

THE NEWSLETTER OF THE BDO MANUFACTURING & DISTRIBUTION PRACTICE

BDO MANUFACTURING OUTPUT



THE IMPACT OF INDUSTRY 4.0: HOW IS IT CHANGING MANUFACTURING?

By Rick Schreiber

The manufacturing sector is in the midst of another major transformation. The confluence of several technology megatrends maturing at the same time—including, among others, Big Data and advanced analytics, robotics and automation, artificial intelligence and virtual reality—is heralding the fourth industrial revolution, known colloquially as Industry 4.0.

Industry 4.0 is all about optimization—smart, flexible supply chains, factories and distribution models where machines capture and convey more data via machine-to-machine communications and to human operators. All this aims to enable businesses to make quicker, smarter decisions, all while minimizing costs. How this trend will play out remains to be seen, but some of the biggest players in the manufacturing industry are already making changes and putting big money into embracing it.

WHAT IS INDUSTRY 4.0?

In 2011, the Association of German Engineers launched a highly integrated project labeled “INDUSTRIE 4.0” to develop and market a wide suite of technologies to affect change in Germany’s manufacturing sector and improve its production competitiveness.

“Industry 4.0” has now been adopted into the general lexicon to refer to the digitization of manufacturing—the coming together of the cyber and physical worlds to reduce inefficiencies and lower costs while improving flexibility. Often used interchangeably with the “Industrial Internet of Things” (though there are nuances), Industry 4.0 usually refers to the “smart factory,” which makes use of technologies like embedded sensors and wireless connectivity in factory machinery and equipment. But “smart logistics,” such as automated warehousing, cargo tracking

CONTENTS

The Impact of Industry 4.0: How is it Changing Manufacturing?	1
Tracking the Automotive Industry.....	3
How to Keep the Lid on Your Finances When a Food Recall Strikes.....	5
Q&A with Eskander Yavar, National Leader of BDO’s Management Advisory Services.....	7
PEerspective in Manufacturing	8
Mark Your Calendar.....	9

CONTINUED FROM PAGE 1

THE IMPACT OF INDUSTRY 4.0

and remote fleet management, can be just as transformative in increasing value across the entire supply chain.

Despite the broadness of the term, most agree that Industry 4.0's impact on the manufacturing industry will be significant, with the potential to disrupt both processes and products. In a recent BDO survey of U.K.-based engineering and manufacturing managers, 20 percent said they have some level of Industry 4.0 strategy in place, and 43 percent are making investments in automation over the next 24 months; those who aren't making investments cite their lack of understanding as the main reason.

BUILDING THE INDUSTRY 4.0 FOUNDATION

Manufacturers have access to a wealth of information and tools that can help improve quality and efficiency in the manufacturing process, and enable them to rapidly adjust course in response to disruptions or variable demand. Those who aren't thinking ahead to what's next risk falling dangerously behind, or worse, becoming obsolete.

However, manufacturers must learn to walk before they try to run. Industry 4.0 entails handling massive volumes of data and using business intelligence software to interpret, address and transfer that data to other parts of the business, back to the enterprise resource planning (ERP) system or supply chain partners. Can the IT system process high volumes of data without compromising performance or speed? Are there safeguards in place to preserve data integrity? Are the ERP and manufacturing execution systems (MES) adequately integrated? Will the current IT architecture be able to scale for the future? If a company's IT infrastructure lacks the capacity or controls to ensure data quality, the investment may go to waste or cause significant delays. Insights based on bad data or bad analysis lead to bad decision-making.

BUILDING CYBERSECURITY PROTECTIONS

Manufacturers can't—or at least shouldn't—make the leap into Industry 4.0 without considering the cybersecurity implications and investing accordingly. Data shows the manufacturing industry is already a prime target among hackers: The U.S. Department of Homeland Security reported in January that investigations of cyber attacks on the manufacturing sector nearly doubled in the year ended Sept. 30, 2015. If unaddressed, Industry 4.0 will only compound the issue.

Only 8 percent of manufacturers said they were very confident in their cybersecurity protections to prevent an IT breach, according to the BDO-sponsored MPI Internet of Things Study. And 44 percent do not have or are unaware if they have the ability to detect and identify unauthorized Internet-connected devices. Industry 4.0 is breaking down the traditional barriers that can stymie innovation and collaboration, but in doing so, it's creating more opportunities for bad actors to break in. Manufacturers need to design their cybersecurity policies and protocols for the factory of the future, and hold their supply chain partners to the same standard.

