

Warehouse Without Walls

April 2006

Executive Summary

Key Business Value Findings

Companies are creating Dynamic Distribution Networks that can fulfill customer demand from any point in the supply chain. Supply chain managers are looking at new ways to control product movements and improve velocity at consolidation points, satellite facilities, and supplier warehouses, with the aid of technology and service providers. The world has become a warehouse – one without walls.

The majority of the 150 executives that responded to the survey that forms the basis of this report say that the reduction of cycle time and inventory within supply chains, along with providing high levels of customer service, are their top priorities. Companies we found to be Best in Class (BIC) in meeting these goals are expert in combining the skills of internal resources, service providers and suppliers to create a responsive, and cost effective, network.

The results speak for themselves:

 \rightarrow Top performing companies have cash-to-cash cycle times that are 25% shorter than their peers.

 \rightarrow On-time delivery performance and order fill rates far exceeded others responding to the survey. Less company assets are committed to the fulfillment process. The impact is significant on both the top and bottom line.

Implications & Analysis

Not every company is capable or ready to create these Dynamic Distribution Networks. The survey shows that departmental rivalries, misaligned goals and performance metrics, and poor partner management policies all contribute to a company's inability to create more fluid and flexible fulfillment operations. Top performers have enough confidence in themselves and partner organizations to rewrite the book on how fulfillment in a global supply chain is done. As the survey shows, they do it through standardized processes, consistent and frequent measurement of performance, and the integration of processes and technology that allows information to be communicated quickly throughout the entire distribution network.

The survey illustrates how the Best in Class company approach is very different from average performers and laggards. Rather than be tied to a fixed distribution network, top performers are able to rapidly assemble or reassemble supply chain services to meet specific needs by using insourced or outsourced logistics and manufacturing services. Best in Class companies evaluate logistics service providers on both their operational and technical excellence. The majority of top logistics enterprises include supply chain performance metrics as part of their supplier agreements.

 \rightarrow Over two-thirds of Best in Class companies consider electronic connectivity with partners very important.

With visibility and the precise control that Best in Class companies maintain on supply chain activities, they are much better suited to employ tactics that keep products in perpetual motion. As Figure 1 shows, cross docking, drop shipping, and postponement are used more frequently by high performing companies and to better advantage.

Think of the Dynamic Distribution Network as "leaning up" the supply chain, designed to root out waste and time, and still be responsive to market demands. And like lean initiatives in manufacturing, success isn't predicated on size of company. Less than a third of the companies chosen in this report had revenues exceeding \$1B. Discipline, organizational and process alignment, and the smart use of technology are the traits of Best in Class competitors.

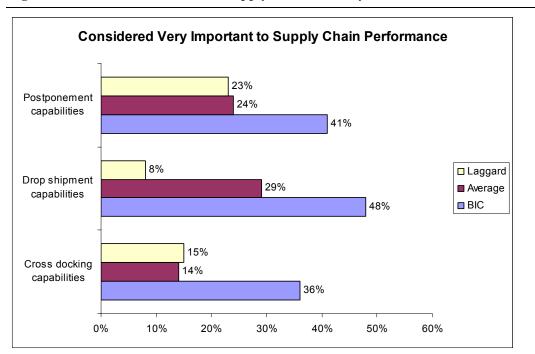


Figure 1: Tactics Used to Increase Supply Chain Velocity

Source: AberdeenGroup, March 2006

Recommendations for Action

Within this report, you will learn how Best in Class companies:

- Build more responsive partner networks through aligning goals and performance measure inside and outside of the enterprise
- Standardize processes across business partners to ensure consistent performance
- View the supply chain as a set of services, with components that can be swapped in and out depending on market requirements
- Deploy technology to maximize supply chain efficiency and effectiveness



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Chapter One: Issue at Hand

- Market demands require greater partner network flexibility.
 - Best in Class partner integration starts with internal company alignment.
 - Supply chains are becoming a collection of componentized services.
 - The world has become our warehouse.

F lexibility and agility: two qualities all winning supply chains must exude to address customers' ever-changing demands. High performance is predicated on a swift and responsive supply chain. Companies are learning that inventory at rest in a static distribution network diminishes their ability to provide service levels required by customers at an acceptable cost.

With the growth in global sourcing and manufacturing, products are made anywhere to be shipped anywhere. Best in Class companies are coupling their capabilities, along with those of their partners, to create Dynamic Distribution Networks that can effectively satisfy customer demand from any point in the supply chain.

