

## Expandable's Customers Implement Best Practices to Improve Performance

Enterprise Resource Planning (ERP) provides the necessary infrastructure that forms the operational and transactional system of record for businesses of all types and sizes. ERP enables businesses to standardize practices, improve efficiency and productivity, provide visibility across functions and departments, and modernize their technology infrastructure. A successful ERP implementation can provide tangible business benefits that can aid top performing companies in putting some distance between themselves and their competitors, and allow smaller businesses to compete on a larger stage. ERP can be particularly essential to manufacturing organizations. As such, Aberdeen has studied the actions of manufacturers along with the benefits that they have received from their ERP implementations.

Throughout this year, Aberdeen conducted its fifth annual ERP survey. In June Aberdeen published ERP in Manufacturing 2010: Measuring Business Benefit and Time to Value which explored the ERP implementations of over 445 manufacturers of all sizes. Recently, Aberdeen has collected 65 responses from manufacturers that have chosen Expandable as their ERP solution. Interestingly, these users have shown that through their actions and with the capabilities they are implementing, they are receiving quantifiable business benefits from their ERP solution that exceed the Industry Average manufacturer and rival those achieved by the Best-in-Class.

### Vendor Snapshot: Expandable

Expandable Software provides an ERP solution that is targeted at growing manufacturers. The solution is built using the Microsoft SQL Server Platform and is fully integrated to provide manufacturers with what they need to effectively manage an organization. It is intended to be scalable so that growing businesses can add functionality as they expand. Expandable's stated goal is to provide a solution that is easy to use while keeping the total cost of ownership low. As such, Expandable offers its solution in both the traditional on premise and the subscription-based Software as a Service (SaaS) models. To facilitate implementation, the company offers an industry-specific solution for medical technology, high tech electronics and industrial manufacturing, designed with startups in mind. The representative sample of 65 manufacturers participating in Aberdeen's survey indicate Expandable's user base is taking advantage of the solution to run their businesses effectively.

### Analyst Insight

Aberdeen's Insights provide the analyst perspective of the research as drawn from an aggregated view of the research surveys, interviews, and data analysis

"After implementation, Expandable gave us the tools that led to improving our inventory turns from 1.5 to 3.0 in approximately 18 months."

~ Vic Fabano, Vice-President of Operations and Quality, Anulex Technologies

## Expandable Users Perform Above the Industry Average

In Aberdeen's ERP survey, respondents are asked to identify their performance across several different metrics. As a result, a weighted average was used in order to determine maturity classes, the top 20% of which are the Best-in-Class, the middle 50% of which are the Industry Average, and the bottom 30% of which are the Laggards. Performance across these maturity classes is illustrated in Table I. The average Expandable customer competes at a higher level than the Industry Average across all manufacturers.

**Table I: Performance of Expandable users**

Definition of Maturity Class	Mean Class Performance
<b>Best-in-Class: Top 20%</b> of aggregate performance scorers	<ul style="list-style-type: none"> <li>▪ 22% reduction in inventory levels</li> <li>▪ 97% inventory accuracy</li> <li>▪ 3.4 days to close a month</li> <li>▪ 96% manufacturing schedule compliance</li> <li>▪ 98% complete and on time shipments</li> <li>▪ 38 days sales outstanding</li> <li>▪ 28 days component inventory</li> <li>▪ 14 days finish goods inventory</li> </ul>
<b>Expandable Customers</b>	<ul style="list-style-type: none"> <li>▪ 16% reduction in inventory levels</li> <li>▪ 96% inventory accuracy</li> <li>▪ 4.2 days to close a month</li> <li>▪ 93% manufacturing schedule compliance</li> <li>▪ 96% complete and on time shipments</li> <li>▪ 43 days sales outstanding</li> <li>▪ 45 days component inventory</li> <li>▪ 18 days finish goods inventory</li> </ul>
<b>Industry Average: Middle 50%</b> of aggregate performance scorers	<ul style="list-style-type: none"> <li>▪ 11% reduction in inventory levels</li> <li>▪ 94% inventory accuracy</li> <li>▪ 5.3 days to close a month</li> <li>▪ 88% manufacturing schedule compliance</li> <li>▪ 93% complete and on time shipments</li> <li>▪ 45 days sales outstanding</li> <li>▪ 34 days component inventory</li> <li>▪ 17 days finish goods inventory</li> </ul>

Source: Aberdeen Group, December 2010

Expandable customers saw a larger reduction in inventory levels as a result of their ERP implementation, higher percentage inventory accuracy, closed the month quicker, and had a better record of manufacturing schedule compliance and percentage of complete and on-time shipments than Industry Average companies. All manufacturers should be measuring these factors, and a well implemented ERP implementation can have a significant

