

ERP in Food and Beverage

Tracing the Path to Success

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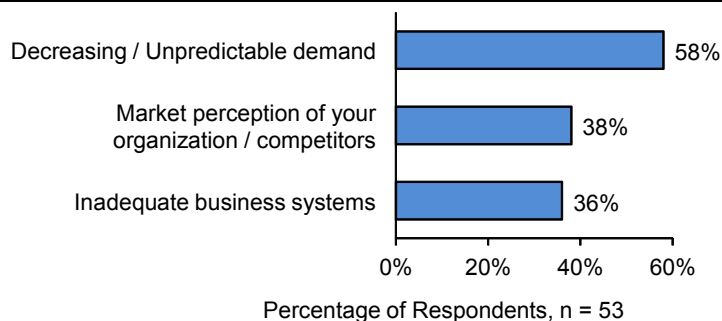
ERP in Food and Beverage: Tracing the Path to Success

Of all of the types of manufacturers out there, food and beverage manufacturers may be subject to the most unique business pressures and requirements of them all. These organizations deal with materials and finished goods that can spoil, may become hazardous, or are subject to a variety of regulations. Mistakes can cost the organization greatly in fines and public perception. At the same time, these organizations have similar requirements to other manufacturers when it comes to the business systems that are used to manage operations and give business leaders visibility that can enable informed decisions. Therefore, food and beverage manufacturers need a business solution that can manage the front and back office from end-to-end, as well as provide detailed visibility into materials and finished goods in order to meet their requirements. As such, according to the [2013 ERP Benchmark Survey](#), 94% of leading food and beverage manufacturers have implemented Enterprise Resource Planning (ERP). This report, based on two Aberdeen surveys, uncovers the pressures that food and beverage manufacturers face as well as the ways in which they address these pressures through ERP.

A Need for Something More

The [HI 2013 Aberdeen Business Review](#) identified the top pressures facing food and beverage manufacturers (Figure 1).

Figure 1: Top Pressures in Food and Beverage



Source: Aberdeen Group, June 2013

Fifty-eight percent (58%) cited an inability to predict demand. When organizations cannot accurately predict demand, products either sit on the shelf or the organization is unable to sell as much of its product as it could have. These problems are compounded in food and beverage where products or materials could spoil. Therefore, organizations need better

Sector Insight

Aberdeen's Sector Insights provide strategic perspective and analysis of primary research results by industry, market segment, or geography.

Aberdeen Methodology

In this report, Aberdeen groups respondents into two maturity classes:

- ✓ **Leaders:** Top 35% of respondents based on performance
- ✓ **Followers:** Bottom 65% of respondents based on performance

visibility into their supply chain, their customers, and their operations in order to be more accurate in demand planning and make smarter investments.

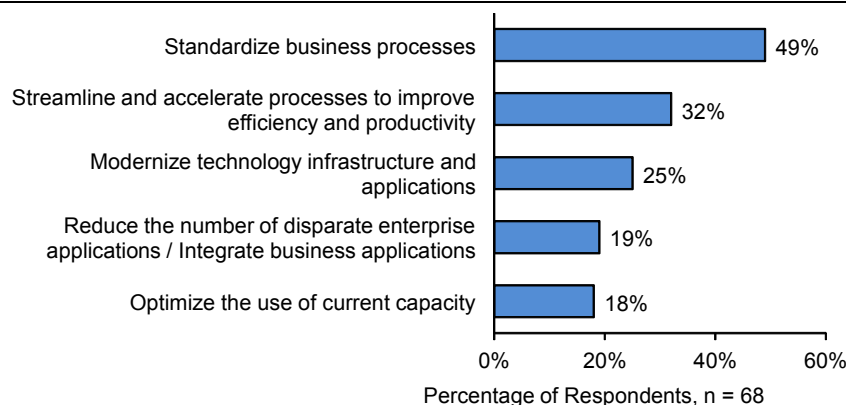
Thirty-eight percent (38%) of food and beverage manufacturers noted market perception as a top business pressure. While this is important for all organizations, food and beverage manufacturers are uniquely susceptible to public relations nightmares if their products make people sick. These organizations need to do a better job of keeping track of the status of their materials and being able to track where they end up, in case a recall is needed.

As a result of the above pressures, and many more, the third biggest pressure in food and beverage is “inadequate business systems” (36%). Not only do some of the business systems they utilize not enable accurate demand planning, or provide good visibility into the status of materials, but these solutions may not contain functionality that enables the business to run efficiently and effectively in a modern environment. These requirements call for a full-fledged ERP solution that can meet the unique needs of a food and beverage manufacturer, but also contain functionality inherent to running a business.

