

## **Next-Generation Order Fulfillment Paving the Road to Fulfillment Success**

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## ***Executive Summary***

In the face of an economic recovery, order fulfillment execution has become a primary concern for consumer sector firms. To capture an ample share of (slowly) increasing demand, consumer-oriented companies — from retailers to distributors to manufacturers — must devise new strategies to deliver required products quickly and more efficiently than the competition. Concurrently, order fulfillment activities consume a major portion of enterprises' cash, and this percentage of revenue is expected to grow over the next three years. To react quickly to market dynamics without consuming an excessive amount of cash requires enterprises to transform their order fulfillment operations with next-generation fulfillment and distribution strategies. Aberdeen's *Next-Generation Order Fulfillment* study finds that early movers in this race are realizing lower costs and inventories, improved response times, and increased revenues and market share.

### **Key Business Value Findings**

Companies view their order fulfillment activities as significant contributors to corporate differentiation and a key to gaining high levels of customer satisfaction. Ninety-five percent of respondents to Aberdeen Group's survey view order fulfillment as a principal domain expertise of their enterprise. This attitude may be wishful thinking and even counterproductive if the organization fails to leverage the capabilities of third-party logistics providers that may in fact be more effective in cost and delivery than the enterprise. Additionally, 42% of all companies reported that they do not use a key performance indicator (KPI) program to manage order fulfillment. This finding calls into question whether order fulfillment can truly be a key domain expertise for many companies if they have no formalized measurement and improvement programs. The study indicated that those companies that use a daily KPI program to manage and improve their operations execute their order fulfillment functions more effectively.

### **Implications and Analysis**

Despite the significant portion of corporate wealth devoted to order fulfillment activities, only 36% of larger firms use KPI programs on a daily basis to track progress and efficiency and to guide improvement programs versus 9% that do not use them at all. For small firms, only 7% use daily KPIs, whereas 30% of them do not use KPI initiatives at all. Those firms that see order fulfillment as differentiating and key to customer satisfaction are looking for fulfillment solutions that give them better operational analytic support, enabling them to understand the current status of fulfillment operations and current customer requirements, as well as guiding improvements in performance.

Companies are seeking more flexible integrated systems that focus operational activities (warehousing, transportation, and in-transit visibility) on driving up customer satisfaction through order accuracy and fill levels, meeting or exceeding compliance mandates, and on-time deliveries. In this context, Aberdeen Group notes the following points:

- Existing solution portfolios are not doing a good job of supporting order fulfillment operations.
- Next-generation order fulfillment goes beyond strict order management and warehouse operation; it includes, for example, returns, transportation, and visibility and disruption management.
- IT solutions that delivered the greatest value were focused on customer service, effective warehouse operations, and continuous improvement programs.

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- Almost 60% of the respondents are planning to make an investment in their continuous improvement programs within the next 24 months.
- Half of all respondents will make investments in solutions to improve customer service, warehouse operations, general operations, and visibility to these operational areas within the next 12 months.

### **Recommendations for Action**

Based on survey results, Aberdeen offers the following recommendations:

- Companies that want differentiated fulfillment performance must implement processes and supporting IT solutions that span the entire fulfillment process. These processes must take a holistic view of operations, such as concurrently planning inbound and outbound transportation.
- Companies should make delivering an integrated presentation of fulfillment activity and information, regardless of the source systems, an investment priority to increase productivity, accuracy, and customer service across their organizations.
- To drive up customer satisfaction and retention, companies should create processes that enable them to react quickly and effectively to fulfillment disruptions, including being able to leverage the capabilities of suppliers and third-party logistics partners.
- Companies should consider outsourcing noncompetitively differentiated fulfillment activities and focusing their efforts on the points where they can provide true differentiation to customers.
- Companies should implement daily KPIs as part of their continuous improvement programs and as a way to spot problems quickly before they snowball into a supply chain disruption.
- Rather than rely on spreadsheets and simple in-house-developed database solutions, companies should use packaged solutions for achieving lower total delivered cost, gaining more reliable solutions, and taking advantage of broader industry experience.

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## ***Issues at Hand***

### ***The Call for Next-Generation Order Fulfillment***

Order fulfillment is the basic corporate activity of delivering the “goods”— that is, delivering what was promised, when it was promised, the way it was promised, and at the price that was promised. This activity includes all sourcing, warehousing, transportation, service, and transformation functions, as well as any additional functions used to make these primary activities more effective. Order fulfillment is the last opportunity that a company has to affect the customer’s perceptions and is the trigger to being paid. Thus, it is a significant driver of customer satisfaction and retention, as well as corporate cash flow.

The current state of order fulfillment has several challenges. The planning focus is typically limited to a single operational discipline, such as warehousing or transportation. This leads to sub-optimized solutions that may actually reduce the total effectiveness of the enterprise’s fulfillment operations. Second, today’s fulfillment systems typically have a limited geographical view. For multi-site operations, these systems can add a further layer of sub-optimization, and they also limit the visibility that the enterprise has of its total operational environment. Third, today’s simplistic, largely file-based solution architectures for today’s order fulfillment systems limit how well the overall process works. Instead of streamlining, poor integration adds complexity through work-around processes and reduces the operational efficiency. Today’s business environment cannot tolerate this “built in” inefficiency and inflexibility. Instead, the current environment is driving companies to change their order fulfillment operations to enable them to cope with added demands. Companies must manage more compliance requirements; more work done by suppliers, including drop shipping; lean processes; postponement; shorter life cycles; and the need for flawless product introductions and promotions — all requiring more flexibility and easier cross-functional process change in their order fulfillment operations.

### ***Next-Generation Order Fulfillment Defined***

The concept of next-generation order is gaining acceptance in many industries as a key expertise necessary to effectively fill customer demands for the lowest total delivered cost. It is defined to include many of the following elements:

- Order aggregation and global sourcing
- Granular management and flexible control of complex fulfillment operations, including trading partners
- Intelligent inventory deployment instructions
- Transportation is modeled for all inventory movements
- Supports multiple means for order capture and validation, including multiple order channels, such as the Internet
- Provides enterprise-wide and supply-chain-wide visibility of fulfillment operations and order status

In this study, Aberdeen Group focuses on the elements of next-generation order fulfillment that are execution instead of planning and sourcing oriented. The differences between current execution-oriented order fulfillment capabilities and a next-generation capability are described in Table 1.

