

The Current State of Labor in Supply Chain and Logistics

New research highlights the labor strategies warehouse and distribution center operators can utilize to achieve fulfillment excellence

Introduction

The race to secure warehouse labor is on, and everyone from the single-location fulfillment center to the huge, international parcel carrier is in the fight right now. Companies like UPS, FedEx and DHL hired more than 200,000 workers in North America in 2020, and that trend will likely continue in 2021. These and other high-profile hiring announcements come right at a time when constrained labor availability, concerns over COVID-19 exposure, and social distancing requirements are impacting fulfillment operations nationwide.

To further exacerbate this dilemma, customer expectations around delivery time have drastically increased over the last few years. With Amazon as the number-one online retailer offering free one-day shipping—and, most recently, two-hour shipping—consumers expect their packages to arrive immediately and free of charge. This shift in expectations has raised the bar for fulfillment: If companies can't keep up with Amazon's standards, for example, they risk losing market share to competitors that can.²

Prior to the pandemic, retail, e-commerce, and business-to-business (B2B) fulfillment operators were increasingly turning to collaborative mobile robots to gain operational flexibility to support growth and contain labor requirements. The pandemic accelerated the surge of automation needs.³

To learn more about current supply chain labor and talent trends, Peerless Research Group conducted a reader survey on behalf of *Modern Materials Handling* for **6 River Systems (6RS)**, a leading collaborative mobile robotics fulfillment solution provider and part of global commerce company Shopify Inc.

Through its wall-to-wall fulfillment solution, 6RS delivers immediate and continuous operational improvement while creating a work environment that makes it easier to attract, train and retain associates.

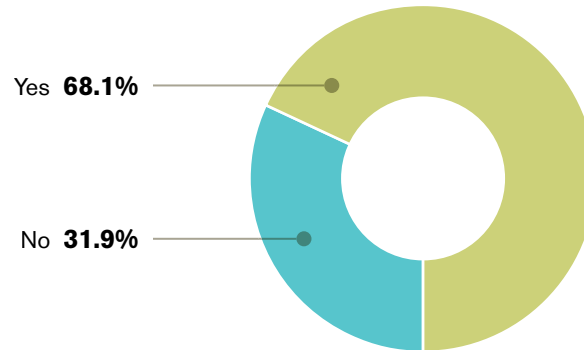
The study was executed in October/November 2020, and was administered via e-mail to *Modern Materials Management* subscribers. The prequalified survey respondents were all personally responsible for interviewing or hiring personnel for materials handling, logistics, and/or supply chain operations.

¹ <https://www.freightwaves.com/news/will-there-be-bidding-wars-for-warehouse-labor>

² <https://6river.com/meet-peak-season-fulfillment-challenges/>

³ <https://6river.com/prepare-for-a-record-breaking-peak/>

FIGURE 1

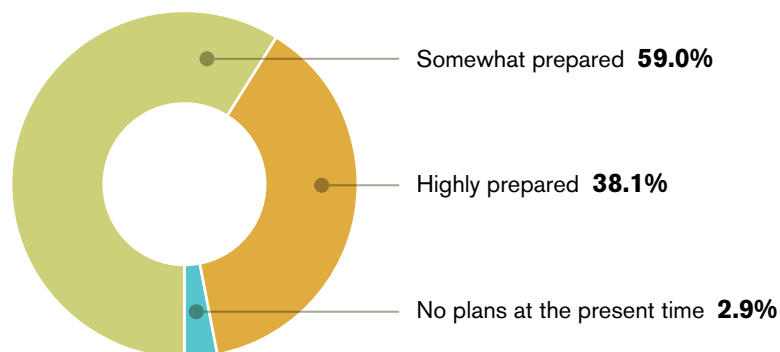
Are you responsible for interviewing or hiring personnel for your materials handling, logistics and/or supply chain operations?

Of those surveyed, 68.1% are responsible for interviewing or hiring personnel for their materials handling, logistics, and/or supply chain operations. The survey gathered 166 respondents from a variety of industries, including retail, food, beverage, and tobacco, computers and electronics, industrial machinery, and chemicals/pharmaceuticals. Respondents represent all U.S. regions (with a particular focus on the Mid-Atlantic region, Midwest, and Southeast), plus Canada, Mexico, and South America.

Through this research, Peerless and 6RS wanted to learn more about companies' current materials handling, logistics, and supply chain operations staff skill levels, and find out what companies are doing to prepare for the current and/or future shortage of materials handling, logistics, and supply chain operations staff. Here's what we learned.

Addressing Key Labor Challenges

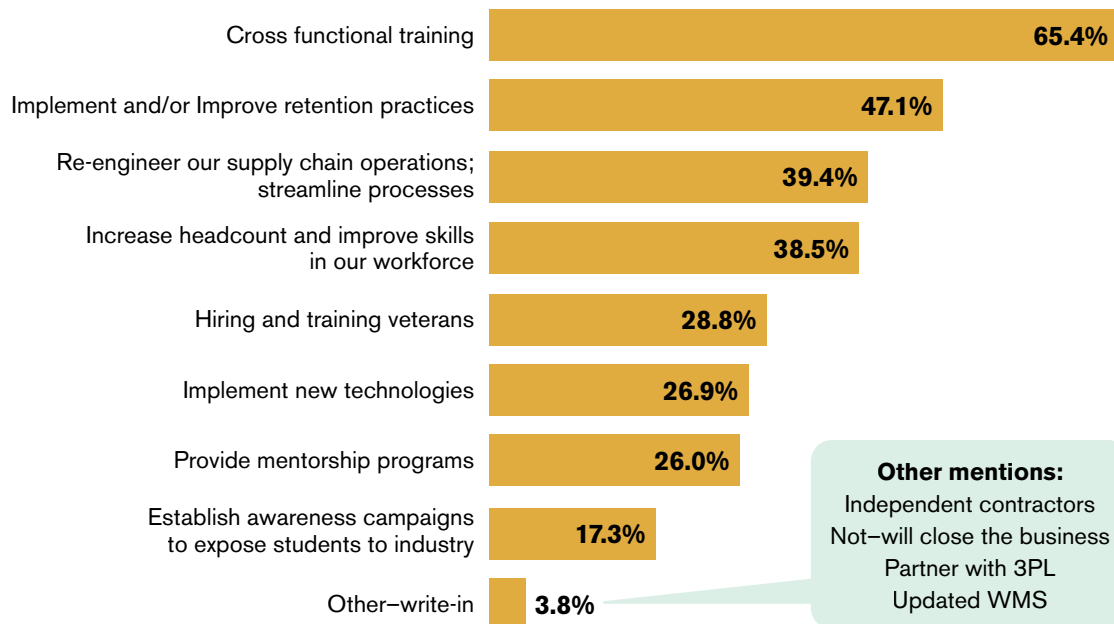
FIGURE 2

Thinking about the skills you currently have on staff, how prepared are you in meeting these challenges?