ERP's Impact on Food and Beverage

According to the [2013 ERP Benchmark Survey](#), food and beverage manufacturers are attempting to combat the above pressures through a variety of strategic actions that are aided by ERP (Figure 2).

Figure 2: Top Strategies in Food and Beverage



Source: Aberdeen Group, June 2013

The top two strategies of food and beverage manufacturers are streamlining and standardizing processes. Through ERP, organizations can communicate best practices across the organization and ensure that processes are completed as intended. This also ensures that regulations are adhered to. ERP is also used to streamline processes by connecting people with the data they need to perform. Through ERP, employees can plan and execute more

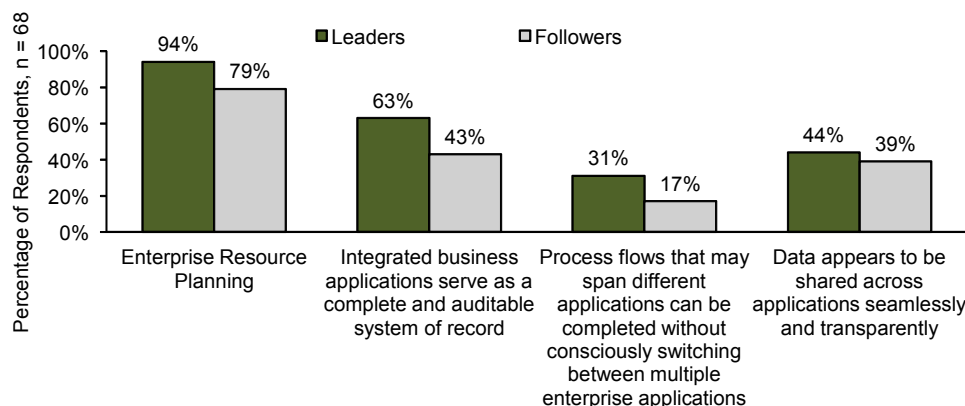
effectively. A key component of this is optimizing the resources that are already available to organizations.

In order to enable standardized processes that are streamlined, food and beverage manufacturers look to modernize and simplify their business systems. A food and beverage manufacturer that is running their business on spreadsheets (or on paper!) cannot provide real-time data that is essential to guiding the business. It would be virtually impossible to track materials through to their final destination. Even with significant technology purchases, a food and beverage manufacturer may not be in the clear. Disparate systems can be complicated and lead to employees utilizing old or redundant data. Therefore, food and beverage manufacturers look for one single source of truth to run their business from end-to-end. This is evidenced by the fact that 25% of food and beverage manufacturers note “modernizing technology infrastructure and applications” and 19% note “reducing the number of applications” as top two strategies.

Modernizing and Simplifying Business Systems

In alignment with the strategies of modernizing and simplifying business systems, Leaders attempt to create business systems that can provide all of the functionality that a food and beverage manufacturer needs in one place (Figure 5). Unsurprisingly, 94% of Leaders have implemented ERP. This is why Leaders are 47% more likely than All Others to have integrated business systems that are a complete and auditable system of record. No matter which process an employee is trying to complete, the data is at their fingertips. Those food and beverage organizations that have implemented a solution, such as ERP, that can run their business from end-to-end see substantial improvements (see sidebar).

Figure 3: A One Stop Shop for Data



Source: Aberdeen Group, June 2013

To understand the functionality that may come with a full-featured ERP solution for food and beverage manufacturers, examine the key modules that Leaders implement in the February 2013 report, [ERP in the Process](#)

How Do You Compare?

Food and Beverage respondents to the [2013 ERP Benchmark survey](#) were ranked on the following criteria:

- ✓ **Days to close a month:**
Leaders – 6,
Followers – 6.6
- ✓ **Complete and on-time delivery:**
Leaders – 96%,
Followers – 87%
- ✓ **Internal schedule compliance:**
Leaders – 96%,
Followers – 87%
- ✓ **Inventory accuracy:**
Leaders – 97%,
Followers – 90%

Direct Benefits of ERP

Both Leaders and Followers report benefits received as a direct result of their ERP solution. Here is how Leaders compare to Followers:

- ✓ **Reduction in operational costs:**
Leaders – 16%,
Followers – 9%
- ✓ **Reduction in administrative costs:**
Leaders – 17%,
Followers – 16%
- ✓ **Improvement in schedule compliance:**
Leaders – 12%,
Followers – 11%

[Industries: Functional Ingredients to Create a Good Mix](#) (Table I). These modules can aid in planning, execution, and resource allocation. Forecasting and demand planning enable organizations to understand how much of a certain material or finished good they will need to maintain profitability. Material Requirements Planning and Purchasing ensure that the organization will have the materials they need to meet forecasted demand. Lastly, Capacity Requirements Planning and Master Production Scheduling are used to ensure that operations run smoothly. All of these modules are implemented at a higher rate in Leading organizations.

Table I: Modules of ERP

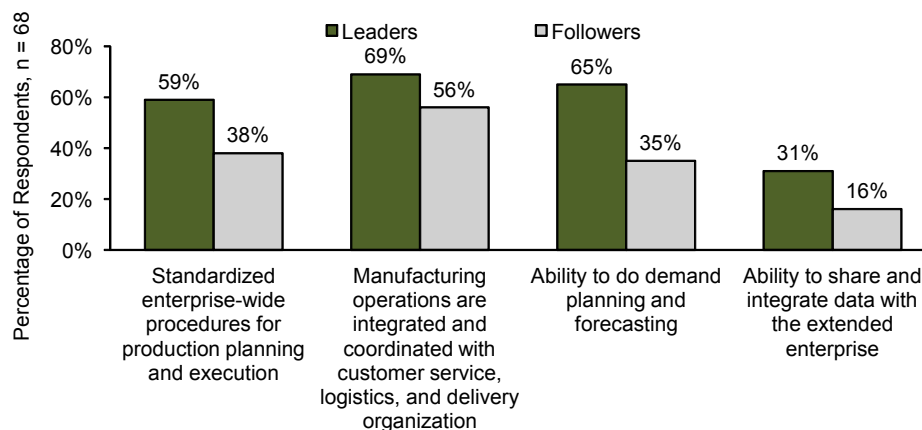
Module	Leaders	Followers
Purchasing	90%	84%
Material Requirements Planning	79%	68%
Master Production Scheduling	69%	48%
Forecasting / Demand Planning	59%	38%
Capacity Requirements Planning	41%	29%

Source: Aberdeen Group, December 2012

Crucial Capabilities

But an effective ERP solution is more than just the modules that it contains. An effective solution enables capabilities within the organization that improve performance across all functions. Aberdeen's [2013 ERP Benchmark Survey](#) illustrates some of the capabilities that leading food and beverage manufacturers have enabled when it comes to managing manufacturing operations and the supply chain (Figure 4).

Figure 4: Managing the Shop Floor and the Supply Chain



Source: Aberdeen Group, June 2013

For example, 59% of Leaders have standardized enterprise-wide procedures for production planning and execution compared to 38% of Followers.

How Do You Compare?

In the report [ERP in the Process Industries: Functional Ingredients to Create a Good Mix](#), respondents were ranked on the following criteria:

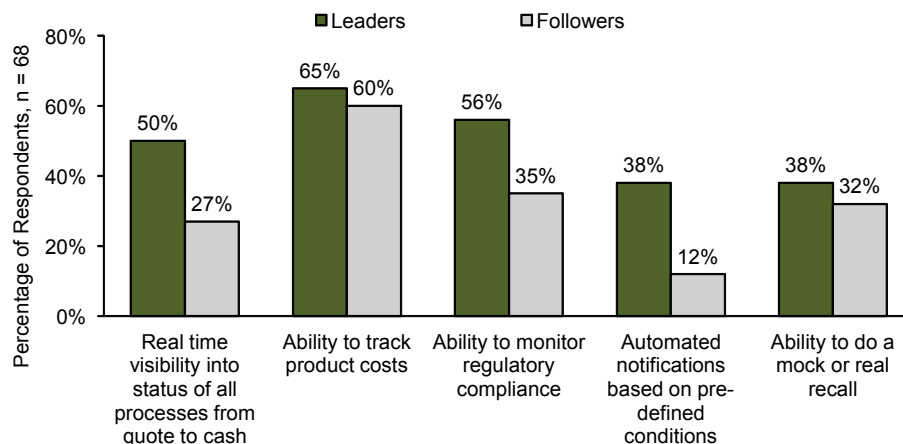
- ✓ **Reduction in inventory levels:**
Leaders – 14%,
Followers – 6%
- ✓ **Inventory accuracy:**
Leaders – 95%,
Followers – 91%
- ✓ **Days to close a month:**
Leaders – 3.9,
Followers – 6.7
- ✓ **Manufacturing schedule compliance:**
Leaders – 94%,
Followers – 87%
- ✓ **Complete and on-time shipments:**
Leaders – 97%,
Followers – 89%