**Table 1: Next-Generation and Current Order Fulfillment Contrasted**

Attributes	Current Order Fulfillment	Next-Generation Order Fulfillment
Operational breadth	Combination of silo-oriented operations, such as transportation, warehousing, and order management.	Multidisciplinary with focus on order fulfillment execution operations with the additional visibility and disruption management and broader assembly operations that reflect the move to more JIT, postponement, and lean processes
Tactical planning breadth	A tactical planning focus is on execution plans within a single operational discipline — e.g., wave planning in a warehouse management system (WMS), shipment planning in a transportation management system (TMS)	A tactical planning focus crosses multiple operational disciplines — e.g., wave planning in the WMS considers labor resource availability, shipment planning in TMS considers warehouse capacity to pick, load, and ship; order promising considers manufacturing, WMS, and TMS constraints and capabilities.
Geographical reach	Most solutions are single department or single site focused (e.g. WMS)	Solutions are capable of an enterprisewide view for operations and tactical planning, and they are capable of supply-chain-wide operation across suppliers, co-packers, etc.
Solution architectures	<p>Order fulfillment is a portfolio of independent solutions, often designed and built by different providers</p> <p>Most of the independent systems were built to be integrated with other heterogeneous applications.</p> <p>Heavy emphasis on custom-built, homegrown applications.</p>	<p>Order fulfillment can be either a portfolio of independent solutions or an end-to-end fulfillment suite, but the breadth each solution covers is a larger footprint, and there may be fewer “solutions” in the portfolio – e.g., a supply chain execution system that includes WMS, TMS, labor management, and event management that were designed to work together and were built and/or integrated by the same solution provider. Thin-client architecture enables central control of satellite facilities.</p>
Supply chain visibility, event management, and intelligent response	These solutions rarely exist, and when they do, they are an independent solution in the portfolio.	These functions are seamlessly incorporated into the broader footprint of the execution solution.

Attributes	Current Order Fulfillment	Next-Generation Order Fulfillment
Flexibility and configurability	Independent solutions are flexible and configurable within the context of their "model" of their portion of the world.	Flexibility and configurability crosses the operational discipline "models" — a single adjustment will affect the multiple disciplines appropriately

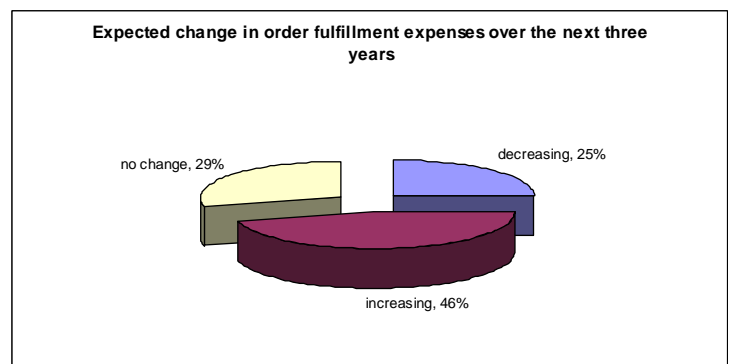
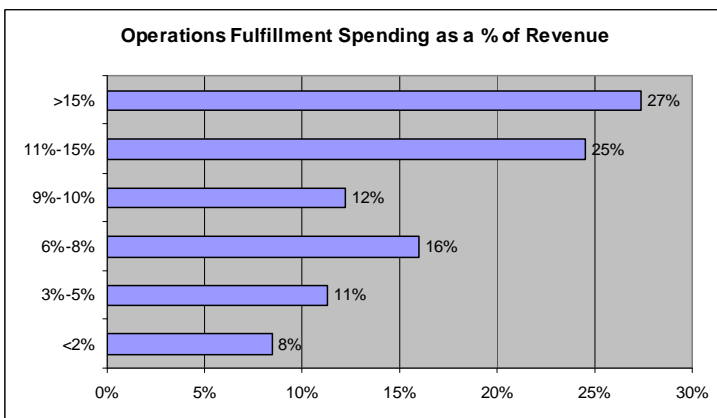
Source: TKR Consulting Associates, August 2005

### Order Fulfillment Is a Significant Expense That Is Growing

Increasing customer requirements and transportation expense are making order fulfillment a critical financial issue for many companies. Half of the respondents to Aberdeen’s survey reported that order fulfillment operations consume 11% or more of corporate revenue, and more than a quarter of respondents indicated that they consume more than 15% of revenue (Figure 1). Also, nearly half of respondents expect this consumption of corporate cash to continue to increase over the next three years, with 21% expecting that increase to be more than 2% of revenue. Large companies are expecting a smaller increase, 33%, whereas midsize enterprises (revenues between \$40 million and \$300 million) are more likely to expect increases.

Many respondents are reacting to new mandates and requirements, such as radio frequency identification (RFID) and data synchronization in the retail space and the fluctuations in fuel costs, and evaluating them as something out of their control. Instead, these companies should look to the capabilities of next-generation order fulfillment processes and solutions, such as integration of RFID into business processes and the management of transportation operations and sourcing, as the means to control and reduce these costs. In turn, they can turn these abilities into a competitive differentiator against those companies that have not adopted these next-generation order fulfillment practices.

Figure 1: Current Operations Fulfillment Spending as a Percent of Revenue



Source: TKR Consulting Associates, August 2005

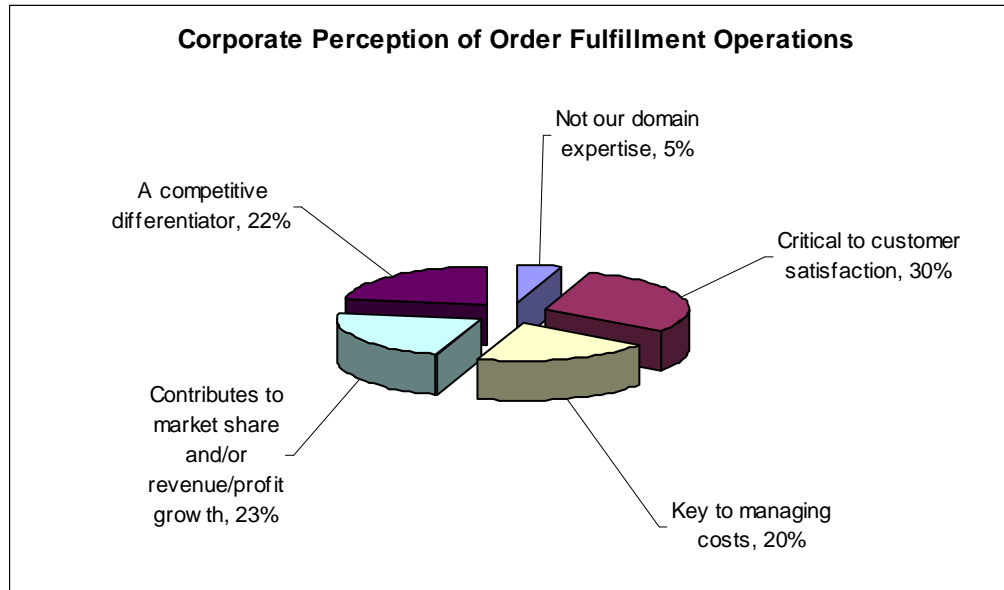
### Order Fulfillment Is Differentiating

One-fourth of respondents believe that efficient order fulfillment operations help them differentiate themselves by improving their ability to compete effectively and meet their

## Next Generation Order Fulfillment

customers' requirements and expectations (Figure 2). Best-in-class companies are using the integrated features of next-generation systems to provide visibility and status information to their customer service operations and to ensure that their fulfillment operations are meeting the compliance and delivery requirements of their customers. They recognize that giving customers what they want, when they want it, the way they want it will encourage customers to stay with them. It sets the stage for added revenue from the customer and the acquisition of new business based on satisfied customers as a reference.