BUILDING A CONNECTED SUPPLY CHAIN

Achieving a smart supply chain requires a network of mutually beneficial relationships between suppliers and customers. Collaboration to achieve better responsiveness and visibility is critical in driving efficiencies and, ultimately, cost savings. Embedded sensor technology enables the links within the supply chain to communicate and cooperate in real time with one another to facilitate smarter, faster decision-making. As a result, the responsiveness of the entire supply chain, including design, manufacturing, volumes, rework and through-life service provisions, is elevated.

Supply chain collaboration in Industry 4.0 also requires a new level of transparency and information sharing across traditionally siloed functions, departments and companies, in order to enable communication in real time about issues that arise. Information sharing must be constant and bidirectional, allowing inter-company visibility into everything from inventory challenges to shipping delays to shifts in demand. Best practices should be shared with internal and external stakeholders to increase efficiencies and improve interoperability. The result—when done right—is increased end-to-end visibility across the entire supply chain ecosystem.

GAINING AN ADVANTAGE HINGES ON STRATEGY

In short, the race to get ahead should be measured. Industry 4.0 is unavoidable, but smart manufacturing requires smart planning and smart investments. Technology can transform a business, but it can just as easily destroy it. There are many intricacies and preliminary steps to consider in embracing a more forward-thinking Industry 4.0 strategy, starting with laying a proper foundation and outlining clear strategic objectives. Long-term strategic planning is critical to success.



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TRACKING THE AUTOMOTIVE INDUSTRY

How are talent shortages in engineering impacting the auto industry?

By Phil Biggs

The auto industry has put the pedal to the metal. As cars and their parts become more advanced, the lines between software, mechanical and electrical engineering are blurring, creating a greater need for collaboration and process improvement among original equipment manufacturers (OEM) and integrator engineering teams.

As a result, the auto space is seeing a fundamental change in the needs and talent makeup of its engineering teams, led primarily by the re-positioning of people and processes, as well as the implementation of new software applications.



WHAT ARE THE KEY BUSINESS ISSUES FACING THE AUTO SECTOR?

Tier 1 system integrators' primary role is to efficiently co-locate with the OEM customer and fulfill system integration requirements, while ensuring critical components and parts have a precise operational and financial fit, can be delivered on time and can meet high standards of quality.

The system integrators are facing a one-two punch as they work to keep pace with OEM global requirements without hurting profitability. And as vehicle platforms become more technologically complex and powertrain options diversify worldwide, these mission-critical suppliers will continue to face even greater demands.

Every supplier will need to optimize vehicle content volume while managing build-to-

operate costs and balancing investment needs. In the next few years, the industry will need to leap over a variety of hurdles, including limited availability and higher costs of key raw materials and down-line supply chain issues in emerging markets. Selecting locations for new assembly plants, complying with evolving tariff and non-tariff policies by region, and aligning those and other business decisions with global technology investments will be vital.

Perhaps the most crucial issue, however, is workforce readiness and deployment as the industry evolves. Modern factories demand a new, diverse and technologically advanced skill set to manage emerging technologies including robotics, laser welding and 3-D printing. Training for jobs in assembly lines and on factory floors and recruiting for engineering staff have been most impacted, particularly amid talent shortages in the U.S.

WHICH FACTORS CONTRIBUTE TO THE ENGINEERING TALENT SCARCITY?

The automotive industry has historically operated a manufacturing-finance business model until it moved to a design-marketing business model during the middle part of last decade. The manufacturing-finance model, which emphasized mass sales, prevailed from the 1960s through the mid-1990s. The design-marketing model evolved when the need to differentiate car brands sharpened and competition from Germany and Japan escalated pressure on American automakers to add content to vehicles. The global evolution in business models today is attributed in part to the relationship between buyers' changing tastes and the proliferation of onboard electronics, technology and development of powertrain variants.

CONTINUED FROM PAGE 3

TRACKING THE AUTOMOTIVE INDUSTRY

Since the mid-2000s, market fracturing between baby boomers and echo boomers has prompted greater vehicle program diversity. Coupled with significant unit volume growth in North America, this generates significant demand for engineering resources and talent while competition for a limited pool of engineering talent is at an all-time high.

