

The Future of Fulfillment Report



Executive Summary

On behalf of Blue Yonder, Researchscape International conducted an online survey of 300 senior executives in omni-channel retail and e-commerce firms with responsibility for logistics and fulfillment. The survey was fielded from October 6 to 13, 2020.

Retailers surveyed saw e-commerce revenue increase by 33% from before the COVID-19 lockdowns, to today. This led to fulfillment challenges including out of stocks (51%), difficulty maintaining mandated social distancing practices or safety protocols (36%), and worker scarcity (34%). Inventory accuracy is critical, along with the ability to view enterprise and third-party vendor inventory across locations and suppliers. In addition, social distancing has propelled traditional brick and mortar retailers to adapt by offering curbside, pickup and contactless shopping experiences.

While the vast majority of executives (81%) believe their order management solution meets their omnichannel fulfillment requirements, only three out of 10 (29%) rate those solutions as excellent.

Given the growth in e-commerce, the automation of fulfillment networks continues as well, with 14% having automation across their networks today. The typical logistic network has 2-4 fulfillment centers:

- This has increased since March for 27% of firms, remained steady for 66% of firms, and decreased for 7%.
- For those organizations that increased the size of their network, the main reason was to respond to increased demand (71%), while nearly half needed to be closer to the consumer (46%) to reduce cost to fulfill and enable delivery speed and convenience. Only a quarter were worried about meeting omnichannel needs (24%).
- The median proportion of online orders filled in full is 90-95%, while just under half (42%) indicated that over 95% of their orders are filled in full as received

online.

• Most of the responding organizations were founded on or after 2000 (59%), with 17% being startups (in business for fewer than five years).

Other Questions

- Which of the following fulfillment options do you have in your network today? In-Store fulfillment (BOPIS, Ship from Store) (64%), E-commerce fulfillment centers E- (49%), Micro-fulfillment centers (15%).
- Which of these delivery options do you offer to your customers today? Standard delivery (74%), Ship-from store (49%), Buy Online / Pickup in Store (BOPIS) (46%).

Challenges

- Regional chains are more likely (24% vs. 14%) to answer No to Does your existing Order Management System fulfill your omni-channel fulfillment requirements?
- Companies with one fulfillment center are also more likely (26% vs. 15%-18%) to have an issue with their existing order management solution fulfilling their omni-channel fulfillment requirements.
- What challenges are you facing when it comes to the last mile of the supply chain? Increasing delivery costs (54%), Reliable order fulfilment (35%), Lack of warehouse workers (25%).
- What extent of your fulfillment locations are automated today? Some (22%), None (29%).
- Almost half (47%) of respondents who indicated "All sales are from e-commerce" note that they have no automation in their fulfillment locations.
- What extent of your fulfillment locations do you plan to have automated 12 months from now? All

(21%), Most (23%).

- Some respondents (40%) who indicated "All sales are from e-commerce" note that they have no plans in the next 12 months to add automation in their fulfillment locations.
- What e-commerce fulfillment challenges has your organization faced as a result of the COVID-19 pandemic? Out of stocks (51%), Maintaining mandated social distancing practices or safety protocols (36%), Worker scarcity (34%).
- Companies with only one fulfillment center in their logistics network are almost three times more likely to indicate no e-commerce fulfillment challenges as a result of the COVID-19 pandemic.

Demand Spikes

- How did the spike in e-commerce demand impact the productivity of your operations? Increased productivity (49%), No change (40%), Decreased productivity (11%).
- Which of the following of your Product Assortment strategies did you deploy to manage the demand spikes during COVID-19 pandemic? We manually prioritized high demand SKUs to maximize production capacity for our vendors (37%), Our SKU management has remained the same (36%), We manually reduced the number of SKUs in product categories to simplify the supply chain (27%).