**Figure 2: Corporate Perception of Order Fulfillment Operations**



Source: TKR Consulting Associates, August 2005



## ***Key Business Value Findings***

### ***Today's Systems Are Delivering Value — But Not to All Enterprises***

The survey shows that for many enterprises, the current order fulfillment IT systems are delivering real business value — 30% of the respondents pointed to key benefits received in customer service operations, specifically citing improvements in customer satisfaction, customer retention, and increased effectiveness in customer service operations. Another 30% of respondents claim that the current systems and processes are delivering improvements in profitability and revenue and are helping to reduce costs. Forty percent of respondents see their current systems delivering improved operational efficiencies. They specifically cited reduced fulfillment time, increased capacity, improved order accuracy, and better regulatory compliance.

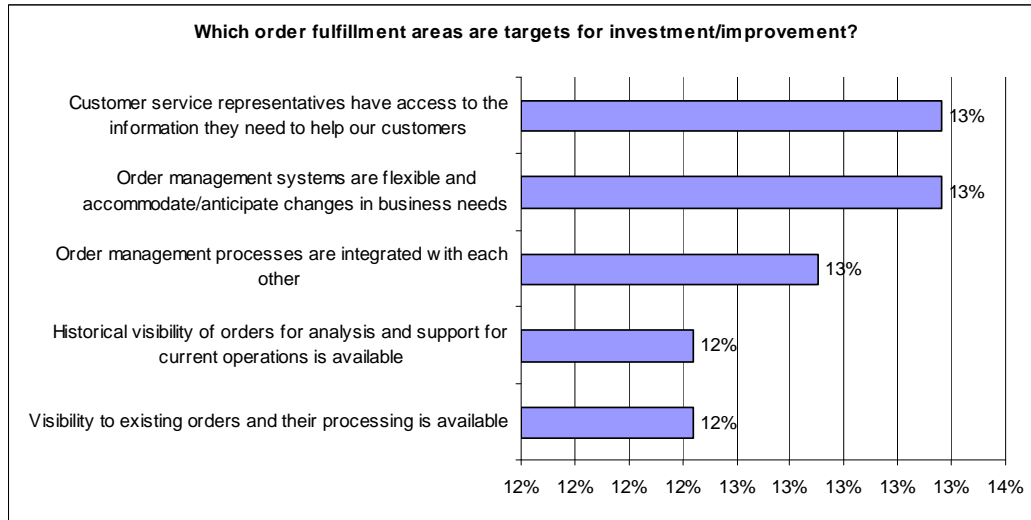
Companies achieving the best performance improvements used key performance indicator (KPI) programs to track and improve their performance, implemented standard processes both within and across departments to ensure consistent execution efforts, and had implemented formal customer satisfaction programs.

### ***Enterprises Need Operational Analytics***

Companies are targeting operational effectiveness and customer satisfaction areas for improvement and investment going forward (Figure 3). Operational analytics were recognized as having the greatest impact on improving day-to-day operations. Operational analytics are those functions that help order fulfillment operations management see, understand, and prevent or fix those actions that detract from customer satisfaction during the order fulfillment process. Many see this concept as the application of daily managed key KPIs, but that is only one element of operational analytics. Operational analytics also includes those functions, or alarms, that help detect a disruption in the effective fulfillment of customer requirements and provides the tools and visibility necessary to fix the disruption. Thus, specifically included in operational analytics are access to customer information and requirements, current and historical visibility of orders, and current visibility to order status and notification of disruptions.

The respondents also indicated that the integrated presentation of this information, regardless of the source systems, is an investment priority. Quick access to information in a common visual metaphor helps operators understand and apply what they see. This quick access enables them to react more quickly and make more accurate and consistent decisions and interventions into the fulfillment operations, thereby increasing productivity, accuracy, and customer service across the corporation. Companies that lack integrated presentation of information to fulfillment personnel and customer service operations should ensure that fixing this becomes a priority.

**Figure 3: Fulfillment Systems Processes That Are Targets for Improvement**

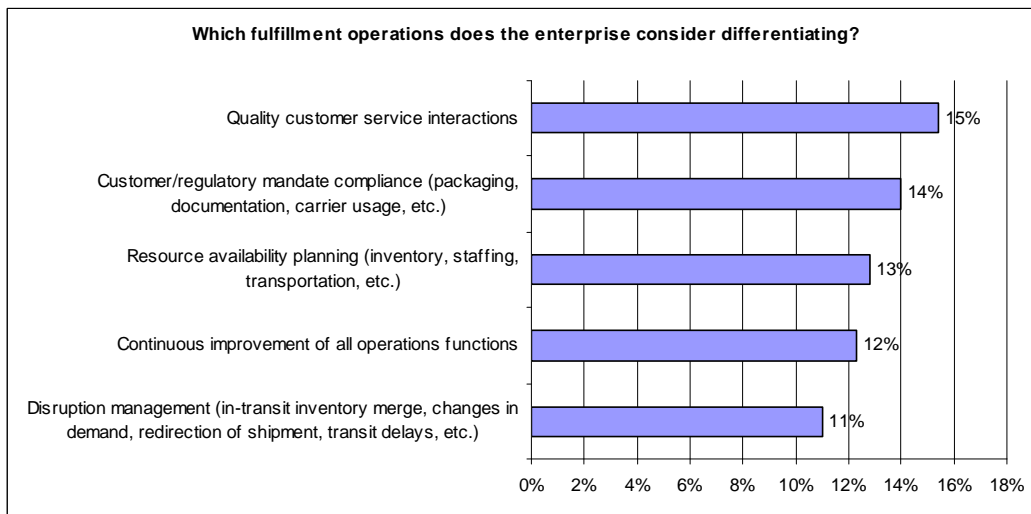


Source: TKR Consulting Associates, August 2005

***The Gap between Differentiating Capabilities and Supporting Technology***

Within order fulfillment, the survey indicates that more companies believe that they have gained competitive differentiation in the areas of superior customer service interaction, customer/regulatory mandate compliance, resource availability, and continuous improvement programs than any other operation (Figure 4).

