

Navigating the Last Mile: Capacity Planning in Today's Supply Chains



In today's fast-paced world, the last mile has become a metric of great importance and is now considered the cornerstone of an impeccable fulfillment experience. In an ecosystem driven by ever-increasing consumer expectations, businesses see the last mile as leverage to stay ahead of the competition. Based on a recent survey of 95 supply chain professionals running last-mile operations for their companies, this report explores the intricacies of last-mile capacity planning. The survey provides valuable insights into the daily operations of these businesses, the challenges they face with matching capacity to demand, and their expectations towards the future of lastmile delivery.

Companies have utilized the last mile segment as a service differentiator for decades. However, the rapid expansion of e-commerce and the "Amazon Effect" has amplified the importance of last mile delivery in recent years. Customers now expect the same level of convenience and speed they experience in physical stores when shopping online. As a result, businesses that can adapt to these expectations and deliver products quickly and efficiently will have a competitive edge over those that cannot.

To begin with, it is interesting to note how businesses continue to have fluid definitions of what is entailed in last mile delivery operations. While **41%** of the survey respondents mentioned they define the last mile value chain from order placement to delivery, **33%** stated it was between dispatch and delivery, and a further **22%** said they consider the last mile to be strictly between pickup and delivery. This variability in the definition is a point to note, as retailers constricting their last mile definitions might find it harder to improve their overall operational efficiency — often due to the lack of recorded data beyond the confines of what they define as their last mile.

Last mile delivery is often the final touchpoint between a business and its customers, leaving a lasting impression. Retailers have been investing in innovative last mile technologies, streamlining their operations, and offering exceptional last mile delivery services to differentiate themselves from competitors. As more companies enter the market, it becomes crucial to position themselves as industry leaders and stay ahead of the curve.

Add to this, the demand for tailored and personalized delivery options, which has grown with the evolving customer preferences. Companies offering flexible and customizable last mile delivery services, such as specific delivery windows or locations, will stand out in a competitive marketplace. As businesses continue to adapt and meet the demands of the ever-changing retail landscape, last mile delivery will remain a crucial component of their operations.

Building A Competitive Moat Around The Last Mile

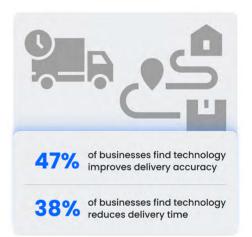
The significance of the last mile is reflected in the opinion of **79%** of respondents surveyed, who consider the segment as very or extremely important in providing a competitive edge. This emphasizes the growing need to meet customer expectations and deliver a seamless last mile experience to remain competitive.

Last mile delivery represents the final touchpoint between a business and its customers, significantly impacting the impression consumers have of the delivered product and the brand as a whole. By building a fast and reliable last mile, businesses can improve customer satisfaction, build brand loyalty, and increase the likelihood of repeat purchases.



Several factors contribute to this heightened significance of the last mile delivery segment. For one, the last mile can be a service differentiator for businesses, as exceptional last mile delivery experience helps retain customers. Adopting freight technology solutions like real-time tracking and route optimization improves last mile operations, with **63%** of the survey respondents mentioning it increased customer satisfaction.

Leveraging advanced technologies allows more visibility into operations, helping companies streamline operations better. 47% of the respondents agreed that technology had improved their delivery accuracy, with a further 38% stating it also reduced their delivery time.



Furthermore, customization and personalization have become essential in meeting customer expectations. The demand for tailored and personalized delivery options grows as customer preferences evolve. Businesses offering flexible and customizable last mile delivery services, such as specific delivery windows or locations, will stand out in a competitive marketplace.

Effective communication with customers throughout the delivery process is also crucial in enhancing last mile delivery



services. The survey revealed that **65%** of businesses believe communication with customers during delivery is essential. By providing real-time updates to customers, companies can keep them informed about the delivery status, estimated time of arrival, and any delays or issues that may arise. This not only enhances customer satisfaction but also builds trust and loyalty.

Key Performance Indicators: Metrics Defining Operational Focus

The data presented reveals the strategic importance of last mile delivery services in the supply chain. With **37%** of surveyed respondents dedicating over **50%** of their overall logistics operations to last mile delivery services, it is clear that businesses recognize the impact this aspect has on customer satisfaction, brand reputation, and profitability.

Several factors are driving the growing focus on last mile delivery services. The surge in e-commerce and parcel deliveries, coupled with the expectation of fast and reliable deliveries, has pressured companies to optimize their last mile operations. The need to meet customer demands for seamless and convenient last mile deliveries has become a critical operational focus for businesses.

Investing in the last mile can also improve a company's operational efficiency. Companies can reduce costs and increase productivity by



optimizing delivery routes and utilizing technologies such as GPS tracking and automated delivery systems. This, in turn, can lead to increased profitability and competitiveness in the market.