Labor challenges continue to persist in the warehousing and distribution sector, where finding, training, and retaining employees became even more difficult during the global pandemic. Right now, just 38.1% of survey respondents say they're highly prepared to face current and future labor challenges, while 59% claim to be somewhat prepared for them. Nearly 3% of companies have no plans in place to address future labor challenges.

FIGURE 3

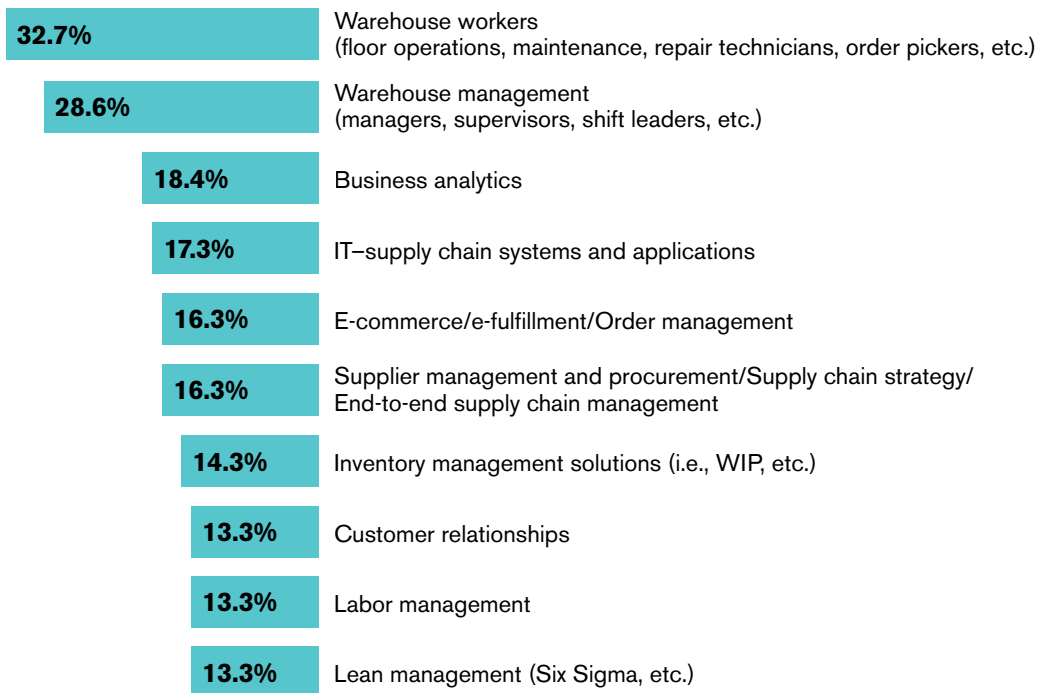
What actions are you taking or will you be taking to address current and future talent shortages?



To manage current and future talent shortages in the manufacturing industry, 65.4% of companies are using cross-functional training and 47.1% are implementing or improving their retention practices. Other organizations are reengineering or streamlining their supply chain operations (39.4%), or increasing their headcount and improving skills in their workforce (38.5%) to meet these challenges. Other approaches include hiring and training veterans (28.8%), implementing new technologies (26.9%), and providing mentorship programs (26%).

FIGURE 4

In which areas are you/will you be hiring to better support current and future changes in your materials handling, logistics and supply chain operations?



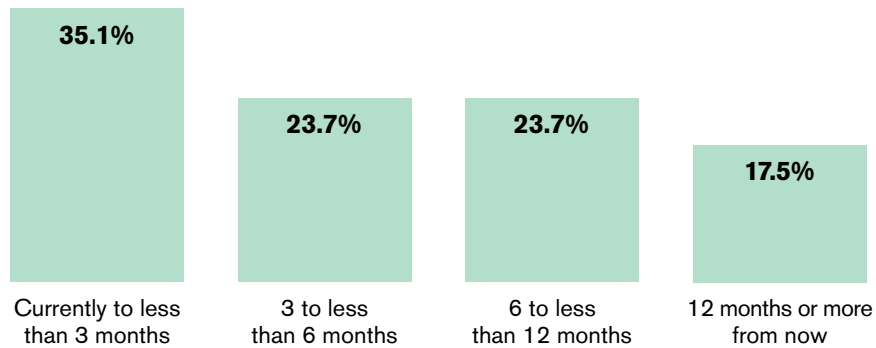
To support current and future changes in materials handling, logistics, and supply chain operations, 32.7% of companies are hiring (or plan to hire) more warehouse workers and 28.6% are hiring more warehouse management staff (or plan to do so). Other companies are hiring to support their business analytics (18.4%), and 17.3% are hiring or planning to hire IT personnel. The survey found that 16.3% of firms are hiring or planning to hire staff to support e-commerce/e-fulfillment, and 16.3% are hiring or planning to hire staff to support supplier management and supply chain management.

Just 14.3% of companies are actively hiring or planning to hire more employees to support inventory management solutions, while 13.3% are either hiring or planning to hire employees for customer relationships and labor management, respectively.

