



Aberdeen *Group*

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Demand Management in Consumer Industries

*Technology Strategies for Managing Demand in Today's
Dynamic Business Environment*

December 2006



Executive Summary

The consumer marketplace is becoming increasingly volatile, fragmented, and dynamic. These changes cry out for a process of dynamically assessing and managing demand. Shrinking product life cycles and an unforgiving marketplace are sharply increasing the costs of demand management errors.

These trends are driving the need for companies to adopt new demand management technology that better accounts for supply chain variability and can improve gross profit margins.

Companies Actively Re-evaluating Demand Management Practices

Aberdeen benchmark results show that demand management processes and technologies are being actively re-evaluated by consumer industry companies. In the past six months, fully 64% of companies have provided or been asked by their management teams to provide recommendations on how to improve their demand management technology. Three-quarters of companies are looking to improve their demand management processes.

Wanted: Rapid Demand Sensing and Response

Aberdeen research finds that 50% of companies say it takes more than one month to sense changes in consumer demand. This is unacceptable in today's dynamic business environment. There are significant opportunities for companies to gain improvements in top line sales, profit margin, and inventory levels through improved demand sensing and shaping practices.

Characteristics of Best in Class Companies

Aberdeen defines Best in Class companies in demand management as those with product family forecast accuracy of 60% or greater and customer service levels of 90% or greater. Best in Class companies have been able to obtain much greater improvements in performance from 2004 than their peers. For instance:

- **Best in Class companies are more than twice as likely** to have increased market share than their peers.
- They are **56% more likely** to have improved gross profit margin.
- They are **1.5 times more likely** to have improved order fulfillment performance.

The Critical Role of Technology in Demand Management

Improving demand management practices calls for a high degree of collaboration and visibility across the supply chain, as well as more sophisticated optimization. Companies that do not use integrated technology to enable their demand management initiatives will not achieve the same level of performance. Spreadsheet methods are not sufficient in today's demanding environment because they're incapable of evaluating all trade-offs.



- Companies using best of breed demand forecasting systems are **three times more likely** than other companies to have forecast accuracy above 70%.
- Companies using best of breed demand--shaping (promotion optimization) solutions are **twice as likely** as other companies to have had increased promotion/trade-fund effectiveness over the last two years.
- Companies using best of breed pricing solutions are **twice as likely** as other companies to have had improved gross margins over the last two years.

Recommendations for Action

To achieve better demand management performance, Aberdeen study results find that a company should:

1. Increase collaboration with key customers to drive to a dynamic, collaborative single demand forecast, including tapping the power of customer-level forecasting.
2. Empower an inter-disciplinary sales and marketing team to manage the demand management process and outcomes with the appropriate technology backbone. Interdisciplinary teams alone do not correlate to better performance.
3. Develop a systematic “what if” iterative demand management process to proactively identify demand risks and demand-shaping opportunities, including leveraging promotion management and price optimization technology.
4. Focus on demand signal repositories to be able to store, analyze, and cleanse true consumer demand data. This will help an organization sense and respond faster to changes in demand.

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Chapter One: Issue at Hand

Key Takeaways

- The top two **pressures** driving companies to improve demand management are poor forecast accuracy resulting in increased inventory costs and a dynamic consumer demand and volatile marketplace.
- 64% of companies have received or requested recommendations from management to improve their demand management technology.
- **50%** of companies indicate that it takes them at least one month to sense changes in demand.

The consumer marketplace is becoming increasingly volatile, fragmented, and dynamic. These changes cry out for a process of dynamically assessing and managing demand. Shrinking product life cycles and an unforgiving marketplace are sharply increasing the costs of demand management errors.

These trends are driving the need for companies to adopt new demand management technology that better accounts for supply chain variability and can improve gross profit margins.

To identify demand management technology adoption trends and benefits, Aberdeen benchmarked 150 consumer industry companies in November 2006. This survey was supplemented with phone interviews of selected consumer companies as well as results from 65 consumer companies from a recent Aberdeen research initiative on sales and operations planning (S&OP) (See Appendix A for the demographics of the survey participants).

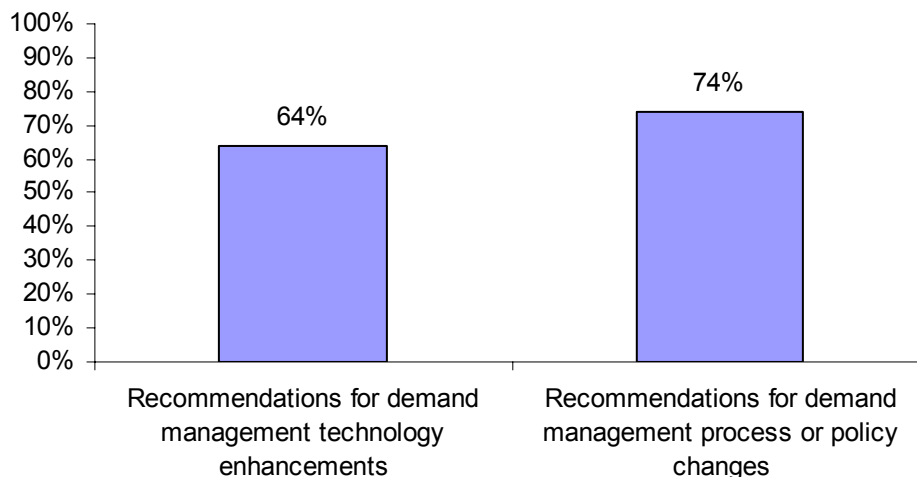
Consumer Industries Include:

Apparel/Footwear, Consumer Durable Goods, Consumer Electronics, Consumer Packaged Goods, Distribution and Wholesale, Food/ Beverage, Health and Beauty Aides, and Pharmaceutical Manufacturing (OTC drugs)

The benchmark results show that demand management processes and technologies are being actively re-evaluated by consumer industry companies today. Fully 64% of respondents say that within the past six months they have provided or been asked by their management teams to provide recommendations on how to improve their demand management technology. Three-quarters of companies are looking to improve their demand management processes (Figure 1).



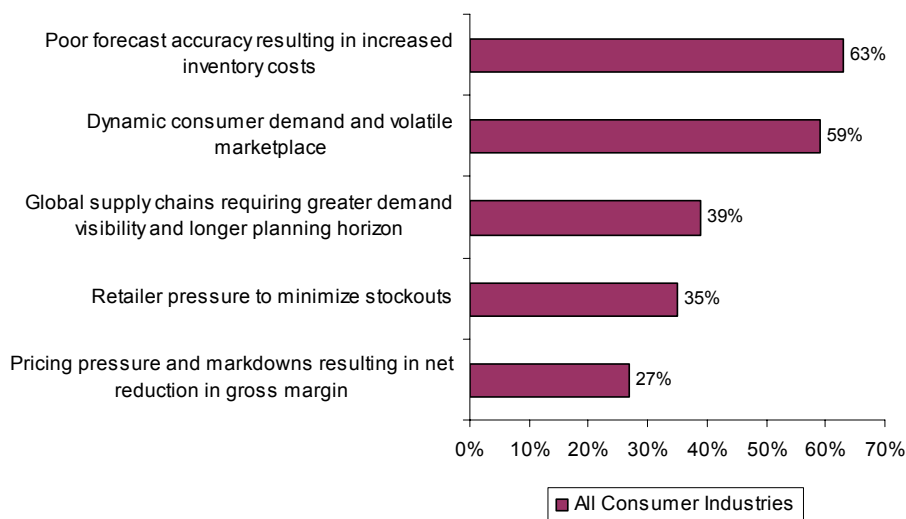
Figure 1. Management is Actively Re-evaluating Demand Management



Source: AberdeenGroup, November 2006

As Figure 2 shows, the top reasons companies are rethinking their demand management practices are poor forecast accuracy resulting in increased inventory costs and the challenges of mastering today's more dynamic consumer demand and volatile marketplace. The increasing globalization of supply chains is also spurring companies to reevaluate their demand management processes. Fully 58% of apparel/footwear and consumer electronics companies indicate that global supply chains are causing more problems.