**Figure 4: Types of Fulfillment Operations That Enterprises Consider Differentiating**

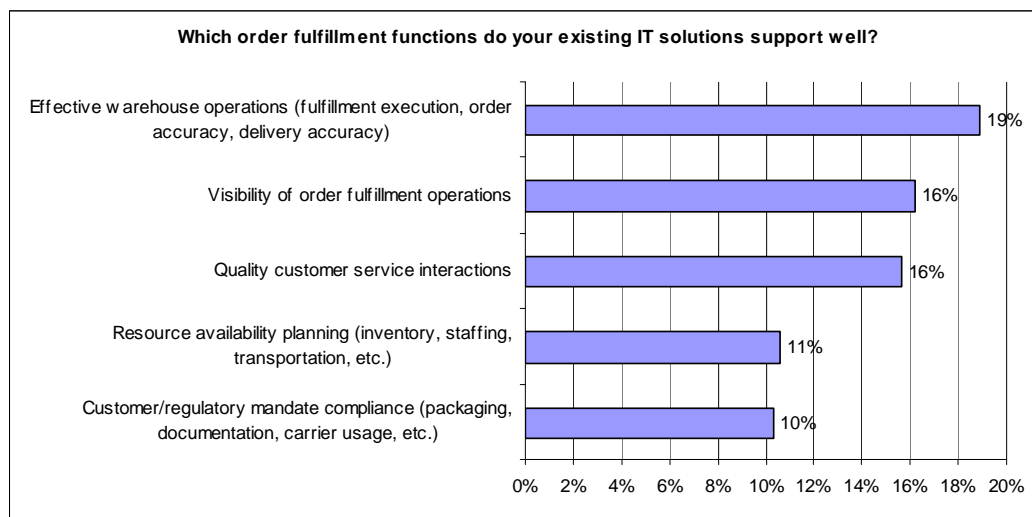


Source: TKR Consulting Associates, August 2005

### **Existing Solutions Are Not Doing the Job**

Even though the respondents to the survey believe that order fulfillment is differentiating, very few of them give a vote of confidence to the existing technology solutions that are supposed to support order fulfillment operations (Figure 5). No function had more than 19% satisfaction levels, and the average was 11%. These results indicate that companies have been achieving order fulfillment differentiation through sweat equity and the development of standard processes (82% claim standard processes exist in each department as a minimum, but only 15% claim these processes are enterprisewide and include coordination with their trading partners). Essentially, the current installed systems are not keeping pace with companies' next-generation fulfillment processes and objectives. As will be discussed in chapter three, this situation is causing a majority of companies to make plans to invest in technology system extensions or replacements over the next 18 months. Those companies not planning on technology system enhancements will see their competition gain ground in customer service and cost efficiency.

**Figure 5: Existing Technology Support for Fulfillment Functions**



Source: TKR Consulting Associates, August 2005

### **Finding the Right Differentiation Areas to Pursue**

Aberdeen developed the Fulfillment Solutions Framework to help companies understand the breadth of capabilities that can be required to achieve next-generation order fulfillment performance (Figure 6). The Fulfillment Solutions Framework lays out the possible functional solutions into four areas of emphasis: trading partner coordination (coordinate it), material flow optimization (organize it), daily operational capabilities (run it), and operational excellence (improve it).

Trading partner coordination functions deal with the coordination of communications with the enterprise's supply chain trading partners (customers, manufacturers, regulatory agencies, and so on).

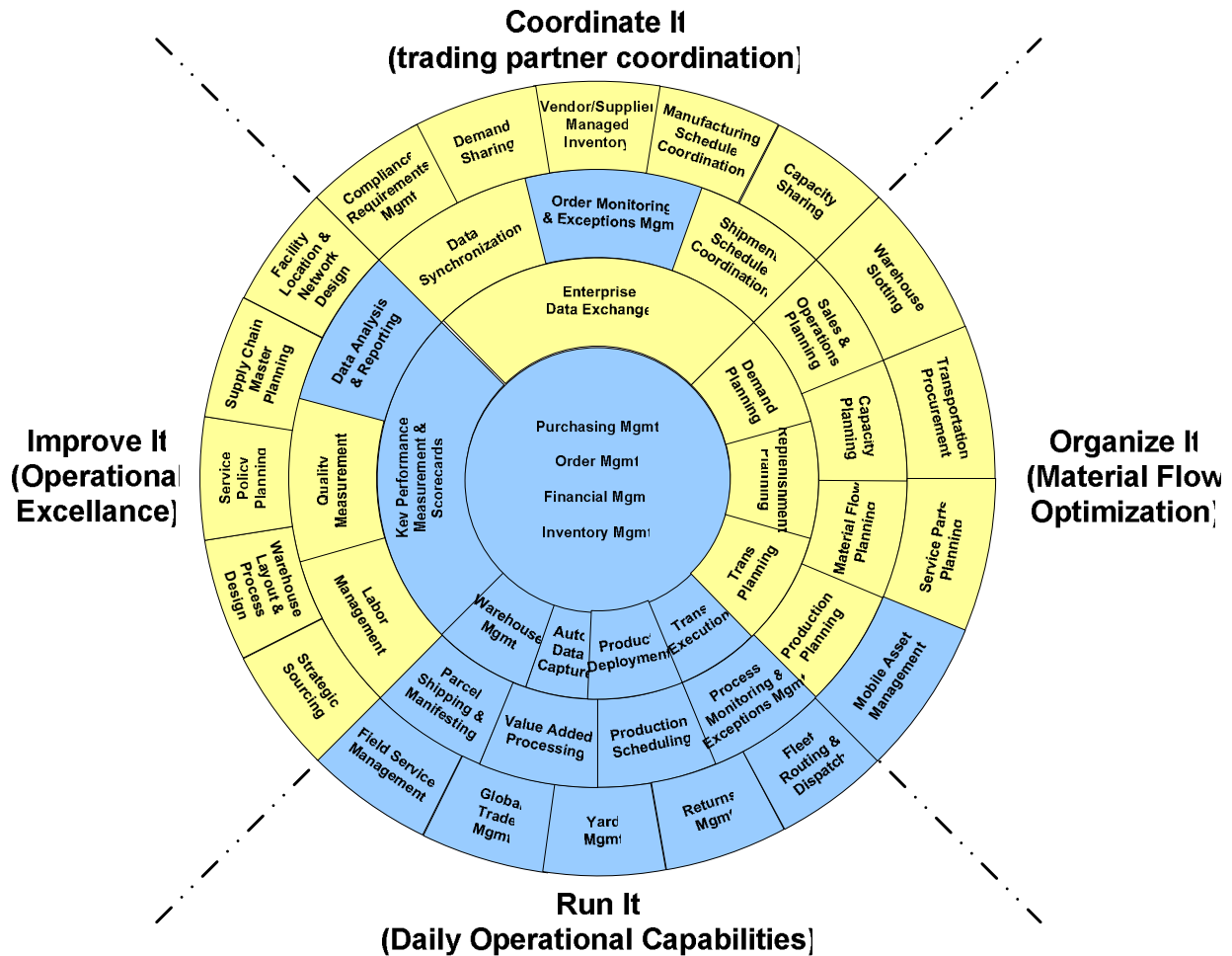
Material flow optimization represents those functions within the enterprise that help the enterprise examine, evaluate, and optimize the organization and its utilization of supply chain assets.