Finding New Employees

FIGURE 5

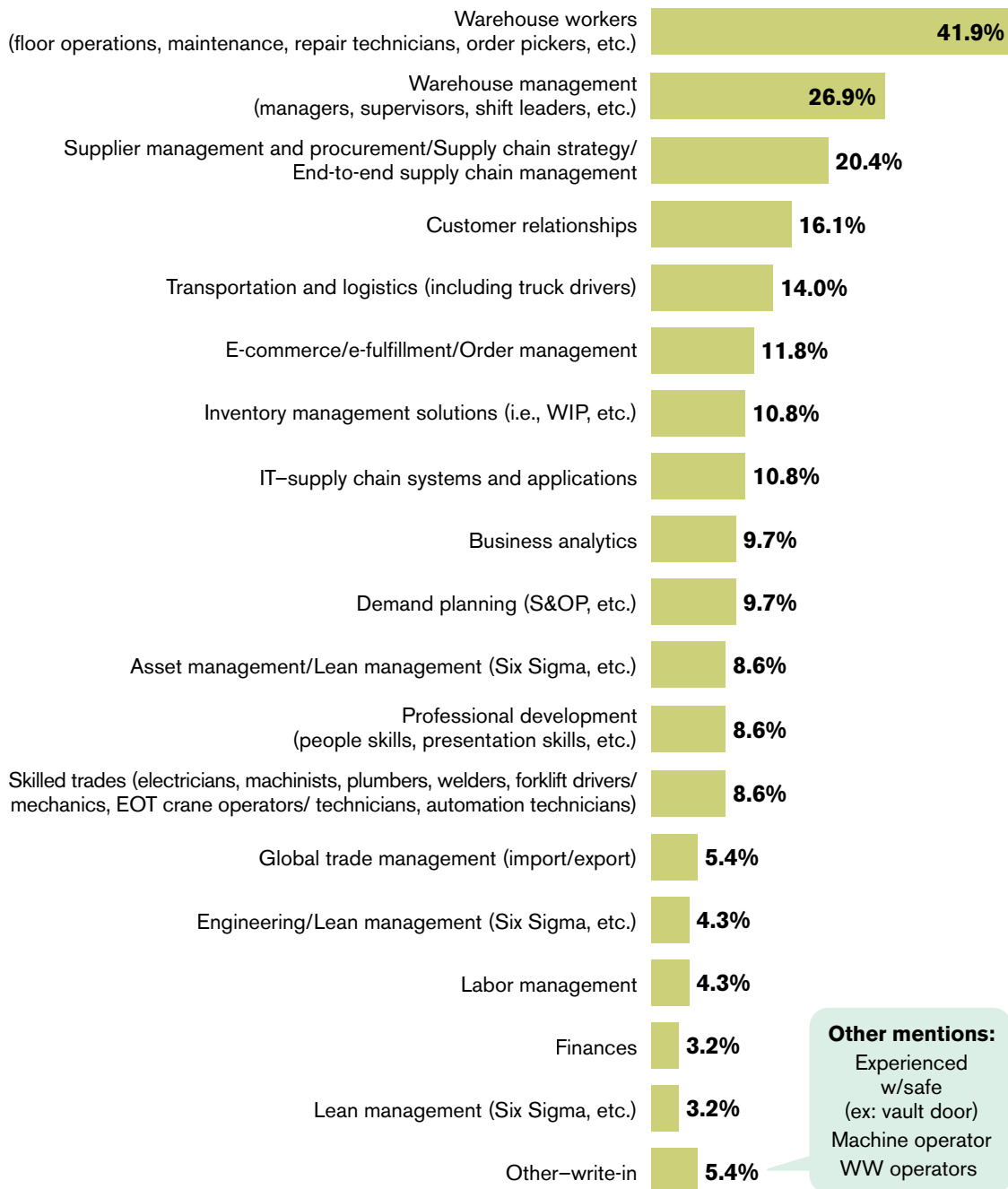
How soon are you looking to fill jobs?



The majority (nearly 60%) of companies want to hire new warehouse staff within the next 12 months, with 23.7% hoping to fill those positions within the next three months. Another 17.5% of organizations are working on hiring timelines of a year or more.

FIGURE 6

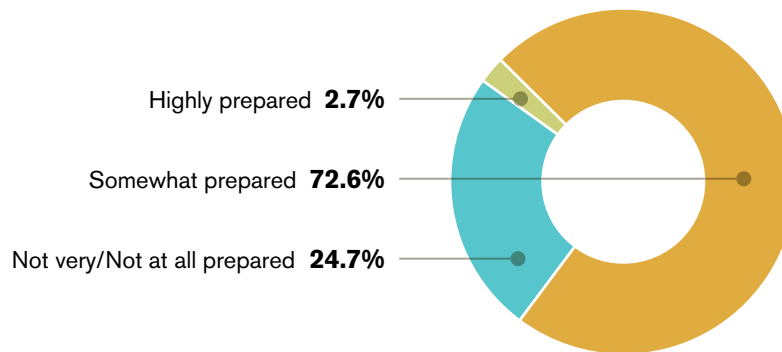
What positions are you now looking to fill now?



The key roles that companies are looking to fill right now include warehouse workers (41.9%), warehouse managers (26.9%), and supplier management/supply chain professionals (20.4%). Another 16.1% are hiring staff to support customer relationships, 14% are currently hiring transportation and logistics personnel (including truck drivers), and 11.8% need new workers to support their e-commerce, e-fulfillment, or order management operations. Companies also need employees to support inventory management solutions (10.8%), IT personnel (10.8%), business analytics experts (9.7%), and demand planning experts (9.7%).

FIGURE 7

How prepared are individuals entering the job market to meet today's challenges in materials handling, logistics or supply chain fields?

