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An Oracle White Paper
January 2014

Manufacturing Outlook: Improving time to market, operational effectiveness and innovation in a highly competitive environment

Executive Overview

There's good news and bad news for manufacturers in 2014 and beyond.

Manufacturing production is expected to grow by 2.4 percent in 2014 and another 4.1 percent in 2015, according to the Manufacturers Alliance for Productivity and Innovation U.S. Industrial Outlook.[1] That's good news, but many manufacturers are still struggling to recover from the contraction in the industry that began in 2008 and left many enterprises with closed plants, lost workers and fewer customers. Suppliers that experienced contracting markets and reduced financing that resulted in a reduction in demand had to cut valuable experienced resources or worse, went out of business.

As the industry rebounds, manufacturers that survived now face a more competitive environment where they must do more with less. They will have to optimize resources, choose projects wisely, better manage risk and find the time and budget to innovate in order to thrive.

An enterprise project and portfolio management solution can help manufacturers position themselves in the new competitive landscape.

Building Optimism

Optimism among industrial manufacturers about the U.S. economy's prospects over the next 12 months remains high among 60 percent of industrial manufacturers, according to PwC's Manufacturing Benchmark.[2]

When manufacturing employment first started rising in 2010, it was hailed by some observers as the beginning of a renaissance in U.S. manufacturing, according to the Deloitte Global Economic Outlook from Q4 2013.[3] Manufacturing output has staged a remarkable recovery—after falling by just over 20 percent during the recession, output is now only 4 percent below its prerecession peak. However, even with the recent recovery, manufacturing employment remains 12.8 percent below its prerecession level as productivity increases in the manufacturing sector are substantially higher than for the economy as a whole.

The recovery in automobiles and auto parts, a subset of manufacturing, is noteworthy, given the taxpayer investment and government-sponsored reorganization that turned around two of the big three US automakers. In 2011 and 2012, all three companies made profits for the first time since 2004. Even though employment in auto and auto parts accounts for less than 7 percent of manufacturing employment, this subsector accounted for 31 percent of the 503,000 manufacturing jobs created since manufacturing employment's low point in February 2010.

What's more, falling energy prices and a large consumer market make the U.S. an attractive place to manufacture.

Globally, the Americas continue to show significant manufacturing strength over the next five years -- with the United States, Brazil, Canada and Mexico all in the top 15 most competitive nations, according to Deloitte's Global Manufacturing Competitiveness Index.[3] But the continued shift to Asia is unquestionable with 10 of the top 15 most competitive nations in five years. Among European nations, only Germany remains in the top 15 as one of the most competitive nations five years from now.

The Challenge: Doing More with Less

To stay competitive, many industrial manufacturing CEOs are focusing on making their businesses more efficient, according to PwC. Nearly half of those surveyed say operational efficiency is their top investment priority this year. That puts it at the top of the list. And four out of five tell PwC their companies have cut costs over the past 12 months. That's even more than the 70 percent who reported last year they were planning cost reduction initiatives and continues a long-term trend in the sector.

Like their peers across all industry sectors, industrial manufacturing CEOs are wary about inadvertently cutting value in the course of cutting costs – and slashing the workforce is one action that can certainly backfire, especially when there are more high technology requirements needed for design, manufacture and service of products.

With the industry getting increasingly global, nearly three-quarters of industrial manufacturing CEOs say their companies now encourage global mobility, transparency and collaboration across projects and programs worldwide. Top operational efficiency goals include:

- **Getting capacity right**
  For industrial manufacturing companies, making sure that capacity levels match demand is critical. More than a third of industrial manufacturing CEOs see it as one of their top investment priorities for the coming twelve months.

- **Working together across the supply chain**
  Some industrial manufacturing companies are innovating together with supply chain partners. That may be one reason 44% of industrial manufacturing CEOs tell PwC that supply chain partners have a 'significant influence' on their business strategy, more than across the sample as a whole.

- **Managing risk**

  The threats facing CEOs are coming from all directions; they're coming harder and faster; and they're coming in more subtly varied forms. Confronted with this changing risk landscape, CEOs recognize that traditional risk management techniques aren't enough. Risk requires identification and management to mitigate potential quality, warranty, legal and environmental consequences.