Supply chain managers are rethinking how to integrate inbound vehicles, dock activity, and yard management into traditional transportation and warehouse processes. Even more, they are looking at new ways to control product movements and improve velocity at consolidation points, satellite facilities, and supplier warehouses, with the aid of technology and logistics services providers. The world has become our warehouse--a warehouse without walls.

To create a Dynamic Distribution Network, companies are looking at the supply chain in different ways. The ability to rapidly assemble or reassemble supply chain services to meet specific needs, insource or outsource logistics and manufacturing services, augment

internal staff with business services from the outside, or deploy resources and assets at any point of the supply chain are all capabilities exhibited by our top performers. Think of the supply chain as a group of services; all componentized elements that can be swapped in or out as the situation dictates.

What's driving the creation of Dynamic Distribution Networks? More than half of the 150 companies responding to the report survey say that it is meeting the unique mandates and logistics requirements of strategically important customers. At the same time, an equal number say that the flexibility outsourcing provides allows them to employ strategies to reduce the days of inventory in the supply chain. Dig into the data a little deeper, though, and some startling differences arise.

Companies considered Best in Class (20%) rank highest in using their network of outsourced service providers to provide differentiated service options to customers and a greater number of inventory deployment options. Both strategies have produced impressive results which distinguish these companies from those that have the ability to solve only one side of the cost and service equation. In our survey, we

Competitive Framework Key

The Aberdeen Competitive Framework defines enterprises as falling into one of the three following levels of practices and performance:

Laggards (30%) — practices that are significantly behind the average of the industry

Industry norm (50%) practices that represent the average or norm

Best in Class (20%) practices that are the best currently being employed and significantly superior to the industry norm

learned why only a select few enterprises are able to use a network of outsourced service providers to meet the goal of profitable growth.

But, achieving profitable growth in a Dynamic Distribution Network environment in the supply chain does not come without obstacles.

Almost 60% of companies told us that processes differ greatly within their trading community, discouraging continuity in operations and common metrics that are necessary to achieve a single goal across multiple enterprises.

•Only 10% of companies reported having common performance measures across all trading partners. This is largely attributed to the fact that the majority of survey respondents manage operations at the department level (Figure 2), thus compounding the problems created by lack of coordination inside the enterprise by extending it to the trading

PACE Key — For a more detailed description see Appendix A

Aberdeen applies a methodology to benchmark research that evaluates the business pressures, actions, capabilities, and enablers (PACE) that indicate corporate behavior in specific business processes. These terms are defined as follows:

Pressures — external forces that impact an organization's market position, competitiveness, or business operations

Actions — the strategic approaches that an organization takes in response to industry pressures

> Capabilities — the business process competencies required to execute corporate strategy

> > **Enablers** — the key functionality of technology solutions required to support the organization's enabling business practices

community as a whole.

The issues facing companies addressing the challenges of managing a global supply chain extend even further.

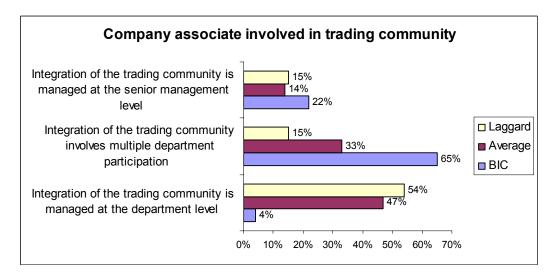
•Over two-thirds of the companies not chosen as Best in Class in this report say that the use of fax, telephone, spreadsheets and email best describe their company's method of integrating information and business processes within the trading community.

Slow in reacting and vulnerable to error, this human network of communication and coordination is a major stumbling block in creating a high performance network of outsourced service providers.

The consequences of managing a poorly integrated community of service providers are significant. Average performers or laggards have cash-to-cash cycle times at least 25% greater than their Best in Class counterparts.

The incentive to create a better integrated network in the trading community is great, and as we will see, the goal is achievable.





Source: AberdeenGroup, March 2006

Chapter Two: **Key Business Value Findings**

- Key Takeaways Performance of the partner network reflects the operating norms of the enterprise
 - Accurate demand plans are still considered top priorities for partner performance
 - Logistics service providers are evaluated on their operational and technical excellence
 - Technology institutionalizes and scales integration of the partner community

ne supply chain manager interviewed for this report tells us, "Our challenge is the rate of change within the network. We used to have a stable network, but nowadays everything changes on a daily basis." It is a challenge for companies to simply execute at an acceptable level, never mind attempting to maintain the precarious balance of high service levels and cost effective operations that results in profitable growth.