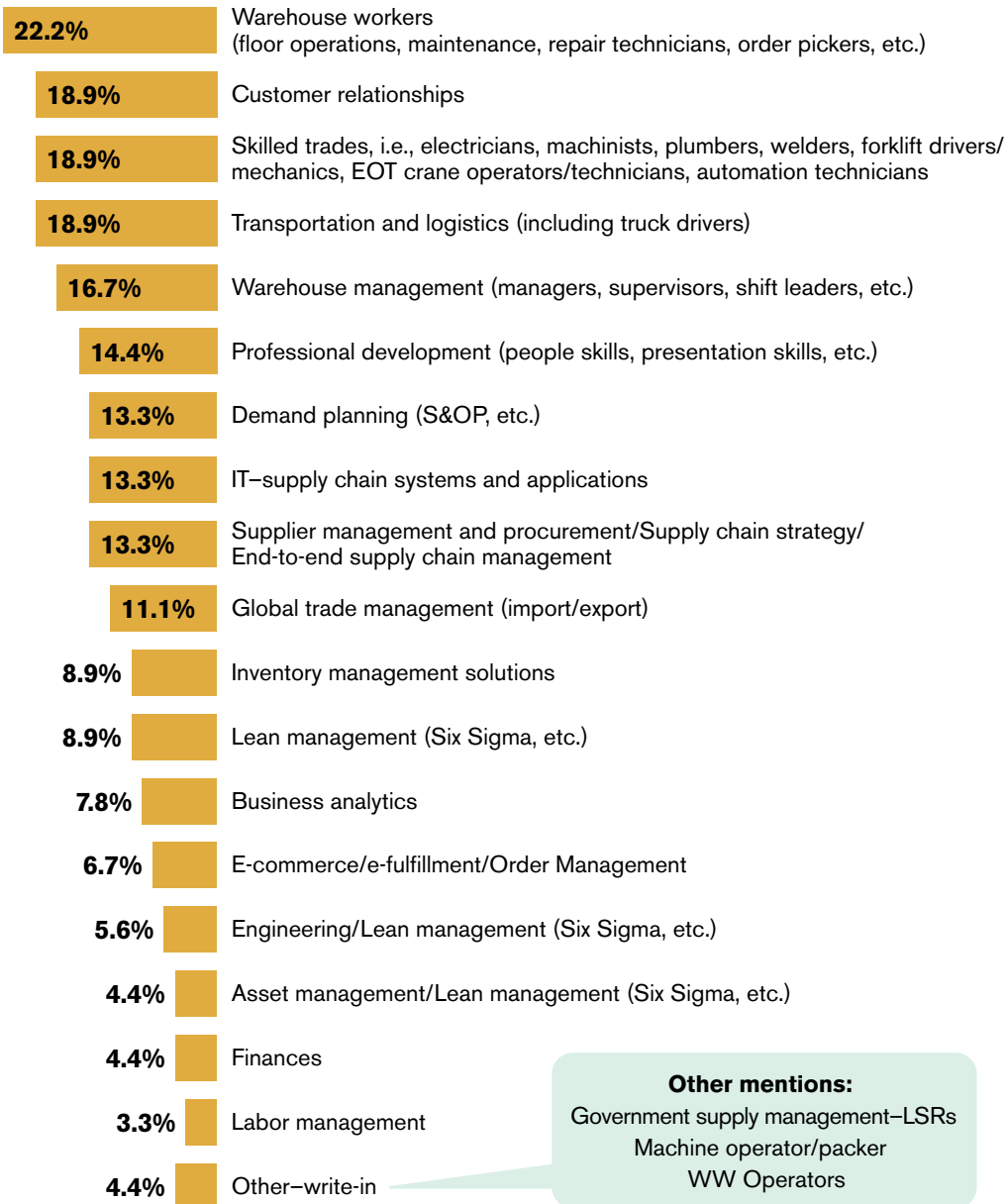


In assessing the current skills levels of entry-level employees, nearly all respondents (97.3%) say those individuals are either somewhat, not very, or not at all prepared to meet industry challenges. Just 2.7% of companies say those incoming employees are “highly prepared” and ready to tackle those obstacles.

Help Wanted

FIGURE 8

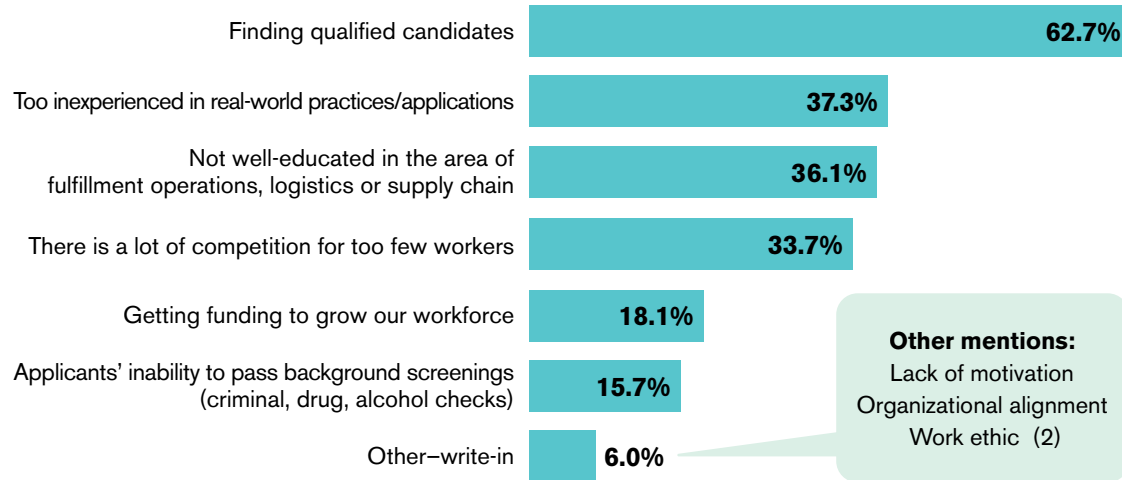
In which areas are jobs most difficult to find qualified talent/suitable skills?



Within the four walls of the warehouse, some job roles are more difficult to fill than others. According to the survey, warehouse worker roles are hardest to fill (for 22.2% of respondents), along with customer relationship experts (18.9%), skilled trade workers (18.9%), and transportation and logistics roles (18.9%). Companies also have difficulties finding professionals to fill warehouse management (16.7%), professional development (14.4%), and demand planning (13.3%) roles.

FIGURE 9

What are/have been the top challenges you encounter?