Firmographics

When was your organization founded?

| 2000 to 2015 | 43% |
|-----------------|-----|
| 1999 or earlier | 41% |
| 2016 or later | 17% |

What is your title?

| Other | 30% |
|--|-----|
| Director or manager of e-commerce | 20% |
| Senior manager of logistics + e-commerce | 18% |

Which, if any, of these product categories are sold by your company?

| Retail – Hard Goods | 54% |
|---------------------|-----|
| General Merchandise | 49% |
| Retail – Soft Goods | 39% |

What is your headcount?

| 1-9 employees | 27% |
|-----------------------|-----|
| 10-99 employees | 19% |
| 100-999 employees | 16% |
| 10,000+ employees | 15% |
| 1,000-9,999 employees | 14% |
| 0 employees | 10% |

Grocery Findings

- Significance found in offering the following delivery options:
 - Buy Online / Pickup in Store: 61%
 - Curbside pickup: 54%
- 66% reported out-of-stocks
- Somewhat more likely to have increased their number of fulfillment centers. 40% indicated an increase vs.
 53% reporting "Stayed the same." Next to the highest reporting which was "Drug Store/Health & Beauty" at 41%. This allows them to meet e-commerce needs and maintain a consistent customer and brand experience.
- Dark stores were selected as being in their current network at a significant level.
- Biggest reported challenge faced when it comes to the last mile of the supply chain was "Increasing delivery costs" but significance was found in the choice "Reliable order fulfillment" at 45% vs. 32-42% of other respondents.

Regional chains vs. National chains

- Regional chains are more likely to fulfill orders in full: 53% vs. 39% (National) reported 95% or higher fulfillment.
- Regional chains are more likely to have only one fulfillment center: 56% vs. 31%
- National chains are more likely to have E-Com Fulfillment Centers as an option in their fulfillment network: 58% vs. 39% (Regional)
- Regional chains are less likely to select "Yes" to the question Does your existing Order Management System fulfill your omni-channel fulfillment requirements? 76% vs. 86% for National chains
- Regional chains are more likely to have none of their fulfillment centers automated: 41% vs. 16% of National chains reporting similarly.
- Regional chains reported less e-commerce fulfillment challenges with worker scarcity (27% vs. 42% for national chains) and out of stocks (43% vs. 59%)
- Regional chains manually reduced the number of SKUs in product categories to simplify the supply chain at a lesser rate (22%) than National chains (34%)
- National chains indicated that they plan to continue to use 3rd party partners to assist with the growth of e-commerce into the future at 55% vs. 40% of Regional chains



Detailed Results

Responses were fairly evenly distributed by extent of e-commerce vs. retail sales: only 20% derived all sales from e-commerce, while 14% derived all sales from stores, with the remaining 66% having a mixed model.

How would you characterize the extent of your e-commerce sales vs. the extent of your sales from physical stores?

| All sales are from stores | 14% |
|-------------------------------|-----|
| Most sales are from stores | 24% |
| Sales are about evenly mixed | 26% |
| Most sales are from ecommerce | 15% |
| All sales are from ecommerce | 20% |

How would you characterize the extent of your e-commerce sales vs. the extent of your sales from physical stores?

| Option | Response % | Cumulative % |
|----------------------------------|------------|--------------|
| All sales are from stores | 14% | 14% |
| Most sales are from stores | 24% | 38% |
| Sales are about evenly mixed | 26% | 64% |
| Most sales are from ecommerce | 15% | 80% |
| All sales are from ecommerce | 20% | 100% |

Sample Size: 300 (All Respondents)

Note: Only a single option could be selected

How would you characterize the extent of your e-commerce sales vs. the extent of your sales from physical stores?

The larger the firm, the more concentrated its sales were in retail.

Approximately how many employees work at your organization (all locations)?

| | 0 employees | 1-9 employees | 10-99 employees | 100-999 employees | 1,000-9,999 employees | 10,000+ employees |
|--|----------------|------------------|--------------------|----------------------|--------------------------|----------------------|
| | (%) | (%) | (%) | (%) | (%) | (%) |
| [All sales are from + Most sales are from stores] | 25 | ↓ 24 | 42 | 44 | 38 | ↑ 53 |
| All sales are from stores | 11 | ↓ 8 | ↑ 20 | 17 | 11 | 13 |
| Most sales are from stores | 14 | ↓ 16 | 22 | 27 | 27 | ↑ 40 |
| Sales are about evenly mixed | 17 | ↓ 18 | 27 | ↑ 34 | ↑ 39 | 27 |
| Most sales are from e-commerce | 10 | ↑ 27 | 16 | 11 | 13 | 11 |
| All sales are from e-commerce | 48 | ↑ 31 | 15 | ↓ 11 | ↓ 11 | ↓ 10 |
| [Most sales are from + All sales are from e-commerce] | 57 | ↑ 58 | 31 | ↓ 22 | ↓ 23 | ↓ 21 |
| Base | n=27 | n=73 | n=50 | n=42 | n=37 | n=41 |