Figure 2. Top Pressures for Improving Demand Management Processes



Source: AberdeenGroup, November 2006



Why Consumer Industries Are Refocusing on Demand Management

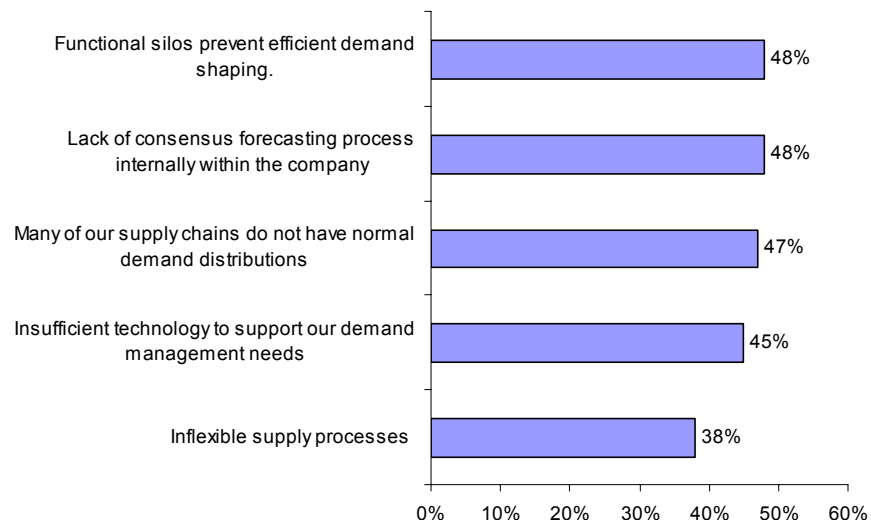
- A mid-size footwear manufacturer says “demand management is an important focus for us because of the need to reduce front-end inventory levels and improve marketing evaluations.”
- A small health and beauty aides manufacturer says “wide variations between forecasts and actual sales are forcing us to look into demand management-related process changes.”
- A major large food/beverage manufacturer says forecast errors are creating a ripple effect in downstream manufacturing and fulfillment.
- The director of supply chain for a large consumer durables manufacturer indicates that his company is focusing on demand management because it’s searching for improved margins in a price-compressed market.
- A large consumer electronics company indicates that it’s focusing on demand management because of its inability to align supply and demand as quickly and accurately as possible.

Barriers to Improving Demand Management

Figure 3 shows the top challenges supply chain executives face when they try to improve demand management processes. The top two barriers are: functional silos that prevent demand shaping and a lack of consensus forecasting within the company. These demand management challenges are consistent with the barriers companies face in improving their S&OP processes (See “[Technology Strategies for Integrated Business Planning](#)”).

The next two barriers are more interesting: Nearly half of companies surveyed report that they’re challenged because their supply chains do not have normal demand distributions, making traditional forecasting difficult. Meanwhile, 45% report having insufficient technology to support demand management needs.

Figure 3. Barriers to Improving Demand Management



Source: [AberdeenGroup](#), November 2006

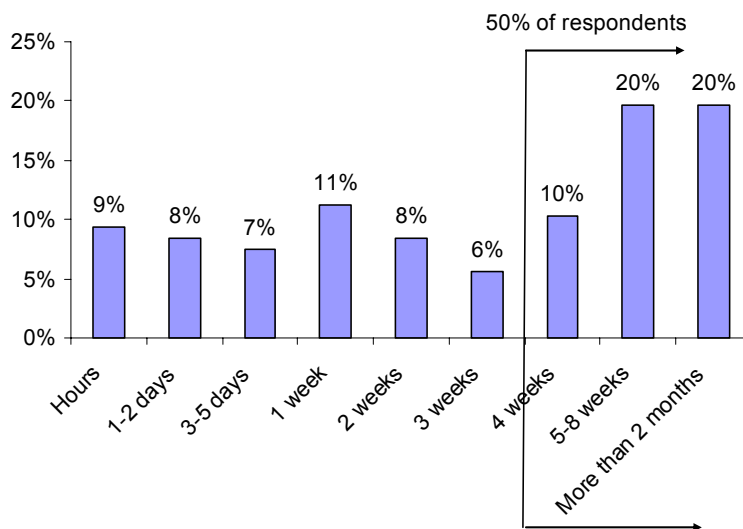


Wanted: Rapid Demand Sensing and Response

Aberdeen research finds that 50% of companies are reporting that it takes more than one month to sense changes in demand (Figure 4), which is unacceptable in today's dynamic business environment. There are significant opportunities for companies to gain improvements in top line sales, profit margin, and inventory levels through improved demand management practices. Companies with any of the following attributes should focus on rapid demand sensing and response:

- Costly safety stock levels to account for poor short-term forecast accuracy;
- Short-to-medium lead times for their products (one to six weeks);
- Promotion-intensive marketing strategies that require strong SKU-level forecast accuracy;
- A failure to have the right mix at the SKU level on retail shelves, which creates measurable losses in gross margin and sales;
- Looking to improve customer-service levels as well as smoother downstream manufacturing processes.

Figure 4. Time it Takes for Companies to Sense Changes in Consumer Demand



Source: AberdeenGroup, November 2006

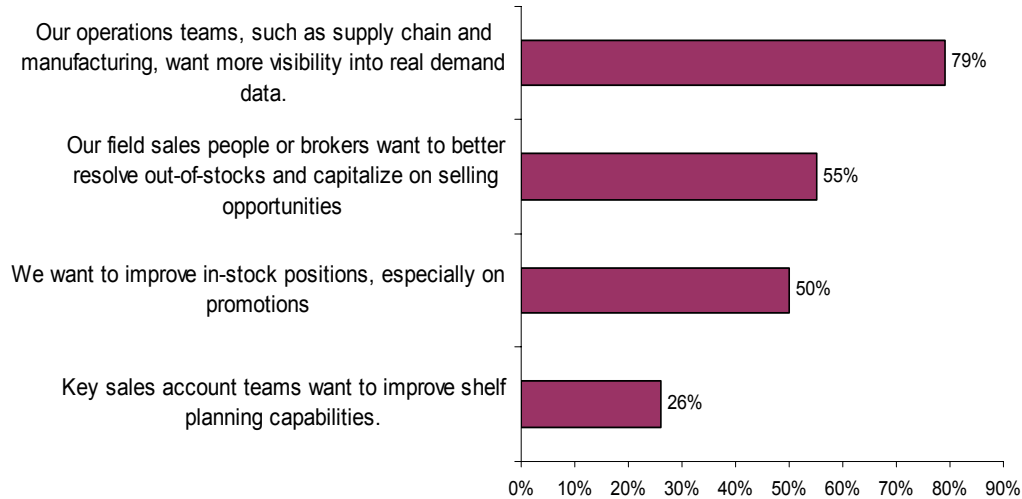
Figure 5 indicates why companies are acutely focused on the tie-in of better demand sensing and response with improved selling opportunities. The following are some of the benefits companies report as a result of improving their ability to sense and respond to shifts in consumer demand:

- Reduced out of stocks and increased sales;
- Improved short-term and long-term forecasting accuracy;
- Improved service levels;



- Reduced price markdowns due to having less excess inventory; and
- Improved production and operations planning for suppliers.