WHAT ARE SOME OF THE CURRENT GAPS BETWEEN ENGINEERING REQUIREMENTS AND RESOURCES?

Because of the growing number of program launches, field production support is more vital than ever. Most customer program delivery now occurs in under two years, with advanced technology projects (in-vehicle **telematics** enhancement, infotainment, **sensor integration**) spanning four to five years. To achieve their ROI goals, these future projects require greater definition of time and motion and a better means to **prioritize which tech projects make it over the commercial finish line**. A global *process* cadence that incorporates common work standards across teams is critical to understanding and achieving efficiency goals and ROI. Auto manufacturers also need to develop comprehensive database tools that enable engineering teams to assess and allocate resources and requirements by global region in real time.

Engineering managers are also weighing the value of *contract labor* against full-time talent in their capacity planning. Hiring contractors can help managers in some cases avoid higher permanent capital expenses. However, manufacturers will want to consider the potential quality and re-work issues—as well as potential turnover—that can occur when working with contractors, especially in foreign locations. Matching software updates with new or ongoing project requirements without disrupting workflow is an ongoing challenge as well.

HOW CAN AUTOMOTIVE OEMS, INTEGRATORS AND SUPPLIERS ADDRESS THE SHORTAGE?

Over the long term, the industry must invent smarter ways to do old jobs, unique ways to do new jobs, and encourage a new generation of talent to pursue engineering degrees. And to appeal to tomorrow's engineers, the industry needs to combat the perception that manufacturing is a dead-end road. The manufacturing industry, and the auto sector especially, may have to rev their engines and honk their horns to stand out against flashier tech jobs and effectively compete for scarcer engineering talent in the coming decade.

In the short term, OEMs and integrators should make plans now to realize aggressive industry growth goals with the same or fewer engineers. This means engineering teams will need to optimize their time, run projects more efficiently and increase productivity both in the advanced technology workstreams as well as program management delivery requirements.

LOOKING AHEAD

Despite flattening volume so far in 2016, car sales are still expected to reach or surpass last year's record of 17.6 million by end of year. Even with low take rates on electric or hybrid alternatives and greater focus on SUVs and trucks, the projections for growth are solid based on millennial buyers entering the market, and ride sharing and other mobility choices driving demand.

According to the National Association of Manufacturers (NAM), 3 million manufacturing jobs are expected to be created over the next decade, with nearly half being automotive-related. Coupled with Google, Apple and other automakers' unrelenting investments in the connected car and autonomous vehicle and infrastructure requirements, market development will

continue and the need for engineering talent will not abate. The challenge is re-training the automotive workforce and matching emerging technical requirements to relevant shop-floor experience and new-age engineering skills.

