Sector Insight



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What does "Getting the Process Right" Mean for the SMB Enterprise?

Process change is hard, especially for something as complex and dynamic as a company's product development process. It's even harder for organizations that don't have a wealth of resources to throw at the problem, like the small or midsize organization. Yet the rewards can be great. Aberdeen's September 2008 <u>Getting the Process Right: A Fresh Look at PLM and Product Development</u> benchmark study found that Best-in-Class companies reported that as a result of process improvement: I) their ability to achieve success in the marketplace with new products and/or services was improved or significantly improved by 80%; and 2) their ability to deliver more new and innovative products was improved or significantly improved by 70%.

With this in mind, the question then becomes, how can Small to Medium-Businesses (SMB) make the most of a product development process improvement initiative? And what distinguishes the needs of SMB companies (those reporting revenues of up to \$1 Billion) from their peers, in this area?

Top Pressures Driving Process Improvement at SMBs

Based on Aberdeen's September 2008 <u>Getting the Process Right: A Fresh Look at PLM and Product Development</u> benchmark study, the top pressures driving SMB companies to improve their product development processes are centered around four key business metrics (Table 1): time to market (42%); profit margin / cost pressures (33%); a corporate goal to improve innovation (24%); and demand for higher levels of product quality (22%).

Table I: Top Pressures Driving Process Improvement

	SMB Companies	All Respondents
Need to improve time to market	42%	42%
Profit margin /cost pressures	33%	30%
Corporate goal to improve innovation	24%	27%
Demand for higher levels of product quality / reliability	22%	18%

Source: Aberdeen Group, September 2008

It isn't surprising is to see emphasis being placed on improving time to market and cost-cutting, especially amidst such economic uncertainty. What is compelling is that we see a focus on innovation, as well - an area most often thought of as the domain of larger enterprises - now showing up as a

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Midsize Definition

For the purposes of this study, SMB organizations are defined as those companies reporting revenue up to \$1 Billion.

"One of the things that we needed was better control of our processes. I started looking at electronic tools to help us to do that. We settled on one and had it working in roughly three months. Since, we've redesigned a number of products that have included a whole number of quality issues. We are now able to track return rates and crack down a little better and execute corrective actions internally and for external suppliers. We decreased the return rates by 50%."

~ Gerrit Kruitbosch Vice President of Engineering Edge Products



pressure for mid-size companies, too. This suggests that the leadership within these companies may be beginning to view innovation as a business driver as well.

Barriers to Process Improvement

As is so often the case, the top challenge facing organizations seeking to pursue a new or improved approach to product development isn't technology at all, but rather understanding how that technology and process change is implemented (Table 2). Specifically, a cultural resistance to change in terms of user acceptance of new processes was cited as the top challenge by SMB companies, which is in line with what all companies reported facing, as well.

Table 2: Top Challenges to Process Improvement

Top Challenges	Midsize Companies	All Respondents
Cultural resistance to change, in terms of user acceptance of new processes	40%	41%
Inability to agree on best practices, obtaining company / department consensus	29%	27%
Lack of a clearly defined process improvement plan	27%	24%
Difficulty in determining how to effectively calculate payback	23%	20%
Lack of an existing formal product development process	23%	23%

Source: Aberdeen Group, September 2008

Other top challenges for SMB companies include the inability to agree on best practices (29%); lack of a clearly defined process improvement plan (27%); difficulty in determining how to effectively calculate payback on process improvement (23%); and lack of an existing formal product development process (23%).

All of these barriers to process improvement are similar to those cited by companies in general, suggesting that SMB organizations share many of the same frustrations as both their larger and smaller peers. The difference is that they have fewer resources to apply to the problem, as noted in Aberdeen's July 2008 benchmark report, <u>The Best Kept Secret of Top SMB Product Developers? Finding the Shortest Path to PLM Value.</u>

Aberdeen Analysis

How do you execute change in a way that sees easy adoption across the product development organization? In order to answer this question, Aberdeen's September 2008 <u>Getting the Process Right: A Fresh Look at PLM</u>

"The technology we implemented was relatively simple. We had sites that had a very well developed product development process. Virtually the only issue we ran into was resistance to change. We implemented a sound plan, persistence and good communication. We had topdown support from upper management. Even then, it was somewhat difficult to get people on board."