Most supply chains are operated with "just enough" inventory and unexpected disruptions cause extra costs to be incurred and ultimately lower levels of customer service.

 \rightarrow Almost two-thirds of respondents to a previous Aberdeen *Group* survey report that supplier delivery performance was the leading cause of unpredictable performance in the supply chain.

 \rightarrow Nearly as many say that the variability of cycle time in Customs and port clearance were also major contributors to uncertainty.

These insights might force us to conclude that the areas requiring the most management attention and focus lay outside of the four walls of the enterprise, and in many cases, outside of its geographical region. In fact, how the enterprise manages its own internal processes is a prime indicator of how successful it will be with managing an extended network.

Performance of the Trading Community Reflects the Operating Norms of the Enterprise

While supply chain managers say that much of the uncertainty that causes the greatest variation in performance resides outside of the enterprise, they are also quick to note that many of the issues stem from how they manage themselves and their partner community (Figure 3).



Figure 3: Internal Operating Norms Considered Important or Very Important



Not unexpectedly, producing accurate demand plans leads the list. If demand signals were perfect, much of the uncertainty present in any supply chain would disappear. Unfortunately, this is a goal that will never be completely realized. And current forecasting metrics are rife with error.

 \rightarrow Many companies settle for a 30% error rate in their demand forecasting, and look for other ways to compensate for what will forever be an imperfect science.

 \rightarrow Companies also combat uncertainty by guaranteeing availability of services and assets. One third of our survey responses said that using dedicated transportation was a key part of their strategy.

Being able to quickly respond to changes in market demand requires that different enterprise functions act collaboratively, with plans and performance metrics aligned. This agility eliminates the conflict so often seen by partners that inevitably results in the uncoordinated execution of the business. Planning more frequently, and including internal and external constraints that would not have been known if planning were done less often, is seen as necessary to enabling partner success. Finally, to identify constraints and process breakdowns, survey respondents say visibility to supply chain activities, data and events is critical to maintaining a high level of trading partner performance.

The Best in Class companies identified in this report are much more adept at using information in place of inventory to buffer against supply chain disruptions, whether it be uncertain customer demand or poor supplier performance.

Challenges and Responses

While the concept of integrating activities both within and outside of the enterprise is a logical one, survey respondents report that overcoming the obstacles to make appropriate integration a reality is difficult (Table 1).

Challenges	% Selected	Responses to Challenges	% Selected
1. Lack of go-forward strategy to lev- erage people, assets, and technology	45%	1. Use consultants to identify oppor- tunity for process improvement	32%
 Significant difference in operational practices and data communication methods across the Supply Chain Network 	42%	2. Select logistics service providers based on operational and technical capabilities, utilize third party data hubs.	47%
3. Poor customer cooperation	34%	3. Verify with customer that initiatives bring value	45%
4. Low level of internal integration within my company	33%	4. Standardize performance goals and metrics	30%
5. Poor supplier cooperation	33%	4. Develop programs that enhance supplier performance and gives them benefit	36%
6. Company's technology is inade- quate	32%	6. Implement integrated supply chain software applications	21%

Table 1: Supply Chain Integration Challenges and Responses

Source: Aberdeen Group, March 2006

To bring some standardization to processes and data communications across a trading community, almost half of companies surveyed depend on logistics service providers to broker and manage services, and also to provide the technology necessary to view and execute the business. This is a significant departure from the past, when logistics service providers were valued more for their operational competence than the technology they presented to the customer. What accounts for the change? Technology delivery for one.

Logistics service providers have developed portal-based services that can quickly allow visibility and event management capabilities in the supply chain. BIC companies show that they are technology opportunists as well. One of their notable traits is that these companies have no hesitation in employing third party technology. Their high level of use of EDI and other electronic communications protocols also tell us that they are better skilled at integrating external data into their internal applications.

Lack of supplier and customer cooperation is often seen as an inhibitor in building an integrated trading community. This complication stems from the fact that often times companies put into place policies and operating norms that benefit themselves at the expense of partners. Our survey respondents find that building programs that were mutually beneficial to everyone was the best way to gain supplier and customer cooperation--easy to say, but difficult to do. Here again, BIC companies lead in creating relationships that aim to distribute value fairly. They focus on the transaction costs of the business and implement the processes and technology that works to reduce them. For example, BIC companies lead in the use of third party data hubs, allowing them to electronically share information with virtually every partner in their networks. This approach is much more

cost effective than using fax, phone and email. Where appropriate, these same companies show a greater willingness to use partner technology in the execution of the business.