Figure 5. Why Consumer Companies Want to Boost Demand Sensing Capabilities



Source: AberdeenGroup, November 2006

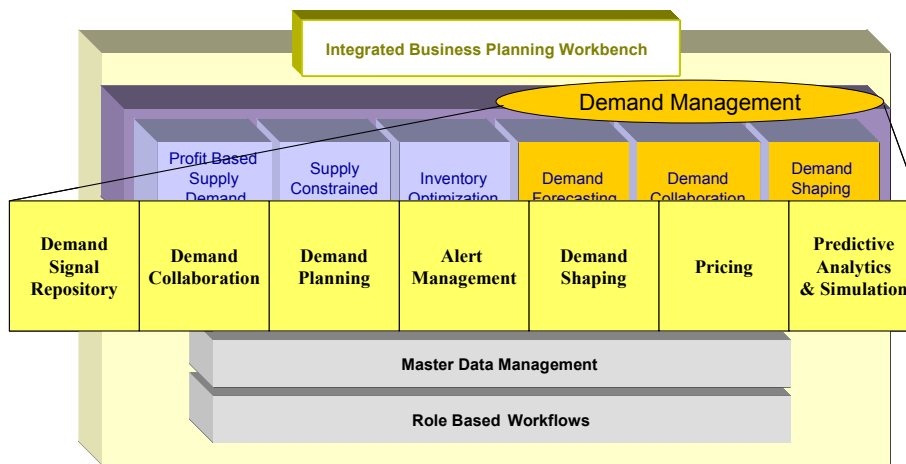
Seven Key Technology Enablers

Figure 6 illustrates the seven key technology enablers for demand management. For a full description of each, see [Consumer Industries Strategies for Demand Management: Sensing, Shaping and Pricing](#). A brief description is also provided in Chapter 3.

Each enabler can deliver significant value and help companies improve top- and bottom-line performance. There are exciting developments in demand signal repository technologies, short-term forecasting approaches, promotion planning, pricing, and retailer-supplier collaboration communities that are providing opportunities for consumer industry companies to better manage dynamic business conditions.



Figure 6. Technology Enablers for Demand Management



Source: AberdeenGroup, November 2006



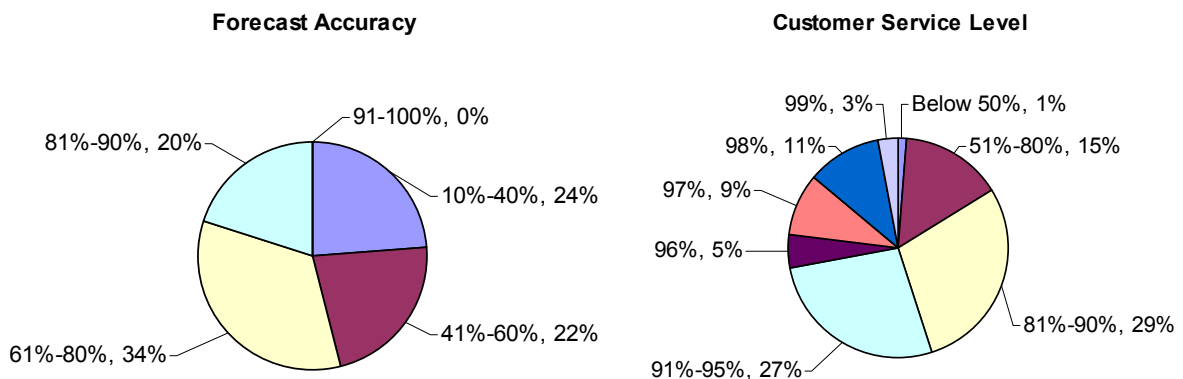
Chapter Two: Key Business Value Findings:

Key Takeaways

- Best in Class companies are achieving customer service levels based on customer requested date of above 90% and forecast accuracy at the product family level of above 60%.
- 67% of Best in Class companies report increased market share, compared with 30% of all other companies represented in the survey.
- Best in Class companies are 56% more likely to have improved gross profit margins.

As part of the research process, Aberdeen benchmarked companies on the following key metrics: *gross profit margin*, *forecast accuracy*, *customer service level*, *order-to-delivery lead times*, and *days on hand of inventory*. Forecast accuracy and customer service levels (Figure 7) were chosen to identify Best in Class companies because they represent the two key demand management goals: the ability to forecast demand better and the ability to fulfill demand better. Aberdeen defines Best in Class companies in demand management as those with a forecast accuracy of 60% or above (as measured at the product family level for the next three months), and a customer service level of 90% or above (measured based on customer requested fulfillment dates). Overall, 17% of respondents met the Best in Class criteria.

Figure 7: Forecast Accuracy and Customer Service Level Ranges for Companies



Source: AberdeenGroup, November 2006

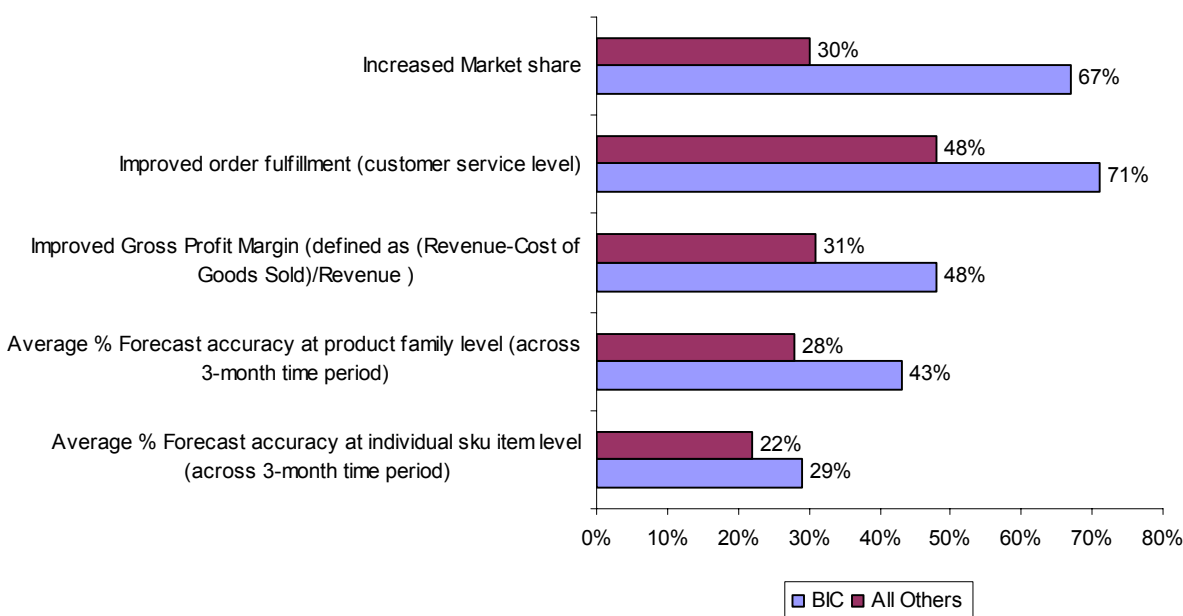
Best in Class Companies Perform Significantly Better