### ERP in Manufacturing Best-in-Class Criteria

Aberdeen used five key performance metrics to determine Best-in-Class ERP implementations in manufacturing companies:

- √ reduction in inventory levels as a result of implementation
- √ inventory accuracy
- √ number of days to close a month
- √ percentage complete and on-time shipments
- √ manufacturing schedule compliance (percent of work orders completed on time)

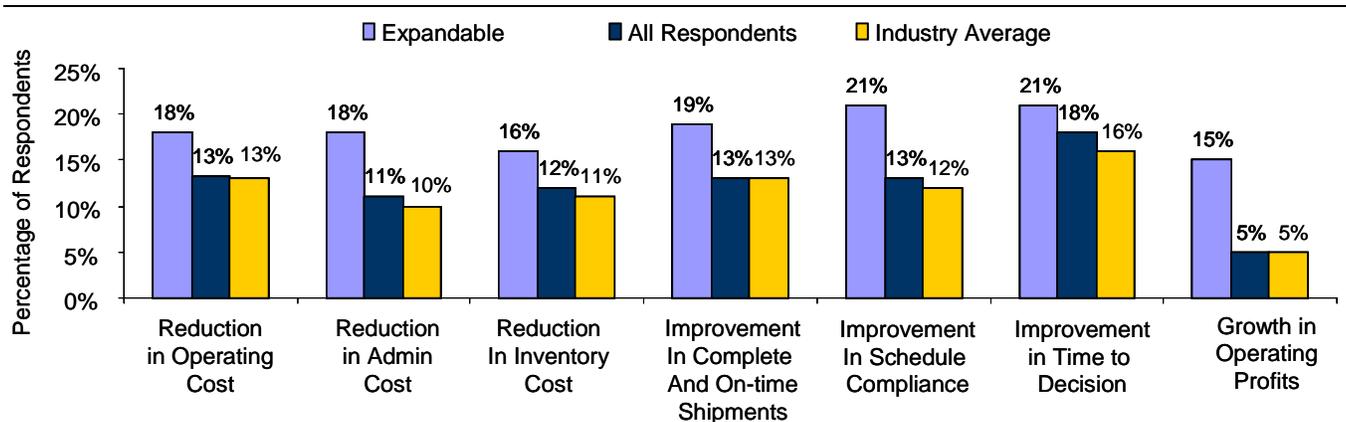
Best-in-Class is defined to be the top 20% of aggregate performance scorers.

impact on these metrics. In most of these Key Performance Indicators (KPIs), Expandable performs closer to the Best-in-Class than the Industry Average. While Expandable respondents have generally performed not as well in days sales outstanding, days component inventory, and days finish goods inventory, these metrics can vary greatly due to the types of products that each specific manufacturer produces. Top performing businesses are able to make the most out of their ERP implementation and receive the greatest benefits.

### Benefits of Expandable Users

A properly implemented ERP solution can help to produce tangible business benefits. Companies that put the time and effort into a successful implementation are gaining a valuable resource to run their business. Figure 1 illustrates the benefits that Expandable customers are receiving in comparison to all manufacturing respondents and the Industry Average. In every category, Expandable is coming out on top. Especially notable to growing companies is the statistic that Expandable customers are seeing three times the growth in operating profits than the Industry Average. Expandable is helping these companies reduce costs, greatly affecting the bottom line. Improvements in complete and on-time shipments are 45% better for Expandable customers than the Industry Average helping these companies keep their own customers happy which can lead to more business in the future. With a well executed ERP implementation, business can see many positive changes in their business; Expandable's solution is proving that to its customers.

**Figure 1: Benefits of Expandable users versus the Industry Average**



Source: Aberdeen Group, December 2010

Additionally, Expandable customers are seeing benefits that approach or exceed the Best-in-Class (Table 2). In some cases, such as in improvement in time to decision and complete and on-time shipments, and growth in operating profits, Expandable customers have actually performed better than the Best-in-Class.