Through ERP, organizations can communicate best practices to ensure that products achieve consistent quality no matter which plant they are produced in. This also ensures that regulations are adhered to. Further, 69% of Leaders have integrated and coordinated manufacturing operations with the customer service, logistics, and delivery organizations. These functions neighbor each other and should be connected to ensure collaboration and efficiency. These two capabilities, enabled by ERP, help organizations to achieve their goals of standardized and streamlined processes.

One of the most important processes that a food and beverage manufacturer needs to excel at is demand planning and forecasting. Spoiled products and materials will do them no good. Accurate demand plans are a key to maximizing profits. Therefore, Leaders are 86% more likely than Followers to have the ability to forecast and plan for demand. Further, to plan for demand effectively, a food and beverage manufacturer must be privy to data that originates outside of the organization. For example, how much demand are its customers forecasting? Also, how much material will suppliers be able to provide? As such, Leaders are almost twice as likely as Followers to be able to share and integrate data with the extended enterprise. It should be noted that the extended enterprise includes regulatory bodies, of which a food and beverage manufacturer should be acutely aware.

Regulations and compliance is just one of the reasons that food and beverage manufacturers need ERP for visibility into their operations. Leading food and beverage manufacturers are more likely to enable visibility with ERP for a wide range of capabilities (Figure 5).

Figure 5: Visibility Enables Traceability



Source: Aberdeen Group, June 2013

Leaders are 85% more likely than Followers to have enabled real time visibility into the status of all processes. This visibility enables decision-makers to alter shipping schedules or production runs due to changes in conditions. It also enables better analysis of how operations are impacting

Fast Fact

- ✓ Fifty-three percent (53%) of Leaders are able to schedule preventative maintenance for assets in comparison to 40% of Followers
- ✓ Seventy-one percent (71%) of Leaders are able to combine planned warehouse orders in comparison to 60% of Followers

the bottom line. For example, 65% of Leaders have the ability to track product costs. They can then purchase alternate materials or alter processes to drive costs down if they become unprofitable.

Where visibility really impacts a food and beverage manufacturer is in compliance. Non-compliance can create nightmares for a food and beverage manufacturer. Through ERP, Leaders are 60% more likely than Followers to have the ability to monitor regulatory compliance. Further, food and beverage manufacturers really should know the minute their products are deemed noncompliant. This can be enabled through automated alerts, which is a capability that Leaders are more than three times as likely as Followers to have. In crisis situations, recalls may become necessary. Through ERP, Leaders are more likely than Followers to have the capability to trace materials and recall only the goods that are affected.

Key Takeaways

In order to run their business efficiently and effectively while maintaining the traceability necessary to maintain compliance and avoid public relations blunders, leading food and beverage manufacturers modernize and simplify their technology infrastructure. This means a complete and integrated ERP package. In fact, 64% of Leaders have an integrated business system that creates a complete and auditable system of record. These systems provide the following benefits, alongside many others:

- **Standardization.** Leaders are 55% more likely than Followers to have standardized procedures for production planning and execution. This ensures that best practices are followed and compliance is maintained.
- **Enhanced planning.** Leaders are 86% more likely than Followers to have the ability to forecast and plan for demand. This ensures that orders can be met and that product does not sit on the shelves.
- **Visibility and traceability.** Leaders are 85% more likely than Followers to have enabled real time visibility into the status of all processes. They can track orders, costs, and materials. By being able to track materials, organizations can understand which shipments must be called in the case of crisis.

Food and beverage manufacturers that consider implementing these capabilities and technologies can trace a path towards success.

For more information on this or other research topics, please visit www.aberdeen.com.

Related Research

[ERP in Wholesale and Distribution: A Logical Solution to Logistical Challenges;](#)
September 2013
[ERP in Manufacturing: Creating a Hub for Visibility, Collaboration, and Innovation;](#)
July 2013

[The Case for Cloud ERP in Manufacturing: Alleviating Outdated Concerns;](#) March 2013
[ERP in the Process Industries: Functional Ingredients to Create a Good Mix;](#)
February 2013

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