Finally, with applications as diverse and siloed as the functions they support, over 20% of companies report that they have or will adopt supply chain software on a common, integrated platform.

Technology is Critical to Building and Sustaining an Integrated Partner Network

Survey respondents make clear in their responses that the integration of enhanced applications within their enterprise and information to manage a trading community is vital. The top three areas of integration considered most important are:

- 1. Company-to-company connectivity, using communications standards and languages like Electronic Data Interchange (EDI) and Extensible Markup Language (XML) can extend an enterprise's reach. The most important areas of connectivity were sharing supply chain data (forecast, replenishment plans, customer demand, etc.) generated by their internal applications and the use of Advanced Shipment Notifications (ASN).
- 2. Visibility to supply chain activities and analytical tools to identify variability in supply chain performance as well as opportunities for improvement are seen as vital. For most companies, this appears to be in the early stages of development, with views provided by function. The concept of a comprehensive dashboard monitoring all activities in the supply chain as an integrated whole remains in the future for laggards and average performing companies. Best in Class companies are much further along in dashboard development and the organizational and process changes it requires to succeed.
- **3.** A sizeable minority, nearly 40%, say that rather than build and support supply chain technology to manage their partner networks, they instead have opted to secure these capabilities as services, largely from third party logistics providers. This is a reflection of the growing need most companies have to move quickly and decisively to assert their control of supply chain partners, and at the same time be as efficient as possible in their application of technology.

It is obvious from the responses that enhanced technology is necessary to institutionalize, sustain and scale any collaborative programs ranging a wide set of partners. How that technology is deployed, and what value companies are realizing from it, depends on many factors not immediately apparent within an organization.

Chapter Three: Implications & Analysis

- Best in Class performers have the highest rate of process standardization across the partner community
- Laggards and Average performing companies build supply chains for efficiency only
- Best in Class companies choose wisely in their use of supply chain technology

verall survey results don't provide the entire answer of how to establish a Dynamic Distribution Network that is able to deploy assets and resources at any point in the supply chain. Typical of Aberdeen*Group* methodology, survey respondents are divided into three segments. Those chosen Best in Class demonstrate with their responses that they perform at the highest level in critical performance metrics such as on-time delivery and order fill rate. To correct for differences in market conditions and fulfillment processes between verticals, BIC companies are also those that report that they out perform industry peers in the same metrics. The contrast between BIC companies and average performing or laggard companies was in many cases significant in areas such as process and organizational design as well utilization of technology (Table 2).

	Laggards	Industry Average	Best in Class
Process	 Least likely to have standard processes established with partners 	 Most likely to take control of business processes where partners are under- performing 	 Highest rate of process standardi- zation with partners
Organization	Manages trading and service rela- tionships at the de- partment level. Little evidence of interde- partmental collabo- ration	The need for inter- departmental col- laboration recog- nized, but still dem- onstrate a low level of adoption	Highest cross de- partmental collabo- ration for partner management

Table 2: Supply Chain	Integration Co	omnetitive Framework
Tuble 2. Supply Cham	integration of	

	Laggards		Best in Class	
Knowledge	 Place low value on supply chain visibil- ity High usage rate of supply chain ana- lytics at site level 	Usage of supply chain analytical tools is lowest, but show highest rate of adoption over the next two years	 Highest usage rate of supply chain ana- lytics. Most likely to have them stan- dardized company- wide Consider frequent planning vital 	
Technology	 Most likely to use phone, faxes, spreadsheets and email to integrate information and process 	Less likely to use technology to in- crease process in- tegration	 Adopt XML and SOA technologies at almost twice the rate of laggards or average performers 	

Source: AberdeenGroup, March 2006

Evaluating the Best in Class Approach

BIC companies understand the fundamental value of first creating a collaborative environment within the enterprise through the integration of processes and information.

 \rightarrow Nearly 75% of BICs report that consistency in the management of service providers and suppliers is the core ingredient in creating a Dynamic Distribution Networks.

In addition, the majority of BIC companies try to scale common processes across the network whenever possible. This is a near impossible task to accomplish if internal organizations are focused on common goals and measures.

BIC companies are also more adept at balancing all the elements involved in the profitable growth equation. While laggards and average performers tend to build and measure supply chains based on efficiency, BIC companies attack both by creating processes to improve flexibility in inventory deployment and also presenting differentiated service options for customers.

