

# From Click To Delivery: Unleashing The Power Of E-Commerce Fulfillment

How 3PL Providers And Cutting-Edge Technology  
Can Transform Order Fulfillment

A FORRESTER CONSULTING THOUGHT LEADERSHIP PAPER COMMISSIONED  
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## Table Of Contents

3	<a href="#"><u>Executive Summary</u></a>
4	<a href="#"><u>Key Findings</u></a>
6	<a href="#"><u>Coping With Shoppers' Changing Expectations And Their Impact On E-Commerce Fulfillment</u></a>
15	<a href="#"><u>In-House Vs. Outsourced Fulfillment: The Struggle For Control And Efficiency</u></a>
28	<a href="#"><u>The Future Of Fulfillment: Leveraging Technology And Outsourcing For Success</u></a>
34	<a href="#"><u>Key Recommendations</u></a>
36	<a href="#"><u>Appendix</u></a>

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## Executive Summary

For today's online retailers, the ability to consistently deliver products to customers on time is critical as it plays a major role in online shoppers' purchasing decisions. E-commerce fulfillment — the process of receiving, storing, picking, packing, shipping, and delivering products to customers who have placed an order in an online store — is becoming a key competitive differentiator in the retail landscape, but its importance is often overlooked. Many online retailers see order fulfillment as simply a box to check, not an opportunity to attract, convert, and retain customers. Those businesses that get this increasingly important piece of the e-commerce puzzle right will be the ones that survive and thrive in the rapidly evolving retail landscape.

In January 2024, Amazon commissioned Forrester Consulting to evaluate the state of e-commerce fulfillment, the challenges that businesses face with fulfillment today, the opportunities that effective fulfillment provides for businesses to gain a competitive advantage, and the future of fulfillment. To explore this topic, Forrester Consulting conducted an online survey with 300 respondents in small and medium-sized businesses (SMBs), large businesses, and enterprises who are managers or higher and have authority or influence over their company's digital, e-commerce, and/or supply chain strategy. We found that online retailers are struggling to keep up with customers' growing demands and expectations for fast, reliable order fulfillment, so they are turning to third-party logistics (3PL) providers and state-of-the-art technologies to help optimize their fulfillment operations.



## Key Findings

**Online retailers struggle to meet consumers' growing expectations and demands for order fulfillment across multiple sales channels.** Eighty-five percent of e-commerce decision-makers say their business's customers have become more demanding over the past five years in terms of their expectations for delivery speed across various sales channels; they predict that those expectations will continue to increase over the next five years. However, on average, only 86% of orders are delivered on time, and 63% of retailers say that at least one in 10 of their orders is delivered late.

**Most e-commerce businesses can't track their order fulfillment KPIs or effectively use the data they collect.** While 82% of leaders say that data and insights can significantly improve fulfillment operations and efficiency, most struggle to track and effectively use data to make informed business decisions.

**Some online retailers keep fulfillment in-house to maintain control but face challenges.** Decision-makers from e-commerce businesses that have chosen to keep order fulfillment in-house state that they did so to maintain control over the fulfillment process, returns process, and their brand. Yet, we found that in-house fulfillment, especially when done poorly, results in substantial challenges and, eventually, damage to the brand they were aiming to protect. As a result, nearly two-thirds of retailers handling fulfillment in-house today plan to outsource these operations to a 3PL in the future, and 91% are at least interested in outsourcing.

## Key Findings (cont.)

### **Outsourcing fulfillment results in substantial business benefits.**

We found that fulfillment can give businesses a significant competitive edge, increase top-line growth, and reduce operating costs. Those online retailers that have chosen to outsource their fulfillment have also seen significant business benefits, including a 29% improvement in on-time delivery rate and pick-to-ship cycle time, a 28% reduction in cost per order, as well as a decrease of nearly a day in their average delivery time, on average.

**Businesses are quickly advancing their technologies to meet customers' order fulfillment demands.** Eighty-two percent of e-commerce leaders are looking to significantly improve their fulfillment technologies to better serve their customers. A growing number of online retailers will turn to 3PL providers — which have access to the latest logistics technologies, such as AI and warehouse robotics — to help them expand their business.



## Coping With Shoppers' Changing Expectations And Their Impact On E-Commerce Fulfillment

As shoppers' expectations continue to evolve, e-commerce leaders are grappling with growing demand for faster and more reliable order fulfillment. How are customers' expectations changing? How can fulfillment play a role in meeting these changing expectations? Are online retailers keeping up? In surveying 300 e-commerce and supply chain strategy decision-makers, we found that:

- **Shoppers' expectations are rapidly changing.** E-commerce decision-makers say that their customers are demanding more from them in terms of fulfillment speed. Five years ago, customers expected a click-to-delivery speed of 5.7 days on average; today, leaders say their customers expect delivery in 2.5 days on average. They predict that next-day or same-day delivery will be the norm within five years (see Figure 1). Most respondents (85%) say their customers have become far more demanding over the past five years in terms of delivery speed expectations, while 80% anticipate this trend to continue over the next five years.

**FIGURE 1**

### Online Shoppers' Average Expectation For Order Delivery Speed Today Vs. Five Years Ago Vs. Five Years From Today

	5 years ago	Today	5 years from today
More than 10 days	9%	0%	1%
6 to 10 days	32%	4%	3%
3 to 5 days	43%	26%	4%
2 days	10%	42%	20%
Next day	4%	25%	36%
Same day	2%	3%	36%

Base: 300 respondents who are managers or higher and have authority or influence over their company's digital, e-commerce, and/or supply chain strategy

Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024

- Fulfillment drives purchasing decisions.** Delivery speeds, cost, and communication play an outsized role in whether online shoppers make a purchase at checkout — and whether they become repeat customers. More than 80% of e-commerce decision-makers agree that the cost of delivery, speed of delivery, and communication of these influence online shoppers' purchasing decisions to a meaningful degree; nearly 80% agree that order fulfillment and return experiences significantly affect whether a customer purchases from a retailer again (see Figure 2). And 82% of e-commerce leaders state that offering faster order delivery speeds has enabled them to increase shopper conversion.

**82%**

of e-commerce leaders state that offering faster order delivery speeds has enabled them to increase shopper conversion.

**FIGURE 2**

**“Before checking out, an online shopper’s decision to buy is influenced to a meaningful degree by:”**



**82%**

How clearly the shipping costs and delivery times are communicated.



**82%**

The cost the retailer charges for delivery.



**80%**

The number of days the retailer promises for delivery.

**“A customer’s decision to buy or not from an online retailer again is significantly influenced by:”**



**79%**

Positive or negative order fulfillment experiences.



**78%**

Positive or negative order return experiences.

Base: 300 respondents who are managers or higher and have authority or influence over their company’s digital, e-commerce, and/or supply chain strategy

Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024

- **Effective order fulfillment is now a key competitive advantage.** With fulfillment playing such a key role in shoppers' purchasing decisions and customer retention, executing it well can give online retailers a massive advantage over the competition: 85% of leaders state that better fulfillment practices give businesses a significant competitive advantage; they also say that online retailers that deliver customer orders with fewer issues have a meaningful advantage over competitors. However, 79% say that poor fulfillment can cause a loss of customer trust and loyalty, and 78% say that it causes a loss in e-commerce sales revenue.
- **Online retailers are struggling to handle order fulfillment operations.** Despite the importance of e-commerce fulfillment, it is not an easy process to manage. Over two-thirds of respondents say that order fulfillment takes up considerable time and resources, and many e-commerce businesses are struggling to keep up. On average, only 86% of leaders state orders are delivered on time, and 63% of online retailers say that at least one in 10 of their orders is delivered late. This is particularly true during peak shopping periods. Very few businesses are meeting the two-day delivery expectations that they say their customers have during these times (see Figure 3). In fact, 64% are unable to deliver consistently during peak times as fast as they believe their customers expect. And 27% still have this issue even during non-peak times. Very few retail respondents — only about a quarter — say their business can consistently deliver more than 90% of its orders within two days.



FIGURE 3

Average Order Delivery Time Today During Peak Vs. Non-Peak Periods

	Average delivery time during peak times	Average delivery time during non-peak times
More than 10 days	1%	1%
6 to 10 days	21%	5%
3 to 5 days	44%	29%
2 days	23%	43%
Next day	9%	17%
Same day	2%	4%

**64%**  
of leaders say their business is unable to deliver on what they believe customers expect during peak times; 27% during non-peak.

Base: 300 respondents who are managers or higher and have authority or influence over their company’s digital, e-commerce, and/or supply chain strategy  
Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024

MEETING SHOPPERS’ EXPECTATIONS ACROSS SALES CHANNELS

Speed isn’t the only place where shoppers’ expectations are changing: 76% of leaders say that their customers expect the order fulfillment experience to be the same regardless of the sales channel they use to place their order. This is a particular challenge given the number of channels through which retailers are selling and consumers are buying. Five years ago, retailers only sold through an average of 4.3 channels; that has ballooned to 5.4 channels today and is expected to reach 6.5 within the next five years (see Figure 4).

Not only are the types of sales channels growing, the number of channels within certain categories is rapidly increasing as well. This is especially true for social media: Five years ago, retailers only sold via an average of 2.6 different social channels; that has risen to 4.0 today and is expected to rise again to 5.4 in five years. The same trend is true for third-party e-commerce marketplaces, with growth from 2.6 channels five years ago to 3.9 today and 5.7 in the next five years.

This rapid increase in the number and variety of e-commerce channels creates challenges for online retailers. They must overcome operational complexities to deliver a consistent checkout and fulfillment experience regardless of the channels consumers use to make purchases.