↑ indicates cells that are significantly greater than all other cells in this row at a 95% confidence level.

↓ indicates cells that are significantly less than all other cells in this row at a 95% confidence level.

To qualify for the survey, respondents had to derive half or more of their sales from consumers rather than businesses; over a third (37%) only sold to consumers.

What extent of your sales are to businesses as opposed to consumers?

The median proportion of online orders filled in full is 90–95%, while just under half (42%) indicated that over 95% of their orders are filled in full as received online.

What is the proportion of orders that are filled in full as received online?

| All sales are to consumers | 37% | Over 95% | 42% |
|------------------------------------|-----|---------------------------------------|-----|
| Most sales are to consumers | 40% | 90-95% | 18% |
| Sales are about evenly mixed | 23% | 80-89% | 21% |
| Most sales are to businesses | | Less than 80% | 10% |
| All sales are to businesses | | Don't know | 9% |
| Sample Size: 300 (All Respondents) | | Sample Size: 255 (85% of Respondents) | |

Prior to the COVID-19 pandemic, e-commerce accounted for approximately what percentage of your organization's total revenue?

| Minimum | 10th Percentile | Average | Median | 90th Percentile | Maximum | Standard Deviation | Sample Size |
|---------|-----------------|---------|--------|-----------------|---------|-----------------------|----------------|
| 0% | 10% | 52% | 45% | 100% | 100% | 32.6% | 257 |

Sample Size: 257 (86% of Respondents)

Today, e-commerce accounts for approximately what percentage of your organization's total revenue?

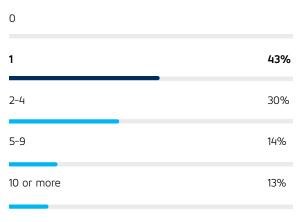
| Minimum | 10th Percentile | Average | Median | 90th Percentile | Maximum | Standard Deviation | Sample Size |
|---------|-----------------|---------|--------|-----------------|---------|-----------------------|-------------|
| 0% | 20% | 63.4% | 60% | 100% | 100% | 30.2% | 257 |

Sample Size: 257 (86% of Respondents)

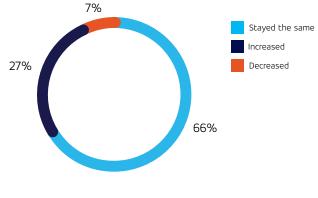
Retailers' e-commerce revenue increased by 33% amidst the pandemic.



How many fulfillment centers currently exist in your logistics network?



How has this changed since March?



Sample Size: 286 (95% of Respondents)

Sample Size: 295 (98% of Respondents)

Why did you expand the number of fulfillment centers?

| To respond to increased demand | | | | |
|--------------------------------|-----|--|--|--|
| To be closer to the consumer | 46% | | | |
| To meet omni-channel needs | 24% | | | |
| Other (please specify) | | | | |

Sample Size: 76 (25% of Respondents)

Which of the following fulfillment options do you have in your network today?

| In-Store fulfillment (BOPIS, Ship from Store) | 64% |
|---|-----|
| E-Com Fulfillment Centers | 49% |
| Micro-Fulfillment Centers | 15% |
| Pop-up Distribution Centers | 12% |
| Dark Stores | 6% |
| Other (please specify) | 2% |
| None of the above | 8% |

Sample Size: 286 (95% of Respondents)

Which of the following fulfillment options do you plan to have in the next 2-3 years?