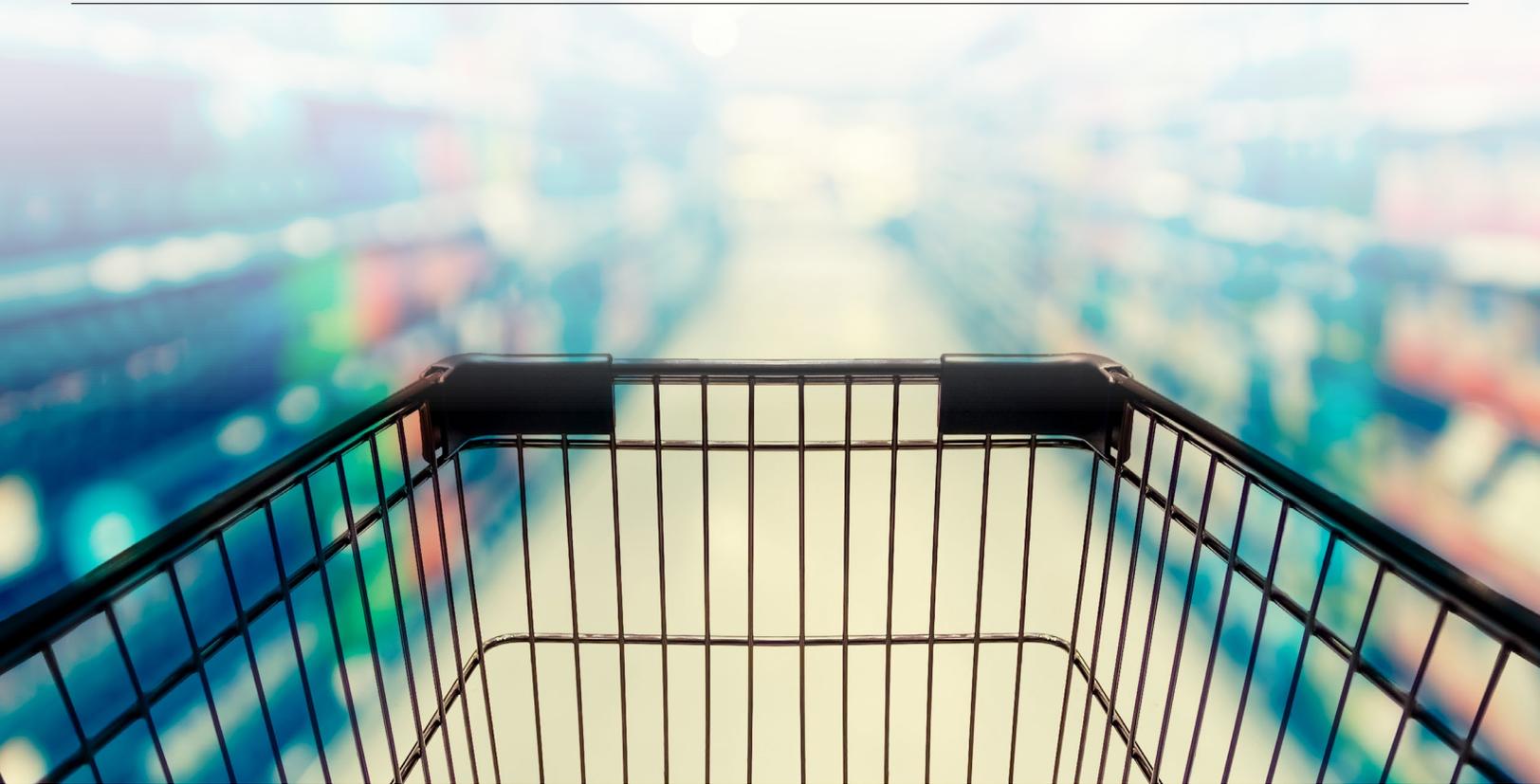
To take advantage of the market opportunity, OEMs and integrators must link the multitude of technology options to unique and ever-changing consumer preferences, while simultaneously accelerating their new product speed to market. Engineering work processes must continually improve as the demands on product development grow. The dual challenge of scarce engineering talent and spiking volumes is causing a dramatic need to evaluate, re-evaluate and improve current engineering and product cycle plans, processes and tactics.



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HOW TO KEEP THE LID ON YOUR FINANCES WHEN A FOOD RECALL STRIKES

By Clark Schweers & Rick Schreiber



Some of the biggest names in the grocery aisle have made headlines this year with high-profile recalls, including General Mills and Kellogg, among numerous other household staples. Major food manufacturers, including ConAgra, have also pulled their products from market with nationwide recalls. In fact, this year, the U.S. Department of Agriculture (USDA) has recorded 51 food safety and inspection recalls and alerts through Aug. 30, up a whopping 121.7 percent from the same period in 2015, when it recorded just 23. In 2014, the USDA recorded 39 recalls and alerts over the same time period, a figure approximately 30 percent lower than this year.

Manufacturers have noticed. According to the 2016 BDO Manufacturing RiskFactor Report, 100 percent of the largest publicly traded U.S. food manufacturers cite product quality, contamination issues or recalls as a significant business risk in their regulatory filings, up from 90 percent in 2015.

And it's clear the stakes are high not just for manufacturers, but for suppliers, retailers and grocers up and down the entire supply chain. It's important to understand why recalls are growing more common and to implement protective measures to mitigate risk before your supply chain sours.

WHAT'S TURNING UP THE HEAT?

Often, upticks in regulatory action can simply be due to a more watchful eye from regulatory bodies. In 2015, President Obama signed into law the Food Safety Modernization Act (FSMA), arguably the most sweeping reform of food safety in more than 70 years. The FSMA provides the FDA with new legislative authority to establish preventive control standards and enforce compliance, as well as tools to better respond to problems when they do occur.