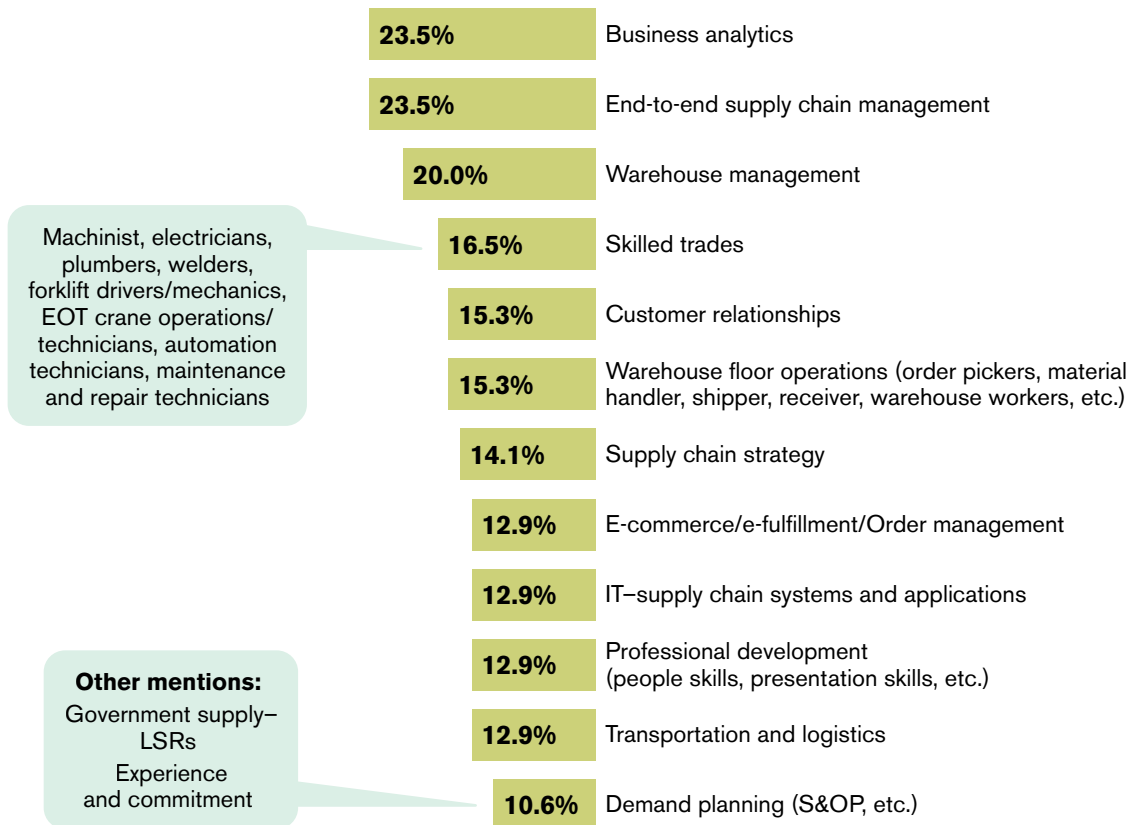


The majority of companies (62.7%) say that finding qualified candidates is by far their biggest labor challenge right now. Key issues include prospective employees that lack real-world application/practice experience (according to 37.3% of respondents), while 36.1% say candidates aren't educated in the area of fulfillment operations, logistics, or supply chain. In addition, 33.7% say there's too much competition for workers and 18.1% can't get the funding they need to be able grow their workforce.

The Fulfillment Skills of the Future

FIGURE 10

What background, knowledge or skills are important in the next 3-5 years materials handling, logistics or supply chain fields?

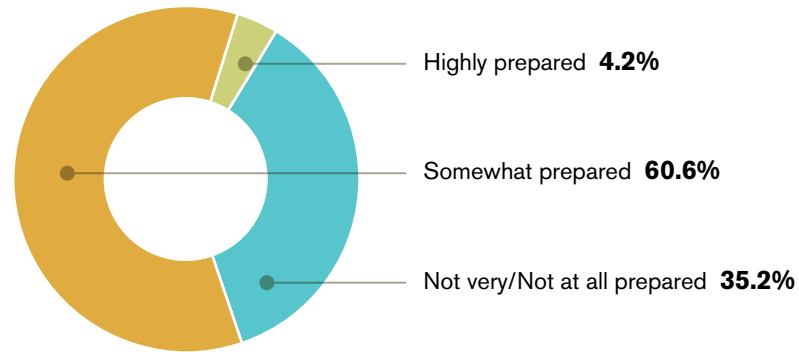


Like most industries right now, the distribution environment is undergoing changes as companies plot their digital paths and find new ways to future-proof their operations. Over the next 3-5 years companies see business analytics (23.5%) and end-to-end supply chain management skills (23.5%) as two of the most critical skills that new job candidates will need.

The materials handling and logistics sector will also need skilled tradespeople like electricians and plumbers (16.5%); those who possess customer relationship skills (15.3%); and those that bring warehouse floor operations knowledge to the table (15.3%). Roughly 14% of respondents also say job candidates with backgrounds in supply chain strategy will be in demand.

FIGURE 11

How prepared are individuals entering the job market to meet future changes in materials handling, logistics or supply chain fields?



Nearly all (95.8%) companies surveyed say that the individuals who are entering the job market are either unprepared or somewhat prepared to take on the challenges of the current fulfillment environment. Only 4.2% of respondents feel these individuals are highly prepared. Key reasons candidates are unprepared include the fact that they're challenged by today's new technology, the environment as a whole is changing too quickly, and younger employees lack good communication skills and/or customer interface skills and experience.

FIGURE 12

Which competencies are most important when hiring materials handling, logistics or supply chain professionals?

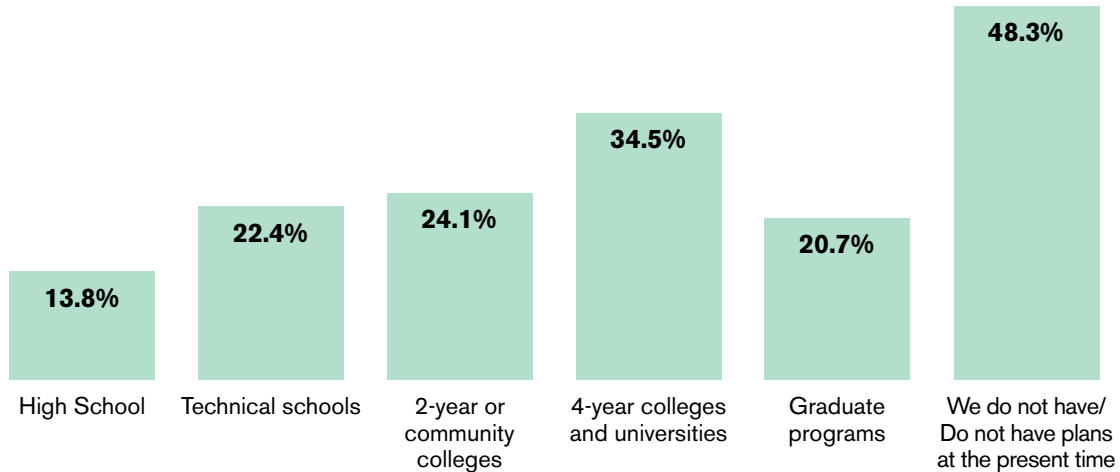


When asked which competencies are critical when hiring materials handling, logistics, and supply chain professionals, 47.1% of respondents see problem solving and analytical skills as being most important. Other important attributes include a positive work ethic (44.1%), hands-on experience (38.2%), and a teachable or trainable attitude (38.2%) as being vital to these roles. Other important attributes include real-world experience (27.9%), strong communication skills (22.1%), and influential leadership skills (14.7%).