Best in Class companies have been able to obtain much greater improvements in performance from 2004 than their peers (Figure 8). This supports the conventional wisdom that better demand management results directly in better market performance.



- **Best in Class companies are more than twice as likely** to have increased market share than their peers.
- **They're 56% more likely** to have improved gross profit margin
- And, **Best in Class companies are 1.5 times more likely** to have improved order fulfillment

Figure 8. Performance Improvements Since 2004 of Best in Class Companies Versus All Others



Source: AberdeenGroup, November 2006

What Best in Class Companies Do Differently

Compared to their peers, Best in Class companies:

- Are more focused on continuing to enhance their demand management technologies: 74% of the Best in Class have provided recommendations to their management to **improve their demand management technologies** (versus 63% of all companies);
- **Are twice as likely** to use commercially available solutions for demand planning/forecasting; and
- Are **1.5 times less likely** to use spreadsheets or no systems.

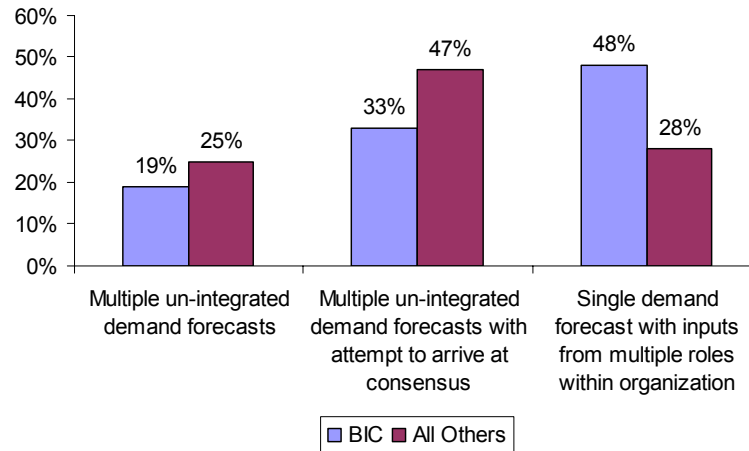
It's clear that technology plays an important role in demand management success. However, organizational strategies also drive the better performance of the Best in Class.



Single Number Forecasts

Aberdeen research finds that Best in Class companies are 70% more likely than their peers to have a single demand forecast with inputs from multiple roles within the organization (Figure 9). This contrasts with poorer performing companies, which are more likely to have multiple, un-integrated demand forecasts.

Figure 9. Usage of Single Number Forecasts



Source: AberdeenGroup, November 2006

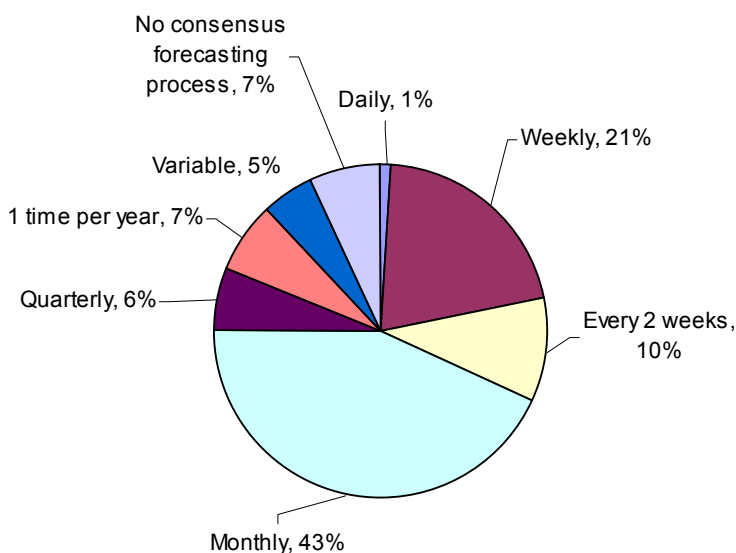
Best in Class companies often have a single demand forecast and their challenge is gaining more granular and accurate data to use this single forecast effectively. The lack of a single demand forecast is primarily an **organizational** challenge and **not** as much a technology issue. Engaging senior management to mandate a single demand forecast is the most successful way to address this challenge since resistance is almost always centered on organizational decision making power and performance metrics and reward systems. To gain this support, respondents say it's most useful to demonstrate the negative impact on customer service, inventory levels, and profitability that are the inevitable results of each functional area having its own version of demand forecast truth. **Aberdeen recommends the single-demand approach since it is proving to bear positive results.**

Frequency of Consensus Forecasting Process

Fully 60% of companies benchmarked forecast at a frequency of less than a month (Figure 10). This dynamic approach requires a rethinking of the **frequency** of forecasting from the all-too-often static monthly forecast to one dictated by the frequency of significant changes in the marketplace – increasingly, daily or weekly. P&G is an example of a company that performs short-term forecasting each day for the one-to-four week time period in addition to regular monthly forecasting.



Figure 10. Frequency of Consensus Forecasting Process

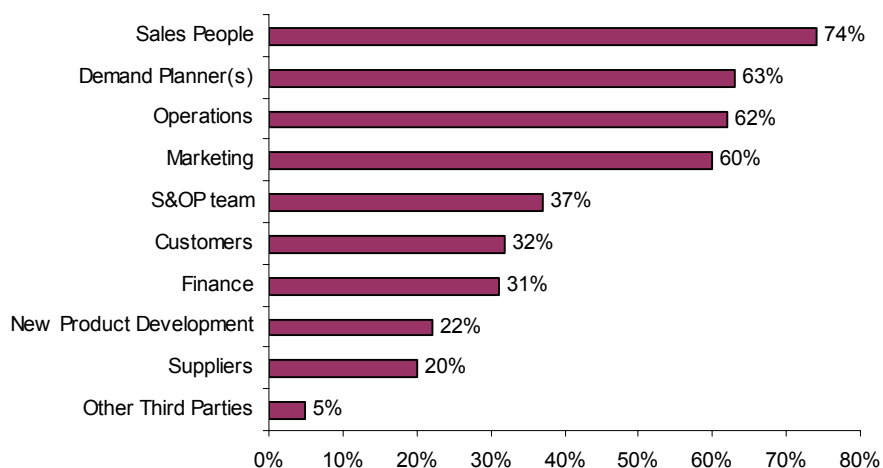


Source: AberdeenGroup, November 2006

Technologies such as pattern recognition and predictive analytics and simulation are emerging to support more frequent forecasting processes.

