The pandemic-driven surge in e-commerce has left virtually no aspect of the retail supply chain untouched, forcing retail leaders to rethink everything from how and where they prepare orders to the delivery options they will provide. A new survey conducted by the Massachusetts Institute of Technology (MIT) Center for Transportation & Logistics in partnership with DC VELOCITY examines some of the changes they’ve made and the challenges that remain. Here’s a look at some of the findings:

### Top areas impacted by e-commerce growth (% of responses, multiple answers accepted)

1. **Distribution and logistics** 67%
2. **Order fulfillment** 63%
3. **Network design** 61%
4. **Demand forecasting** 59%
5. **Inventory management** 59%
6. **Returns** 35%
7. **Merchandising** 33%
8. **Sustainability** 26%

Not surprisingly, distribution/logistics and order fulfillment are the supply chain areas most impacted by the growth of e-commerce. Not only is e-commerce boosting the number of deliveries, but more on-demand delivery services are required. Online commerce is also changing the way retailers fulfill (pick, pack, and ship) orders.

### Types of distribution channels offered to customers

- **Click & collect in store** 31%
- **Click & collect, detached (i.e., lockers)** 13%
- **Click & collect curbside** 16%
- **Other** 3%
- **Home delivery** 37%

### Main pain points facing retailers today (% of responses, multiple answers accepted)

1. **Keeping up with relevant technological advances** 68%
2. **Stock shortages** 53%
3. **Positioning the right item at the right location** 50%
4. **Demand planning challenges** 45%
5. **Lack of carrier availability** 45%
6. **Lack of visibility on inventory availability** 45%
7. **Redefining the key performance indicators (KPIs) to assess each area** 37%
8. **Higher logistics costs** 35%
9. **Out-of-stock items online** 26%
10. **Managing inventory redundancy** 24%

The struggle to keep current with technology and stock shortages are causing the most pain for retailers today. This means many retailers are on the hunt for ways to quickly incorporate technologies that will help provide end-to-end visibility across their supply chains.

### Top challenges facing retailers in shaping their omnichannel distribution strategies (% of responses, multiple answers accepted)

1. **Redefining the company strategy** 67%
2. **Integrating the online and offline channels** 56%
3. **Determining which distribution channels to offer** 48%
4. **Deciding how to prepare the orders** 35%
5. **Deciding where to prepare the orders** 35%
6. **Managing the commercial returns** 29%
7. **Deciding how to deliver** 29%
8. **Deciding when to deliver** 28%