Best in Class Companies Make Smart Use of Technology

Best in Class companies are adept at using technology to their benefit in managing a partner network. And it's not necessarily that they spend more on network facilitation. Only 30% of the companies in this category that have revenues above \$1B (Figure 4), fall into the category of mid-size, where technology investments are carefully scrutinized, and in most cases, money is begrudgingly spent.

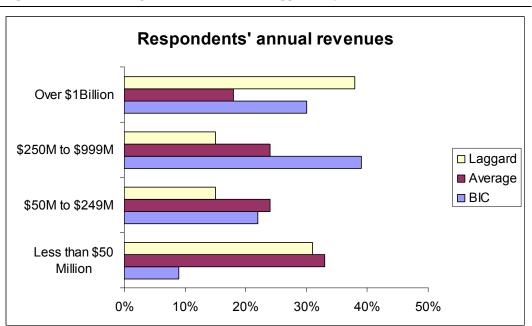


Figure 4: BIC, Average Performers, and Laggards by Revenue

Source: Aberdeen Group, March 2006

With this in mind, though, the variety and level of sophistication of business process implemented, supported by software applications, show they use applications greatly surpasses that of average performers and laggards (Figure 5).

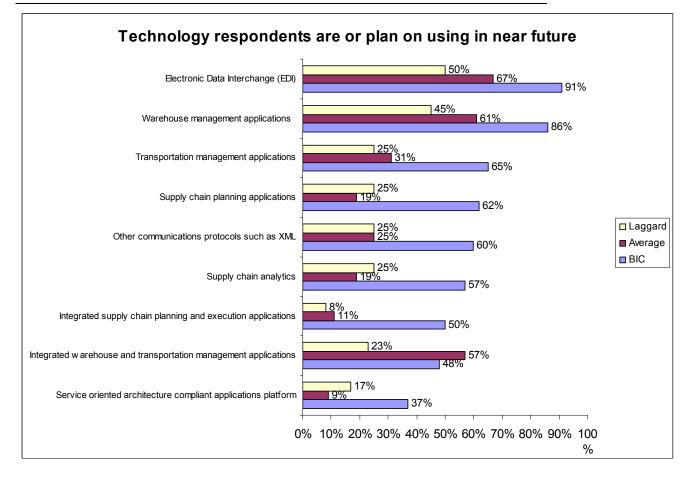


Figure 5: Level of Current Use of Supply Chain Technologies and Applications

Source: Aberdeen Group, March 2006

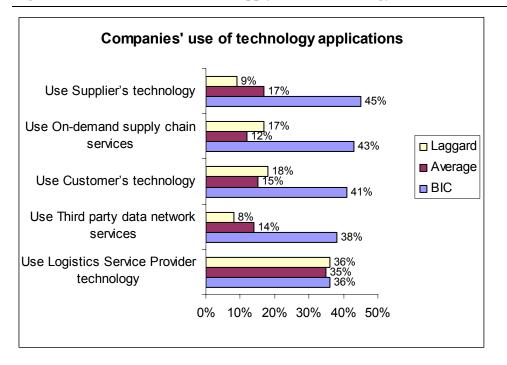
In recognition of the importance of data connectivity:

- ■More than 90% of respondents use EDI, and
- ■60% use other, more advanced communication protocols such as XML.

Supply chain planning and execution applications have more than a 60% adoption rate, and half have integrated both types to the other. Nearly 40% of BIC companies say they have applications platforms built on SOA principals. As we find in the September, 2005 Benchmark report, "<u>SOA in the Supply Chain</u>: What Supply Chain Managers Must Know," this technology approach has a profound impact on building more flexible applications and business processes, and simplifying the task of data integration.

Most interesting is BIC companies' willingness to use applications and services outside their enterprise (Figure 6).

 \rightarrow BICs are more than twice as likely to utilize third party data network services--a very effective and efficient way to network trading communities-- than average performers or laggards.





The same holds true for utilization of supplier and customer applications. Finally, like their counterparts, BIC companies understand the role and value of logistics service providers' technology in managing their network.

The other distinguishing feature of BIC company technology usage is the scope with which they apply technology. In each of the major technology areas of infrastructure, applications, and use of services, a minimum of 50% of companies say that they have adopted them company-wide. The standardization of application use reflects the process and organizational integration that BIC companies possess, and helps to sustain it(John what does "it" refer to?) through a common view of how the business is performing.

As the survey shows, there is a clear relationship between internal and external process integration, technology deployment and usage, and consistent partner management that results in a supply chain flexible in nature and able to achieve goals of both profitability and growth. Such supply chain flexibility allows a company to work efficiently and at the same time create differentiation in the marketplace that makes doing business with the company easier (Table 3).