Allocating more resources to the last mile can enable tech companies to expand their customer base by reaching new markets and customers previously inaccessible due to logistical constraints. Companies can deliver products to remote areas and underserved communities by leveraging technologies such as drones and autonomous vehicles. Moreover, businesses focusing on last mile delivery services can identify opportunities to optimize processes, reduce inefficiencies, and lower overall costs. This is particularly important given that last mile delivery services often account for a large portion of total logistics costs.

Urbanization is another critical factor — as urban regions expand and new ones mushroom, the demand for last mile delivery services increases dramatically. In densely populated urban areas, delivering goods to customers' doorsteps can be challenging due to limited parking, traffic congestion, and other logistical hurdles. in electric or hybrid delivery vehicles that can navigate narrow streets and reduce carbon emissions — something that 22% of the respondents stated was a strategy. They may also need to partner with local businesses to provide pickup points and lockers, which can help reduce delivery times and increase convenience for customers.

By investing in last mile delivery operations, companies can also gain a competitive advantage in the urban marketplace. They can differentiate themselves from competitors by offering faster and more convenient delivery options, which can increase customer

222% of the respondents will invest more in EVs and hybrid delivery vehicles

4445

To effectively navigate the complexities of urban delivery, companies must develop innovative solutions tailored to urban customers' unique needs. For example, companies may need to invest loyalty and retention. This can lead to increased revenue and profitability in the long run.

Freight Capacity Challenges Impacting the Last Mile

The challenge of freight capacity in last mile delivery is a growing concern for businesses, with **40%** of the respondents pointing to capacity as a substantial hurdle to providing reliable last mile delivery.

As online shopping gains a bigger portion of the retail pie, so do freight capacity challenges for the last mile, given that e-commerce significantly increases the need for last mile movement. Online shopping leads to a significant surge in parcel volumes, which puts immense pressure on existing freight capacity. As a result, businesses are grappling with challenges related to the transportation of goods, particularly in the last mile.

The last mile presents unique challenges that are distinct from other segments of the supply chain. This final step of the delivery process requires high precision and attention to detail, as it involves transporting goods from a local distribution center to the customer's doorstep. This process is often timesensitive and must be completed within a specific window to meet customer expectations.

However, the surge in e-commerce has created significant challenges in meeting these expectations. The increased demand for last mile of businesses state adequate freight capacity is a hurdle for reliable last mile services movement has strained logistics networks, making it difficult for businesses to ensure timely and reliable delivery services. Freight capacity challenges, such as limited transportation resources, road and traffic conditions, further exacerbate the issue, causing inefficiencies in the last mile, identified as a major obstacle by 35% of

35%

of businesses state road and traffic conditions cause

inefficiencies in the last mile

the respondents.

Seasonal fluctuations are another factor impacting freight capacity tightness. Seasonal peaks such as the holiday season can heighten demand for delivery services, with sudden demand surges leading to potential delays, negatively impacting customer satisfaction. Limited infrastructure is also a significant factor contributing to freight capacity challenges. Inadequate or outdated logistics infrastructure can hinder a business's ability to efficiently manage last mile delivery operations. This may include insufficient warehouse space, lack of loading docks, and limited availability of transportation resources, among others. Environmental and regulatory constraints can also limit available freight capacity. Increasing environmental regulations and urban restrictions, such as emissions standards and traffic congestion management policies, can restrict available freight capacity. These constraints may require businesses to adopt more sustainable practices to meet regulatory requirements and maintain reliable delivery services.

Strategies for Optimizing Freight Capacity

Last-mile operators have a string of metrics to work on to gain that competitive edge, be it enhancing delivery speed, cost efficiency, or overall customer satisfaction. A common denominator to 42% of the respondents was their intention to increase technology integration moving into the future, helping them gain more visibility into assets and manage their networks better.

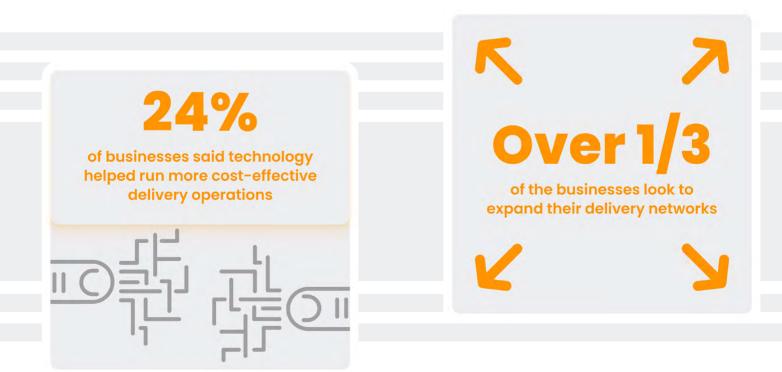
For instance, integrating with shipping tech can help companies track their deliveries in real-time, optimize routes, and get alerts for any issues that may arise. This can dramatically improve scheduling and help companies make more informed decisions — as seen with nearly half the respondents, who mentioned that improved delivery scheduling helped optimize their delivery networks.