**FIGURE 4**

## Top Digital Channels Five Years Ago Vs. Today Vs. Five Years From Today

	5 years ago	Today	5 years from today
Our website	49%	61%	67%
Social media channels	46%	63%	72%
Online ordering for in-store customers in our physical store	44%	52%	57%
Our mobile website	42%	54%	63%
Our app	39%	55%	63%
Third-party marketplaces	38%	46%	55%
Through partnerships with others outside of retail	32%	43%	51%
Other retailers' websites	25%	32%	35%
Through products in homes	23%	27%	35%
Our progressive web app (PWA)	22%	26%	37%
Smart TVs	18%	23%	34%
Smart glasses	13%	14%	19%
Smart speakers	13%	18%	25%
Smart cars	12%	14%	18%
Through VR (headsets)	10%	11%	18%
<b>Average:</b>	<b>4.3 channels</b>	<b>5.4 channels</b>	<b>6.5 channels</b>

Base: 138 to 216 respondents who are managers or higher and have authority or influence over their company's digital, e-commerce, and/or supply chain strategy

Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024

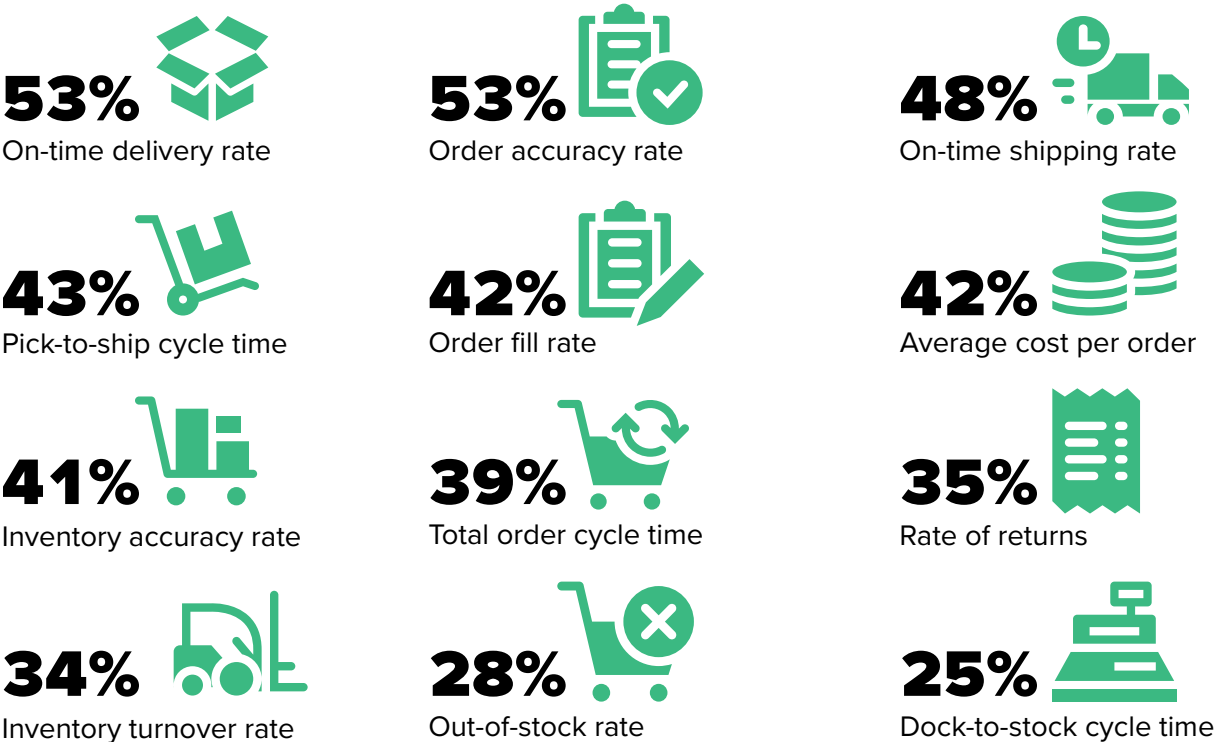
## KPI AND TRACKING DATA

As the complexity and importance of fulfillment grows, tracking KPIs and maintaining a strong data management system has become more critical. However, e-commerce leaders struggle to collect and act on data. While 82% of leaders say that robust fulfillment data and insights can significantly improve fulfillment operations and efficiency, 59% say they struggle to use the data to accurately forecast demand; half say they don't use order fulfillment data to help them make business decisions as much as they should. We found that:

- **KPI tracking today is still fairly low.** Utilizing data begins with data collection, yet leaders are falling short in tracking their KPIs. Overall, only about half of respondents say their business is tracking critical KPIs such as on-time delivery rate, average cost per order, and inventory turnover rate (see Figure 5).

FIGURE 5

### Retailers Track The Following KPIs Today



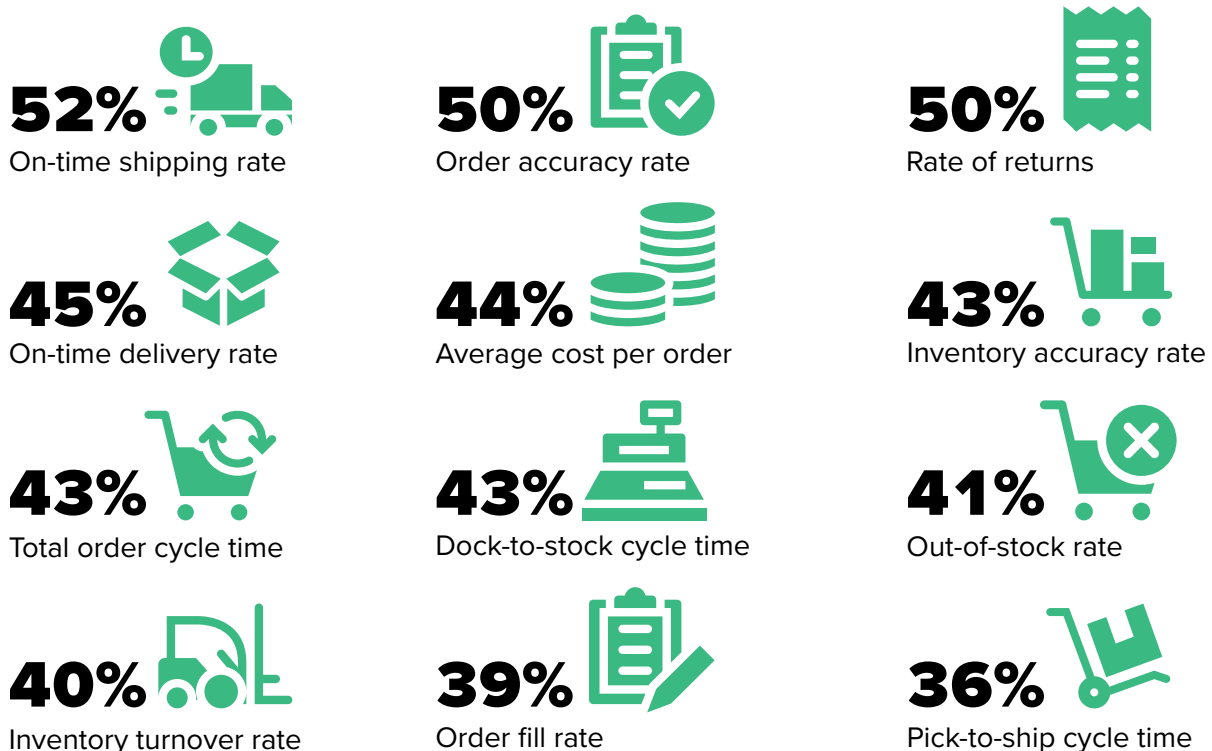
Base: 300 respondents who are managers or higher and have authority or influence over their company's digital, e-commerce, and/or supply chain strategy  
Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024

- **Data is unreliable and therefore is not being used for decision-making.**  
Leaders aren't leveraging the full potential of the data they've collected, in part because the data is often unreliable. Only a small number of leaders say that the KPIs that they track are very reliable. This lack of trust in their data means very few leaders use these key metrics when making business decisions, which can lead to adverse consequences with fulfillment (see Figure 6-1 and 6-2). Two-thirds of respondents report that they struggle to tie customer and sales data to fulfillment data so that they can understand how fulfillment impacts sales and predict how it will affect sales in the future.

**FIGURE 6-1**

**“How reliable/unreliable do you consider each of the following e-commerce fulfillment KPIs?”**

(Showing “Very reliable”)



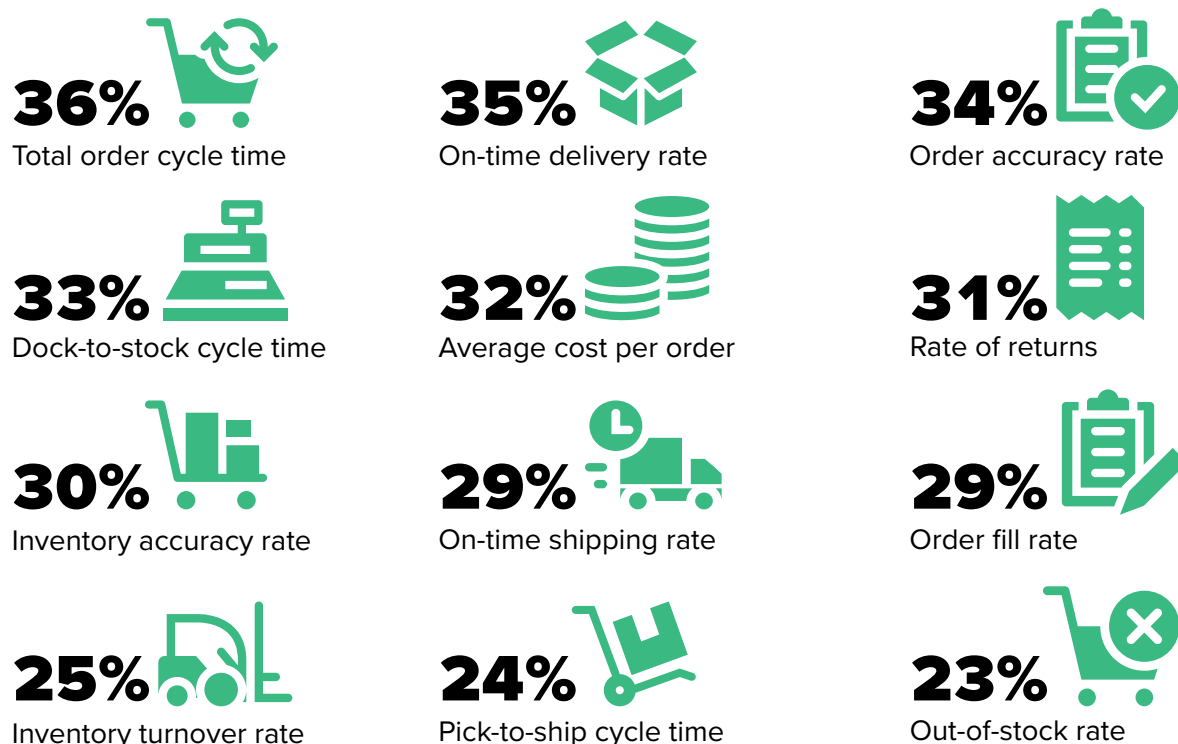
Base: 75 to 159 respondents who are managers or higher and have authority or influence over their company's digital, e-commerce, and/or supply chain strategy; base sizes vary by response category

Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024

FIGURE 6-2

**“How often do you use the following metrics in making business decisions?”**

(Showing “Always”)



Base: 75 to 159 respondents who are managers or higher and have authority or influence over their company's digital, e-commerce, and/or supply chain strategy; base sizes vary by response category

Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024

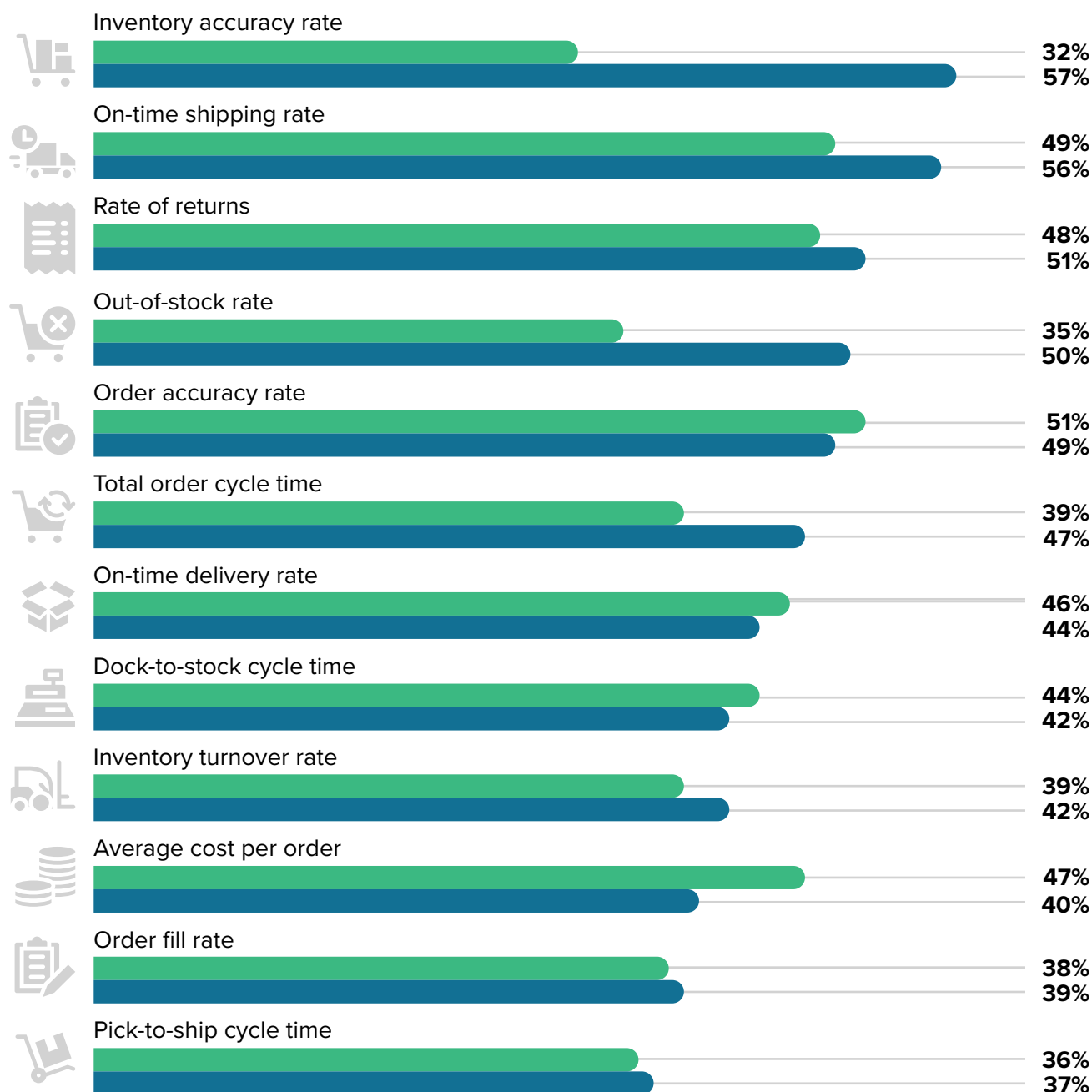
- **Those outsourcing their fulfillment have more confidence in their data.** Despite most businesses not effectively tracking their KPIs, there are key differences between those that outsource their fulfillment to 3PL providers and those that handle fulfillment in-house. Leaders from retailers that outsource fulfillment find their KPIs to be more reliable than their in-house peers (see Figure 7).

**FIGURE 7**

## “How reliable/unreliable do you consider each of the following e-commerce fulfillment KPIs?”

(Showing “Very reliable”)

● In-house fulfillment    ● Outsourcing fulfillment



Base: 75 to 159 respondents who are managers or higher and have authority or influence over their company's digital, e-commerce, and/or supply chain strategy; base sizes vary by response category

Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024



## In-House Vs. Outsourced Fulfillment: The Struggle For Control And Efficiency

Deciding whether to handle e-commerce fulfillment operations in-house or outsource them to a 3PL provider can have a profound impact on the overall success of a business. In this study, we examined the key differences between those handling their fulfillment in-house and those outsourcing it:

1. In-house fulfillment involves managing all aspects of order fulfillment internally.
2. Outsourced fulfillment involves working with a 3PL provider, leveraging its expertise and resources to handle aspects of order fulfillment operations like storage, picking, packing, shipping, and returns.

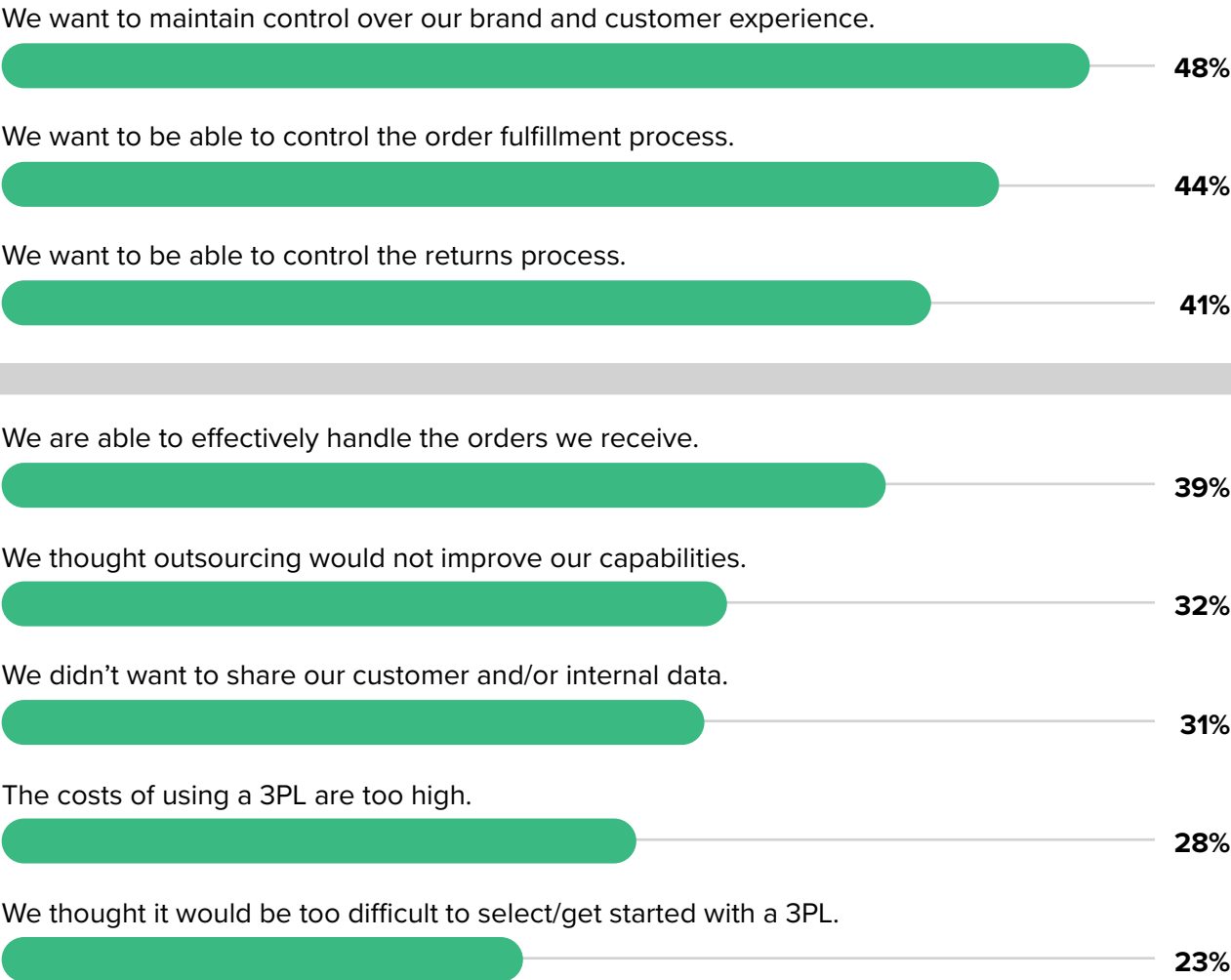
### IN-HOUSE FULFILLMENT IS A STRUGGLE BUT VARIES SIGNIFICANTLY

Why do retailers choose to keep fulfillment in-house today? What do these in-house fulfillment programs look like? Where are the challenges of managing fulfillment in-house? We found that:

- **Leaders choose to handle fulfillment in-house to maintain control over their brand and customer experience.** When asked why they decided to keep their business's fulfillment in-house, leaders showed considerable worry that outsourcing to a 3PL will result in a loss of control over their brand and customer experience. The top three reasons leaders cited for staying in-house were to maintain control over the fulfillment process (44%), the returns process (41%), and, most commonly, over the brand and customer experience (48%) (see Figure 8).