The biggest challenge in achieving faster frequencies of consensus forecasts is the number of participants involved in this activity (Figure 11). As can be seen, there is a need to incorporate the inputs from a wide variety of roles. This is why interdisciplinary teams are widely regarded as the most-effective approach to creating consensus forecasts.

Figure 11. Roles Involved in Consensus Forecasting Process



Source: AberdeenGroup, November 2006



Interdisciplinary Demand Management Teams

As Table 1 indicates, only about 19% of consumer industry companies have interdisciplinary sales, marketing, and operations teams that determine the best demand plans that synchronize with their supply chains. Consumer packaged goods companies are most likely to have these teams; consumer durable goods, the least likely.

Table 1. Interdisciplinary Teams for Demand Management

	Little coordination/consensus building across functions; unclear responsibility for final forecast	Informal alignment of marketing/sales/operations demand forecasts	Interdisciplinary marketing, sales and operations team determines best market demand plan and synchronizes with supply chain
Overall	26%	55%	19%
Apparel/Footwear/Accessories	27%	64%	9%
Consumer durable goods	38%	62%	-
Consumer electronics	38%	38%	24%
Consumer packaged goods	50%	19%	31%
Distribution	43%	36%	21%
Food/Beverage	42%	42%	16%
Health and Beauty Aides/Over the Counter Pharmaceuticals	30%	40%	30%
Wholesale	43%	29%	28%
Retail	42%	37%	21%
Other industries	26%	55%	19%

Source: [AberdeenGroup](#), November 2006

However, Aberdeen research finds that simply having these interdisciplinary teams is not enough. These teams need to be supplemented with technology enablers and enhanced use of demand-related data. Best in Class companies are winning here because they can leverage both process and technology to achieve the best demand management solutions.

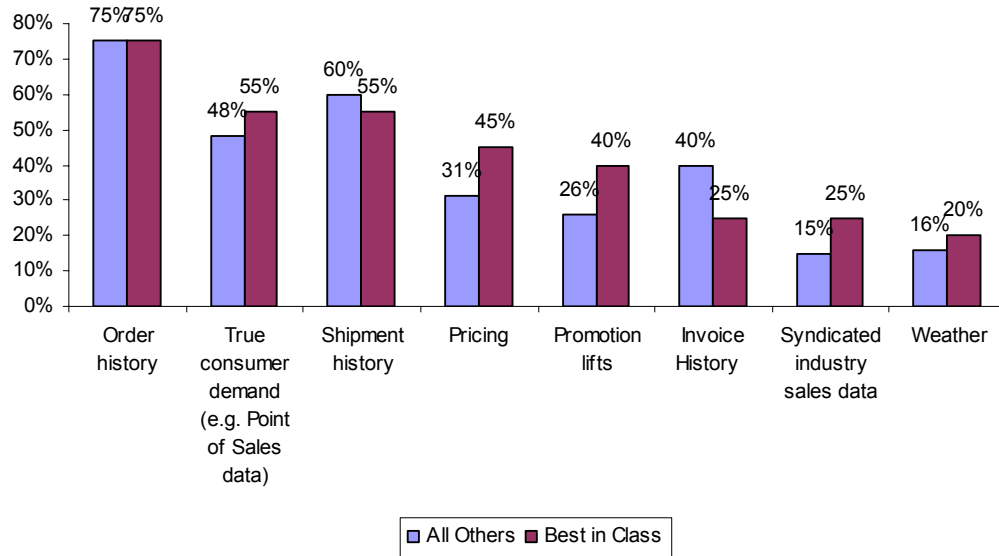
Data Elements Used Within Demand Management Processes

Figure 12 compares the data elements used in demand management for Best in Class companies compared to their peers. Best in Class companies are further along in using more advanced data elements in addition to technology.

- 45% of Best in Class companies use pricing data versus 31% of all other companies;
- 55% of the Best in Class use true consumer demand versus 48% of all others;
- 40% of the Best in Class use promotion lifts versus 26% of all others.



Figure 12: Data Elements Used in Demand Management Processes



Source: [AberdeenGroup](#), November 2006



Chapter Three: Implications & Analysis

Key Takeaways

- Companies using best of breed demand forecasting systems are **three times as likely** as other companies to have forecast accuracy rates higher than 70%.
- Companies using best of breed demand shaping (promotion optimization solutions) are **twice as likely** to have increased promotion/trade-fund effectiveness over the last two years.
- Companies using best of breed pricing solutions are **twice as likely** to have improved gross margins over the last two years.

The Critical Role of Technology in Demand Management

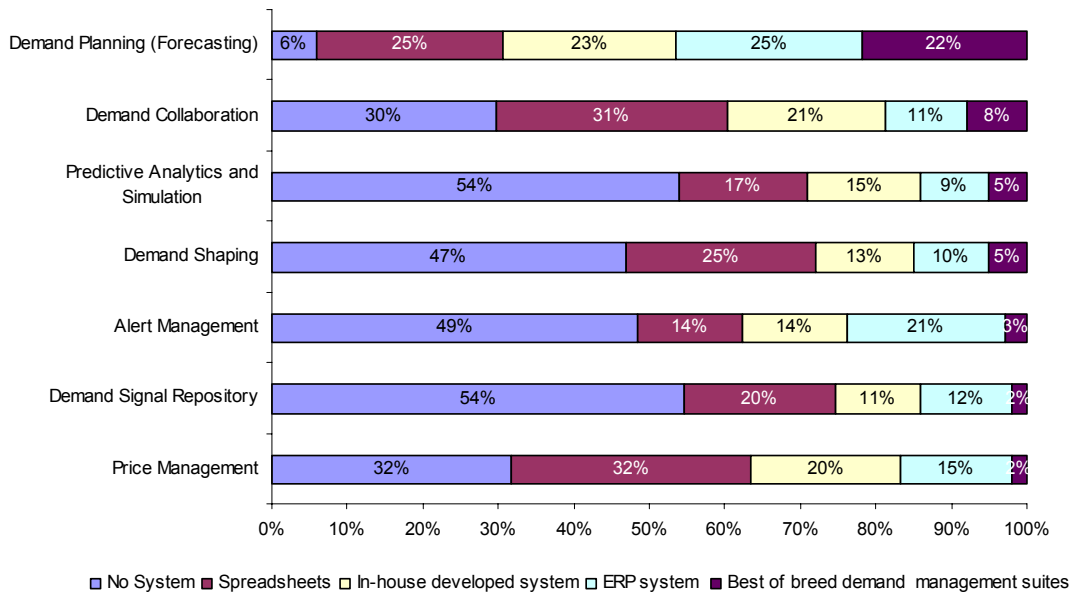
Improving demand management practices calls for a high degree of collaboration and visibility across the supply chain, as well as more sophisticated optimization. Companies that do not use technology to enable their demand management initiatives will not achieve the same level of performance. Spreadsheet methods are not sufficient in today's demanding environment because they are incapable of evaluating all trade-offs.