Education and Developmental Programs

FIGURE 13

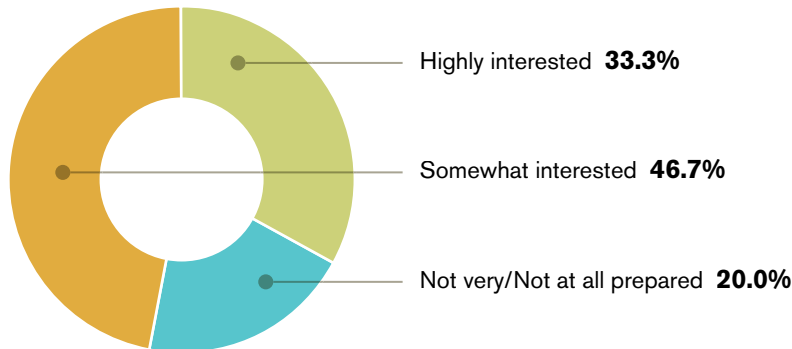
Does your company have or plan to implement an apprenticeship or internship program with any of the following types of institutions?



By investing in talent development, companies can cultivate a pipeline of skilled workers, increase their productivity, and improve their own bottom lines. And while 48.3% of survey respondents lack in-house apprenticeship or internship programs (and have no plans to add them in the future), companies are working through apprenticeship or internship programs with four-year colleges/ universities (34.5%), two-year/community colleges (24.1%), or graduate programs (20.7%). About 14% of companies have formed educational partnerships or programs with high schools, while 22.4% have developmental programs with technical schools.

FIGURE 14

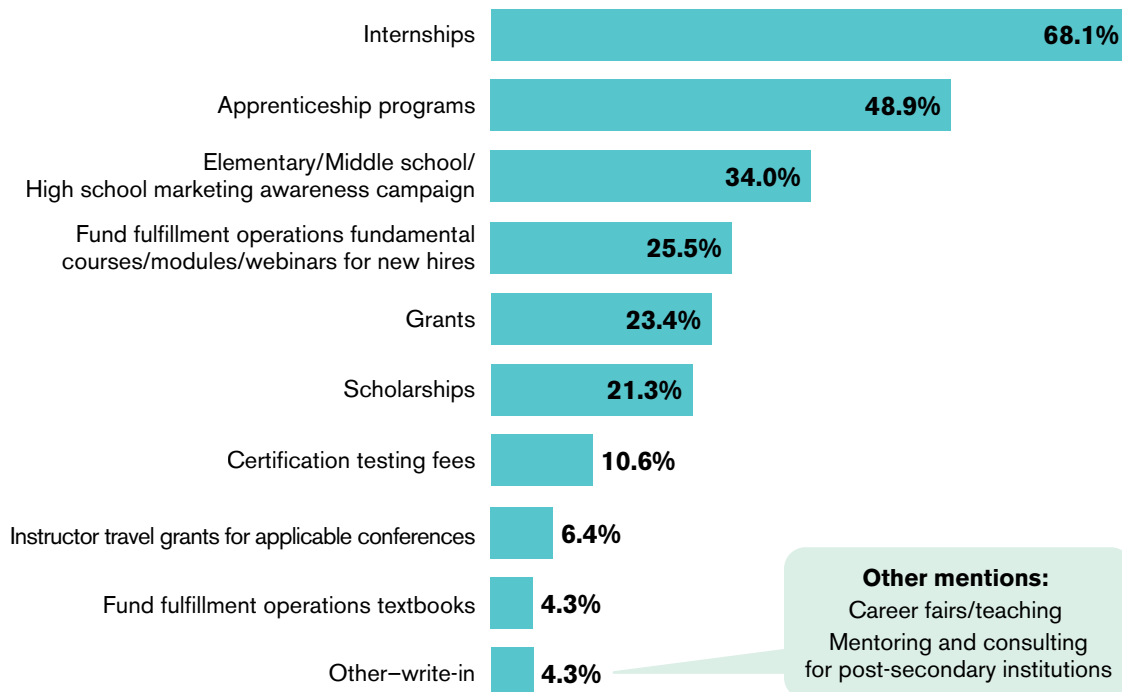
How interested would you be in supporting a program that would better help prepare students/ job candidates entering the materials handling, logistics and/or supply chain operations job market?



One-third (33.3%) of respondents say they'd be "highly interested" in supporting a program to better help prepare students and job candidates entering the materials handling, logistics, and/or supply chain operations job market. Almost half (46.7%) would be somewhat interested in a program of that nature and 20% showed no interest in this type of arrangement.

FIGURE 15

What types of education support programs would be of greatest interest?

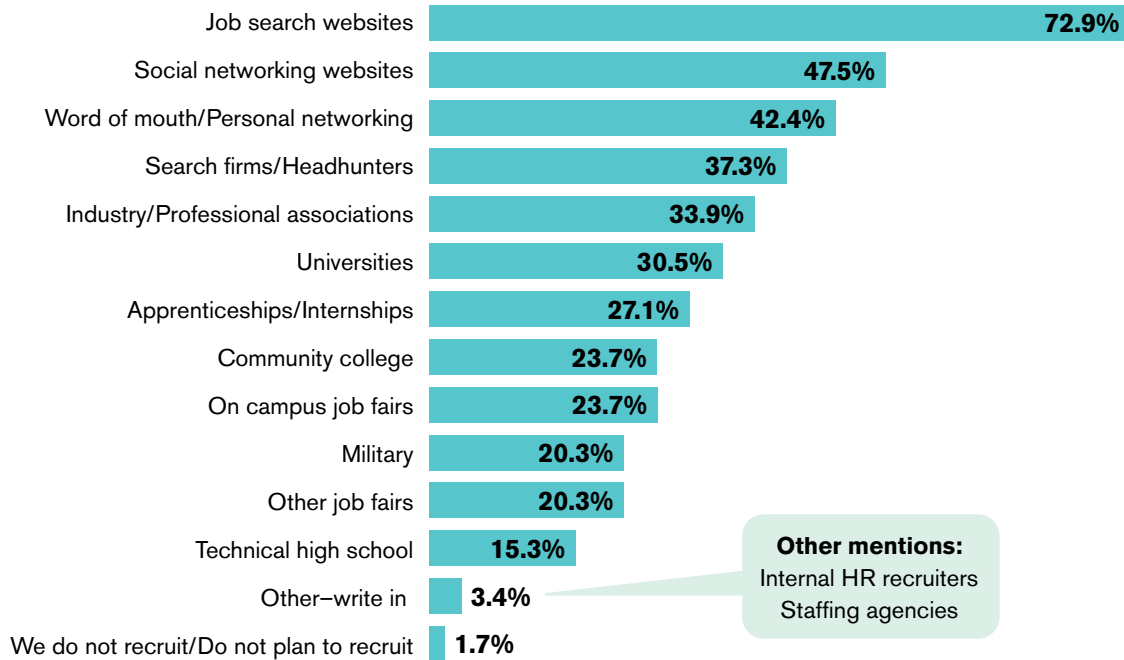


When it comes to specific educational programs, 68.1% of respondents are most interested in internships, while 48.9% are most interested in implementing apprenticeship programs. Some would rather focus on early education, with 34% saying they would be most interested in campaigning at the elementary, middle school, or high school level. Other respondents are interested in fundamental courses, modules, or webinars for new hires (25.5%); grants (23.4%); or scholarships (21.3%) to support candidate preparation.

