

CAPACITY PLANNING:

How last mile delivery transforms customer experience



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Are you **losing customers** to an outdated, slow last mile fulfillment process?

Last mile delivery — the final stage of a product's journey from your warehouse or distribution center to a customer's door — is the most critical step in the delivery process.

That's especially true if you're seeing high customer turnover and looking for ways to improve customer loyalty.

Amazon and Walmart customers are used to speedy shipping and less patient with companies who don't (or can't) provide it. That effect, known as the "Amazon Effect," has spread rapidly over the past few years.

The problem? The last mile is the most expensive step in fulfillment, accounting for up to 53% of total shipping costs. That makes last mile optimization essential to lowering your overall business expenses, keeping customers happy and remaining competitive. In a recent survey of 95 top supply chain companies, 40% identified freight capacity as the biggest obstacle in providing reliable last mile delivery, highlighting the need for efficient capacity management and investment in technology.

One of the best ways you can lessen last mile challenges is to improve your capacity planning process and accuracy. The good news is you don't have to do it alone: Partnering with 3PLs and final mile shippers allows you to leverage their expertise and bigger shipping footprint. This helps you not only handle busier shipping times, but also plan year-round capacity to ensure happier repeat customers.



Why is better capacity planning crucial to **business success?**

“Our goal is to be proactive instead of reactive. We’re trying to solve problems before they happen.”

AHMADOU DIOP

Co-Founder & COO, XPressRun

Effective capacity planning identifies the amount of deliveries your company can handle at any given time, allowing you to meet demand without overtaxing your fleet. By anticipating customer demand throughout the year, you can plan your operations to meet shipping demands.

Accuracy in your capacity and demand forecasting can make all the difference in your ability to grow a loyal customer base. It helps you avoid stockouts, delays and other inventory issues that can lead to unhappy customers.



Forecasting and demand management

The most important ingredient in capacity planning is data. Without looking at your historical data and trends in demand, forecasting is little more than guesswork. This is why collaboration with your shipping partners is so valuable — sharing and centralizing information makes it far easier to see patterns and work together to solve problems.

Shippers can use data about future demand projections, planned promotions and new product launches to ensure enough capacity to handle those spikes in activity.

For example, if you offer same- or next-day shipping, having historical demand information means spotting potential problems with those delivery windows earlier. If you're fast approaching Black Friday and know your order volume was too high to meet ultra-tight delivery promises last year, you can work with shippers to set more realistic expectations with your customers this year.

By building strong relationships with last mile shipping partners and creating open communication channels, you can maintain consistent service quality that will improve both customer satisfaction and profitability.

Resource allocation and optimization

Using your resources efficiently — from warehousing space to vehicles to labor — will reduce costs and increase profitability by allowing for more competitive pricing on your products. Resource allocation is key to capacity planning, ensuring you have the right space, equipment and people in place to meet demand.

Some important aspects to consider when optimizing your resources include:

- **Fleet management.** Using your historical data to accurately predict capacity can reduce empty miles — which can save you fuel, maintenance and labor costs.
- **Route planning.** Making your last mile more efficient is impossible without good delivery routes that make every mile count. With better routes, you can batch orders going the same direction to cut down on trips while saving on the fuel and maintenance costs that come with higher mileage.
- **Balancing demand with available resources.** How many vehicles do you have available? Are they the right size? How many drivers? How will you handle less than a load (LTL)? All of these factors have to be part of your forecast calculations to ensure you have enough bandwidth to handle volume.

Improved sustainability

Consumers are more sustainability-minded than ever, with a whopping **91%** saying they want eco-friendly shipping options at checkout, according to [a survey by logistics data platform Sifted](#). Businesses that don't take sustainability into consideration during their fulfillment operations can risk alienating these customers. Those that do prioritize eco-friendly practices can build stronger relationships with their customers — and as an added bonus, it helps reduce costs, improve efficiency and build a positive brand reputation.

Good capacity planning can help you show your commitment to sustainable practices. It allows to you build a more sustainable business by:

- **Reducing empty miles.** By optimizing delivery routes and batching orders, you minimize the number of trips. This lessens your fuel consumption and carbon emissions.
- **Optimizing vehicle capacity.** Capacity planning helps you make full use of every vehicle's available space, reducing the number of vehicles on the road.