**Table 2: Expandable Improvements vs. the Best-in-Class**

Definition of Maturity Class	Mean Class Performance
<b>Best-in-Class: Top 20%</b> of aggregate performance scorers	<ul style="list-style-type: none"> <li>▪ 20% reduction in operating cost</li> <li>▪ 18% reduction in administrative cost</li> <li>▪ 22% reduction in inventory cost</li> <li>▪ 17% improvement in complete and on time shipment</li> <li>▪ 18% improvement in manufacturing schedule compliance</li> <li>▪ 34% improvement in time to decision</li> <li>▪ 10% growth in operating profits</li> </ul>
<b>Expandable Customers</b>	<ul style="list-style-type: none"> <li>▪ 19% reduction in operating cost</li> <li>▪ 18% reduction in administrative cost</li> <li>▪ 16% reduction in inventory cost</li> <li>▪ 19% improvement in complete and on time shipment</li> <li>▪ 21% improvement in manufacturing schedule compliance</li> <li>▪ 21% improvement in time to decision</li> <li>▪ 15% growth in operating profits</li> </ul>

Source: Aberdeen Group, December 2010

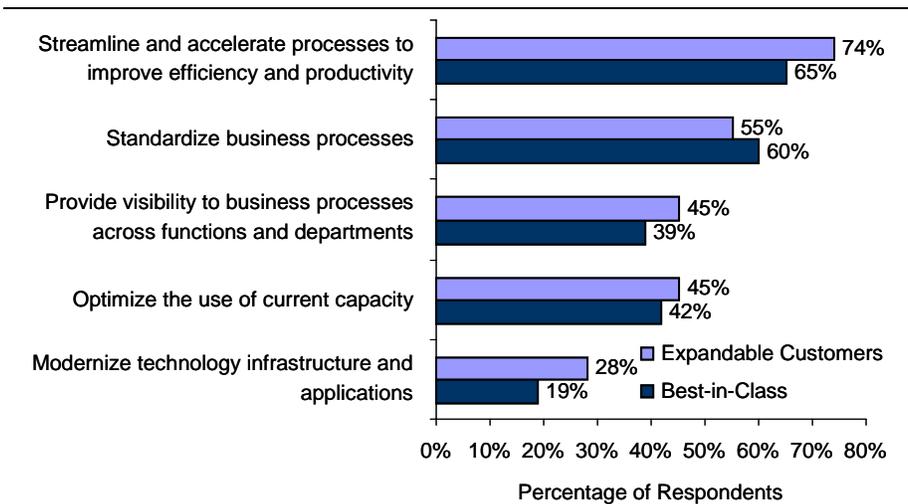
### Why?

So why are Expandable's customers doing so well? Simply implementing an ERP solution will not necessarily produce these kinds of results. It takes great effort to properly implement an ERP solution. These benefits are attained as a result of specific actions and capabilities. Expandable users are identifying the best strategic actions in order to achieve their goals and combat their challenges. They have also implemented capabilities that assist in carrying out these actions.

### Actions of Expandable Users

Which strategic actions are the most successful manufacturers performing in order to prosper? Both Expandable customers and the Best-in-Class are utilizing similar strategies (Figure 2). Topping the list of strategic actions is streamlining and accelerating processes to improve efficiency and productivity. ERP can be useful in serving as the vehicle for not only this efficiency boost but for standardizing these processes as well which is another top action. This provides a template as well as a common communication vehicle for data sharing and process workflow definition. Visibility allows decision makers to make better informed decisions, because accurate data is readily available. We see that Expandable customers are more likely than the Best-in-Class to use ERP in assisting in the optimization of the use of current capacity. These businesses are making the most out of their resources. Finally, modernizing technology infrastructure and applications means that the Best-in-Class and Expandable customers are supporting their ERP implementations with new technology rather than older, less robust technology.

**Figure 2: Strategic Actions**



Source: Aberdeen Group, December 2010

### Capabilities of Expandable Users

Businesses can turn these strategies into profit with the integration of ERP with the company's organizational and operational infrastructure. Using ERP as a template for standardization of business processes, as well as the integration and coordination of people, processes, and technology can have a significant impact on the benefits achieved and the time to value. Each class, along with Expandable users, shared characteristics in five key categories: (1) **process** (demonstrated ability to standardize processes and ERP implementation); (2) **organization** (executive commitment and assigned ownership of ERP implementation); (3) **performance management** (the ability of the organization to measure its results to improve its business); (4) **knowledge management** (providing visibility in order to drive decision-making); and (5) **technology** (effective use of modules of and extensions to ERP). These characteristics (identified in Table 3) serve as a guideline for best practices, and correlate directly with performance across the key metrics.

"We saw an increase in throughput, a decrease in inventory, and a centralization of easy to access information."