- Companies using best of breed demand forecasting systems are **three times as likely as** other companies to have forecast accuracy rates higher than 70%.
- Companies using best of breed demand shaping (promotion optimization solutions) are **twice as likely** to have increased promotion/trade-fund effectiveness over the last two years.
- Companies using best of breed pricing solutions are **twice as likely** to have improved gross margins over the last two years.
- Companies using best of breed demand collaboration solutions are **five times more likely** to be collaborating with at least one customer.
- **All** respondents using best of breed demand signal repositories and/or predictive analytics and simulation solutions are sensing changes in demand within a month, compared with only 40% of all other companies in the survey.

Despite the compelling benefits of best of breed demand management technology, a large number of companies are using either spreadsheets or homegrown custom applications for demand management functions. Nearly 50% of companies report that they are using spreadsheets or homegrown applications for forecasting (Figure 13). But these fragmented applications are not capable of modeling and managing demand effectively across the enterprise.



Figure 13: Technology Architecture for Demand Management



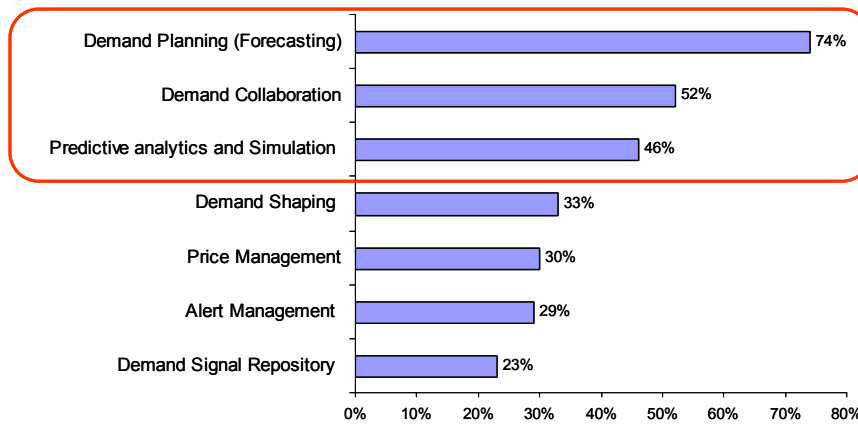
Source: AberdeenGroup, November 2006

Technology Investment Plans

Figure 14 shows the technologies that respondents' companies are planning to invest in over the next 18 months. Demand forecasting, demand collaboration, and predictive analytics and simulation are the top three areas of investment. The following are companies' spending plans for 2007:

- 33% plan to spend more than \$500,000 US in demand management technology.
- 51% plan to spend between \$50,000 and \$500,000.
- 16% indicate investments plans of less than \$50,000.

Figure 14. Demand Management Technology Investment Plans



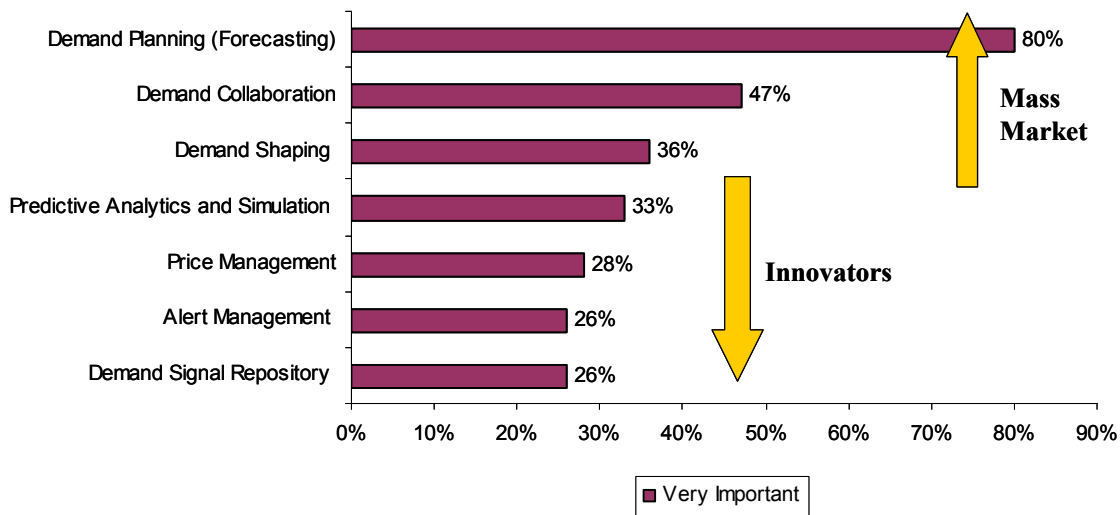
Source: AberdeenGroup, November 2006



Technology Enablers for Demand Management

A number of technology enablers are being adopted by the mass market, such as demand forecasting (80%) and demand collaboration (47%) (Figure 15). However, other enablers are still being adopted predominantly by innovators. In addition, large companies are 20% to 30% more likely to be adopting these technology enablers than mid-size and small companies are. Best in Class companies are most focused on improving demand management technology in the following areas: 76% are focusing on internal collaboration technology, 57% on technology that creates a tighter feedback loop from actual market activity, and 48% are focusing on demand shaping, pricing, and promotion management technology.

Figure 15. Technology Enablers for Demand Management



Source: AberdeenGroup, November 2006

Demand Forecasting

Demand forecasting deals with the technologies that help create statistical forecasts based on demand projections of past sales or shipments. Usually the first step in this process is removing the outliers from sales history or other demand data before creating the statistical forecasts. The next step is incorporating different kinds of data, such as sales history, invoice history, POS data, and promotion history to create the statistical forecast at either an aggregate product family level or at individual SKU levels. An important criterion for the technology in this area is to consider POS data as an input stream and to create forecasts out of it.

In recent times, newer paradigms have emerged that are based on pattern recognition and other sophisticated algorithms for doing near-term forecasting in highly dynamic environments such as apparel, food/beverage, and consumer packaged goods.



Godiva: Sweet Success with Demand Management

Godiva Chocolatier is a household name in the food industry, synonymous with high-quality confections. The company uses a demand management solution, SmartForecasts by Smart Software, which allows it to manage highly seasonal demands. Demand for the company's sweets is year round, but peaks at holiday times such as Christmas, Valentines Day, and Mothers Day. In 2000, Godiva's plants were underutilized, and the company lacked a dependable and organized demand forecasting and planning process. Godiva implemented the new forecasting technology that reflects the demand history for 10 customer types (large wholesalers, book stores, military, institutions/hotels/hospitals, mail order, etc.). The resulting baseline statistical forecasts the solution generated are distributed to product managers who can make manual judgmental adjustments based on additional market information they might have. The resulting consensus forecast drives the manufacturing planning system.

Demand Collaboration

Demand collaboration deals with the technologies that allow the various stakeholders of demand management – such as retailers, internal sales and marketing, and distributors – to be able to feed their version of demand into the process and **collaboratively** decide the consensus forecast.

P&G: Laser Sharp Focus on Inventory Levels

As a global manufacturer of consumer products, Procter & Gamble has a wide variety of supply chains associated with different product lines. P&G uses an existing ERP system that performs well for the medium to longer term (7 to 104 weeks). P&G was interested in supplementing this existing demand planning system by adding a real-time forecasting (RTF) module to improve short-term forecast accuracy for weeks 1 to 6.