FIGURE 8

The Top Reasons For Keeping E-Commerce Fulfillment In-House



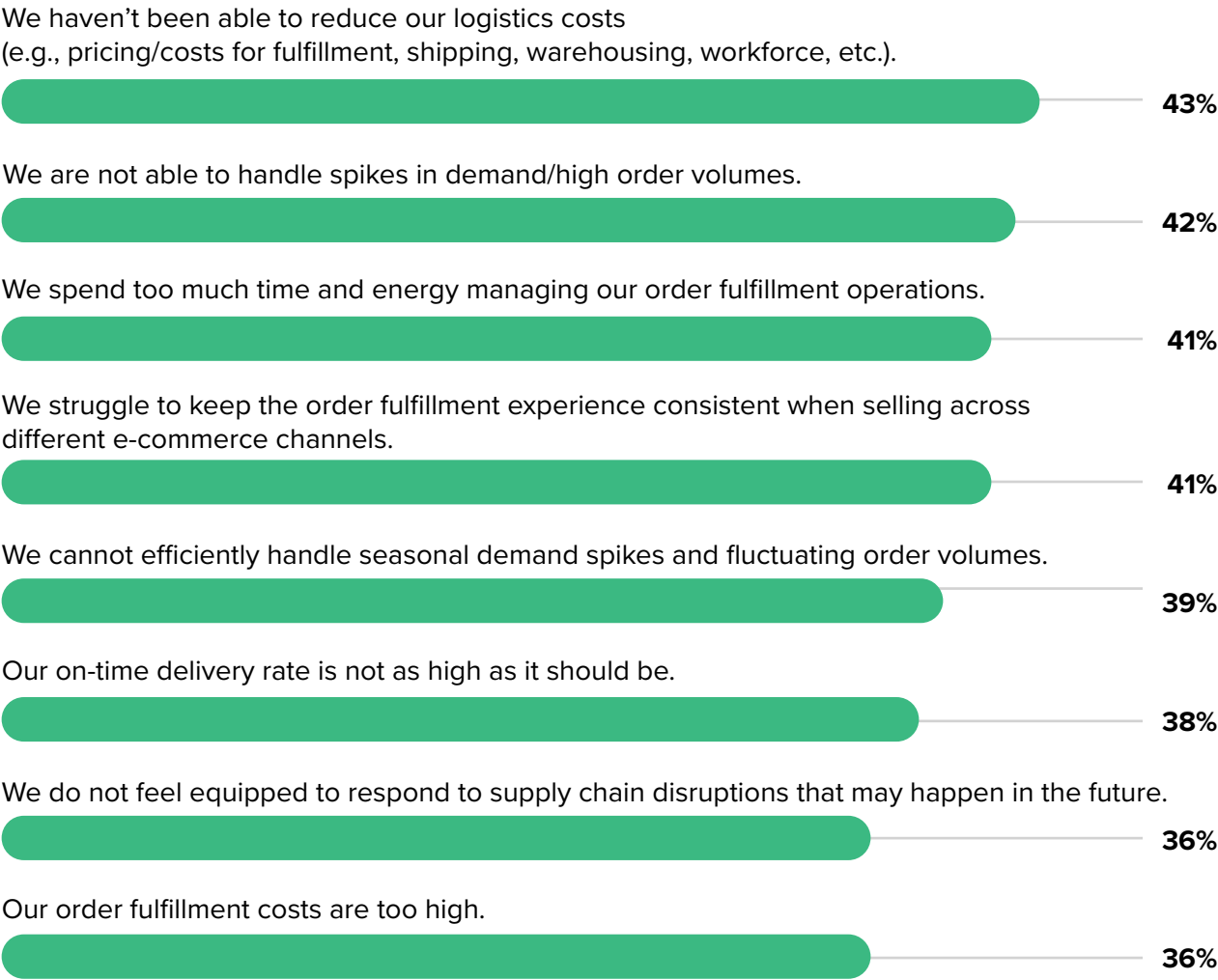
Base: 160 respondents who are managers or higher and have authority or influence over their company's digital, e-commerce, and/or supply chain strategy  
Note: Showing top eight responses  
Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024

- **Keeping fulfillment in-house comes with significant challenges.** While keeping fulfillment in-house gives many online retailers a sense of control, that control comes with considerable responsibility and challenges. Leaders from businesses with in-house fulfillment report being unable to reduce logistics costs (43%) or handle spikes in order volumes (42%); they also spend too much time managing fulfillment (41%) (see Figure 9).

FIGURE 9

The Top Issues With In-House E-Commerce Fulfillment Capabilities

(Showing “Agree”/“Strongly agree”)



Base: 160 respondents who are managers or higher and have authority or influence over their company’s digital, e-commerce, and/or supply chain strategy

Note: Showing top eight responses

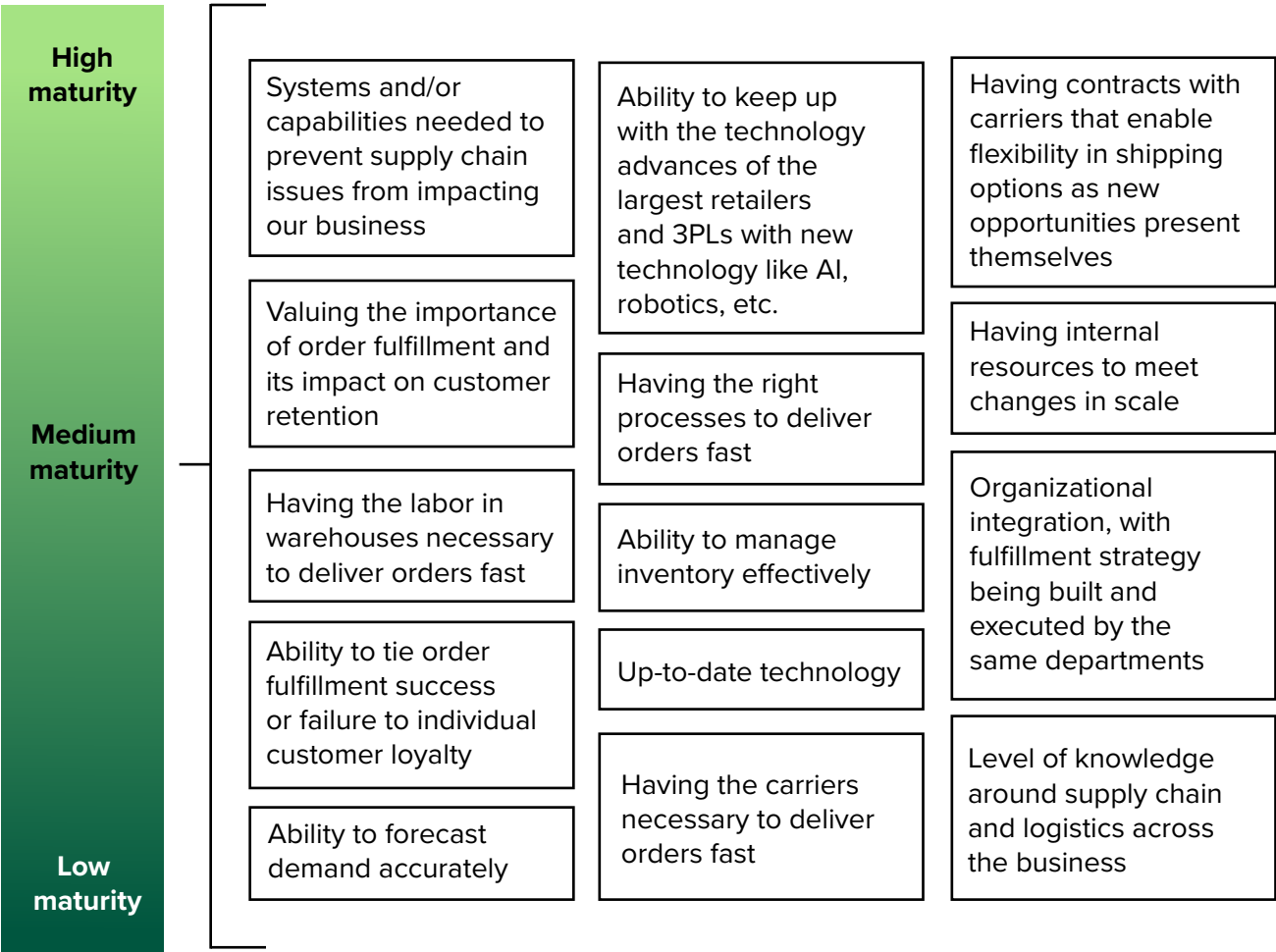
Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024

- **Fulfillment challenges can hinder success.** In-house fulfillment problems have led to critical challenges for businesses, such as an inability to expand to new channels (48%), high fulfillment costs (43%), and a loss of customers due to poor fulfillment capabilities (36%).

While we have been discussing in-house fulfillment programs as a single idea, in reality, each business runs its fulfillment operations differently and has its own strengths and weaknesses. Some in-house fulfillment programs are much more successful than others. To better understand what these variations mean for fulfillment success, we developed an in-house fulfillment maturity model to examine how different programs vary. This maturity model is based on success across 14 different capabilities, such as forecasting demand, having internal resources to meet changes at scale, and managing inventory effectively (see Figure 10).

FIGURE 10

IN-HOUSE



Base: 140 respondents who are managers or higher and have authority or influence over their company’s digital, e-commerce, and/or supply chain strategy

Note: Respondents were given a score between 1 and 5 for each of the capabilities above; these scores were totaled and then respondents were divided into three approximately even groups based on total score

Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024

For the purposes of this study, we focused on the extremes of high-maturity and low-maturity in-house fulfillment programs. Not entirely surprisingly, enterprises were more likely to have high-maturity programs than SMBs — 40% vs 29% — but all company sizes showed a wide range of maturity. We found that:

- **Low-maturity businesses face far greater issues.** When it comes to the challenges that companies face with their fulfillment capabilities today, we see an enormous gap between high- and low-maturity programs. Businesses with low-maturity in-house fulfillment programs are substantially more likely to face issues in handling spikes in order volumes, being able to reliably ensure a first-class customer experience, and spending far too much time managing fulfillment operations (see Figure 11-1). These low-maturity retailers are also far more likely than their high-maturity counterparts to have to deal with the negative consequences of order fulfillment issues like stockouts or overstocking, losing customers due to poor fulfillment performance, and difficulties in expanding to new channels, markets, or product lines (see Figure 11-2).