Source: Aberdeen Group, March 2006

Priorities	Prioritized Pressures	Prioritized Actions	Prioritized Capa- bilities	Prioritized Enablers
1	Gain greater flexi- bility to deploy inventory	Synchronize processes within the trad- ing community	Drop shipment and cross docking ca- pabilities through- out the network	Analytics and multi-tier supply chain visibility with electronic integra- tion of data to identify and execute deploy- ment options
2	Reduce days of inventory in the supply chain	Demand sig- nals transmitted throughout the extended sup- ply chain	Increase velocity of material and infor- mation	Integrate supply chain planning and execution applications. Use third party networks for data communication and shared applications
3	Meet unique cus- tomer service requests	Improve flexibil- ity internally and with supply chain partners	Change the work- flow of operations without losing in- tegrity in supply chain processes	Use logistics service providers equipped with technology to provide multiple ser- vice options. Begin adoption of SOA based technologies
4	Create differenti- ated service op- tions for custom- ers	Provide ser- vices that en- hance customer performance	Build collaborative relationships that ensures services are mutually bene- ficial	IT-enabled solutions that satisfy both the compliance and infor- mation requirements of customers
5	On-time delivery	Entire supply chain focused on end cus- tomer satisfac- tion	Supplier score carding, visibility to activities and events in supply chain	Supply chain planning solutions that factor both internal and ex- ternal constraints

Table 3: PACE (Pressures, Actions, Capabilities, Enablers)

Source: Aberdeen Group, March 2006

Best in Class companies develop and utilize capabilities such as those listed above due to their ability to create the proper enabling infrastructure of process and technology. For example,

 \rightarrow BIC companies report they are twice as likely to use cross docking, drop ship, and postponement tactics as laggards or average performers.

While simple in concept, their execution depends on tight communications and coordination at a level the other classes have yet to reach.

Chapter Four: **Recommendations for Action**

- Key Takeaways Best in Class companies perform at a much higher level in key performance metrics
 - Regardless of business model, any company can benefit from partner integration
 - Laggards must standardize processes internally and with their partners
 - Average performers will benefit from the use of supply chain analytics

ompanies take many different paths to attain profitable growth. Whether your company competes in the market on brand, innovation, or as a low cost provider, there are financial benefits to be found in having a flexible and responsive network of suppliers and service providers.

 \rightarrow BIC companies are half as likely as laggards to have cash-to-cash cycle times that exceed 60 days.

BIC companies also excel in servicing the customer. Almost three-quarters of those identified as BIC have order to delivery cycle times of less than five days (Figure 6), and rank the highest in on-time delivery.

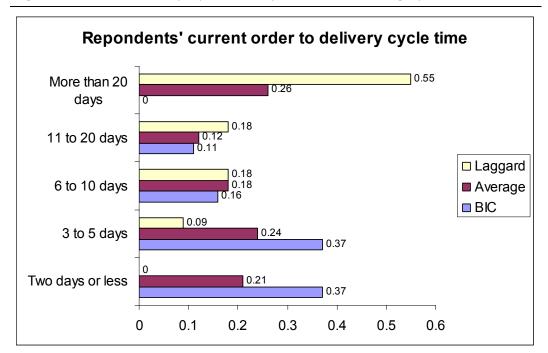


Figure 7: Order to Delivery Cycle Time by Performance Category

Source: AberdeenGroup, March 2006

Regardless of how your company competes in its market place, integration of business processes and information among your own company and its partners is essential to creating a high performance supply chain.

Whether a company is trying to gradually move the performance of it supply chain from "Laggard" to "Industry Average," or "Industry Average" to "Best in Class," the following actions will help spur the necessary performance improvements:

Laggard Steps to Success

1. Show one face of the company to suppliers and service providers

Laggards display a marked tendency to manage partners at a functional level, each trying to optimize its own performance often at the expense of other departments. At best, the confusion that ensues negatively impacts the partner's ability to execute at its highest level of performance. At worst, partners will get no consistent guidance, and they will make independent decisions, causing loss of management control. A more centralized approach to planning will also help here, where decisions and tradeoffs can be made, while understanding a decision's consequence to the entire supply chain.

2. Establish standard processes across partners

Laggard companies have the lowest rate of standard practices across their partner communities. Lack of technology adoption beyond phones, faxes, emails and spreadsheets is largely to blame for this circumstance. Follow the lead of Best in Class companies by investing in applications that can be shared external to the company, and by incorporating third party networks that can scale integration of both business and data across the partner network.

