USING ERP TO TAKE YOUR MANUFACTURING OPERATIONS TO THE NEXT LEVEL

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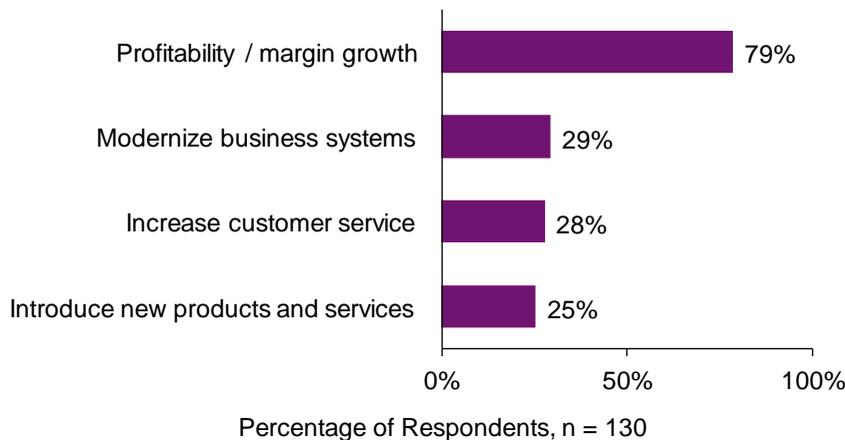Bryan Ball
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ABERDEEN

As the manufacturing industry shifts its focus from process efficiencies to superior customer service, finding new ways to deliver innovative products and services is imperative. But can you support new business models with traditional business systems and processes?

Manufacturers Must Modernize

Increased competition in the manufacturing sector is leading to a focus on meeting customer needs. For many, this has necessitated a change in processes, and even changes in business models. For example, if customers are looking for greater product customization, manufacturers need to respond by changing their approach to production and delivery. Unfortunately, not all business systems can support such changes.

When we asked manufacturers about their goals for the coming year, their top goal was, far and away, increasing profitability. The next three goals were closely related and mutually dependent: improving customer service; introducing new products and services; and, above all, modernizing business systems.

Figure 1: Top Manufacturing Goals
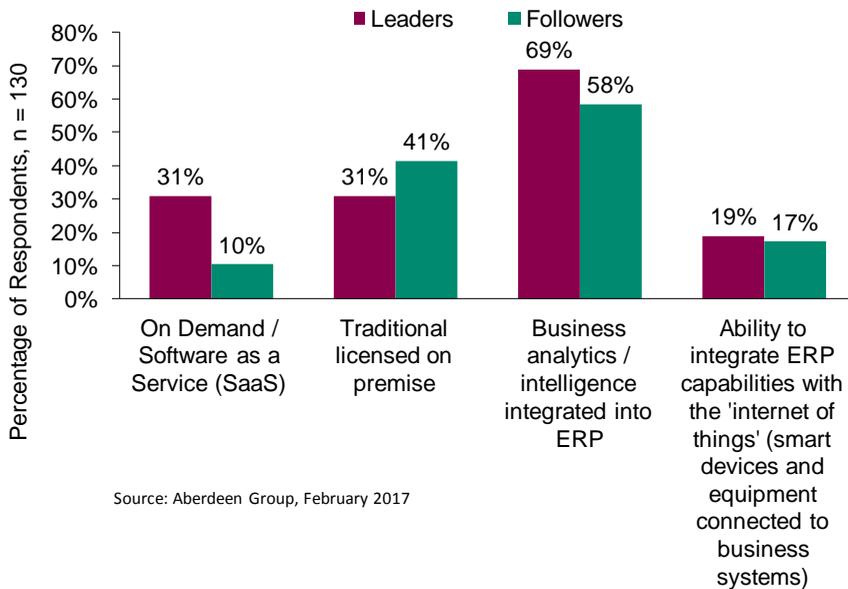

Percentage of Respondents, n = 130

Source: Aberdeen Group, February 2017

Modernization and Industry 4.0

So, how are manufacturers approaching this modernization?

As you can see in Figure 2 (below) the approach taken by Leaders differs from that of Followers. First, leading manufacturers are over three times as likely to choose on-demand or SaaS models for their technology deployments. By the same token, Leaders are less likely to have deployed their solution using a traditional, on-premise model.

Figure 2: Steps Towards Modernization

Source: Aberdeen Group, February 2017

SaaS solutions offer a level of accessibility that provides organizations with a central source of real-time data and communication that is not tied to geography or the physical plant. Additionally, software vendors continuously update SaaS solutions, thus freeing organizations from time-consuming maintenance activities and ensuring that they are always using the latest version of the software. As a result, this deployment model supports manufacturers who seek to be flexible, fast, and effective.

Leaders are also slightly more likely (16%) to have business analytics already integrated into ERP. Analyzing the effectiveness of processes, determining profit trends, and monitoring customer data can lead to decisions that will impact the bottom line. Integration with the ERP solution facilitates and speeds up such analysis. Furthermore, when ERP is connected to the Internet of Things (IoT), the expanded access to data – equipment data,

Leading manufacturers are over three times as likely to have deployed their ERP solution in the cloud.

product data, usage data – it can revolutionize the way an organization delivers products and services.

The Internet of Things, along with cyber-physical systems, cloud computing, and cognitive computing (AI / machine learning), is a core component of Industry 4.0. As Figure 2 illustrates, today's Leaders are slightly more likely to make the connection between ERP capabilities and the Internet of Things. Nevertheless, as you can also see, overall adoption of this capability is relatively low.

This is slowly changing. Aberdeen Group research has found that 38% of manufacturers plan to implement IoT technology in the next 12 months; seventy-two percent (72%) plan to do so within the next three years. Organizations that do not understand the impact IoT technology can have on their operations and their ability to meet evolving customer demands will be left behind.

Key Takeaways and Recommendations

It's time to take your manufacturing operations to the next level. This can be a scary process for manufacturers of all sizes, but there is a path to the future. By using ERP as a foundation, your organization can integrate key technologies and capabilities, particularly those associated with the Internet of Things, revolutionizing the way it operates.

To begin this journey, consider the following recommendations:

➔ **Don't wait.** Your competitors have already begun the process of modernization. Every day they are benefitting from innovative approaches to ERP specifically as well as the innovations that fall under the umbrella of "Industry 4.0." Failing to take action now will only cost you in the long run.

➔ **Identify opportunities.** Where are your processes coming up short? Is it taking too long to get products to market? Are you unable to react to demand trends? Are your resources overburdened? Prioritize the biggest challenges your organization faces and think about how cloud-based solutions, analytics, and the Internet of Things can accelerate innovation.

➔ **Start small.** Wholesale change is disruptive. Many manufacturers begin their journeys with something small, such as deploying sensors on their machinery and seeing what types of intelligence they can gather. Even small innovations like this can greatly influence a

company's ability to exceed customer expectations through predictive maintenance.

➜ **Work with your ERP vendor.** Your vendor interacts with your industry peers and works to incorporate best practices into their solutions. These business partners can be a valuable resource when it comes to planning organizational innovation.

➜ **Continuously improve.** Industry 4.0 is just the next stage of your journey. Ensure that your employees, processes, and technology are flexible enough to react to industry changes as they happen.

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