Quantitative Benefits

Procter & Gamble is live on the RTF tool in Europe and plans to roll the software out globally over the next two years. The company has been able to reduce short-term forecast errors for the first week more than 30% and anticipates a more than 10% reduction in safety inventory. The greatest improvement in accuracy occurs within the first week of the time horizon with significant reductions in subsequent weeks.

Qualitative Benefits

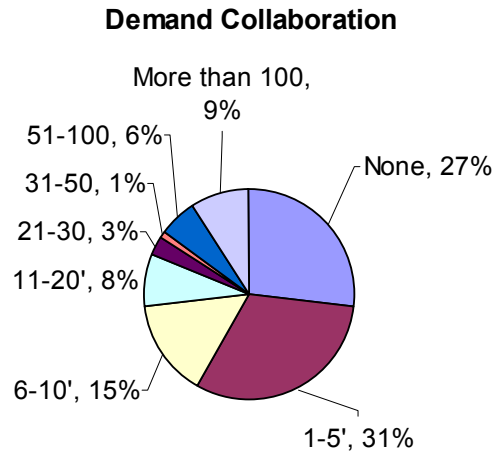
Qualitative benefits include: reduction in manual effort by the demand planners due to automation, focus on longer term issues by demand planners, and automatic recommendations of safety stock targets into the demand planning systems through the RTF system.

Aberdeen research finds that 73% of companies are collaborating with fewer than 10 customers (Figure 16). This points to the fact that the companies have not been able to scale their collaboration initiatives. Best in Class companies **overwhelmingly** (76%) identify working collaboratively with internal organizations and customers as the most critical element to a successful demand management program. By comparison, less than half of Industry Norm and Laggard companies place this level of emphasis on demand collabo-



ration. This collaborative approach is key to improving forecast accuracy and achieving early tactical alignment on new product introduction strategies.

Figure 16: Challenges with Demand Collaboration Scalability



Source: AberdeenGroup, November 2006

DDS: Mid-Market Distribution Demand Management Success Story

Diversified Distribution Systems (DDS), headquartered in Minneapolis, is a supply chain partner to large corporations with a specialty in serving large branded retail corporations, including some of the biggest retail chains in North America. Many of DDS's supplies are critical parts requiring high service levels. DDS sources product globally and operates a number of distribution centers across North America.

Problem:

DD has been growing rapidly, averaging a growth rate in excess of 30% per year. The company looked to a mid-market demand management solution to manage the complexity of growing products, customer needs, and expectations. Its customers expect just-in-time delivery on everything they need, including a broad array of products, highly seasonal items, and complex supply/event management requirements.

Solution:

DDS maintains a sharp focus on meeting its customers' service-level requirements through sensing changes in demand from retailers rapidly. The demand management solution allows DDS planners to manage their base-line forecasts as well as impacts of promotions/events such as new store openings into their forecasts. The planners maintain a high level of collaboration with their customers through planning the product mix and identifying the impact of promotions and other events on demand lifts.

Consumer Electronics Success Story

Collaboration is a key strategy to improving demand management, but not all retailer-manufacturer collaborations start with the retailer. A leading consumer electronics manufacturer decided to take the first step after being involved in an extremely successful CPFR collaboration with one of its customers. The initial collaboration enabled the manufacturer to move from a 'Tier 3' to a 'Tier 1' partner, and to improve forecast accuracy up to 20%. The manufacturer decided to adopt the same solution internally and offer it proactively to all trading partners, to harmonize its business practices and drive consistent, proven results across its customer base.



Demand Shaping/Promotions

Demand shaping deals with the technologies companies use to plan and manage demand stimulation activities:

- Channel promotions (special displays, in-store promotions) – creating demand lift through channel promotion of products;
- Incentives to sales through bonus programs, contests, etc.;
- Trade funds and retailer incentives – encouraging the retailers to participate in store-level programs to improve demand;
- Runout strategies – how to manage a product as it approaches the end of its life cycle; and
- Advertising and marketing – improving brand awareness and sales via advertising programs

Demand-shaping solutions complement demand planning and technology and feed demand lifts back to the demand planning tool. For instance, a supply chain planner at one of the largest beverage bottling companies in the U.S. indicates that it considers the following demand shaping events: event price, event date and duration, select calendar holidays, retail ad placement, and additional store location placement and display.

Shaw Industries

Shaw Industries is the world's leading carpet manufacturer, selling woven and tufted broadloom carpet in Canada, Mexico, and the U.S., and exports its goods worldwide.

Problem:

Because of rapid growth due to acquisitions, Shaw Industries could not react fast enough to changes in demand, which resulted in rising inventories in some cases and inventory shortages in others. This problem was exacerbated by the fact that Shaw operates in a fashion industry with rapid changes in styles and demand, especially during the front and back end of a product life cycle.

Solution:

Shaw Industries implemented a life cycle planning solution from a best of breed supply chain planning technology provider. The solution has improved Shaw's ability to forecast the launch-to-sunset of its products, and it has been able to identify the lifecycle curve of its products, including how fast they would catch on and how quickly their popularity would wane.

Results:

Shaw has reduced obsolete inventory 30% and improved its gross margins by more than \$1 million a year.



Predictive Analytics and Simulation

These solutions provide predictive analytics or simulation capabilities that can analyze large streams of RFID and POS data and provide insights to future events based on the analysis. For instance, these technologies can help identify when out-of-stock situations might occur.

Alert Management

Alert management is the component of the process that alerts demand managers of any abnormality anywhere in the demand chain. This component is also frequently called “performance management.” Examples of events that could be tracked and alerted on are: promotion effectiveness to plan, unplanned inventory shortages (or excess builds), and strong discrepancies between actual and budget in financial terms at some category level. These solutions help close the loop between the demand planning and demand execution processes.

Alert/Performance Management Example

A global market leader in the food industry embarked on a comprehensive demand management improvement program with a best of breed supply chain vendor that also provides ERP solutions. Its customers are quick service chain restaurants that demand very tight customer service level requirements. The company has a supply chain that spans seven plants and more than a dozen warehouse locations in 11 states.

Problem:

How to lower inventories while increasing customer service levels.

Solution:

The company implemented a demand/supply management suite consisting of forecasting, advanced planning and scheduling, and alert/performance management. The frequency of the planning process for the company is monthly; however, demand changes are monitored and updated weekly. The alert/performance management software is used to update the demand signals from the company's customers and any deviations from forecasts are highlighted and the schedulers alerted. Views are available to allow the schedulers to drill down into areas where deviations between forecast and actuals are highest.

Demand Signal Repository

This area deals with the technologies used to **sense, identify, and store** true consumer demand. Current forecasting technologies at consumer goods companies typically rely too much on shipment history or consumer order history. These are often misleading because they may not reflect actual consumer buying patterns at the retailer channels. The various inputs of true customer demand can include POS data and RFID. Demand signal repository technologies collect and cleanse the data and make it ready for feeding downstream optimization tools.