3. *Measure partner performance frequently and consistently*

According to survey responses, laggard companies measure performance of the network infrequently, and often with metrics that only reflect how a particular function is performing. Best in Class companies align their metrics within functions to measure the performance of a process. They also measure on a monthly or more frequent basis, to identify areas of concern--and opportunities for improvement.

4. *Improve knowledge gathering through increased visibility of supply chain events and activities*

Making assumptions with little or no data about the status of supply chain events and activities is sure to result in extra costs and poor customer service. Inventory buffers are increased to protect against what might happen, and the ability to change plans or give timely direction to partners is greatly diminished when a process breakdown occurs. There are several options to increase visibility. Select partners that offer visibility as part of their service operations. There are also many On-Demand options available to create a personalized portal to monitor activity.

Industry Norm Steps to Success

1. Resist the tendency to take back control of an operation of an underperforming partner

Average performing companies show a tendency to quickly take back management responsibilities from service providers to which they have outsourced business processes, if those providers are not performing to expectation. No one benefits in such a situation. Companies in this position should implement a plan of action to raise the service partner performance, with precise goals and metrics as well as a timetable for correction.

2. Adopt supply chain analytical tools to monitor network performance and identify opportunities for improvement

Companies in this category have the lowest rate of adoption for supply chain analytics. They should consider increasing their usage. These tools have proven valuable in identifying trends and performance characteristics of the network much more effectively than spreadsheets. Analytics can be accessed as licensed software or through an On-Demand vendor.

3. Evaluate how well your technology stack supports managing a partner network

Processes are difficult to establish, institutionalize and scale without the use of technology. Global networks are at work 24/7, and they require up to date information as well as access to critical applications of their customers systems. Develop a strategy where Best in Class processes are implemented in conjunction with technology that supports its use.

4. *Push for wider adoption of standard communications standards such as EDI and XML*

Average performers still show a low adoption rate of communications standards that would allow them to electronically connect with a much wider group of partners. Electronic communications are necessary for supply chain management to keep pace with the changes inherent in a global network. EDI is less costly to implement than even five years ago, and companies should, if they haven't, rethink their position. Other options can include using a third party data hub.

Best in Class Next Steps

1. Continue to drive for electronic connectivity with all partners

Exactly 30% of Best in Class companies are aiming to move electronic integration beyond strategic partners and extend it to the rest of their network. Others should consider following their lead. Integration of this sort is a much more efficient--and effective--way to manage the supply chain.

2. Continue adoption of SOA-based platforms

With its incremental approach, SOA allows companies to implement the technology without incurring the high risk inherent in previous technology waves. The flexibility and level of integration that SOA brings will allow BIC companies to further distance themselves from average performers and laggards.







Author Profile

John Fontanella

Senior Vice President & Research Director, Supply Chain Services

John Fontanella oversees research programs, products, and services as well as client development related to Planning and Advanced Analytics, Global Manufacturing, Global Trade and Logistics, and Retail.

Prior to joining AberdeenGroup, Fontanella was vice president of supply chain services at AMR Research and the Yankee Group. He has also led worldwide logistics for Microsoft Corp., and held a variety of operations and marketing positions at Digital Equipment Corp.

Appendix A: Research Methodology

Between January and February of 2006, Aberdeen*Group* and *Supply Chain Management Review* magazine examined the procedures, experiences, and intentions of more than 150 enterprises in consumer products, retail, food and beverage, aerospace and defense (A&D), automotive, high-tech, industrial products, and other industries of how they were increasing the effectiveness of their supplier networks through process and technical integration.

Responding supply chain, logistics, and operations executives completed an online survey that included questions designed to determine the following:

- The degree to which process integration impacts corporate strategies, operations, and financial results
- The structure and effectiveness of existing process integration initiatives
- Current and planned use of automation to aid these activities
- The benefits, if any, that have been derived from integration of both process and technology.

Aberdeen supplemented this online survey effort with telephone interviews with select survey respondents, gathering additional information on service parts management strategies, experiences, and results.

The study aimed to identify emerging best practices for service parts management and provide a framework by which readers could assess their own service parts management capabilities.