FIGURE 11-1

The Top Issues With In-House E-Commerce Fulfillment Capabilities:  
High Maturity Vs. Low Maturity

● High maturity    ● Low maturity

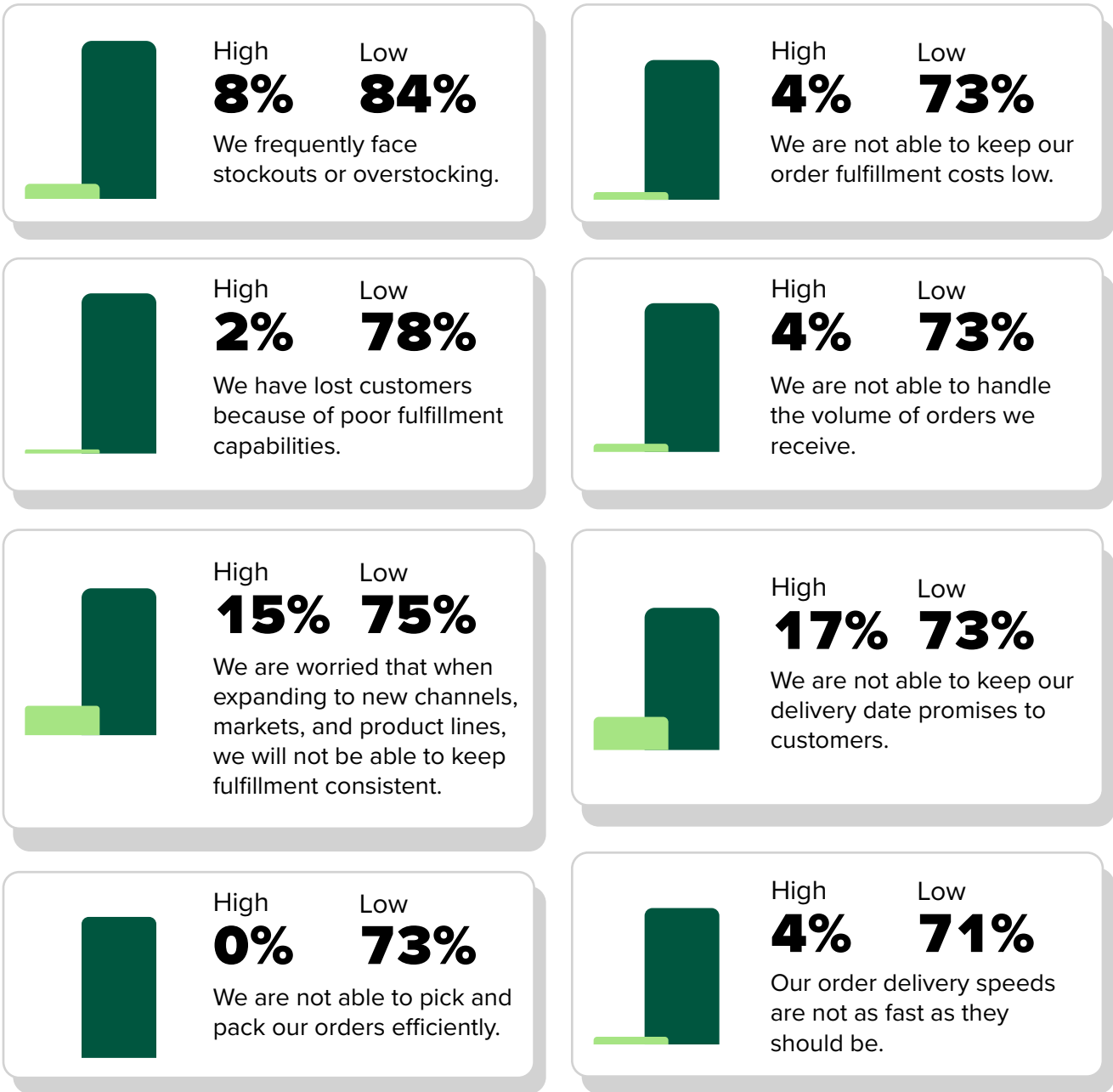




FIGURE 11-2

The Negative Consequences That Stem From Issues With In-House Fulfillment Capabilities: High Maturity Vs. Low Maturity

● High maturity    ● Low maturity



Base: 160 respondents who are managers or higher and have authority or influence over their company's digital, e-commerce, and/or supply chain strategy  
Note: Showing top eight responses  
Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024

- **Lack of prioritization holds low-maturity firms back.** We examined what holds low-maturity e-commerce businesses back from improving their fulfillment. We found that the issues stem primarily from their deprioritization of fulfillment and lack of resources. Often, these firms don't focus on fulfillment and don't dedicate budget and staff to it. As they are attempting to manage fulfillment in-house rather than leveraging the resources of a 3PL provider, they also struggle with a lack of access to a strong fulfillment network and the latest fulfillment technologies (see Figure 12).

FIGURE 12

IN-HOUSE

### “Which of the following holds your organization back from improving its fulfillment capabilities?”

#### ● Low maturity

Need to focus on other areas of the business (e.g., product development, sales, etc.) instead of fulfillment



Lack of access to fulfillment network and resources



Lack of access to the latest logistics technologies



Lack of budget



Lack of internal knowledge/expertise



Lack of access to data about our order fulfillment performance



Lack of executive support



Base: 160 respondents who are managers or higher and have authority or influence over their company's digital, e-commerce, and/or supply chain strategy

Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024

# OUTSOURCING FULFILLMENT TO A 3PL PROVIDER: THE KEY TO STREAMLINING OPERATIONS

79%

Why are many online retailers choosing to outsource their fulfillment to 3PL providers? What are these providers able to deliver that retailers aren't capable of in-house? What hesitations did leaders have before outsourcing? We found that:

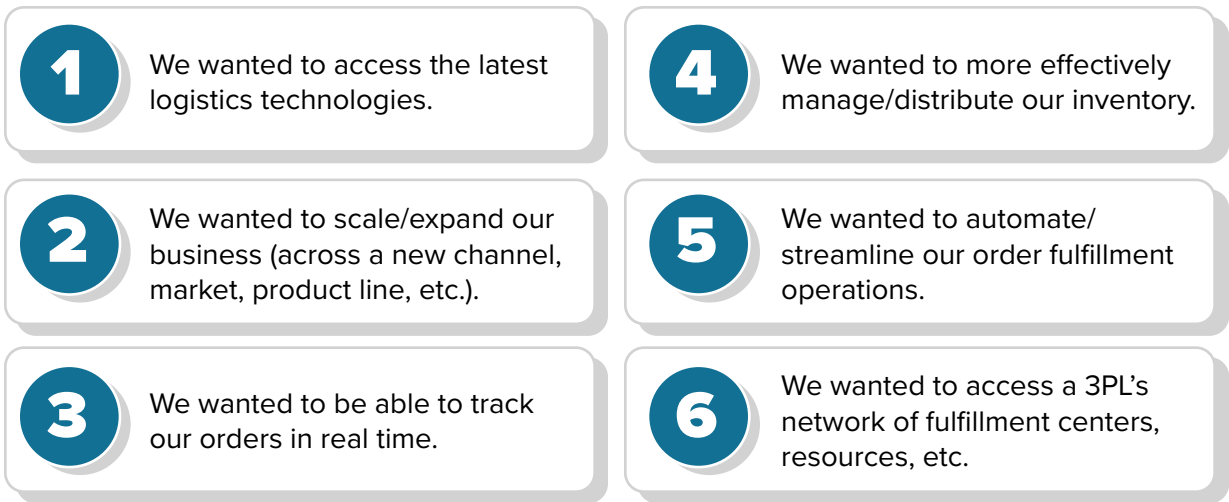
- **Outsourcing fulfillment can improve speed and efficiency.** For the most part, leaders from businesses that chose to outsource their fulfillment say they did so to take the responsibility for fulfillment off their plate; 79% report that outsourcing to a 3PL provider has freed up their time to concentrate on other aspects of the business. They also wanted to gain access to state-of-the-art logistics technologies, to scale their business, to gain the ability to track orders in real time, and to streamline their fulfillment operations (see Figures 13-1 and 13-2). 3PL providers present businesses with access to capabilities they can't get in-house.

of leaders report that outsourcing to a 3PL provider has freed up their time to concentrate on other aspects of the business.

FIGURE 13-1

OUTSOURCING

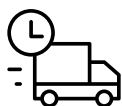
## The Top Reasons For Outsourcing Fulfillment



Base: 140 respondents who are managers or higher and have authority or influence over their company's digital, e-commerce, and/or supply chain strategy

Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024

**“Which of the following fulfillment capabilities does your business’s 3PL offer that it would be unable to replicate in-house?”**

**1**

The ability to offer faster order delivery speeds

**2**

The ability to achieve a higher on-time delivery rate

**3**

The ability to integrate back-end systems, including e-commerce software, order and inventory management systems, ERPs, etc.

**4**

The ability to accurately forecast demand

**5**

Robotics/automation capabilities for order fulfillment

**6**

The ability to negotiate with shipping carriers

Base: 140 respondents who are managers or higher and have authority or influence over their company’s digital, e-commerce, and/or supply chain strategy

Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024

However, leaders at different types of online retailers have different drivers for outsourcing fulfillment. Decision-makers at enterprises are far more interested than their SMB peers in access to the latest technologies (59% vs. 28%), increasing their on-time delivery rate (47% vs. 11%), and more reliable order fulfillment (41% vs. 21%).

- **Leaders from businesses that outsource their fulfillment initially shared similar concerns with those from businesses that handle their fulfillment in-house.** Leaders said that before their businesses started outsourcing fulfillment to a 3PL provider, they were most concerned about losing control over their brand and customer experience (32%) as well as losing control over the order fulfillment process (29%). These are very similar concerns to those from businesses that handle their fulfillment in-house.