Chapter Four: Recommendations for Action

Key Takeaways

- Create customer-level forecasts for key clients.
- Focus on demand signal repositories to be able to store, analyze and cleanse true demand data. This will help you sense and respond to changes in demand faster.
- Focus on demand management technologies that support the ability to support short term forecasting, perform predictive analytics on stock out positions as these can bring impact on short term forecast accuracy and result in reduced stock-outs and improved sales.

Assessing Your Demand Management Maturity

Companies should use Table 2 to identify their maturity levels across the various areas within demand management. Areas in which your company is not Best in Class can be targeted for improvement.

Table 2: Demand Management Competitive Framework

	Laggards	Industry Average	Best in Class
Demand Management Process	<ul style="list-style-type: none"> • Multiple un-integrated demand forecasts; limited iterative market segmentation; monthly process 	<ul style="list-style-type: none"> • Single demand forecast; iterations limited to major shortfalls; high level segmentation; weekly-monthly process 	<ul style="list-style-type: none"> • Closed-loop, iterative single prioritized demand forecast; segmented causal based forecasting; daily-weekly process
Demand Management Organization	<ul style="list-style-type: none"> • No empowered interdisciplinary team; unclear responsibility for final forecast 	<ul style="list-style-type: none"> • Informal alignment of marketing/sales forecasts; S&OP process identifies major supply issues 	<ul style="list-style-type: none"> • Interdisciplinary marketing/sales team determines best synchronized demand and supply plan
Use of POS Data	<ul style="list-style-type: none"> • Limited market segmented price and profit data; minimal sharing with customers 	<ul style="list-style-type: none"> • High-level market segmentation; basic price/margin data available; shared forecasts periodically with customers 	<ul style="list-style-type: none"> • Detailed market segmentation price and profit data available; dynamic sharing of forecasts with customers



	Laggards	Industry Average	Best in Class
Demand Management Technology	<ul style="list-style-type: none"> Spreadsheet-based forecasting; transaction data access not automated; no use of price/demand optimization 	<ul style="list-style-type: none"> Use of lift matrices for key products; trend-based demand forecasting; little or no use of price/demand management technologies 	<ul style="list-style-type: none"> Pattern recognition, causal-based and “what-if” demand forecasting; some revenue/profit management and optimization solutions; common database
Demand Management Key Metrics	<ul style="list-style-type: none"> Separate non-integrated metrics for sales and marketing; minimal feedback of results; internal focused 	<ul style="list-style-type: none"> Sales and marketing metrics loosely linked; compensation aimed at revenues and volumes 	<ul style="list-style-type: none"> Integrated set of metrics across value chain; marketing and sales metrics include forecast accuracy, profitability

Source: AberdeenGroup, November 2006

Because of today’s more dynamic demand conditions, technology support is increasingly critical to designing and executing a successful demand management program. In particular, companies should seek solutions that let them manage demand signals through repositories, being able to shape demand better through promotions, and monitor the performance of the demand shaping program through alert management. Change management and metric re-alignment also need to be part of the program.

Below are recommendations for action based on a company’s current maturity stage. Whether a company is trying to move its demand management practices from “Laggard” to “Industry Norm,” to move from “Industry Norm” to “Best in Class,” or to remain at “Best in Class” status, the following actions will help improve performance:

Laggard Steps to Success

1. Drive to a single operational demand forecast across the supply chain
2. Put in place an inter-disciplinary marketing and sales team to manage the demand management process and support it with the right metrics and technology enablers
3. Move from spreadsheets to demand forecasting technologies especially for statistical forecasting for key profit regions and performing collaboration with key customers.
4. Focus on demand management and inventory management as two important facets of the same problem – namely, meeting consumer needs at the retail store. This could be done with an enhanced focus on S&OP process related initiatives.

Industry Norm Steps to Success

1. Expand demand collaboration with more customers to drive to a dynamic collaborative single demand forecast
2. Empower an inter-disciplinary sales and marketing team to manage the demand management process and outcomes with the appropriate technology backbone
3. Leverage your demand forecasting investment by adopting automated workflow and decision-making technologies



4. Create customer-level forecasts for key clients
5. Adopt events and promotions planning technology to manage demand shaping activities. Ensure that the demand lifts created by the promotion process is integrated with the demand forecasting process.

Best in Class Next Steps

1. Pilot short-term forecasting solutions to complement your existing investments in ERP or APS forecasting solutions.
2. Focus on demand signal repositories to be able to store, analyze, and cleanse true demand data. This will help your organization sense and respond to changes in demand faster.
3. Focus on predictive analytics and simulation applications in order to be able to identify potential out of stock situations and resolve them before they impact sales
4. Focus on pricing optimization solutions for those retailer customers willing to allow dynamic price adjustments.
5. Create events and promotions to manage demand shaping activities and ensure that the demand lifts created by this process are integrated with the demand forecasting process. Also ensure that there is an alert management platform in place to monitor the performance of the promotions.

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Appendix A: Research Methodology

In November and December 2006, Aberdeen Group examined the demand management procedures, experiences, and intentions of more than 150 enterprises in apparel/footwear, consumer durable goods, consumer electronics, consumer packaged goods, distribution and wholesale, food/beverage, health and beauty aids, pharmaceutical manufacturing (over the counter drugs), and other related consumer industries.

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

- What benefits in terms of both financial and operational metrics are companies getting through demand management?
- What technology enablers are identified by end users as critical to an improved demand management process?
- Where are Best in Class companies focusing their demand management technology investments?

Aberdeen supplemented this online survey effort with telephone interviews with select survey respondents, gathering additional information on demand management strategies, experiences, and results. In addition, the responses from 65 consumer industry respondents from a July 2006 benchmark report titled “Technology Strategies for Integrated Business Planning” was leveraged towards this report.

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

Responding enterprises included the following:

- **Job title/function:** The research sample included respondents with the following job titles: Senior management (CEO, COO, President, CIO, CFO) (15%); Vice President (13%); Director (23%); Manager (26%), and Staff (8%).
- **Industry:** The research sample included respondents predominantly from consumer industries. Respondents were asked to choose all the industries they were involved in.
 - Consumer Packaged Goods/Food/Beverage – 33%
 - Retail/Wholesale – 23%
 - Consumer Durable Goods/Consumer Electronics – 20%
 - Distribution – 14%
 - Apparel/Footwear/Accessories – 11%
 - Health & Beauty/OTC Pharmaceuticals – 9%
 - Other Related Industries – 33%



- **Geography:** 57% of the respondents were from North America. Remaining respondents were from Europe (20%) and Asia (18%).
- **Company size:** About 39% of respondents were from large enterprises (annual revenues above US\$1 billion); 43% were from midsize enterprises (annual revenues between \$50 million and \$1 billion); and 18% of respondents were from small businesses (annual revenues of \$50 million or less).



Appendix B: **Related Aberdeen Research & Tools**

Related Aberdeen research that forms a companion or reference to this report include:

- [*Integrated Price Management: The Key to Profitable Demand Management*](#); April 2005
- [*Technology Strategies for Integrated Business Planning*](#); July 2006
- [*Technology Strategies for Inventory Management*](#); September 2006
- [*Consumer Industries Strategies for Demand Management: Sensing, Shaping and Pricing*](#); Nov 2006

Information on these and any other Aberdeen publications can be found at www.Aberdeen.com.

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