2018 Manufacturing Risks and Opportunities

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Here are the key risks and opportunities for 2018:

Attracting and Retaining a Quality Workforce

Productivity challenges exist when a manufacturer can't retain a consistent workforce. Manufacturing companies today have a hard time finding employees who will be on time for work and stick with their jobs. When it's hard to find reliable personnel, employers have to spend more time hiring and training new employees, then rehiring and training new employees. While manufacturing firms are doing what they can to inspire a new generation of manufacturing employees and experts, there is still a considerable void when it comes to skills and experience.

Work with schools and universities in your community to ensure that schools are teaching and promoting manufacturing-focused subjects. In addition, you can bridge the generation gap by encouraging your older employees to gradually slow down to retirement, passing on valuable skills to younger employees during a transition phase. You should prepare for a wave of retirements in the next 10 years.

Cybersecurity

Manufacturers should be proactive in cybersecurity by implementing effective controls to prevent and detect cyber-crime. A successful cybersecurity campaign includes educating employees of potential phishing schemes. Potential effects of a network infiltration include shut down of operations, theft of sensitive customer information, or theft of sensitive banking information.

Big Data Management and IT Infrastructure

Manufacturing involves a great deal of data and reliance on IT systems. Many companies are unsure of how to access and use that data to leverage positioning within a competitive market. In order for manufacturers to leverage their data properly, they must study data management opportunities and challenges, identify data management abilities, and prioritize data analysis plans. Additionally, manufacturers may consider completing an IT assessment to determine if investments need to be made to advance the company through more effective systems that facilitate data analysis.

Product Development and Innovation

The global marketplace puts an emphasis on product development and innovation, so make sure you don't miss out on well supported R&D opportunities. Focus is needed to manage the innovation process and allow for a good flow of new product ideas and innovations to enhance future success.

Regulation Compliance and Traceability

The manufacturing sector faces increasing regulation and compliance measures. Inconsistent regulations from state to state and country to country present competitive challenges. You must have complete visibility throughout your supply chain for your own compliance and that of your suppliers. Compliance can include everything from product safety to IT security to fair competition. Revenue and lease accounting standards are changing and impacting manufactures' financial statements in 2018-2020 as well. Identifying a complete population of all leases under the new standard presents significant challenges to all businesses.

Safety, Including Overtime Management

Safety is a major concern for manufacturers, as their employees routinely work around heavy equipment. Poor equipment maintenance can cause health and safety issues, as well as unplanned or excessive downtime. You should perform preventive maintenance on recommended schedules to keep operating costs low and throughput high, while helping to ensure worker safety. Additionally, monitoring overtime hours to help protect the safety of employees represents an important oversight role and a vital way to control costs.

Embracing the Tax Cuts and Jobs Act

Manufactures in the U.S. start 2018 with lower income tax rates, which affords you with the opportunity to invest back into your business. Owners may also look at stock buyback opportunities. The new tax act allows for 100% bonus depreciation for five years, which encourages capital investment. You may be able to improve employee benefit packages as well, which can help retain key employees. Lastly, you should look to move business back to the U.S. from foreign locations to take advantage of the better tax landscape.

Robotics and Automation

Advancements in technology have afforded manufactures new tools that will alleviate some of the labor challenges. Manufactures have begun to use autonomous vehicles in warehouses to move materials and product. The nation is facing a shortage of truck drivers so the opportunity to use autonomous trucks could be accelerated as well. Robot orders indicate high interest in the automobile, electrical/electronics, and metals industries. Experts proclaim that robots will change the economics of manufacturing with less time focused on low-cost labor positions. Robots are becoming lighter and less expansive, and they offer the opportunity to be repurposed for multiple tasks.

The average global robot density was about 74 industrial robots installed per 10,000 employees in the manufacturing industry in 2016. The most automated countries are Republic of Korea, Singapore, Germany, and Japan. Smarter robots with a “brain” in the cloud as a basis will benefit from big data and collective learning. Robots improve the quality of work by taking on dangerous, tedious, and dirty jobs that are not possible or safe for humans to perform.

Global robot installations in 2018-2020 are estimated to increase by at least 15% on average per year (a total of 1.3 million new robots installed). During 2018 alone, the industry expects 400,000 new robots to be installed around the globe, with 38,000 new robots installed in the United States. It is estimated that approximately 3 million robots will be operational on a global basis by 2020, as compared to only 1 million operational robots in 2010.

Sources: International Federation of Robotics, Robotic Industries Association, National Association of Manufacturers Outlook Survey