**57%**

of e-commerce decision-makers say losing control over their brand and customer experience by outsourcing to a 3PL was **far less** of an issue than they had initially thought.

- **These fears and other concerns were mostly unfounded.** Leaders from businesses that chose to use a 3PL to manage their order fulfillment quickly realized that their initial worries about outsourcing were much less of a concern than they had anticipated. Some 57% of leaders say losing control over their brand and customer experience was far less of an issue than they had initially thought, and 46% say the same about losing control over the fulfillment process in general. And 47% of respondents stated that concerns about the costs of using a 3PL being too high were less of an issue than they had anticipated before they started outsourcing.



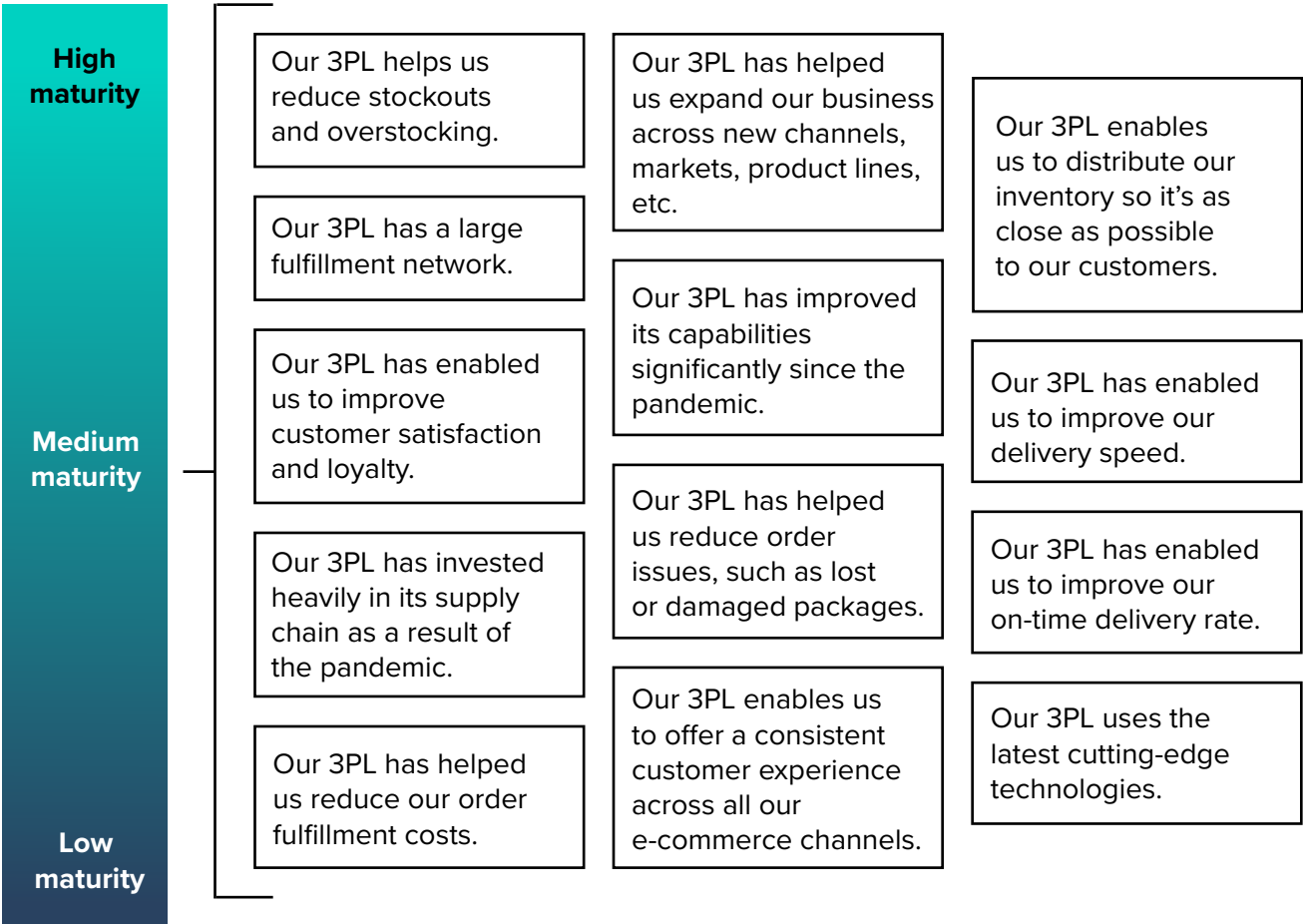
**47%**

of respondents state that concerns about the costs of using a 3PL being too high were less of an issue than they had anticipated before they started outsourcing.

- **Outsourcing also comes with its own risks.** Even though their concerns were allayed after using a 3PL provider, many leaders have still encountered challenges through outsourcing fulfillment: 29% say the costs for fulfillment and shipping increased; 27% say order delivery speed is not as fast as they'd like it to be; and 26% say they have difficulty tracking inventory. Choosing the right 3PL provider that fits your specific business needs is critical to minimize these and other fulfillment risks.

As with in-house fulfillment programs, not all 3PLs are created equal. So, we similarly wanted to understand the difference between less- and more-effective 3PLs and created an outsourcing fulfillment maturity model. This model was based on 13 criteria, such as the size of the 3PL provider’s fulfillment network, the use of cutting-edge technology, and the ability to help reduce fulfillment costs (see Figure 14).

FIGURE 14



Base: 140 respondents who are managers or higher and have authority or influence over their company’s digital, e-commerce, and/or supply chain strategy  
Note: Respondents were given a score between 1 and 5 for each of the capabilities above; these scores were totaled, and respondents were divided into three approximately even groups based on total score  
Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024



As with in-house maturity, we found that companies working with low-maturity 3PLs are considerably more likely to face issues with their fulfillment, including higher logistics costs, less-than-ideal delivery speeds, and difficulty tracking inventory (see Figure 15).

FIGURE 15

The Top Issues With Outsourcing E-Commerce Fulfillment Capabilities To A 3PL Provider: High Maturity Vs. Low Maturity

● High maturity    ● Low maturity



## The Future Of Fulfillment: Leveraging Technology And Outsourcing For Success

While navigating the e-commerce fulfillment landscape can be exceedingly challenging, those from businesses that do it right can see transformational business benefits. Engaging the right 3PL providers can revolutionize an online retailer's order fulfillment operations.

How has outsourcing improved fulfillment? Are there differences when it comes to using a high-maturity 3PL provider versus a low-maturity 3PL provider? We found that:

- **Outsourcing fulfillment has provided significant benefits.** Leaders state that outsourcing fulfillment to a 3PL has led to transformational improvements to their business, including reduced operating costs (77%), improved on-time delivery rate (76%), and increased customer conversion through faster delivery promises (74%) (see Figure 16).

**74%**

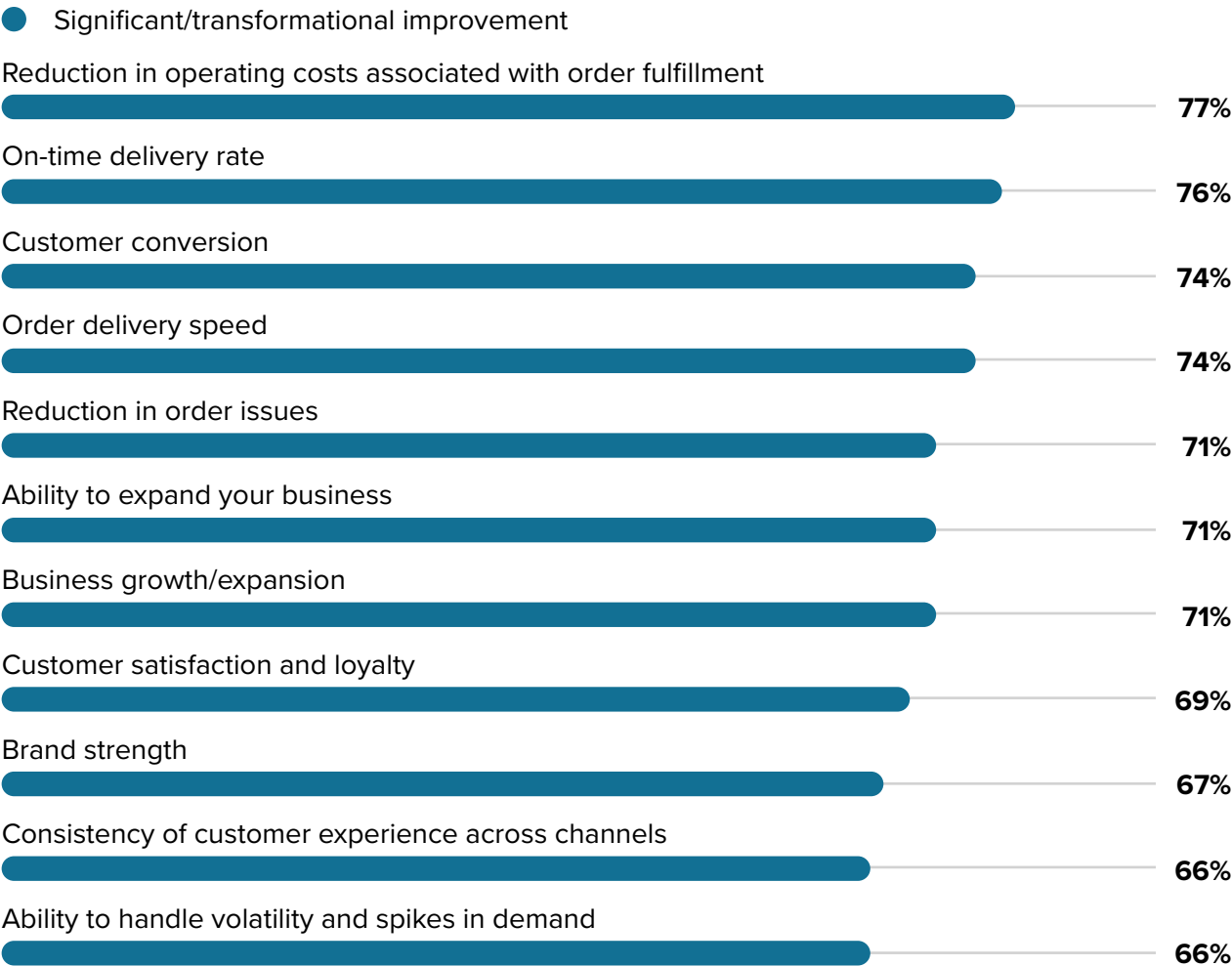
of e-commerce leaders from businesses that have outsourced their fulfillment say their firm increased its customer conversion through faster delivery promises.

