

ERP IN DISCRETE MANUFACTURING: IT'S NOT WHAT YOU HAVE, IT'S HOW YOU USE IT

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Report Highlights

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This report, based on a survey of 81 discrete manufacturers, illustrates the ways Leaders get the most out of their ERP solutions by identifying the essential capabilities for success in discrete manufacturing.

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Not every ERP is created equal: just because a discrete manufacturer has ERP, does not mean it will be a successful business.

In the quarter century since the phrase Enterprise Resource Planning (ERP) was coined, the solution has expanded its user base to include all industries, but it remains a solution that can greatly improve a manufacturer's ability to run effectively and efficiently. When it comes to discrete manufacturing, ERP enables visibility into the supply chain, helps to promote standards, and improves agility. Still, not all ERP's are created equal: just because a discrete manufacturer has ERP, does not mean it will be a successful business. But, since ERP is the solution used to run an organization from end-to-end, those that are able to take advantage of ERP capabilities can most effectively put significant ground between themselves and their competitors.

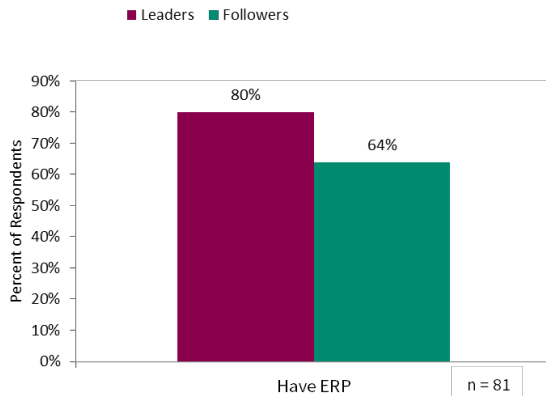
It's Not Whether You Have it, It's How You Use It

Discrete manufacturers are well past understanding that ERP is essential for doing business. Having a standardized system of record in place is now considered to be "table stakes" rather than a "nice to have." While a sample of 81 discrete manufacturers in Aberdeen's [2013 ERP Benchmark survey](#) found that Leaders are more likely than Follower to have implemented ERP, 90% of the total sample already implemented an ERP solution (Figure 1). On the one hand, those that have yet to implement an ERP solution are at a disadvantage; on the other hand, implementing an ERP solution is not the magic bullet. Rather, success is decided on *how* the solution is utilized.

Discrete manufacturers that responded to the [2013 ERP Benchmark survey](#) were ranked on the following criteria:

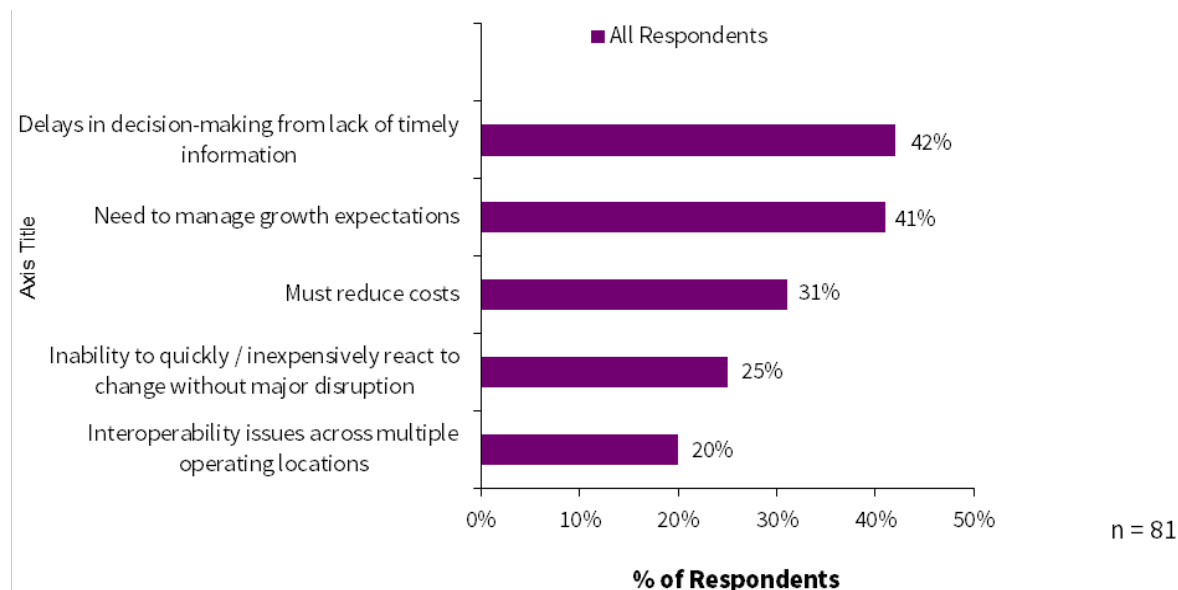
- Days to close a month:
Leaders (Top 35% in performance): 3.2 Followers (Bottom 65% in performance): 6.5
- Complete and on-time delivery:
Leaders: 95%, Followers: 88%
- Internal schedule compliance:
Leaders: 95%, Followers: 88%
- Inventory accuracy:
Leaders: 98%, Followers: 92%

