders



Data Integrity

- Poor data
- Inconsistent data
- Failure to map data to correct fields



Internal Resources

- Improper tools
- Lack of capabilities
- Poor resource bandwidth

Integrations connect your business with a technology provider and\or third-party provider technology (such as one of your carriers) across various aspects of last-mile delivery. Below are just a few examples of specific API connections that allow the two parties to communicate:

Fields	Data Type	Field Description	Example
carrier_code	String	Carrier code to be shared if the shipment is pre-assigned to a carrier	DHL, FEDEX
shipper_code*	String	Unique code of shipper system	FLK(Flipkart), AMZ
shipper_tax_number	String	Tax Identification Number is the unique business identity necessary for billing	254618662342879
type_of_order*	String	Type of order	Forward, Reverse, Exchange, Dropoff
main_modaility	String	Mode of transport	Road, Air, Ocean

Checklist for Success

Mapping Your Future

Here is a brief checklist to help you outline your company's future last-mile delivery goals, as well as your current processes and KPIs. When working with a last-mile delivery technology vendor, you can expect to provide similar information to help find a solution tailored to your challenges that works best for you.

Goals

Wh	ich last-mile delivery goals are you looking to achieve?	
	Increase delivery volume and available capacity	Reduce carbon emissions
	Increase on-time delivery rate	Reduce calls to customer-service centers due to failed/missing delivery
	Increase delivery success rate	Reduce loading and transit time
	Increase consumer satisfaction and NPS scores	Reduce last-mile cost [fuel usage, operational
	Increase driver productivity	costs, labor cost, etc]
	Increase the number of delivery options	Reduce errors and leakage in your last-mile
	Increase service level agreements (SLA) and scheduling options	Reduce fake/fudge attempts
	Increase vehicle capacity utilization	Reduce overall delivery time
	Increase special delivery types (cold and hot storage deliveries)	Reduce Dwell Time
	Increase payment types accepted	Other(s)
	Improve delivery tracking, visibility and ETA transparency and accuracy	



Improve demand forecasting and planning

Improve consumer experience

Improve carrier integrations

Improve driver management

Metrics and Key Performance Indicators (KPIs)

How do you currently measure last-mile performance and success? How do your current metrics compare to your target metrics?

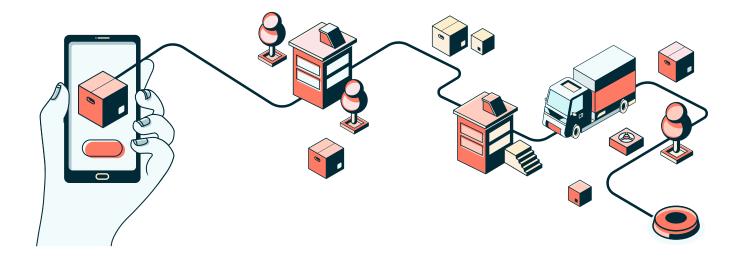
КРІ	Currently Measured	Current Value	Target Value
% Deliveries made on time			
Tracking consistency of shipments			
Consumer NPS			
Driver performance			
% deliveries made first attempt			
Capacity utilization			
Cost-per-delivery			
Cost-per-trip			
Delivery lead time (average)			
Total number of stops			
Total Km or miles driven daily			
Cost-per-carrier			
Cost-per-mode			
Carbon emissions (Tons)			
Stops-per-hour			
Planned vs actual mileage			
Cost per returned order			
Driver utilization			
% of fake/fudge attempt			
% delivery time saved			
% fuel saved			
No. of vehicle utilized			
Other(s)			

First Choice for Last Mile

FarEye's Delivery Management platform turns deliveries into a competitive advantage. Retail, e-commerce and 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's Delivery Management Platform

- Access real-time visibility, ML-driven insights, and decisioning for shippers, carrier networks, and consumers
- Detimize dynamic routing, delivery scheduling, order tracking and delivery accuracy
- Provide flexible and frictionless order tracking and fulfillment controls in a branded consumer experience
- ▶ Create opportunities to upsell and strengthen brand and consumer relationships
- Map business process management workflows to current operational strategies
- Manage green fleets, reduce CO2 emissions and achieve sustainability goals



First Choice Last Mile



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