By outsourcing their fulfillment, e-commerce businesses have improved their delivery speeds by an average of **24%**.



FIGURE 16

**“To what extent have each of the following changed since your business began outsourcing its fulfillment capabilities to a 3PL?”**



Base: 140 respondents who are managers or higher and have authority or influence over their company’s digital, e-commerce, and/or supply chain strategy

Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024

To go beyond this qualitative reporting of benefits, we wanted to quantify exactly what level of improvements retailers gained by outsourcing fulfillment. We found that e-commerce businesses improved their delivery speeds by an average of 24% by outsourcing their fulfillment, with order delivery averaging 3.7 days for in-house fulfillment and 2.8 days for outsourced (see Figure 17). They also saw a 29.4% improvement in on-time delivery rate, a 29.7% improvement in pick-to-ship cycle time, and a 27.8% reduction in average fulfillment cost per order (see Figure 18).

FIGURE 17

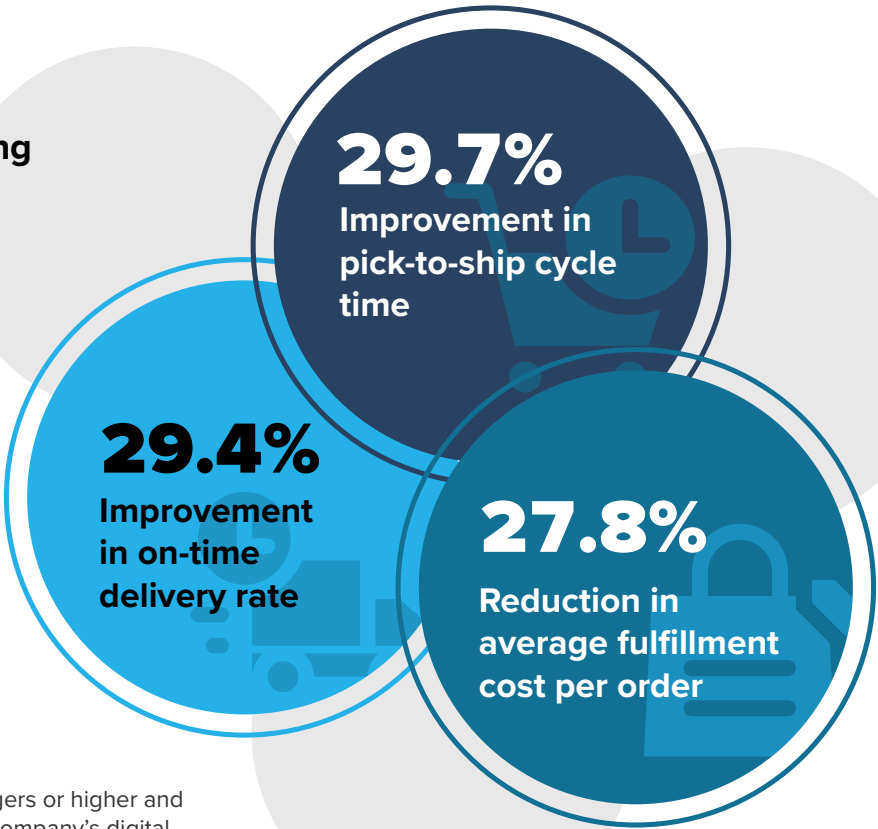
Average Order Delivery Speed Before And After Outsourcing Fulfillment

	Before outsourcing	After outsourcing
More than 10 days	0%	1%
6-10 days	12%	9%
3-5 days	55%	22%
2 days	19%	43%
Next day	11%	21%
Same day	2%	4%

Base: 140 respondents who are managers or higher and have authority or influence over their company’s digital, e-commerce, and/or supply chain strategy  
Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024

FIGURE 18

Average Improvements  
Gained From Outsourcing  
Fulfillment To A 3PL



Base: 160 respondents who are managers or higher and have authority or influence over their company’s digital, e-commerce, and/or supply chain strategy  
Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024

- **High-maturity 3PLs see even greater gains.**

In general, leaders from businesses that have outsourced their fulfillment to a 3PL provider have seen impressive improvements. However, those from businesses that outsourced to high-maturity 3PL providers have seen considerably greater benefits than those from companies outsourcing to low-maturity 3PLs (see Figure 19). An impressive 93% of those working with high-maturity 3PL providers say that offering faster delivery speeds has enabled them to increase shopper conversion by more than 25%. While nearly all who outsourced saw benefits, this significant gap between the benefits delivered by high- and low-maturity 3PLs providers underlines the need to choose a fulfillment provider carefully. By selecting the right 3PL provider, retailers can gain significant competitive advantages from outsourcing.

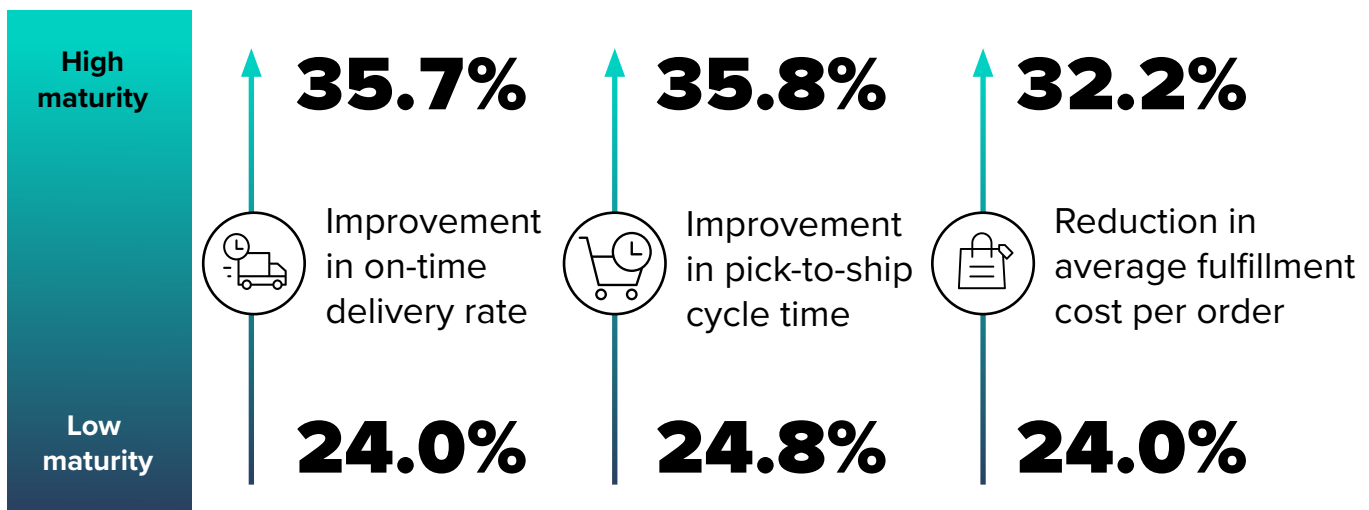
**93%**

of leaders from businesses working with high-maturity 3PL providers said that offering faster delivery speeds has enabled their company to increase shopper conversion by more than 25%.

FIGURE 19

OUTSOURCING

### Average Improvements Gained From Outsourcing Fulfillment To A 3PL: High Maturity Vs. Low Maturity



Base: 160 respondents who are managers or higher and have authority or influence over their company's digital, e-commerce, and/or supply chain strategy

Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024

# TECHNOLOGY INNOVATION: THE KEY TO FUTURE SUCCESS IN FULFILLMENT OPERATIONS

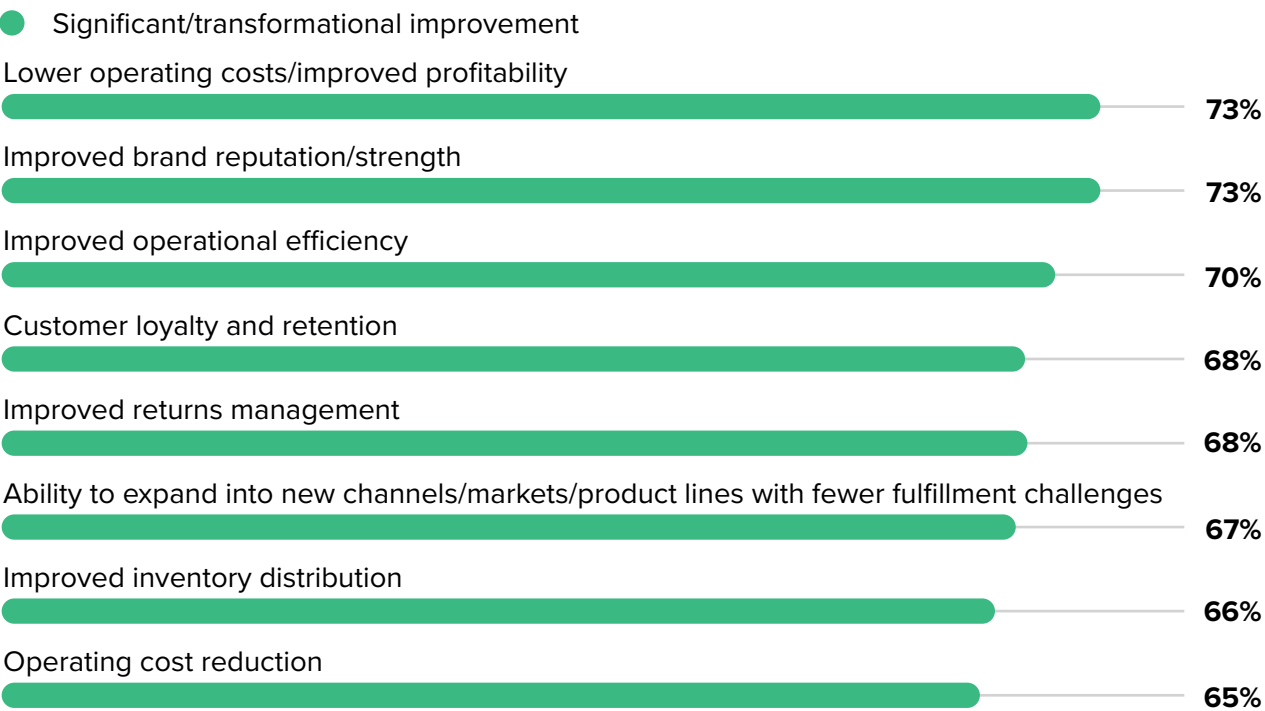
What will the fulfillment practices of tomorrow look like? How are those outsourcing fulfillment and those keeping fulfillment in-house changing their strategies? We found that:

- **Leaders from businesses that keep fulfillment in-house see the value of improving their fulfillment.** Those who handle fulfillment in-house know they have an opportunity to achieve business benefits by streamlining their order fulfillment operations. They see the potential of improving their fulfillment capabilities to lower their operating costs (73%), improve brand strength (73%), and improve operational efficiency (70%) (see Figure 20).