| In-Store fulfillment (BOPIS, Ship from Store) | 59% |
|---|-----|
| E-Com Fulfillment Centers | 51% |
| Micro-Fulfillment Centers | 27% |
| Pop-up Distribution Centers | 26% |
| Dark Stores | 12% |
| Other (please specify) | 3% |
| None of the above | 9% |

Which of these delivery options do you offer to your customers today?

| Standard delivery | 74% |
|--------------------------------------|-----|
| Ship-from store | 49% |
| Buy Online / Pickup in Store (BOPIS) | 46% |
| Curbside pickup | 39% |
| Same-day delivery | 34% |
| Vendor drop ship | 19% |

Sample Size: 286 (95% of Respondents)

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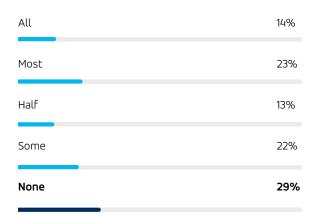
Challenges

Four out of five executives (81%) report that their existing Order Management System meets their omni-channel fulfillment requirements.

What challenges are you facing when it comes to the last mile of the supply chain?

| Increasing delivery costs | 54% |
|----------------------------|-----|
| Reliable order fulfilment | 35% |
| Lack of warehouse workers | 25% |
| Not enough warehouse space | 23% |
| Other (please specify) | 1% |
| None of the above | 13% |

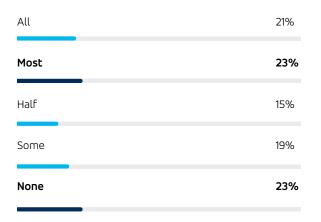
What extent of your fulfillment locations are automated today?



Sample Size: 281 (94% of Respondents)

Sample Size: 286 (95% of Respondents)

What extent of your fulfillment locations do you plan to have automated 12 months from now?



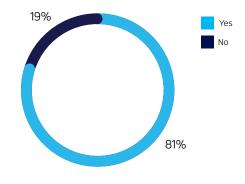
Sample Size: 281 (94% of Respondents)

What e-commerce fulfillment challenges has your organization faced as a result of the COVID-19 pandemic?

| Out of stocks | 51% |
|---|-----|
| Maintaining mandated social distancing practices or safety protocols | 36% |
| Worker scarcity | 34% |
| Store closures | 27% |
| Lack of visibility into inventory and orders | 24% |
| None of the above | 29% |

Sample Size: 281 (94% of Respondents)

Does your existing Order Management System fulfill your omni-channel fulfillment requirements?



Sample Size: 281 (94% of Respondents)

How would you rate your existing Order Management System for fulfilling your omni-channel fulfillment requirements?

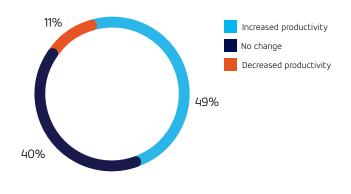
| Excellent | 29% |
|------------|-----|
| Good | 52% |
| Acceptable | 16% |
| Poor | 2% |
| Terrible | 2% |

Sample Size: 281 (94% of Respondents)

Demand Spike

Half of respondents indicated that the spike in e-commerce demand increased productivity (49%), while only 11% reported it decreased productivity.

How did the spike in e-commerce demand impact the productivity of your operations?



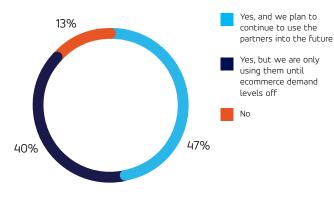
Sample Size: 243 (81% of Respondents)

Which of the following of your Product Assortment strategies did you deploy to manage the demand spikes during COVID-19 pandemic?

| We manually prioritized high demand SKUs to maximize production capacity for our vendors | 37% |
|---|-----|
| Our SKU management has remained the same | 36% |
| We manually reduced the number of SKUs in product categories to simplify the supply chain | 27% |
| We used automation to focus our SKU portfolio and reduce complexity | 19% |

Sample Size: 279 (93% of Respondents) Six out of ten executives surveyed (60%) indicated that they are using third-party partners to assist with the growth of e-commerce.

Are you using 3rd party partners to assist with the growth of e-commerce?



Sample Size: 277 (92% of Respondents)

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