Hiring Sources

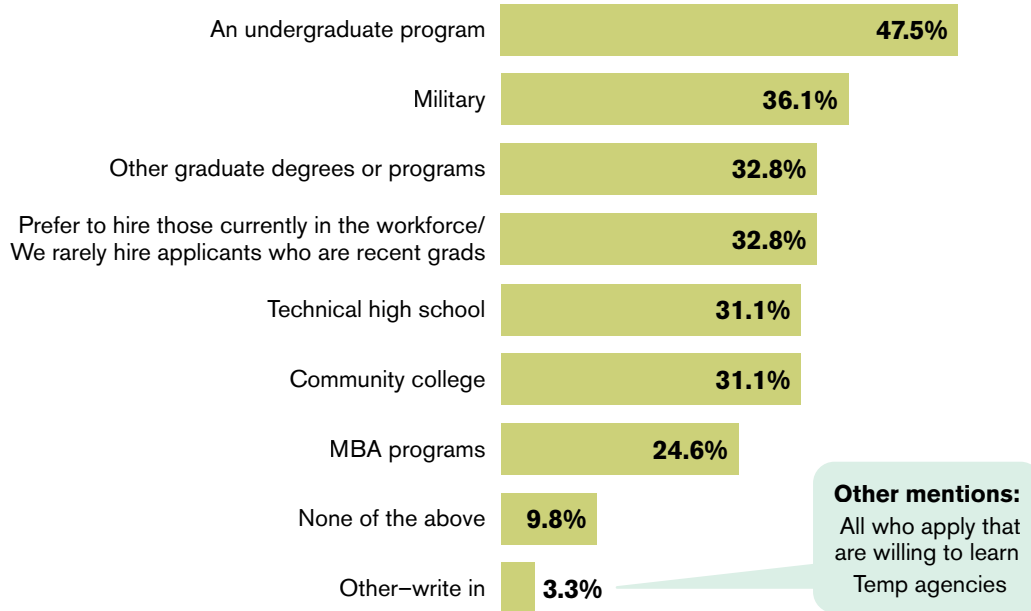
FIGURE 16

When recruiting, which source(s) do you use?



When recruiting, most companies (72.9%) use job search websites and 47.5% use social networking sites. Other sources of new candidates include word of mouth or personal networking (42.4%); recruiting firms or headhunters (37.3%); industry or professional organizations (33.9%); and universities (30.5%). About 27% of companies recruit through apprenticeship or internship programs, 23.7% recruit at community colleges, and 23.7% actively recruit new talent at on-campus career fairs. Other options include the military (20.3%), job fairs (20.3%), and technical high schools (15.3%).

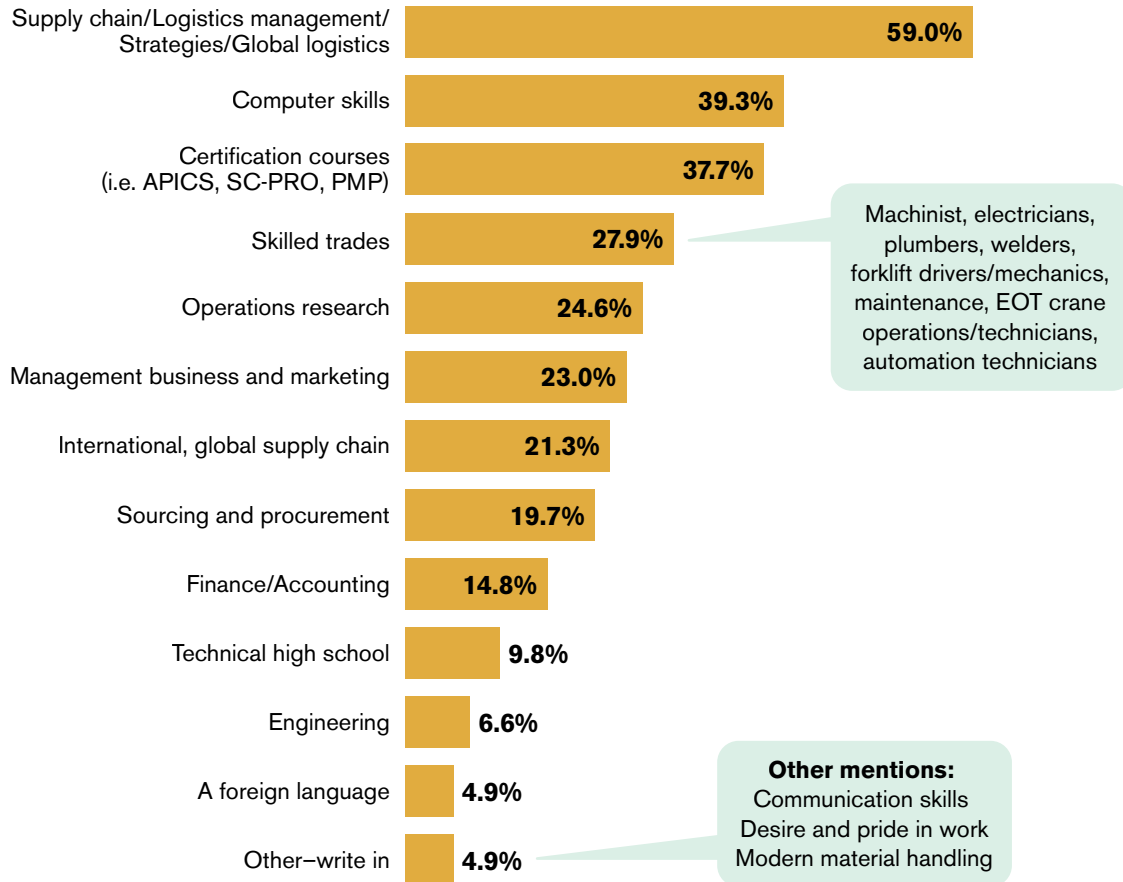
FIGURE 17

From which of the following have job candidates been hired?