FIGURE 20

IN-HOUSE

**“To what extent do you believe a significant improvement in your business’s e-commerce fulfillment capabilities would provide the following benefits?”**



Base: 160 respondents who are managers or higher and have authority or influence over their company’s digital, e-commerce, and/or supply chain strategy

Note: Showing top eight responses

Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, January 2024

- **Leaders are increasingly realizing the advantages and benefits of outsourcing their fulfillment operations.** A growing number of business decision-makers are becoming aware of the value that they could gain from improving fulfillment — and many businesses that currently handle their fulfillment in-house are turning to outsourcing: Nearly two-thirds of leaders from online retailers that aren't currently outsourcing fulfillment plan to do so in the future, and 91% say they are at least interested in outsourcing.
- **Few are looking to change their 3PL provider.** Surprisingly, only 19% of leaders from businesses that outsource their fulfillment today are considering changing their 3PL providers. While leaders may be drawn to the benefits and opportunities that outsourcing can provide, they may not realize that they could benefit even more by exploring other 3PLs and finding the right providers for their business.
- **Technological innovation will be key going forward.** Prioritizing technological innovation will be of the utmost concern in the future. Some 82% of respondents say that advances in fulfillment through technological innovations like AI and robotics will significantly improve their business's ability to serve customers. We expect to see more leaders looking to 3PLs — many of whom utilize state-of-the-art fulfillment technologies — to help them scale their businesses. As we noted earlier in this study, the top reason leaders' businesses decided to outsource was to gain access to the latest logistics technologies, and 82% of those from businesses that outsource say that their 3PL provider uses cutting-edge technologies. Finding a 3PL provider that can continue to meet this need will become increasingly vital.

## Key Recommendations

Forrester's in-depth survey of e-commerce decision-makers about their companies' order fulfillment operations yielded several important recommendations:

### **Redefine fulfillment from “what you do” to “how you compete.”**

Digitally savvy consumers feel that product availability has become as ubiquitous as access to the web itself; they have shifted their loyalties to those retailers that create online shopping experiences that provide more reliability, consistency, and value. Done well, order fulfillment helps meet those expectations and enables the retailer to better win, serve, and retain customers. And as a result of reducing operating costs by optimizing fulfillment, e-commerce businesses can have more capital available for other investments, such as new or upgraded technologies and larger budgets for acquisition and retention marketing.

### **Reassess your fulfillment management and measurement maturity.**

Retailers and brands can no longer afford to waste precious capital on fulfillment inefficiencies or to lose customers by failing to deliver orders within the promised time frame. Even a 99% on-time delivery rate translates to one in 100 customers experiencing some level of disappointment and dissatisfaction with the brand. Those responsible for fulfillment must take a hard look at the robustness of their company's technologies and real-time data analysis capabilities. By leveraging real-time data to generate insights, a business can remain agile and respond efficiently to dynamic supply chain situations.

### **Challenge your assumptions and beliefs about outsourcing.**

While some retailers and brands believe that retaining control of fulfillment operations is important to ensure they minimize operating expenses and give customers the best possible order delivery experience, the data doesn't generally support these assumptions. Most leaders from e-commerce



businesses that have made the switch to outsourcing report improvements in nearly all aspects of fulfillment performance. Those in charge of fulfillment operations should assess whether they are being too company-obsessed, rather than customer-obsessed, when making strategic decisions about supporting fulfillment in-house rather than outsourcing.

**Vet your options carefully when choosing a 3PL provider.**

The survey shows that e-commerce businesses that have opted to outsource their fulfillment to a 3PL have seen varying levels of impact. While around three-quarters of respondents state that their business has realized lower operating costs as well as improved on-time delivery rates and shopper conversion rates by using a 3PL, some say their company has not been able to achieve these benefits through outsourcing. This suggests that not all outsourced fulfillment providers are guaranteed to deliver the outcomes your company would expect. When choosing a 3PL, make sure you thoroughly explore your options and assess your own needs and capabilities against the final list of providers under consideration so that you can identify the right 3PL for your business.

**Decide whether to dedicate significant resources to optimizing fulfillment or outsource to specialists.**

Getting to an optimized state of in-house order fulfillment — where click-to-delivery operations are flawless, costs are minimized, and customer expectations are consistently met — takes a dedicated team focused on driving continuous improvement through operational iterations and the close monitoring of fulfillment data. No less important is having the robust technologies needed to accomplish these tasks, as well as investing to ensure you're using the latest innovations in fulfillment technology as they come to market. For those unwilling or unable to make such a commitment, the business case for outsourcing fulfillment becomes even stronger.

## Appendix A: Methodology

In this study, Forrester conducted an online survey of 300 respondents in small and medium-sized businesses, large businesses, and enterprises in the US who are managers or higher and have authority or influence over their company’s digital, e-commerce, and/or supply chain strategy. Survey participants included decision-makers in e-commerce, operations marketing, product/project/program management, and supply chain/logistics departments. Respondents were offered a small incentive as a thank-you for time spent on the survey. The study began in December 2023 and was completed in January 2024.

## Appendix B: Demographics

REGION	
United States	100%

INDUSTRY	
Retail	18%
Consumer product goods	16%
Electronics and/or electronics accessories	16%
Consumer packaged goods: food or non-food	13%
Apparel or footwear	10%
Professional services, including consulting	8%
Appliances	6%
Home goods	5%
Health and beauty	3%
Pharmaceutical and other consumer medical products	2%
Sporting goods	1%
Toys	1%

COMPANY SIZE: ANNUAL REVENUE	
SMB (\$1M to \$49M)	34%
Large (\$50M to \$99M)	33%
Enterprise (\$100M to more than \$200M)	33%

RESPONDENT LEVEL	
C-level executive	10%
Vice president	41%
Director	33%
Manager	17%

CURRENT POSITION/DEPARTMENT	
E-commerce/digital commerce	40%
Marketing	16%
Operations	16%
Product/project/program management	15%
Supply chain/logistics	13%

Note: Percentages may not total 100 due to rounding.

## Appendix B: Demographics (cont.)

### CHANNELS USED TO SELL TO CUSTOMERS

Online sales/e-commerce	<b>100%</b>
Brick-and-mortar retail locations	<b>83%</b>
B2B sales	<b>65%</b>

### LEVEL OF RESPONSIBILITY: ONLINE RETAIL SALES AND E-COMMERCE STRATEGY

Final decision-maker at my business	<b>72%</b>
Part of a team making decisions	<b>23%</b>
Influence decisions	<b>5%</b>

### BUSINESS MODEL

Only B2C	<b>35%</b>
Primarily B2C with some B2B	<b>17%</b>
Roughly equal split between B2C and B2B	<b>41%</b>
Primarily B2B with some B2C	<b>8%</b>

### LEVEL OF RESPONSIBILITY: ONLINE FULFILLMENT/LOGISTICS

Final decision-maker at my business	<b>73%</b>
Part of a team making decisions	<b>23%</b>
Influence decisions	<b>3%</b>

Note: Percentages may not total 100 due to rounding.



FORRESTER®



# 3PLs And Tech: Driving Scalable E-Commerce Fulfillment For Large Businesses And Enterprises

## OUTSOURCING ORDER FULFILLMENT LEADS TO SIGNIFICANT IMPROVEMENTS

On average, large businesses and enterprises that outsource to a 3PL see:\*

# 77%

Saw a significant/ transformational improvement in customer conversion through faster delivery promises

# 28.7%

Improvement in on-time delivery rate

# 27.4%

Reduction in average fulfillment cost per order

# 27.2%

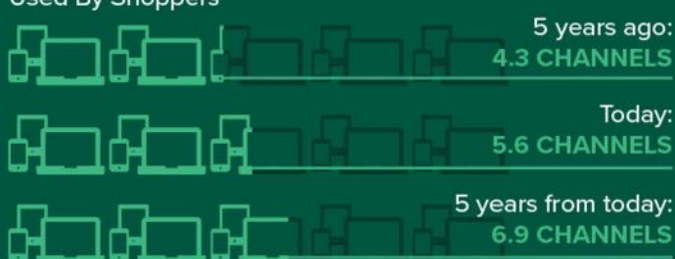
Reduction in average delivery time

## SHOPPERS' EXPECTATIONS AND HABITS ARE RAPIDLY CHANGING

Shoppers' Average Delivery-Speed Expectations



Average Number Of Sales Channels Used By Shoppers



## POOR FULFILLMENT CAN HAVE NEGATIVE CONSEQUENCES TO THE BUSINESS



# 78%

of respondents say poor order fulfillment experiences can cause a loss in e-commerce sales revenue.

## BUSINESSES TURN TO 3PLS FOR ADVANCED TECHNOLOGY TO MEET CUSTOMERS' NEEDS



# 81%

of respondents say advancements in fulfillment through tech innovations like AI and robotics will significantly improve their organization's ability to serve customers in the future.

Base: 198 managers+ from large businesses/enterprises who have authority or influence over their organization's digital and e-commerce and/or supply-chain strategy

\*Base: 87 managers+ from large businesses/enterprises who have authority or influence over their organization's digital and e-commerce and/or supply-chain strategy

Source: A commissioned study conducted by Forrester Consulting on behalf of Amazon, April 2024

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