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Figure 1: ERP is Near-Ubiquitous in Discrete Manufacturing

Source: Aberdeen Group, December 2014

So what are the key criteria to focus on when trying to make the most of an ERP solution? Discrete manufacturers should understand the top business drivers that impact ERP strategies in discrete manufacturing (Figure 2).

Figure 2: Business Drivers Impacting ERP Strategies

Source: Aberdeen Group, December 2015

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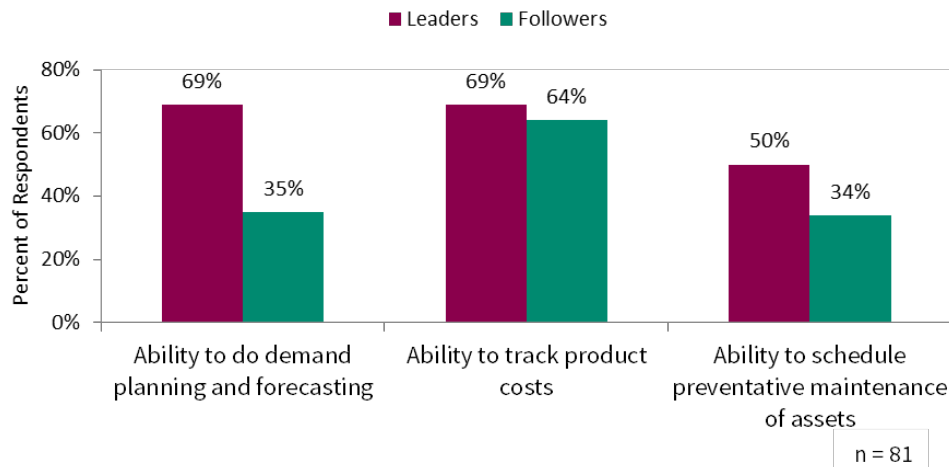
Leaders are 25% more likely than Followers to have the ongoing ability to tailor ERP to reflect business change.

These drivers indicate that a successful ERP initiative should support real-time visibility, efficiency, collaboration and scalability. Therefore, leading discrete manufacturers should emphasize capabilities that align with these criteria. ERP can provide real-time data that informs forecasts, shortens the time to decisions, and can promote standards across the organization, standards which include best practices that drive efficiency. It can bring employees in different locations or functions together, leading to collaboration and innovation. In today's volatile business environment, an effective solution can be tailored to support business change. Whether these are internal changes, such as new product lines or subsidiaries, or external, such as new reporting requirements, a flexible ERP supports a discrete manufacturer as it grows.

Essential Capabilities

With these criteria in mind, let's examine the differences between Leading and Following discrete manufacturers in regard to the ERP capabilities they have implemented. Note the key capabilities that relate to visibility, cost savings and efficiency. These are essential capabilities for success in discrete manufacturing (Figure 3).