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Daily operational capabilities focus on those functional areas that most affect the daily execution and management of supply chain transactions.

Operational excellence focuses on those solutions and/or practices that are used to monitor, analyze, and improve the operational capabilities of the supply chain.

**Figure 6: Fulfillment Solutions Framework (Order Fulfillment)**



Source: TKR Consulting Associates, August 2005

Use of the framework is contingent on the executive having an understanding of the direction the company is pursuing, the requirements and performance metrics that order fulfillment operations need to meet to support the company direction, and an honest evaluation of the current state of the company's order fulfillment capabilities. With this foundation, the executive can look to the framework, see the areas that are missing or underperforming in their current portfolio, understand the relative impact that improvements in these areas can have, and then select areas to investigate business process or technology enhancements. It can also be used to identify which areas of the company will be impacted by a business process change or technology investment. For instance, improving transportation planning capabilities often requires adjustments to warehouse processes to deliver full economic benefits.

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In Figure 6, we have highlighted, in blue, those fulfillment solutions that are referenced in this report as a part of next-generation order fulfillment practices.

## ***Implications and Analysis***

### ***Daily KPI Programs Are Needed***

In assessing which order fulfillment management functions the respondents execute daily or not at all, the glaring omission of KPI programs becomes clear; only 15% of respondents use KPIs on a daily basis, and 42% do not use them at all. KPIs are important to understanding what an enterprise's performance really is. You cannot improve what you do not understand, and you cannot understand what you do not measure. Two-thirds of those companies that used KPI programs on a daily basis were capable of responding to disruptions or changes in order fulfillment requirements, one of the top challenges discussed earlier. All of those companies had good visibility of order fulfillment operations, and half of them performed transportation planning for both inbound and outbound shipments (thus enabling better cost control and service). All of these tasks are key contributors to gaining competitive differentiation through order fulfillment operations.

A significant change in results occurred when KPI programs were used weekly instead of daily. Effective response to disruptions or changes in order fulfillment requirements slipped from two-thirds of companies to half, and transportation planning slipped from half to just a third. And only half of companies using weekly KPIs reported that they had sufficient visibility into order fulfillment operations.

Clearly, best-in-class companies use daily KPIs as part of their next-generation fulfillment strategy. These companies use KPIs as part of a total process of managing fulfillment, including providing visibility and access to fulfillment information across all their operations, reacting quickly and effectively to fulfillment disruptions, and taking a holistic view of operations, such as concurrently planning inbound and outbound transportation. Companies should implement daily KPIs as part of their continuous improvement programs and as a way to spot problems quickly before they snowball into a supply chain disruption.

The final point to be made here is that none of the performance improvements expected or additional business benefits to be gained can be proved or confirmed without a program of regular performance measurement. A recent study executed by The Logistics Institute of the Georgia Institute of Technology produced some interesting results. First, the Logistics Institute defined several sets of metrics to determine the quality and productivity performance aspects for the fulfillment operations that were included in the study. Then these results were compared against the number of metrics that were included in a performance measurement program at the responding facilities. The results confirm the "conventional wisdom" that you cannot improve what you do not measure. The more measurements that were included in the program, the more likely that facility was run effectively and efficiently. The study indicated that a program that measured more than 11 items would deliver a 30% performance improvement over a program that measured as few as five items.

The Aberdeen survey participants are aware of this shortcoming. Three-fourths of them are planning to make an investment in their continuous improvement program within the next 24 months, and almost two-thirds will make this investment within the next 12 months.

### ***A Misconception about Domain Expertise***

A surprising finding from the Aberdeen survey is that 95% of respondents perceive that order fulfillment is part of their domain expertise. If this was true, you would expect that more than 38% of respondents would have fulfillment processes in place that include

coordination across multiple departments and with their suppliers and customers. Instead, the majority continue to operate various departments as independent silos. In addition, one would expect that more than 15% of companies would use a KPI program daily instead of 42% having no KPI program at all. These same companies do not think that their existing systems do an adequate job of supporting their current operations. The reality is that no single system was thought to be good at supporting existing operations by more than 19% of the respondents. These findings indicate that many companies do not know enough about their own operations to be able to judge if it is a domain expertise or not. Interestingly, this misperception about abilities exists regardless of company size or industry segment.

The 95% of companies that believe fulfillment is their domain expertise may be missing (or underutilizing) the opportunity to leverage further the proven skills and technical abilities of many third-party logistics companies. These entities make their entire living on providing order fulfillment services more cost-effectively through economies of scale and multiple industries worth of experience. Companies should consider outsourcing noncompetitively differentiated fulfillment activities and focusing their efforts on the points where they can provide true differentiation to customers.

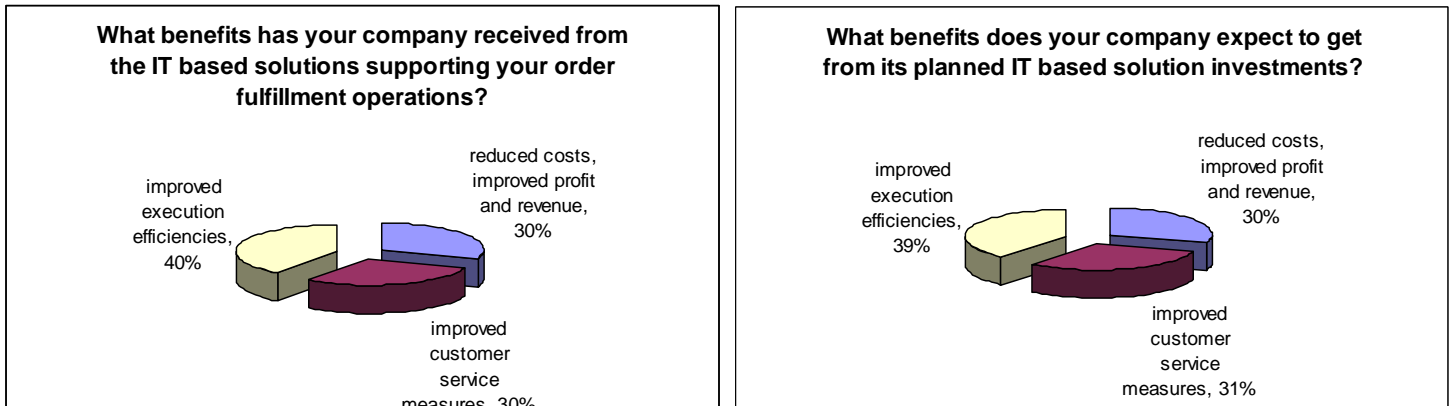
### ***Expected Benefits Mirror Current Benefits***

Companies expect that their benefits from future order fulfillment technology solutions will be almost exactly the same as the current benefits from their existing IT systems (Figure 7). This finding indicates that companies are meeting their current goals or are content with their existing performance in multiple areas to include order fill rates, timely delivery, order accuracy, meeting customer mandates, and so forth. However, these companies may be setting themselves up for difficulties down the road. Aberdeen notes the following points related to companies' that are maintaining the status quo with respect to order fulfillment technology:

- Companies should be looking at today's customer requirements and evaluating how they will be changing in the future. Relying on past competencies is dangerous.
- Companies that lack KPI programs are missing an opportunity to rigorously evaluate where their weaknesses are and what the business value will be from strengthening those areas. A broad opportunity exists for solution providers that can offer the analysis and visibility (e.g., operational analytics components) that will help companies understand their true strengths and weaknesses.
- Companies appear to be accepting cost increases as largely out of their control.