- **Optimizing inventory levels.** Accurate forecasting helps ensure you have the right inventory on hand at all times. This has two significant benefits: 1) You can reduce excess inventory (and the need to expend resources on return shipping for unsold product) and 2) you can cut down on stockouts that may result in last-minute, one-off deliveries when products come back in stock.





Customer satisfaction and loyalty

Another important reason to optimize your last mile capacity planning is improving customer satisfaction. With the retail landscape becoming more competitive, providing stellar customer service is table stakes for your business success.

Stockouts, delayed shipments and inaccurate resource planning lead to customer frustration and tarnish a company's image. Optimizing capacity to meet anticipated demand goes a long way toward solving these issues before they affect customers.

There is increasing customer demand for faster, more reliable deliveries — and businesses know it. An overwhelming 79% of surveyed businesses consider last mile delivery services to be very or extremely important in providing a competitive edge. However, less than half of respondents (**48%**) have actually optimized their delivery networks for last mile delivery services.

79%

of businesses say last mile delivery services are very or extremely important in providing a competitive edge.

SOURCE: 2023 Last Mile Delivery Survey, FRAYT

48%

of respondents have optimized their delivery networks for last mile delivery services to improve cost efficiency.

SOURCE: 2023 Last Mile Delivery Survey, FRAYT

Challenges to accurate capacity planning

All of these planning steps can be easier said than done — and there are a number of things that can complicate matters or throw your plan off entirely. Some of the potential pitfalls include:

- **Uncertainty.** Whether it's a sudden spike in demand for a product or a major disruption in the supply chain, unforeseen conditions can make it all but impossible to accurately predict capacity needs. You can mitigate the effect of uncertainty on your operation by using predictive analytics and forecasting tools to help anticipate demand and potential disruptions.
- **Inaccurate and incomplete data.** In order to plan for the right capacity, you need correct information about inventory levels, demand and delivery times. But data for many organizations lives in separate siloes that are difficult to merge in a complete picture — especially if you're partnering with 3PLs and brokers who have their own systems. The solution? Invest in data management and analytics tools that can turn your different data sources into accurate, up-to-date and easily accessible information. At a minimum, incorporate data validation processes into your organization to spot and fix data errors.
- **Inefficient processes.** Getting an accurate capacity plan involves complex processes and data analytics. Errors or inefficiencies here result in delays and higher costs. Automating processes like demand forecasting and inventory management can reduce your risk of errors.
- **Lack of visibility.** Without real-time visibility across your supply chain, you'll struggle to identify and fix capacity issues. Real-time tracking and visibility tools like sensors and IoT devices help you pinpoint shipment status and location, along with potential delays.

“By proactively identifying potential capacity restraints, organizations can take steps to adjust production levels, prioritize orders and optimize resource usage. This ensures they can meet demand while maintaining quality levels and reducing costs.”

AHMADOU DIOP
Co-Founder & COO, XPressRun



Improve flexibility and scalability to weather supply chain storms

Disruptions happen — it's part of working in logistics. Being able to scale your operation up or down to meet sudden changes in demand requires a combination of real-time visibility, advanced analytics and flexible supply chain practices. Using agile supply chain practices like dynamic routing and scheduling, crowdsourced delivery and micro-fulfillment centers helps you shift quickly to handle these challenges.

Optimizing your last mile shipping capacity is a huge benefit. “By maintaining adequate vehicles and drivers, organizations reduce the risk of stockouts and minimize excess inventory during periods of low demand,” explains Jim Waters, Vice President of Marketing at [FRAYT](#), the leading on-demand last mile delivery platform.

If all else fails, he says it's essential to have contingency plans in place. If the past few years have taught us anything, it's that a large-scale disruption — especially in last mile and LTL shipments — can send supply chains into a tailspin. While it's impossible to plan for every possible scenario, having a process in place to quickly ramp up or scale down capacity to meet demand can help you survive the next big disruption.

Real-time visibility: eliminating blind spots in your capacity planning process

Without the right data in front of you, it's impossible to make informed business decisions and respond fast enough to disruptions or demand shifts to avoid alienating customers. Real-time visibility and capacity planning go hand-in-hand, corralling your data so you can make wise choices based on up-to-date information.

Real-time visibility shows your current inventory levels, order volumes and delivery status. This helps you spot slowdowns, delays and other issues so you can proactively adjust.