- **Driving innovation**

  Talent-driven innovation is deemed the most critical driver of a nation's competitiveness among the 10 major categories of drivers, according to executives surveyed by Deloitte. Within talent-driven innovation, the quality and availability of scientists, researchers and engineers and the quality and availability of skilled production workers are ranked as the first and second most important of the 40 individual sub-components of competitiveness drivers.

Road to Resilience

Faced with these challenges, manufacturing CEOs are taking a three-pronged approach to resilience, according to PwC.

First, they are targeting pockets of opportunity. CEOs are focusing on a few well-chosen initiatives, primarily in their existing markets, to stimulate organic growth. They're more wary about entering new markets or engaging in mergers and acquisitions, and diluting their resources too much.

They're also concentrating on the customer. CEOs are looking for new ways to stimulate demand and foster customer loyalty, such as capitalizing on digital marketing platforms and involving customer sin product/service development. But they're also aiming to keep their R&D costs down and make the innovation process more efficient.

Finally, CEOS are balancing efficiency with agility. They're trying to cut costs without cutting value or leaving their organization exposed to external upheavals. They're also delegating power more widely and collaborating with organizations to share resources and develop new offerings.

Each of these objectives can be accomplished with the help of an enterprise project portfolio management solution that can streamline operations, improve time to market, increase agility, and provide visibility and transparency with all stakeholders.

A Powerful Tool

Manufacturers need a tool to help improve operational effectiveness, manage production demands and the time-to-market cycle, as well as facilitate innovation.

- An enterprise project portfolio management solution (EPPM) provides visibility and collaboration across the enterprise to bring heavy vertically positioned groups together to share project status, information and updates in a timely manner – thereby minimizing delays. To effectively leverage resources, such as personnel, equipment and materials, the utilization view must extend to more than just one project, and cross utilization must be appropriately coordinated. An EPPM solution keeps Operations apprised of project status in each area, anticipates schedules delays and helps plan for the next phase of the launch.
- An EPPM solution enables organizations to align the right resources to the right projects at the right time. As technologies evolve, manufacturers will endeavor to distinguish and develop talent pools with traditional and non-traditional workers by technology and region, according to Deloitte. Workforce requirements for each region will be determined by function and scale. An EPPM solution ensures that these resources are fully leveraged, and resource requirements are clearly understood.
- An EPPM solution gives all appropriate participants access to vital project and portfolio information. Participation is also enhanced with integration to mobile devices. By connecting

everyone involved in the project process both information velocity and decision-making are faster and more accurate.

- EPPM can also help manufacturers pick the right products to take to market. Risk Analysis provides a comprehensive means of determining confidence levels for product success and easy techniques for determining contingency and risk response plans. It provides a view of required contingency to account for cost and schedule uncertainty, as well as analyzes the cost effectiveness of risk response plans.
- EPPM ensures return on investment. Financial goals are met, providing increased revenue, stakeholder satisfaction and increased market share.

Conclusion

Optimism for the world economic outlook has improved among U.S. industrial manufacturers.[4] The U.S. economy remains a growth driver, with moderate revenue growth expected in 2014.

Manufacturers plan to increase investment spending, with and emphasis on R&D and new products, while remaining agile to adjust to market changes. They must also do more with a smaller pool of qualified workers. An enterprise project portfolio management solution can help manufacturers navigate these challenge and better position themselves for the new competitive environment.

1. "Manufacturers Alliance for Productivity and Innovation U.S. Industrial Outlook," September 2013. www.mapi.net, http://www.mdm.com/articles/30862-forecast-manufacturing-production-to-grow-32-in-2014
2. "PwC Manufacturing Barometer," October 2013. http://www.pwc.com/us/en/industrial-manufacturing/barometer-manufacturing/index.jhtml
3. Global Economic Outlook, Q4 2013. http://dupress.com/articles/global-economic-outlook-q4-2013-united-states/?coll=4923
4. "Deloitte 2013 Global Manufacturing Competitiveness Index," Deloitte Touche Tohmatsu Limited, November 2012.

http://www2.deloitte.com/content/dam/Deloitte/global/Documents/Manufacturing/gx_2013%20Global%20Manufacturing%20Competitiveness%20Index_11_15_12.pdf

Manufacturing Outlook 2014 and Beyond
January 2014

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