Responding enterprises included the following:

- Job title/function: The research sample included respondents with the following job titles: procurement, supply chain, logistics executive or manager (57%); manufacturing/operations executive or manager (11%); IT manager (23%); and sales and marketing (9%)
- *Industry:* The research sample included respondents predominantly from manufacturing industries. Consumer packaged goods and food and beverage represented 22% of the sample, followed by Consumer durables and consumer electronics, which accounted for 18% of respondents. Retailers and apparel manufacturers totaled 13% of respondents. Distribution companies and industrial equipment manufacturers each accounted for 11% of the sample. Other sectors responding included pharmaceutical, chemical and automotive
- *Geography:* 48% of survey respondents were from North America. EMEA accounted for 27%. Asia Pacific represented 18% of respondents, and rest of world 7%
- *Company size*: Approximately 27% of respondents were from large enterprises (annual revenues above US\$1 billion); 48% were from midsize enterprises (an-

nual revenues between \$50 million and \$1 billion); and 25% of respondents were from small businesses (annual revenues of \$50 million or less).

Solution providers recognized as sponsors of this report were solicited after the fact and had no substantive influence on the direction of the *Supply Chain Integration Benchmark Report*. Their sponsorship has made it possible for Aberdeen*Group* and *Supply Chain Management Review* to make these findings available to readers at no charge.

Table 4: PACE Framework

PACE Key
Aberdeen applies a methodology to benchmark research that evaluates the business pressures, actions, capabilities, and enablers (PACE) that indicate corporate behavior in specific business processes. These terms are defined as follows:
Pressures — external forces that impact an organization's market position, competitiveness, or business operations (e.g., economic, political and regulatory, technology, changing customer preferences, competitive)
Actions — the strategic approaches that an organization takes in response to industry pressures (e.g., align the corporate business model to leverage industry opportunities, such as product/service strategy, target markets, financial strategy, go-to-market, and sales strategy)
Capabilities — the business process competencies required to execute corporate strategy (e.g., skilled people, brand, market positioning, viable products/services, ecosystem partners, financing)
 Enablers — the key functionality of technology solutions required to support the organization's enabling business practices (e.g., development platform, applications, network connectivity, user interface, training and support, partner interfaces, data cleansing, and management)

Source: AberdeenGroup, March 2006

Table 6: Relationship between PACE and Competitive Framework

PACE and Competitive Framework How They Interact

Aberdeen research indicates that companies that identify the pressures that most impact their operations and take the most transformational and effective actions are most likely to achieve superior performance. The level of competitive performance that a company achieves is strongly determined by the PACE choices that they make and how well they execute.

Source: AberdeenGroup, March 2006

Table 5: Competitive Framework

Competitive Framework Key

The Aberdeen Competitive Framework defines enterprises as falling into one of the three following levels of integration practices and performance:

Laggards (30%) — Integration practices that are significantly behind the average of the industry, and result in below average performance

Industry norm (50%) — Integration practices that represent the average or norm, and result in average industry performance.

Best in Class (20%) — Integration practices that are the best currently being employed and significantly superior to the industry norm, and result in the top industry performance.

Source: AberdeenGroup, March 2006

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Our Mission

To be the trusted advisor and business value research destination of choice for the Global Business Executive.

Our Approach

Aberdeen delivers unbiased, primary research that helps enterprises derive tangible business value from technology-enabled solutions. Through continuous benchmarking and analysis of value chain practices, Aberdeen offers a unique mix of research, tools, and services to help Global Business Executives accomplish the following:

- IMPROVE the financial and competitive position of their business now
- PRIORITIZE operational improvement areas to drive immediate, tangible value to their business
- LEVERAGE information technology for tangible business value.

Aberdeen also offers selected solution providers fact-based tools and services to empower and equip them to accomplish the following:

- CREATE DEMAND, by reaching the right level of executives in companies where their solutions can deliver differentiated results
- ACCELERATE SALES, by accessing executive decision-makers who need a solution and arming the sales team with fact-based differentiation around business impact
- EXPAND CUSTOMERS, by fortifying their value proposition with independent fact-based research and demonstrating installed base proof points

Our History of Integrity

Aberdeen was founded in 1988 to conduct fact-based, unbiased research that delivers tangible value to executives trying to advance their businesses with technology-enabled solutions.

Aberdeen's integrity has always been and always will be beyond reproach. We provide independent research and analysis of the dynamics underlying specific technologyenabled business strategies, market trends, and technology solutions. While some reports or portions of reports may be underwritten by corporate sponsors, Aberdeen's research findings are never influenced by any of these sponsors.



AberdeenGroup, Inc.

260 Franklin Street, Suite 1700 Boston, Massachusetts 02110-3112 USA

Telephone: 617 723 7890 Fax: 617 723 7897 www.aberdeen.com

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