~ Director, Computer equipment manufacturer, Expandable user

**Table 3: The Competitive Framework**

	Expandable Customers	Best-in-Class	Industry Average
<b>Process</b>	Standardized enterprise-wide procedures for procurement, cash collection, and financial reconciliation		
	91%	84%	71%
	Standardized procedures for order management and delivery / fulfillment across similar businesses within the enterprise		
	83%	83%	66%
Standardized implementation of ERP across the (possibly distributed) enterprise			
80%	76%	49%	

	Expandable Customers	Best-in-Class	Industry Average
<b>Organization</b>	Line of business ultimately owns the success of the implementation		
	70%	79%	62%
	Dedicated resources are / were assigned throughout ERP implementation project		
	82%	83%	75%
	Cross-functional continuous improvement teams are responsible for improving operational performance		
	56%	72%	52%
<b>Performance Management</b>	New employees are properly trained in using ERP after initial stages of implementation		
	70%	74%	50%
	Quantifiable business benefits resulting from overall implementation of ERP are measured		
	37%	59%	36%
	Time to Value was/is measured for initial implementation		
	22%	53%	28%
<b>Knowledge Management</b>	ROI for ERP projects are measured		
	23%	47%	27%
	From summary data, decision-makers can drill down to transactions that form the fiscal and operational audit trail		
	63%	74%	52%
	Real time visibility into status of all processes from quote to cash		
	45%	64%	38%
<b>Technology</b>	Ability to automatically notify decision-makers when scheduled activities fail to occur on time		
	40%	57%	30%
	Ability to automatically and immediately notify decision makers when certain conditions occur		
	49%	52%	31%
	Integrated business applications serve as a complete and auditable system of record		
	66%	76%	59%
<b>Technology</b>	Users have access to ERP through the Internet from any laptop or desktop computer (no special software required on the personal computer)		
	42%	69%	54%
	Users have access to ERP from mobile devices (other than laptops connected to the Internet)		
	8%	33%	17%

Source: Aberdeen Group, December 2010

## Process

Standardization plays a huge role in the ultimate success of a business. When everyone is on the same page, it ensures that the best practices are being followed throughout the company. This leads to increased efficiency and productivity. Expandable users have identified these as key capabilities. They are more likely to standardize enterprise-wide procedures for

procurement, cash collection, and financial reconciliation and standardize procedures for order management and delivery / fulfillment across similar businesses within the enterprise. It should be noted that these efficiencies are being aided in Expandable users by standardized implementations of ERP across the (possibly distributed) enterprise. Expandable users are 63% more likely to do this than the Industry Average. Expandable users are more likely to have achieved this level of standardization than the Best-in-Class thereby streamlining and automating their business processes.

### **Organization**

The organizational capabilities that are shown in Table 3 are important for businesses to implement in order to get the most out of their ERP solution. Again, Expandable customers are more likely to implement these capabilities than the Industry Average and are comparable to the Best-in-Class. If the line of business ultimately owns the success of the ERP implementation they are going to be more personally invested and do everything in their power to see that it succeeds. Continuous improvements may come from expanded use of functionality or bringing access and visibility to a broader audience within the company allowing businesses to get the best usage out of their implementation. In companies that are able to continually use ERP more effectively new employees are trained in ERP usage after the initial stages of implementation. If employees come on board and don't learn how to effectively use ERP, the benefits fall by the wayside. In contrast, Expandable customers are 40% more likely to train new employees on ERP usage than the Industry Average.

"We drilled into our employees that if it's not in Expandable, it didn't happen. It's gotta be in Expandable."

~ Bill Moradkhan, implemented Expandable in an executive position at two startups

### **Performance Management**

While Expandable customers are achieving impressive results from their ERP implementations, being able to continue to produce these kinds of results requires continued attention and potentially additional investment. One area where Expandable users need to improve is in the implementation of performance management capabilities. In the reports derived from the annual ERP survey, Aberdeen has shown that the more likely companies are to quantify the results achieved through the implementation of ERP, the more business benefit is actually achieved. This is evidenced by the fact that the Best-in-Class are 74% more likely than the Industry Average to measure return on investment for ERP projects. Measuring actual returns helps assure management commitment of both time and resources.

### **Knowledge Management**

Visibility into the business is one of the key benefits of ERP. By having access to data in real time, decision makers are armed with the most accurate information to make informed choices to lead the company. Summary data allows decision makers to find the data that they are looking for in the most straightforward fashion possible, without having to wade through a myriad of details. And yet when anomalies or exceptions occur, being able to drill down to successive levels of detail can be priceless. The majority of

Expandable customers (63%) and the Best-in-Class (74%) have implemented this capability.