But while increased regulatory scrutiny is likely a contributor to the increase in product recalls and contamination issues, it's not entirely to blame. Shifting consumer preferences are prompting dramatic changes in the industry as some food manufacturers remove pesticides, preservatives and other additives from their products to take advantage of the organic craze. While the popularity of organic food is driven by a trend toward greater consciousness of health and wellness, synthetic substances serve an important role in safeguarding against spoilage and foodborne illness. More recently, food manufacturers have also begun removing preservatives and artificial ingredients from non-organic food, in response to demand for "natural" foods. The long-term health benefits of organic or natural foods remain unclear, but there's no question that the preservatives they exclude prevent bacterial growth during transport and distribution.

CONTINUED FROM PAGE 5

HOW TO KEEP THE LID ON YOUR FINANCES

Technology has also changed the way we detect and report on foodborne illness. Individual incidents that historically would have been dismissed as one-off episodes and gone unreported can now be tracked and connected by Genome and DNA testing. This allows regulators to better pinpoint the source of foodborne illness outbreaks, which could be contributing to the number of product recalls. Social media and consumer-run websites have also become popular forums for bringing an outbreak to attention.

GLOVES ON: WHAT PROTECTIVE MEASURES CAN HELP?

Food processed at a single plant can be routed far and wide through the market — for example, a large processor's fruit may be sold in frozen bulk, smoothie mixes and other products under various manufacturers' brand names nationwide. This makes the process of a product recall potentially extensive and costly. And the consequences can persist long after the financial bleeding stops — reputation can also take a serious bruising.

To shield themselves from the consequences of a contamination incident or recall, food manufacturers should consider these protective measures:

1. Implement strong supply chain management procedures.

An ounce of prevention is worth a pound of cure. Thoroughly understanding where risk lies along the supply chain and implementing strong quality controls can help to mitigate and detect food contamination before an outbreak occurs. To proactively manage the risk of a food recall incident, food manufacturers should implement policies and procedures to ensure their suppliers' and their own compliance with Current Good Manufacturing Practice regulations and the latest food safety standards, including food allergen controls and routine food safety audits by third-party certification bodies.

2. Review contracts.

Heavyweights in the retail industry are increasingly including indemnifications against damages in the event of a product recall or critical incident in their contracts with suppliers and manufacturers. Food manufacturers should thoroughly evaluate their agreements with distributors and retailers to identify where responsibility lies in the event of a recall, and avoid risky business where possible.

3. Expect the worst.

Every food facility should have an up-to-date crisis management plan that establishes roles and responsibilities and outlines a strategy for every possible scenario.

4. Invest in insurance protection.

Product contamination policies have gained popularity in recent years — not only because of the increased spotlight on food safety, but because investors expect it. Fortunately, as more companies incorporate liability, property and product recall policies within their coverage, more carriers have entered the market and the growing demand has pushed premiums down.

the rise, companies should take a close eye to their insurance policies and contracts with supply chain partners to pinpoint risk, and ensure the right protective measures are in place to keep the supply chain in check and limit damage in the event of a recall.

This article was originally published in Food Manufacturing.



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BOILING OVER: HOW TO LIMIT THE DAMAGE?

No manufacturer is entirely safe from the risk of a recall or contamination incident. It's important to have a contingency plan in place to help identify the source of the contamination and isolate the problem to prevent further spread in plants and factories. Manufacturers should also have a response plan prepared to curb potential financial and reputational fallout. Consumers and investors alike are much more forgiving when companies react and respond quickly.

In the event of a contamination incident, it's also important to factor in potential losses to financial forecasts to staunch the bleeding and avoid future surprises. With recalls on

Q&A WITH ESKANDER YAVAR, NATIONAL LEADER OF BDO'S MANAGEMENT ADVISORY SERVICES



What do you find energizing about the work you do in manufacturing?

We spend a lot of time working with middle market manufacturers, which is an exciting space. Many of our clients are at a critical growth point—a new product or service that they've introduced to the market is taking off, and with that success comes growing pains. Scaling up invites an entirely new set of challenges that we get to help them tackle.

What are some of the major issues these manufacturers are wrestling as they scale up?

First and foremost, bad data is the source of many problems. Many companies mistakenly think that if they just adopt a new technology or practice, it will fix their difficulties, but it often just exacerbates the situation. Instead, it's the fundamental processes and systems, along with the data behind them, that need to be re-examined.