40%

of professionals believe it is extremely important to maintain direct communication with last mile drivers, ensuring efficient operations and prompt issue resolution.

SOURCE: [2023 Last Mile Delivery Survey, FRAYT](#)

“Real-time visibility helps organizations optimize delivery routes and schedules, improving the efficiency of their last mile operations,” says Waters. “By tracking delivery status and location in real time, and communicating with drivers directly, organizations can identify potential delays or bottlenecks and take corrective action to ensure on-time delivery.”

Waters says that this allows you to identify potential capacity constraints so that you can adjust as needed to avoid delays or added costs. It also contributes to a more sustainable last mile, more satisfied customers and the opportunity for faster fulfillment.

“Real-time visibility provides organizations with the data they need to make informed decisions and respond quickly to changes in demand or supply chain disruptions.”

JIM WATERS

Vice President, Marketing, FRAYT

Integrate with shipper, 3PL and freight broker systems

Using APIs (Application Programming Interface) and EDIs (Electronic Data Interchanges) to integrate your fulfillment software with your shipping partners' systems lets you easily share data. This includes real-time tracking information, accurate rate quotes and driver collaboration — all without requiring countless emails or phone calls.

Using software tools to centralize data also reduces manual data entry and the errors that accompany it. And a platform accessible to both you and your partners gives you better visibility into inventory levels and better collaboration to overcome challenges or meet sudden changes in demand.





Track the **right metrics**

Meeting performance standards and identifying areas for improvement, both in capacity planning and your overall last mile operation, is much easier if you're keeping track of the right numbers. Important metrics include:

- **On-time delivery rate.** Measuring the percentage of orders delivered on or before the expected delivery date shows you where you're not measuring up — and where you're potentially leaving customers dissatisfied with your service. Cost per delivery. If this number's too high, you may need to take a look at your route optimization and other processes to find ways to improve efficiency.
- **Delivery lead time.** How long does it take between the order and delivery? An extended lead time may indicate bottlenecks in your fulfillment process or inaccurate capacity planning that must be addressed.
- **Delivery vehicle capacity usage.** This measures the percentage of total vehicle capacity you're using. It can be used to help optimize routes and schedules in order to take full advantage of available space while reducing unnecessary trips.
- **Inventory turnover.** How quickly is your inventory sold and replenished? Do you have excess stock sitting in warehouses? Optimizing inventory levels can help you reduce costs and fulfill orders faster.
- **Customer satisfaction.** All of the above metrics lead to this one: How happy are your customers with your fulfillment and delivery process? Happy customers are repeat customers, so this number is crucial to your overall business success.

Conclusion

The benefits of effective capacity planning far outweigh the investment in tools and resources to get it done. Accurate forecasting and capacity planning improve your fulfillment efficiency, reduce costs and enhance customer satisfaction — which leads to return customers and more business.

Partnering with 3PLs, freight brokers and last mile shippers to share data and collaborate on solutions makes all the difference to your last mile success. Benefits include:

- **Expertise and resources.** Last mile delivery companies have specialized expertise in technology, logistics processes and fleet maintenance, which is essential to improving your fulfillment operation.
- **Scalability.** When you're not relying on an in-house fleet of delivery vehicles, it's far easier to scale up and down to meet demand. If your business has unpredictable or seasonal demand fluctuations, partnering with a shipper who has resources to scale quickly is even more important.

- **Cost-effectiveness.** Maintaining your own fleet is expensive. You're on the hook for fuel, labor and vehicle maintenance. Last mile delivery companies can use the large scale of their operations to negotiate lower vehicle, fuel and other costs — and pass that savings on to you.
- **Customer experience.** As highlighted throughout this playbook, the customer experience is paramount to your business success — and your capacity planning and fulfillment processes are critical to that experience. Last mile shipping partners can give your customers faster, more reliable and more convenient delivery options.

Why partner with FRAYT

FRAYT allows you to offer scheduled or same-day delivery to your customers with less fuss. With real-time tracking and quick delivery for your biggest or smallest products, FRAYT helps you maximize your delivery spend through efficient batching and routing.

With the FRAYT platform, you can get an instant quote, place your delivery with a driver and track it in real-time. You can even share alerts and confirmation with your customers to avoid WISMO calls.

Read our survey report today to learn more about last mile delivery technology and the role of last mile logistics in supply chain operations.

[Download the Report](#)



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