Companies should demand more from their investments than Aberdeen's survey showed. An integrated interaction of functional areas and clear visibility to order fulfillment information and disruptions within the supply chain will deliver much more extensive benefits in profit and customer service. Companies should be evaluating these next-generation fulfillment processes as a way to go far beyond just improving how efficiently they execute their strategies.

**Figure 7: Current and Expected Order Fulfillment Benefits**



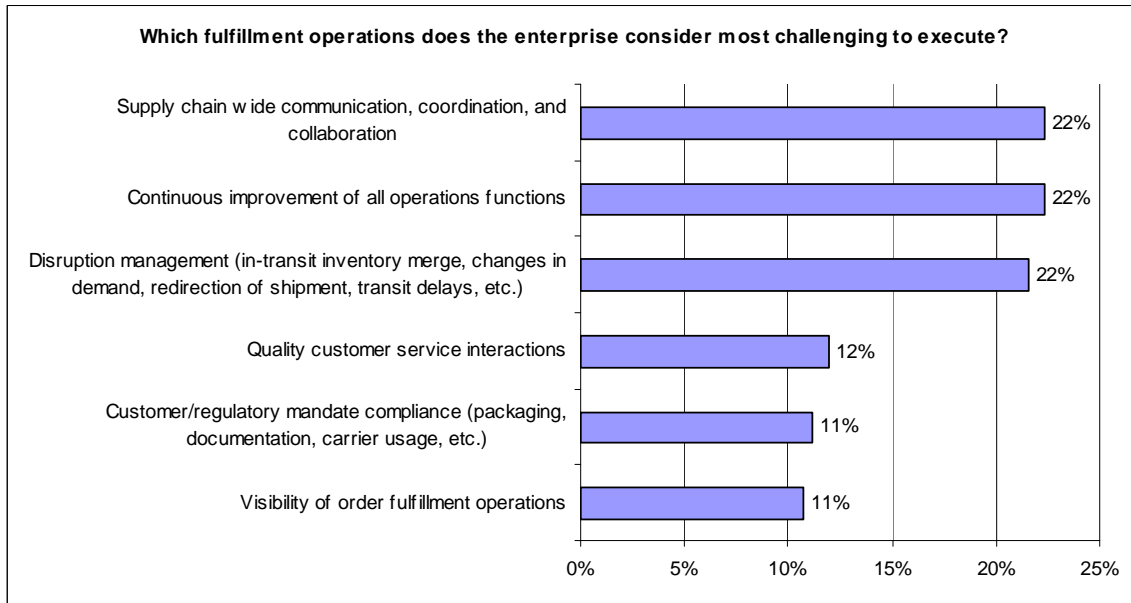
Source: TKR Consulting Associates, August 2005

**Overcoming the Top Order Fulfillment Challenges**

Disruption management and supply-chain-wide communication, collaboration, and coordination are among the most difficult fulfillment tasks to execute, according to respondents (Figure 8). Next-generation order fulfillment solutions that provide visibility to the events occurring in the order fulfillment process along with a consistent, integrated presentation metaphor for operators to use will enable the enterprise to meet these challenges more effectively. Without these capabilities, the primary differentiators of customer satisfaction and retention will not be feasible. Companies cannot execute the perfect order, compliant with customer mandates, if disruptions in the fulfillment process are not recognized and addressed in a timely fashion. To drive up customer satisfaction and retention, companies should create processes that enable them to react quickly and effectively to fulfillment disruptions, including being able to leverage the capabilities of suppliers and third-party logistics partners.



**Figure 8: Challenging Fulfillment Functions**

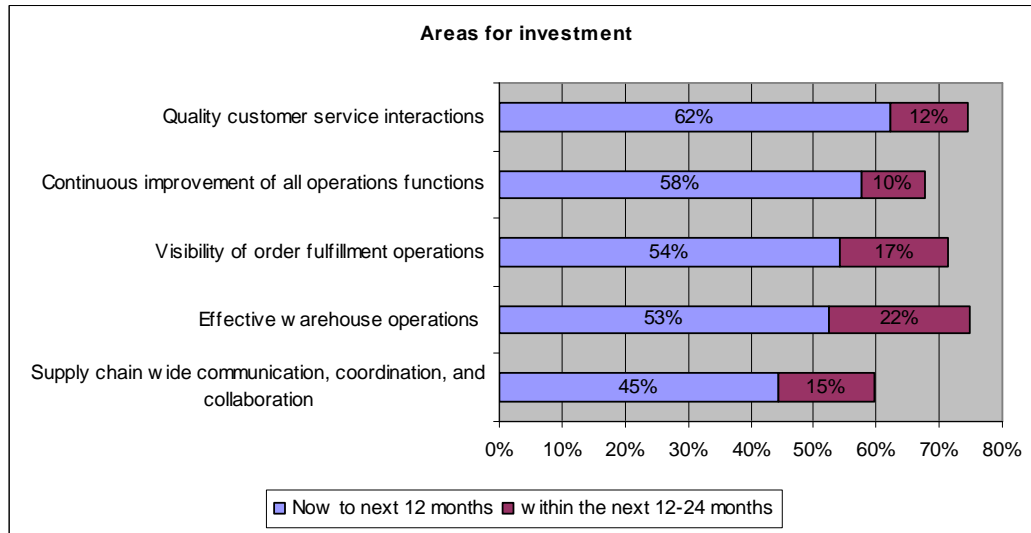


**Source: TKR Consulting Associates, August 2005**

Several of the most challenging areas for companies (e.g., visibility across the supply chain, supply-chain-wide communication, disruption event recognition) are areas that depend on cross-functional (and often cross-trading partner) infrastructure, which traditionally has been ignored in the quest to satisfy business operations requirements. Because next-generation order fulfillment practices require broader, more integrated operations and supporting technology, these infrastructure-type investments are now being included in corporate investments plans (Figure 9).

A surprisingly high percentage of companies, ranging from 32% to 75%, depending on functional area, plan to invest in improving specific components of order fulfillment within the next 24 months. Between 24% and 62%, depending on functional area, indicated that they plan to invest in the next year. If your fulfillment performance today is undifferentiated, this should raise significant question about your strategy and IT solution deployment plans. Many of your competitors will be making investments and “raising the bar” on industry fulfillment performance over the next 24 months.