Harnessing the power of data analytics and advanced forecasting tools can enable businesses to improve their freight capacity planning. A data-driven approach allows them to forecast demand better and allocate resources efficiently, minimizing the risk of delays and ensuring optimal capacity utilization. Through data analysis, businesses can identify trends and patterns that can help them anticipate fluctuations in demand and plan accordingly. By incorporating this information into their capacity planning, they can ensure they have the necessary resources to handle increased demand during peak periods. Additionally, data analytics can help businesses identify inefficiencies in their supply chain and make strategic adjustments to optimize capacity utilization.

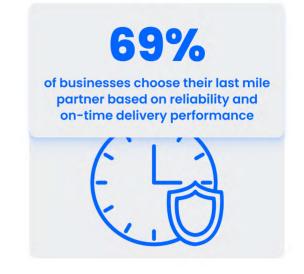
Companies prioritize staying in touch with their delivery workers. **73%** of the respondents contended that it was reasonably essential to know the workers' live location, as it can help them stay ahead of inconsistencies like wrong addresses, missed deliveries, and subsequently work on exception management. Companies are also more receptive to collaborating with other delivery companies to consolidate shipments. 24% of the respondents pointed out that collaborating helps reduce their empty miles, while improving their network density due to association. This ultimately translates to cost savings, lesser congestion by removing redundant delivery runs, and lower emissions.

Over one-third of the respondents felt that expanding their delivery networks was paramount, including notching up network density. A dense and wellspread-out network helps delivery operators gain valuable economies of scale, cutting the distance they move between deliveries, resulting in improved cost efficiency and a lower carbon footprint.



Choosing the Ideal Last Mile Partner for Your Business

When choosing a last mile partner, reliability and on-time delivery performance are top of mind for most businesses. 69% of respondents consider these factors critical when selecting a partner.



Businesses recognize that their reputation is on the line when delivering products to customers, and any delays or disruptions in the delivery process can hurt the customer experience. A dependable last mile provider can help businesses ensure that their products are delivered on time and in good condition, even in the face of unexpected challenges or disruptions. By working with a provider that has a strong track record of reliability and on-time delivery, businesses can minimize the risk of delays, improve customer satisfaction, and protect their reputation.

A further **54%** of the respondents contended that customer service and responsiveness were critical — reflecting the desire for businesses to have ondemand visibility into their last mile. The delivery process can sometimes encounter issues, and how these issues are handled can significantly impact a company's reputation. A last mile partner that prioritizes customer service can play a crucial role in promptly and efficiently resolving any issues that may arise, mitigating potential damage to a company's reputation.

Effective communication, proactive issue resolution, and the ability to handle special requests or delivery exceptions are all critical components of a strong customer service strategy. By selecting a last mile partner with a strong focus on customer service, businesses can ensure their customers receive the support they need and enjoy a seamless delivery experience.



To that effect, a last mile service provider offering such a strong delivery experience would require greater integration of technology in its operations. One-third of the respondents mentioned that a partner that leverages advanced technology, such as realtime tracking, route optimization, and automated notifications, can help businesses streamline their operations and meet the evolving demands of modern consumers.



Real-time tracking enables businesses and customers to track deliveries in real-time, providing greater visibility into the delivery process and enhancing the overall customer experience.

> Route optimization technology helps optimize delivery routes, minimizing delivery times and reducing transportation costs, which is crucial for businesses operating in highly competitive markets.

As companies evolve and respond to dynamic market conditions, having a last mile partner that can scale and adapt their services is critical. This includes managing fluctuations in delivery volume, expanding their geographic footprint, and providing customized delivery options. A flexible and scalable partner can assist businesses in navigating growth and sustaining dependable service levels, even amidst changing circumstances.



While cost efficiency may not be the primary factor for many businesses, it is still vital when selecting a last mile partner. Choosing a partner that offers competitive pricing without compromising on service quality is crucial. By doing so, businesses can strike a balance between managing expenses and maintaining a high level of customer satisfaction — a sentiment that 53% of the respondents echoed. While last-mile delivery challenges are numerous, taking proactive measures to overcome them is pertinent. From partnering with great last mile providers to adopting new technologies and improving sustainability, businesses optimize operations and enhance customer experience, ultimately standing out in a highly competitive market. By rising to the occasion and addressing such challenges, companies can stay ahead of the competition and continue offering reliable, efficient, and sustainable delivery services to their customers.



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