The ability to identify and respond to variances in real-time or near real-time is critical to effective exception management. Being able to detect conditions (e.g. inventory levels that are too high or too low, customer balance exceeds credit limit, etc.) or activities that fail to occur (delayed receipt of materials, slipped production schedules, customer non-payment, etc.) may trigger an investigation that requires these additional details. Enabling a rapid response to conditions such as non-conforming product, allows corrective action to be undertaken to prevent product deviation and minimize the impact on the plant's internal schedule. These implementations give managers the tools they need and also allow them to combat problems in the most efficient way possible.

### **Technology**

Lastly, Expandable users could stand to improve their implementation of technology capabilities. While they are better than the Industry Average in having integrated business applications serve as a complete and auditable system of record, which is the ultimate goal of ERP, there are other capabilities that the Best-in-Class are implementing that could greatly improve the benefits that Expandable users get from their ERP implementations. As the speed of business increases, workers are going to need access to data no matter where they are. The Best-in-Class have identified this and are now starting to enable access to ERP through mobile devices. While only 33% of the Best-in-Class have implemented this capability, they are still 94% more likely to do so than the Industry Average. For Expandable users to gain the full benefit of their ERP implementation they need to enable access to ERP on the same level that top performers do. Aberdeen finds it encouraging that modernizing technology is one of the top strategic actions planned by Expandable customers. This type of additional technology infrastructure will be necessary to maintain a competitive advantage into the future.

### **Case in Point - Ardian, Inc.**

Founded in 2003, Ardian, Inc. is a growing developer of medical devices. The company has developed a system to help hospitals fight hypertension. The company's catheter based treatment offers a safe and effective way to battle hypertension, which is associated with heart attack, stroke, heart failure, kidney disease, and even death. The new company has seen rapid growth over the last decade.

Tim Kahlenberg, Chief Financial Officer, has been with Ardian for about two years. In 2009, the company was preparing to expand into Europe. Prior to this, Ardian had been using desktop based tools to run the business. Kahlenberg knew that they would need a more substantial solution in order to effectively make the transition to being a multi-national company. Business process-wise, the company was facing product development

"Our implementation went very smoothly, it was done in less than a month."

~ Director, Consumer electronics manufacturer,  
Expandable user

pressures as well as the challenges of running tests in Europe to make sure that their product met European medical standards and would be allowed to enter into the market. The company was also having trouble hiring the right people and putting them in the position to succeed. As a growing business, the company knew that certain capabilities needed to be implemented in order for them to take the next step.

As a decision maker, Kahlenberg had several criteria in mind when looking for the right ERP solution. The company needed something that included traceability and full order processing and invoicing capabilities, allowed them to comply with FDA requirements, and gave them inventory control. They needed to be able to implement and learn quickly so that the company could enter into the market as soon as possible. The company was on a very tight budget. These criteria led Ardian to select Expandable as its ERP provider.

Kahlenberg states, "Expandable did everything we needed, and a lot more." The company was able to implement the solution quickly and easily in about a month. He says, "This surprised even Expandable, how quickly everything went." Ardian brought in one of Expandable's implementation experts to look over their shoulder during implementation, facilitating the process. According to Kahlenberg, "Our employees like our solution and have picked it up very quickly."

The company is now able to efficiently manufacture its products for commercial use. The company has since grown from 25 to 50 employees. Ardian implemented Expandable's SaaS solution because of the lower up front costs until the successful completion of its European clinical trial. This allowed the company to get up and running without making a huge capital expenditure. Once the company was assured that it would be able to compete in Europe, the company moved their solution on-premise, seeking an added measure of control. Now the company has a mature ERP solution that helps them to compete with larger companies and facilitates future growth.

## **Key Takeaways**

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Expandable is an ERP provider that is targeting manufacturers to help them grow into bigger businesses. Expandable's complete solution has helped its users to perform at a high level. This performance has led to real, quantifiable business benefits that have helped these businesses to compete at a higher level. Of course, simply implementing Expandable, or any other ERP solution, will not provide these benefits on their own. Businesses need to implement the capabilities to lead to these benefits. They need to fully commit to the change in the fundamental way that their business runs that comes with ERP. Continued support from all levels of the business is essential to ensure that businesses get the full use and benefits out of their ERP solution. Best practices armed with a successful ERP implementation lead to increased performance that businesses can use to gain an advantage over their competitors.

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### Related Research

<a href="#"><i>SaaS ERP: Trends &amp; Observations 2010;</i></a> October 2010	<a href="#"><i>ERP in SME: Fueling Growth and Profits;</i></a> August 2010
<a href="#"><i>ERP Plus in Process Industries: Managing Compliance in the Pursuit of Profits;</i></a> September 2010	<a href="#"><i>ERP in Manufacturing 2010: Measuring Business Benefit and Time to Value;</i></a> June 2010
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