**Figure 9: Enterprises' Fulfillment Investment Plans**

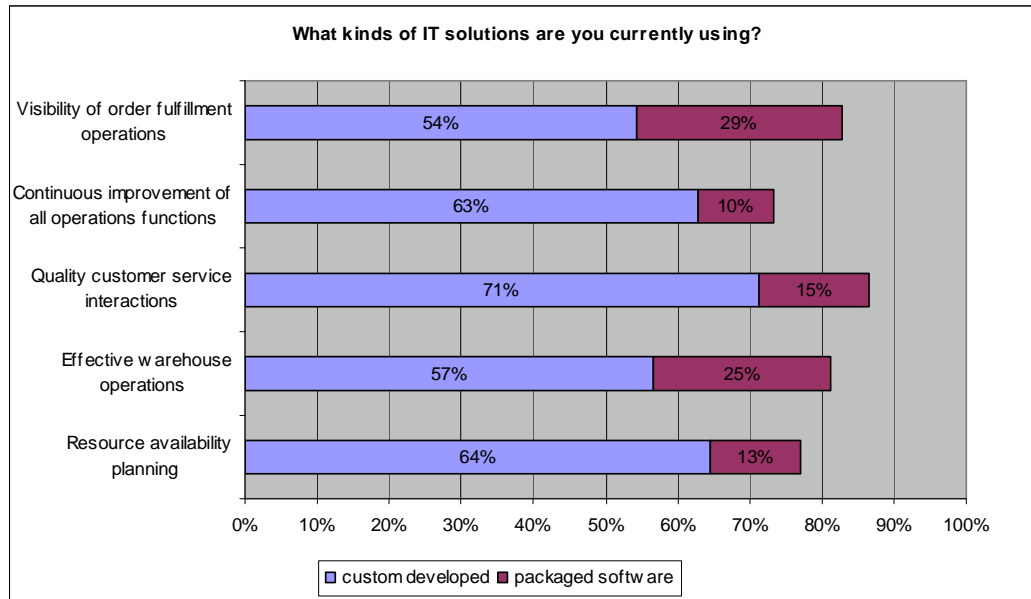


Source: TKR Consulting Associates, August 2005

***Moving Beyond the Existing Portfolio***

In examining respondents' investment plans, Aberdeen believed that it is important to understand the systems that these companies have in place now. Between 30% and 71% of respondents, depending on functional area, currently use custom-developed solutions (Figure 10). Across the board, at least a third of these custom solutions are either Microsoft Excel or Access based. This dependence on homegrown or highly customized solutions leads to higher levels of maintenance costs. Such solutions, especially those based on Excel or Access, are fragile and do not cope well with changes in business requirements, changes in organizational conditions, or in disruptions to normal processes. Dependence on inflexible custom-developed solutions is a key element behind the dissatisfaction with current IT solution support of order fulfillment operations.

**Figure 10: Enterprises' Use of Custom-Developed and Packaged IT Solutions by Functional Area**

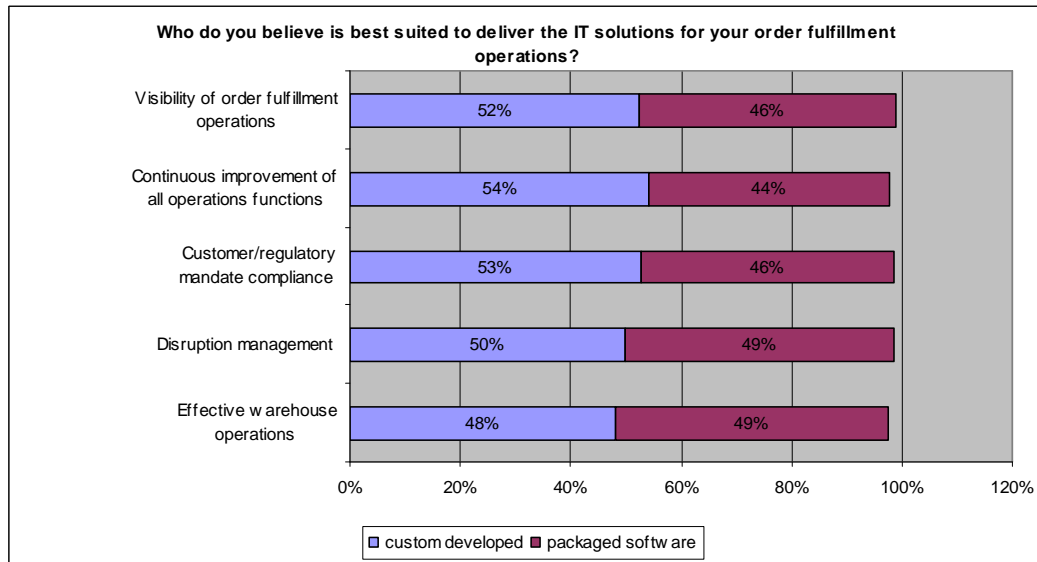


**Source: TKR Consulting Associates, August 2005**

Enterprises' plans for new investments in technology are much more balanced between packaged solutions and custom-developed solutions. One reason for this pattern is that the current portfolio for many companies is composed of legacy systems that were made Y2K compliant and are only now being considered for upgrade. The packaged applications that they are competing against for investment dollars have gained functional richness that make them more likely candidates as replacement systems. This change of focus is also an acknowledgment that packaged solutions represent a chance for the enterprise to gain solutions that have incorporated functions and capabilities derived from implementations that are beyond their own experience. Finally, it is an acknowledgment that the development of custom systems is a detailed, time-consuming, exhausting, and costly process. Figure 11 lists enterprises' preferences for custom-developed or packaged solutions by type of fulfillment operation.

Aberdeen Group believes that enterprises should look to packaged solutions that have the majority of the necessary solution capabilities implemented as a proven suite. Supply chain execution management systems are a good example of a suite type that would be applicable in a next-generation order fulfillment situation.