What does that look like? For one client, it was their purchasing list that was creating problems—they had 10 different ways they listed a specific part, which was purchased at many different prices from multiple vendors. The lack of standardization had a major trickle effect, ultimately reducing profits. When there are cracks in the foundation, the results are going to be damaged. The first priority must be to identify and repair those cracks.

Replenishment systems are one area where controls typically need tightening. Clean data is essential for having clear visibility into future demand, so there is stability around things like re-order points and safety stock. Problems, such as running out of a component in the middle of the manufacturing cycle, will compound quickly.

Inventory transparency is another area that creates major headaches. As companies scale up, the level of complexity in tracking every item in stock at every plant and warehouse increases exponentially. Management must have accurate data about how much inventory is on hand and for how long to gauge the health of the business.

Logistics and distribution also become more complicated as companies grow. As more parties get involved in delivering products to the end customer, the right tracking systems must be in place to give companies clear insight into exactly where their products are at every step of the manufacturing process.

Beyond having clean data, what else do growing manufacturing companies need to maintain tight control over the process?

Seamless integration between the supply chain, manufacturing and finance teams is crucial. When they are in sync, companies can drive growth and make advancements with much greater ease. When they are out of sync, everything becomes more complex.

Companies also need to consider their vendor strategy. What are the benefits of a regional hub strategy, compared with a more localized strategy? How important is it to have vendors in close proximity to a manufacturing facility? How will it affect cost and delivery times? Do alternative vendors need to be added to the mix to ensure a proper level of inventory? How will these decisions affect control over the process? These considerations can have major ramifications on the end result.

What are some of the impediments to implementing these changes?

Founders or owners who have built the business can be very sensitive to embracing change, which they can misinterpret as a loss of their control. Focusing on the root cause of problems that are emerging can help change their perspective. Late deliveries, unhappy customers, lower profit margins: these are all indications that the company has lost some level of control over the systems governing their manufacturing cycle.

It's important that everyone (founders included) see the value of change—whether it's around processes, technology or new systems—and understand how tightening controls and processes can help the business reach a new level of maturity.

What new challenges lie ahead?

It's easy to get caught up in the idea of implementing new technologies or more automation on the factory floor, with all of the chatter around Industry 4.0 and the movement toward more automated smart factories. But to capitalize on any of it, the basic foundations I've just discussed must be airtight. Accurate systems and processes must be in place in order to support the adoption of new technology. Automation will only necessitate even greater control over clean data, inventory visibility and the standardization of manufacturing processes.

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Perspective in MANUFACTURING

A FEATURE EXAMINING THE ROLE OF PRIVATE EQUITY IN THE MANUFACTURING SPACE.



Private equity firms continue to exert influence on manufacturers'

global supply chains. There are a number of lucrative opportunities to create efficiencies and reduce operating costs along the entire supply chain, such as the impact of tax and duty on the bottom line.

Apollo Investment recently announced a partnership with Nike to build a regional apparel supply chain in the Americas for the sporting goods company, in contrast to the firm's long-term strategy of overseas production. The new manufacturing and logistics company—in which Nike will not invest directly—aims to bring production closer to home, partly in response to growing demand for increased sustainability and domestic manufacturing. The vertically integrated manufacturing hub will enable Nike's supply chain to be nimbler and will make it better suited to manufacture customized products, *Forbes* reports.

According to *Supply and Demand Chain Executive*, Apollo's Special Situations I fund has so far acquired New Holland, a Pennsylvania-based apparel manufacturer, and ArtFX, a Virginia-based textile screen-printing and logistics company. Apollo plans to buy more apparel suppliers and

textile firms in North and Central America, and build out new manufacturing plants, warehouses and logistics networks for Nike, *Forbes* reports.

In the auto manufacturing sector, Bain Capital is partnering with Japanese airbag manufacturer Daicel Group, and Carlyle Group is teaming up with Ningbo Joyson Electronic Corp.-owned Key Safety Systems to bid for Takata, an airbag supplier up for auction after a massive safety recall. KKR is also said to be mulling a bid, according to the *Financial Times*. With 70 million Takata airbag inflators globally scheduled for replacement by 2019, some of the bidders are considering bankruptcy proceedings to mitigate liabilities, *Bloomberg* reports. Because some of the world's largest automakers are expected to spend the next few years recalling airbag parts, Takata set up a committee in February to negotiate with its carmaker customers and other stakeholders.