~ Engineering Director Midsize Automotive Supplier



and Product Development benchmark study surveyed over 160 enterprises. Participating companies were benchmarked according to five key performance criteria. These criteria evaluated their ability to meet crucial product development targets, including the percentage of the products they bring to market that meet the following:

- Product revenue targets
- Product cost targets
- Product launch dates
- Quality targets
- Development cost targets

Using these metrics, Aberdeen categorized respondents into the top 20% (Best-in-Class), the middle 50% (Industry Average) and the bottom 30% (Laggard) of performers. Figure I displays the performance gaps that define each category.

93% 96% 100% 83%_{76%} 91% 87% 74% 69% 78% _{73%} 70%66% 50% Product Revenue **Product Cost** Product Launch **Quality Targets** Development **Targets Targets** Dates Cost Targets ■ Best-in-Class ■ Industry Average ■ SMB

Figure 1: The Maturity Class Framework

Source: Aberdeen Group, September 2008

It is important to note that the largest gaps between the Best-in-Class and their competitors fall in the areas that measure the top driving pressures of product development process improvement: 'need to improve time to market' and 'profit margin / cost pressures.' SMB organizations lag the farthest behind the Best-in-Class when it comes to meeting cost and product launch targets. Learning from the steps the Best-in-Class have taken can empower these companies to overcome internal resistance to improve their performance.

Overcoming a Cultural Resistance to Change

Unfortunately, having fewer resources can often translate into a tendency to maintain the status-quo rather than to actively seek out ways to improve. What this means is that any attempt to improve the product development process must take into account this tendency for users to resist abandoning familiar practices and to embrace new ones. Here, our findings show that



there is significant value in investing in training programs, based on the steps the Best-in-Class have taken in this area (Table 3).

Table 3: Competitive Framework - Organizational Capabilities for Process Improvement

	Best-in-Class	Industry Average	SMB	
Organization	Definition of 'as-is' and "to be" product development process			
	66%	53%	44%	
	Assessment of current enterprise and workgroup information sharing processes (both formal and informal)			
	83%	58%	51%	
	Assessment of current enterprise and workgroup IT-based information sharing processes (both formal and informal)			
	72%	53%	47%	
	Formal program in place for technical / software training			
	71%	51%	41%	
	Formal program in place for business / conceptual training			
	50%	25%	30%	
	Champions or coaches available to help users with new processes or solutions			
	61%	50%	49%	
	Performance metrics for improvement agreed to and being used to drive improvement efforts			
	89%	52%	46%	

Source: Aberdeen Group, September 2008

Specifically, where the Best-in-Class have formal technical / software training in place 71% of the time, SMB companies rank even below the Industry Average (51%) in this area at a 41% adoption rate. This represents a level of performance that lags 20% behind that of the Best-in-Class. Similarly, although SMB companies (30%) are slightly ahead of the Industry Average (25%) in terms of formal business / conceptual training, they are still over 60% less likely than the Best-in-Class to have adopted such training.

Together, these findings suggest that midsize companies should consider investing in training in order to support users and to help them accept and adopt new processes - both from a technical / software standpoint and from a business / conceptual standpoint.

SMB companies also lag behind the Best-in-Class across a number of other key organizational capabilities as well. In particular:

- SMB companies are 1.5-times less likely than the Best-in-Class to have defined their "as is" and "to be" product development processes
- SMB companies, on average, are nearly 60% less likely than the Bestin-Class to have conducted an assessment of their current



- enterprise and workgroup information sharing processes (both manual and IT-based)
- Best-in-Class companies are nearly twice as likely as SMB organizations to have adopted agreed-upon performance metrics to drive process improvement

One area where SMB companies offer some advantage is in making champions or coaches available to help users with new processes or solutions. Here, at an adoption rate of 49%, these companies are at least on par with the Industry Average (50%). This would seem to suggest that while SMB companies may be lacking in formal training processes, they are still very committed to helping users succeed through champions or coaches.

Leveraging Best Practices and Lessons Learned

In terms of their business process capabilities, our research shows that SMB companies lag behind not only behind the Best-in-Class, but the Industry Average as well across a number of key areas (Table 4).