Almost half (47.5%) of hiring professionals in the field say they have hired candidates from undergraduate programs, 36.1% have hired candidates from the military, and 32.8% have hired from graduate degrees or programs. Many prefer to hire those who are currently in the workforce as opposed to recent graduates (32.8%). Some hire directly out of technical schools (31.1%) or community colleges (31.1%), while others hire candidates coming out of MBA programs (24.6%).

FIGURE 18

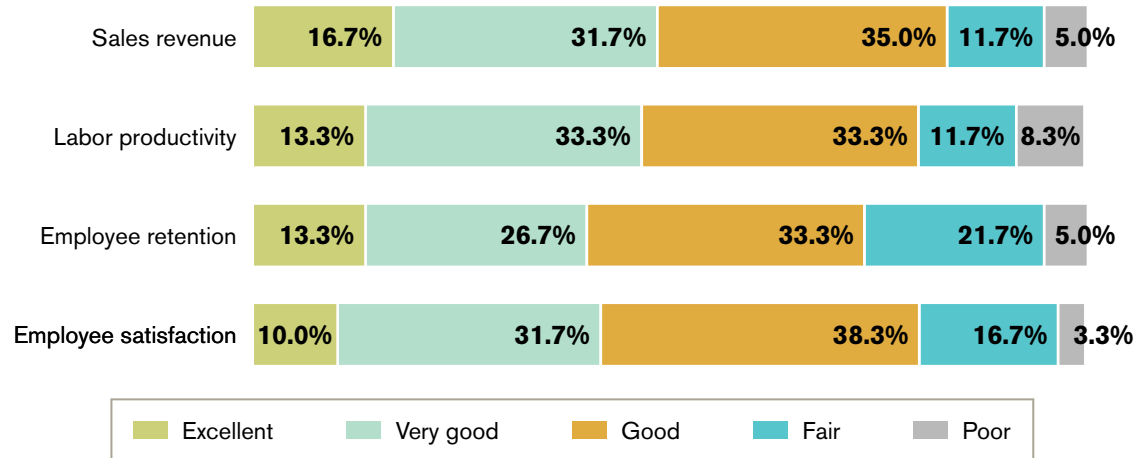
What course(s) do you think would be most useful for a candidate entering the job market?



For candidates entering the job market, 59% of respondents feel that taking a course in supply chain, logistics management, or a related subject would be most useful. Additionally, 39.3% say a course in computer skills is useful, while 37.7% say a certification course (APICS, SC-PRO, PMP) would be most useful, and 27.9% suggest a course in a skilled trade (i.e., plumbing or welding).

FIGURE 19

How would you rate your business across the following business performance metrics?



When it comes to hiring and keeping associates, 26.7% of companies say their efforts are either poor or fair, while 73.3% rate their employee satisfaction and retention as good, very good, or excellent. Just 10% call their employee satisfaction levels “excellent,” while nearly 70% say this metric is good or very good. Just 3.3% characterize their employee satisfaction levels as poor.

Filling Future Positions

FIGURE 20

Please indicate your level of agreement with the following statements

Universities need to spend more time on developing the candidates' "people skills"



There is a lack of workers willing to enter the manufacturing, warehousing and distribution industry at entry/floor level positions



There is a shortage of skilled individuals entering the materials handling, logistics and supply chain job market



There is a lack of relevant skills and knowledge among those seeking positions in the materials handling, logistics and supply chain field



The materials handling, logistics and supply chain labor pool is shrinking



Job candidates seem generally able to apply what they have learned in the classroom to real-life workplace



■ Completely agree
 ■ Agree
 ■ Neither agree nor disagree
 ■ Disagree

The current materials handling, logistics, and supply chain labor pool is shrinking, according to two-thirds of respondents. With the labor market tightening and the logistics environment in flux, nearly all companies (84.7%) say that universities should spend more time on developing candidates' people skills. The industry's image could also use some burnishing in a world where 73.4% of companies see a lack of workers willing to enter the manufacturing, warehousing, and distribution industry at entry-level positions.

Right now, most survey respondents (80%) agree that there is a shortage of skilled individuals entering the materials handling, logistics, and supply chain job market, and 39% say that job candidates are generally unable to apply what they've learned in the classroom once they start working in the real world. These are telling numbers in a fast-paced work environment where being able to quickly learn and apply knowledge has become mandatory for today's workers.

Conclusion

As supply chain networks continue to recover from perhaps the most significant global supply chain disruption in history, companies are rethinking their supply chain structures and implementing strategies to improve resilience—from reevaluating labor strategies to reassessing safety stocks to improving fulfillment processes.

Already underway pre-COVID19, the push to automate and add robotics to fulfillment operations accelerated in 2020 and is expected to continue as companies reimagine their processes.

Collaborative mobile robots, or “cobots,” are the new way warehouses fulfill. Their flexible and adaptive capacity allows them to be deployed quickly to increase both productivity and order selection accuracy in warehouse operations, while reducing labor requirements and increasing retention. These benefits are especially critical during volume peaks, as the ongoing labor shortage prevents operations from being able to rely on seasonal labor to bridge the gap.

Traditional automation and goods-to-person systems can generate very good pick rates to limit labor requirements. But those solutions take years to deploy as opposed to weeks with collaborative mobile robots.

Heavy and cumbersome to use, manual push carts become increasingly difficult to manipulate as goods are loaded onto it during a pick run and cause congestion as operators scale for peak. By replacing manual carts with collaborative mobile robots, employees are less physically taxed and able to focus their work.

About 6 Rivers Systems

Founded in Waltham, Mass. in 2015, 6 River Systems is a leading collaborative mobile robotics fulfillment solution provider and part of global commerce company Shopify Inc. Founders Jerome Dubois and Rylan Hamilton were previously executives at Kiva Systems (now Amazon Robotics). The 6 River Systems solution is operating in more than 80 facilities in the U.S., Canada and Europe, fulfilling millions of units each week for companies including Lockheed Martin, Bodybuilding.com, Pure Fishing Fulfillment, DHL, XPO Logistics and Office Depot. To learn about 6 River Systems and its wall-to-wall fulfillment solution, please visit www.6river.com.

*SOURCES: <https://6river.com/challenges-of-supply-chain-management/>
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