Following its 2015 purchase of Chinese plastics injection manufacturer Ying Shing Enterprises, Platinum Equity will acquire Singapore-based industrial parts distributor Broadway Industrial Group's foam plastics and flow control devices divisions for \$111 million, according to *Mergers & Acquisitions*. Platinum specializes in turning divestitures into stand-alone businesses, and has extensive experience in the Asian markets, according to a press release. The Los Angeles-based PE firm plans to grow the

Asian business both organically and through strategic add-on acquisitions, *Mergers & Acquisitions* reports.

In an unusually large Japanese deal, PE firms Bain Capital, KKR and MBK Partners are submitting second-round bids for Nissan's 41 percent stake in auto parts maker Calsonic Kansei, according to *Reuters*. The second bidding round is expected to close in October, so the value of bids cannot be ascertained. However, the parts maker has a market value of \$2.4 billion, and therefore represents a rare opportunity for a large deal. The drastic restructuring methods often associated with PE have traditionally been a turn-off for Japanese companies, but Nissan invited buyout firms to submit bids after corporate buyers failed to materialize, *Reuters* reports.

Supply chain optimization is one of several ways PE firms can create value and efficiencies in the manufacturing industry. Whether it is building a manufacturing backbone that helps reduce transportation costs and import duties, or building a platform by acquiring similar supplier and distributor companies within a given industry across the globe, there are significant opportunities for PE firms with an interest in the sector.

Sources: Bloomberg News, Financial Times, Forbes, Insead, Mergers & Acquisitions, Reuters, Supply & Demand Chain Executive, Supply Chain Digest, Tompkins International

FUTURE PERSPECTIVES: WHAT'S NEXT FOR MANUFACTURING INVESTORS?

As 3-D printing looks set to become the future of factory production, some industrial firms are betting big on the new technology. GE recently spent \$1.4 billion acquiring Sweden's Arcam AB and Germany's SLM Solutions Group in two separate transactions. The company—the world's largest maker of jet engines and gas turbines—aims to bolster its existing manufacturing operations, and build a \$1 billion 3-D printing business by 2020, *Bloomberg Markets* reports. The move could trigger a wave of acquisitions in the sector, as manufacturers move out of the R&D phase and begin using 3-D printers for more large-scale production.

DID YOU KNOW...

U.S. factory production rose 0.2 percent in September, [according to the Federal Reserve](#), up from August's decline of 0.5 percent.

According to a [survey conducted by The Economist Intelligence Unit](#), 32 percent of biopharmaceutical executives report regulatory uncertainty as the highest potential disruption of their company's strategy in the next five years.

Forty percent of U.S. manufacturing companies surveyed expect to hire in the next six months, according to [a recent survey conducted by Prime Advantage](#).

FedEx and UPS project that the number of seasonal workers they hire this year will remain steady at over 50,000 and 95,000 workers, respectively, after sharply ramping up holiday hiring earlier in the decade, according to [The Wall Street Journal](#).

Manufacturers shed 13,000 jobs in September, marking the second month of cuts, according to [the U.S. government's jobs report](#).

For more information on these and other service offerings for the manufacturing and distribution industry, please contact one of the service leaders below:

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NOVEMBER

Nov. 14-15

7th Annual American Manufacturing Strategies Summit

Sheraton San Diego / San Diego

Nov. 16-18

FABTECH 2016

Las Vegas Convention Center / Las Vegas

DECEMBER

Dec. 6

Smart Seminar Series - Additive Manufacturing: 3D Scanning and Imaging

NextEnergy / Detroit

Dec. 6-7

NAM NPASC December Meeting

Ritz-Carlton Chicago / Chicago

JANUARY

Jan. 16-18

Council of Manufacturing Associations 2017 Winter Leadership Conference

Westin Annapolis / Annapolis, Md.

Jan. 19-21

2017 International Conference on Manufacturing Technologies

San Diego



People who know Manufacturing, know BDO.

BDO MANUFACTURING & DISTRIBUTION PRACTICE

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BDO has been a valued business advisor to manufacturing and distribution companies for more than 100 years. We work with a variety of companies from all industrial sectors, ranging from global manufacturing and distributors to startup and niche manufacturing corporations, on a myriad of accounting, consulting, tax and other financial issues.

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