Automated technologies have been proven to speed up and streamline processes for warehouse, distribution and logistics organisations, but the majority of companies are still behind the curve in terms of investment and adoption.

### Future Technologies

The percentage of retail, manufacturing and logistics professionals who are currently investing in the following technologies:

- Warehouse automation: 41%
- Predictive analytics: 40%
- Internet of things: 40%
- Cloud logistics: 41%
- Optimization: 34%
- Autonomous vehicles: 22%
- Robotics: 21%
- Visibility: 21%
- Portal/integration: 19%
- Loading vehicles: 18%

**Survey of warehouse managers**

**Timeline for acquiring new automation techs**

Survey of warehouse managers:

- 49% of warehouse and distribution centre managers say they will use mostly manual processes for order fulfilment by 2023.
- 50% of large global organisations expected to be using AI, advanced analytics and IoT in supply chain operations by 2023.
- 30% of operational requirements will be met through automation and robotics by 2022.

### Extent of Supply Chain Automation

Based on manufacturing and logistics professionals, we rank the degree of their supply chain automation:

- Data interchange: 2.5
- Manufacturing: 2.5
- Data analysis: 2.5
- Back-office processes: 2.5
- Fulfilment: 2.5
- Visibility: 3.5
- Inventory management: 3.5
- Roaming: 3.5
- Picking and packing: 3.5
- Cross docking: 3.5
- Order scoring: 3.5
- Lead times: 3.5
- Return management: 4.0

### Top Barriers for Warehouse Automation

Survey of warehouse managers:

- Budget approval: 4.5
- Support resources: 4.5
- Leadership support: 4.5
- Distribution centre footprint/space: 4.5
- Other: 4.5
- Software/integration issues: 4.5
- Downtime and troubleshooting: 4.5
- Frequent manual intervention: 4.5
- Vendor/partner issues: 4.5
- Outgrown automation capabilities: 4.5
- Scope didn’t solve all issues: 4.5
- Industry changes outside capabilities: 4.5

### Automation Performance Challenges

Survey of warehouse managers:

- Operational savings: 2.1
- Profits/revenue: 2.1
- Order accuracy: 2.1
- Other: 2.1
- Customer scorecard: 2.1
- Cost per unit: 2.1
- Autonomously: 2.1
- Autonomously: 2.1
- Operationally: 2.1

### How Automation ROI is Measured

Survey of warehouse managers:

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- Support resources: 4.5
- Leadership support: 4.5
- Distribution centre footprint/space: 4.5
- Other: 4.5
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**Modern Materials Handling 2019**

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**Gartner 2019**

- 49% of operational warehouse workers will be supplemented, not replaced, by collaborative robots by 2023.

**EyeforTransport 2019**

- 61% of professionals expect capacity requirements to increase over the next year.