For example, SMB companies are nearly 80% less likely than the Best-in-Class and over 25% less likely than their Industry Average peers to openly celebrate early success stories. Similarly, in terms of gathering requirements for process improvement across the enterprise, SMB companies are nearly 36% less likely than the Best-in-Class and nearly 17% less likely than the Industry Average to do so.

There are several other key business process capabilities - focused primarily on knowledge reuse - where SMB companies should especially consider taking their cues from the Best-in-Class, including:

- the ability to capitalize on benchmarks or references
- the ability to capture and make use of lessons learned
- the ability to identify and share best practices

In fact, in the area of identifying best practices specifically, we see SMB companies lagging behind the Best-in-Class by over 70%. SMB companies are also nearly 50% less likely than the Best-in-Class to capture and make use of lessons learned, and 60% less likely than the Best-in-Class to capitalize on related benchmarks or references.

The implication here? These findings suggest that SMB organizations stand to benefit greatly from improving their ability to capture and leverage both best practices and lessons learned related to product development process improvement, and to seek out and take advantage of relevant references and benchmarks.

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Table 4: Competitive Framework - Business Process Capabilities for Process Improvement

	Best-in-Class	Industry Average	SMB
Process and	Pilot implementation before rollout		
Organizational	61%	39%	42%
Capabilities	Early success stories openly celebrated		
	59%	41%	33%
	Requirements gathered across enterprise		
	56%	48%	41%
	Best practices identified		
	72%	53%	42%
Knowledge and	Benchmarks / references reviewed		
Performance	72%	57%	45%
Management	Lessons learned captured / reused		
	61%	60%	41%
Technology	Supporting technology currently in use:		
Enablers	■ 76% data model templates	■ 39% data model templates	■ 35% data model templates
	■ 50% industry templates (or solution)	■ 21% industry templates (or solution)	■ 27% industry templates (or solution)
	• 61% meeting collaboration / virtual presence	■ 48% meeting collaboration / virtual presence	■ 39% meeting collaboration / virtual presence
	■ 39% business process modeling/mgt	■ 28% business process modeling/mgt	■ 27% business process modeling/mgt

Source: Aberdeen Group, September 2008

Finally, with respect to their use of technology to support business process capabilities and drive process improvement, SMB companies perform at levels most similar to that of the Industry Average, which lag behind the Best-in-Class significantly in terms of their use of data models and industry templates or solutions. Specifically, the Best-in-Class are approximately twice as likely as SMB organizations to take advantage of data models or industry templates to improve their product development processes than the Industry Average or SMB organization. In addition, like their Industry Average peers, SMB companies are over 40% less likely than the Best-in-Class to use business process modeling to achieve their process improvement objectives.

Required Actions

While SMB enterprises can face substantial cultural objections that can delay process change, sooner or later, it will happen. In order to overcome cultural resistance and realize greater benefits from process change, particularly to take greater advantage of innovation, SMB manufacturers can learn from those steps taken by the Best-in-Class. Key points include:



- Make use of industry-based templates or solutions to shorten development cycles
- Improve their ability to define their 'as-is' and "to be" product development processes
- Make greater use of performance metrics to drive process improvement
- Invest in training both technical / software training and business / conceptual training - in order to help users overcome their cultural resistance to change
- Improve their ability to leverage best practices and to capture and make use of lessons learned related to product development process improvement.

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

"We started to prepare the implementation of our PLM by looking at industry specific templates; we work in the automotive industry and some patterns are almost compulsory. We would have probably found the same value in PLM without the templates, but they sped up the process and gave us the confidence that our customer would not get upset when auditing our process for new product development."

~ Marco Pasquandrea Product Development and Planning Manager Dell'Orto SpA

Related Research

<u>Getting the Process Right – A Fresh Look</u> <u>at PLM and Product Development</u>: September, 2008

<u>The Best Kept Secret of Top SMB</u>
<u>Product Developers? Finding the Shortest</u>
<u>Path to PLM Value</u>; July 2008

<u>The Engineering Executive's Strategy</u>
<u>Agenda:</u> June 2008
<u>Profiting from PLM: Strategy and Delivery</u>
<u>of the PLM Program:</u> July, 2007

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