**Figure 11: Type of IT Solution Best Suited for Order Fulfillment by Type of Operation**

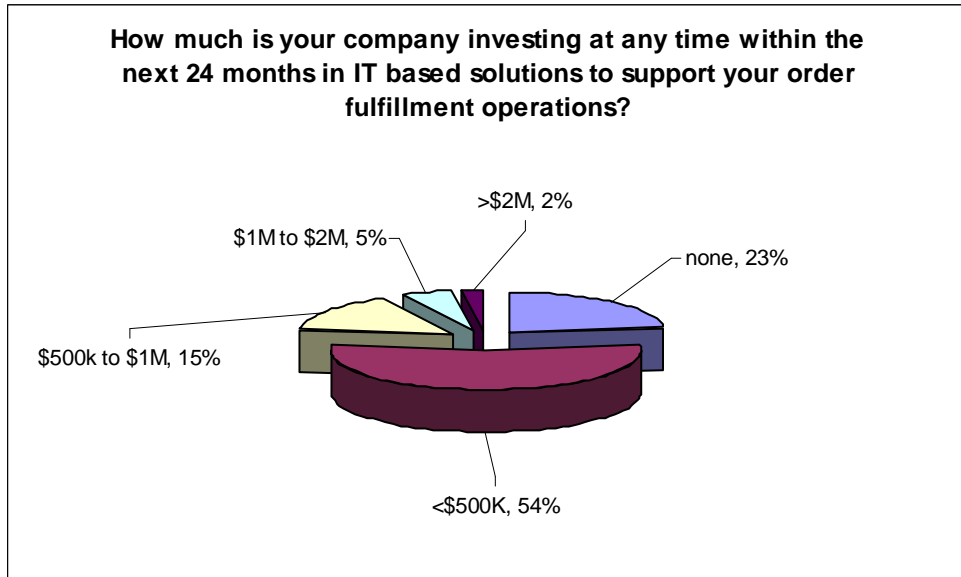


**Source: TKR Consulting Associates, August 2005**

Half of all respondents plan to invest in the next 12 months in operational improvements in customer service, warehouse operations, general operations, and visibility to these operational areas. Investments will tend toward \$1 million or less (69%). The larger the enterprise, the more aggressive the investment plans: 57% of midsize enterprises plan to invest in the next year, and 62% of large corporations plan to invest in the next year (Figure 12).

These are very high numbers. This investment story is consistent with the perception of many companies that their existing systems do an insufficient job of supporting their order fulfillment operations. Therefore, for most companies, if they are not planning on investing in process and technology improvements in order fulfillment in the next 12 to 18 months, their competition is likely to and thus is also likely to gain ground on them in customer service and cost efficiency.

**Figure 12: Enterprises' Fulfillment Solutions Spending Plans for the Next 24 Months**



Source: TKR Consulting Associates, August 2005

## Recommendations for Action

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### ***Develop the Next-Generation Plan***

Corporations need to determine which areas of order fulfillment represent the direction that will best serve their goals, they need to assess their own capabilities, and they need to map a plan to deliver the required results. Aberdeen's Order Fulfillment Framework, Maturity Grid, and the PACE framework discussed below can all be used to help guide this process.

In particular, companies seeking to differentiate themselves through superior order fulfillment operations should adopt the next-generation order fulfillment strategies discussed in this report. Companies should evolve their order fulfillment capabilities to respond more effectively to disruptions or changes in order fulfillment requirements, provide visibility and access to fulfillment information across all their operations, react quickly and effectively to fulfillment disruptions, and link processes across the enterprise, such as concurrently planning inbound and outbound transportation (thus enabling better cost control and service). All of these tasks are key contributors to gaining competitive differentiation through order fulfillment operations.

### ***Focus on Customer Satisfaction***

Enterprises need to focus on delivering the products requested in compliance with all customer requirements. This product delivery needs to be done in a way that ensures timely delivery, guarantees full and complete orders, and supports the concepts of (1) customer retention through customer satisfaction and revenue and (2) profit growth through customer retention. To drive up customer satisfaction and retention, companies should create processes that enable them to react quickly and effectively to fulfillment disruptions, including being able to leverage the capabilities of suppliers and third-party logistics partners.

### ***Implement Daily Operational Analytics and KPI programs***

You cannot improve what you do not measure, and you cannot plan without data to plan from. It is no longer cost-effective, or even feasible, to have the customer-focused capabilities recommended above without having KPIs in place to assess performance, determine corrective actions, and support continuous improvement programs. In addition to KPIs, companies should implement other aspects of operational analytics, including access to customer information and requirements, current and historical visibility of orders, and current visibility to order status and notification of disruptions.

### ***Implement an Integrated View of Fulfillment Information***

Companies should make delivering an integrated presentation of fulfillment information, regardless of the source systems, an investment priority to increase productivity, accuracy, and customer service across the organization.

### ***Find Leverage Points***

Leverage logistics service providers to provide domain expertise and technical assistance in those areas where the enterprise is weak. These companies make their living doing all the varieties of order fulfillment operations in multiple industries. They have experience that can be applied that a single company may never have witnessed. Used properly, logistics service

providers can help an enterprise rapidly expand into new geographies, they can deliver services that are new to the enterprise, but have been a part of their experience, and they can often do this more cost-effectively.

### ***Use Packaged Solutions***

Companies are dissatisfied with their legacy technology systems, and these systems must be addressed or the enterprise will lose competitive position. Packaged solutions, like third-party languages (3PLs), represent an opportunity for an enterprise to gain solutions proven in other industries or for other enterprises that are beyond their own experience. These solutions exist and are proven. Supply chain execution management systems are a good example of a suite type that would be applicable in a next-generation order fulfillment situation.

Packaged solutions can be implemented now versus a custom solution that must go through design, develop, test, fix, and then rollout steps. Small and midsize companies need to follow the lead of the larger enterprises and use packaged solutions to meet their needs with less reliance on homegrown Excel- and Access-based solutions. This style of homegrown solution is not robust, can be easily "broken," and requires ongoing support to ensure data integrity and effective transaction execution. These solutions are especially hazardous for companies that have growth plans because they are unlikely to stand up to the stress of business expansion.

Custom solutions, especially those developed using Access or Excel, are best suited to experimentation and proof-of-concept situations. They can be developed quickly to prove out a technique or process and then can be replaced before their fragility to changes in the business process or daily exceptions become serious concerns.

## ***Appendix A: Research Methodology***

Between April and June 2004, Aberdeen Group and *Operations and Fulfillment* magazine examined order fulfillment management procedures, experiences, and intentions of more than 114 enterprises in multiple consumer-oriented industries.

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

- The degree to which order fulfillment impacts corporate strategies, operations, and financial results
- The structure and effectiveness of existing order fulfillment management procedures
- Current and planned use of IT solutions to aid these activities
- The benefits, if any, that have been derived from order fulfillment management initiatives

The study aimed to identify emerging best practices for order fulfillment management and provide a framework by which readers could assess their own order fulfillment 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 (12%); manufacturing/operations executive or manager (44%); IT manager (11%); and other corporate management positions (30%).
- ***Industry:*** The research sample included respondents predominantly from manufacturing industries. Retail/wholesale businesses represented 30% of the sample, followed closely by distribution companies, which accounted for 20% of respondents. Manufacturers of consumer packaged goods totaled 10% of respondents.
- ***Company size:*** About 22% of respondents were from large enterprises (annual revenues above US\$300 million); 28% were from midsize enterprises (annual revenues between \$40 million and \$300 million); and 51% 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 *Next-Generation Order Fulfillment Benchmark Report*. Their sponsorship has made it possible for Aberdeen Group and *Operations and Fulfillment* magazine to make these findings available to readers at no charge.