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Figure 3: Visibility for Cost Savings

Source: Aberdeen Group, December 2014

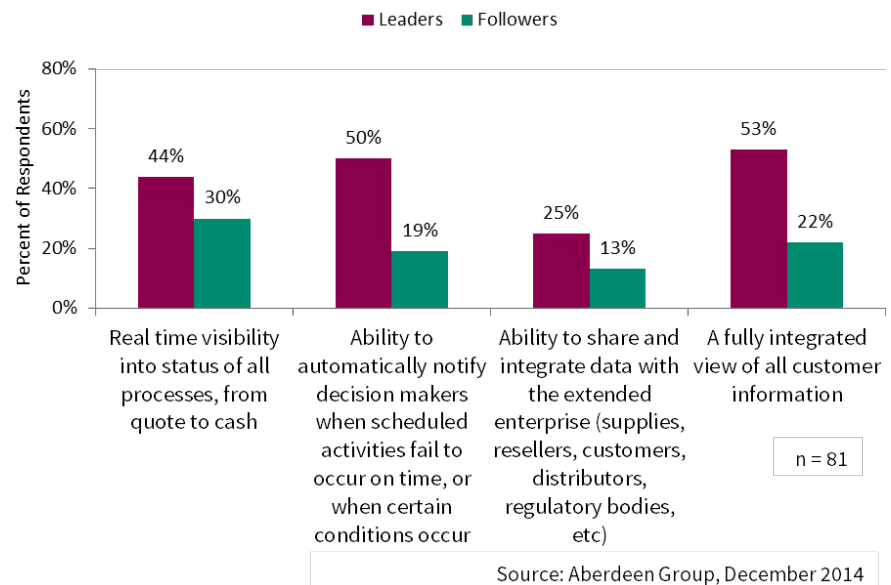
Leaders are almost twice as likely as Followers to have the ability to do demand planning and forecasting. By understanding demand, discrete manufacturers can avoid inventory carrying costs and secure more beneficial prices on materials. Better demand planning reduces the uncertainty and hedging that occurs for "just in case" inventory. Likewise, the less disruption passed on to suppliers due to volatility and unplanned orders, the better they are able to control their costs and pass on savings. Further, 69% of Leaders have the ability to track product costs, which helps to keep costs in check and enable decision-makers to understand if goods are priced accordingly.

But profitability does not only come from products sold. Asset downtime can increase costs and lower both margins and revenue. Ensuring machinery availability is essential for discrete manufacturers as they attempt to serve customers. Therefore, Leaders are 47% more likely than Followers to have the ability to schedule preventative maintenance of assets.

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The visibility provided by ERP also enables agility and more informed decision-making. Forty-four percent (44%) of Leaders have real-time visibility into the status of all processes (Figure 4)

Figure 4: Visibility for Agility and Decision-Making



Real-time visibility improves reaction times. For example, Leaders are 2.6 times as likely as Followers to receive automatic notifications based on various criteria. If a machine goes down, production can immediately be shifted, thus eliminating much of the manual firefighting on the shop floor. In an increasingly competitive environment, real-time visibility enables discrete manufacturers to get ahead of their competition.

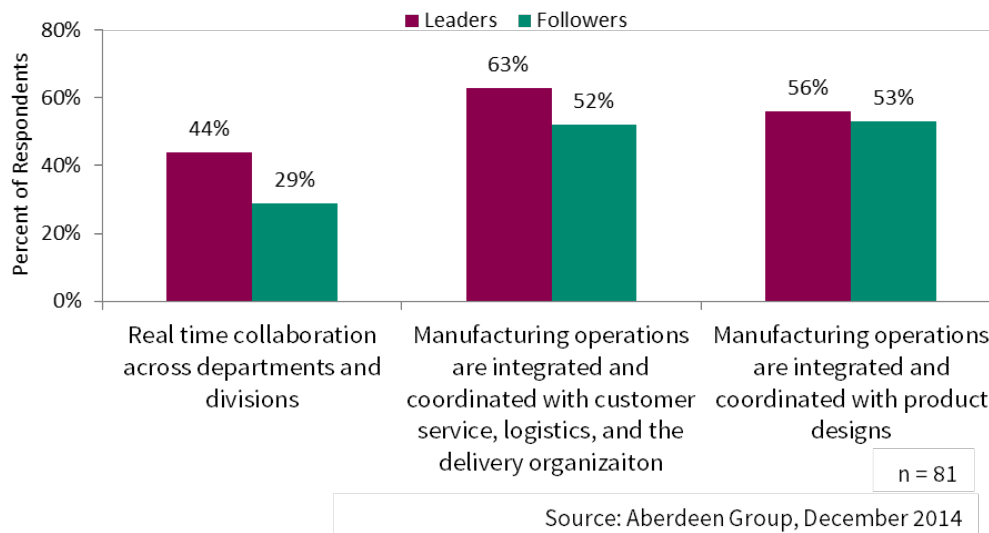
Of course, internal data is not alone in its ability to enable valuable insight to discrete manufacturers. Leaders are almost twice as likely as Followers to have the ability to share and integrate data with the extended enterprise. This includes suppliers, resellers, customers, and regulatory bodies. Sharing with suppliers, for example, enables organizations to know if enough of a certain material will be available to meet demand. Further, Leaders are 141% more likely than Followers to have a

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fully integrated view of all customer information. This not only promotes efficiency in customer interactions, but also leads to more satisfied customers.

The next set of crucial ERP capabilities for discrete manufacturers involves internal collaboration. Discrete manufacturers must manage employees over many locations and functions, while making the most of the resources they have. By using ERP as a portal, top-performing discrete manufacturers can improve collaboration and innovation. Note that Leaders are 52% more likely than Followers to have real-time collaboration across departments and divisions (Figure 5).

Figure 5: A Portal for Collaboration



ERP software vendors have begun to introduce "social ERP," where users can tag processes, customers, products and more, as they would in the social media they use in their lives out of work. Why is this important? Sixty-three percent (63%) of Leaders integrate and coordinate customer service, logistics, and delivery. This helps to ensure that products are available for shipping upon order, leading to happy customers. This is why

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Leaders achieve 95% complete and on-time delivery, in comparison to 88% for Followers. Fifty-six percent (56%) of Leaders integrate manufacturing operations with product design, as these functions should communicate in order to share information about manufacturability. The shop floor knows what they can do with the assets available to them, which is vital information for product design.

Key Takeaways

The strong majority of discrete manufacturers understand the need for ERP. Those that have not implemented a solution are at a disadvantage and should investigate their options. Those that have already implemented a solution may not be getting the most out of their investment, or they may have chosen a solution that is unable to support the functionality most essential to success in discrete manufacturing. Look for an ERP that supports the following business drivers:

- ➔ **Visibility:** Forty-four percent (44%) of Leaders have real-time visibility into the status of all processes, in comparison to 30% of Followers. This enables agile decisions and improved accuracy in demand forecasting.
- ➔ **Efficiency:** Leaders are 47% more likely than Followers to have the ability to schedule preventative maintenance of assets. This allows them to minimize downtime and keeps operations running smoothly.
- ➔ **Collaboration:** Leaders are 52% more likely than Followers to have real-time collaboration across departments and divisions. By connecting functions and departments, organizations can do more with fewer employees, increasing innovation.

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➔ **Scalability:** Leaders are 25% more likely than Followers to have the ongoing ability to tailor ERP to reflect business change. This ensures that they can support growth and changing regulations without significant investment or disruption to the business.

Discrete manufacturers will have difficulty surviving without ERP, but those that select a solution with the right capabilities can get ahead of their competitors.

Related Research

[*BPM and EPM: The Perfect Pairing for Process;*](#)
December 2013

[*ERP in Automotive: Taking a Look Under the Hood;*](#) October 2013

[*SaaS and Cloud ERP Observations: Enabling Collaboration in the Midmarket;*](#) December 2013

[*ERP in Manufacturing: Creating a Hub for Visibility, Collaboration, and Innovation;*](#)
July 2013

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