

Turning the Assortment Vision into Reality

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EXECUTIVE OVERVIEW

Too often in today's complex retailing environment, the vision of the assortment strategy—along with the profitability it promises—fails to become reality. Perhaps that strategy encapsulates a directional heading toward more localized execution. Or perhaps it represents a more aggressive approach in getting the trendiest styles or the year's "hottest" items. Whatever the driver might be, when execution of the assortment strategy breaks down, certain undesirable conditions invariably result—stockouts, overstocks, presentation breaks, excessive markdowns—that decelerate inventory turns, bleed gross margins, and erode brand image.

Many retailers believe that lackluster execution against the assortment strategy is due to a failing in the assortment planning process. And, in some cases, this can be a contributing factor. But, most often, when stores fail to reflect the assortment vision, it's not because the vision itself was faulty, but rather because the plans break down as they are being executed, through the maze of all the merchandising decisions involved in delivering the right inventory to the right stores at the right time. The quantitative decisions made during the execution of the assortment vision can have a great impact on profitability.

This white paper discusses what is needed in order to translate an assortment strategy into a profit-maximizing reality, and it offers a path into an area of untapped opportunity—localized execution—which until now has been too complicated for tackling the challenges of traditional assortment strategies.

In today's retail environment, there are two key drivers to the financial outcome of season: the quality of the assortment vision and how that assortment vision physically presents itself in the store. When these two forces are working in concert, the results are quite compelling: customers reward the retailer with a strong increase in sales and revenue. Conversely, when the season presents disappointing financial results, the questions as to exactly why this was the case become difficult to answer.

Traditionally, the assortment plan has received the bulk of the blame for missed expectations, with the most commonly cited factor being a miss-read of the year's hot trends. In reality, however, the primary financial drag on the season is not the quality of the assortment strategy, but rather how that assortment is executed through the complex quantitative decisions related to buying, allocating, and managing inventory.

Throughout execution, merchants and planners must make thousands and thousands of calculations related to buying inventory and the logistics of delivering it to the store. Each of these decisions is based on an assumption or forecast of customer demand. Ultimately, these decisions can lead to only one of three possible conditions in the store:

“When confronted with an out-of-stock condition, 21-43% of consumers will make a purchase at another store, and an additional 7-25% will not make a purchase at all.”

- not enough inventory
- too much inventory
- just the right amount

— Sundar, Bharadwaj, Thomas W. Gruen, and Daniel S. Corsten, "Retail Out of Stocks: A Worldwide Examination of Extent, Causes, and Consumer Responses," Goizueta Business School, Emory University, 2002

Two out of three of these conditions represent failed expectations and margin erosion.

As a result, when the assortment vision fails to make the expected financial contribution, the fault typically lies not in the quality of the assortment vision—whether the merchant forecasted the fashion trends accurately and bought the right merchandise—but rather in the tactical quantitative decisions that were supposed to bring this vision to life in the store.

Whenever these decisions are made by some practice such as average-based planning, which obscures or simplifies the nuances of the problem, the results are usually suboptimal. The quantities allocated to a particular store are close, but not quite right. Size XL for a particular item stocks-out faster at one location than another. The case pack configuration leads to an over-allocation of one size to one store and an under-allocation to another. These are the minor cuts, none lethal in and of themselves, that in aggregate spell disappointment for the season’s financial performance. Because it is so difficult to point to any one specific “cut” as the cause of poor performance, external factors like the weather or the merchandise strategy typically receive the blame.

CASE IN POINT: HIGH STOCKOUT RATES ON PROMOTED ITEMS

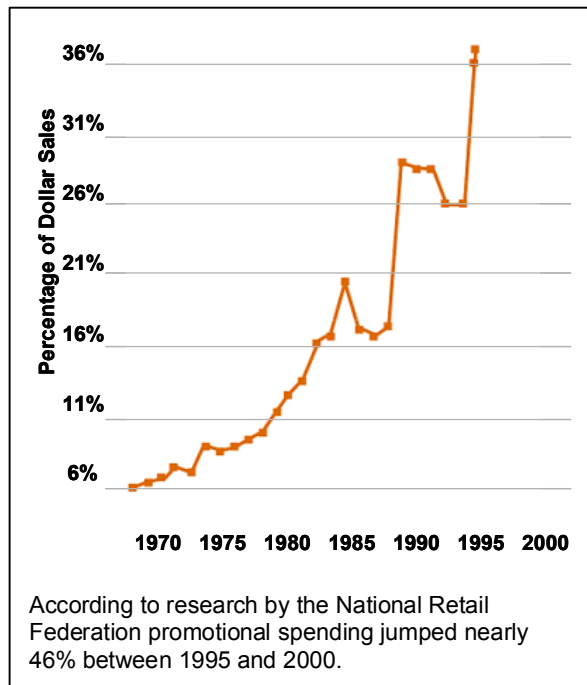
A deeper look at one aspect of executing the assortment—the interplay of promotions and in-stock rates—brings additional color to the financial importance of good assortment execution. According to industry studies, the out-of-stock rate for any one item is typically between 5 and 10 percent. However, for promoted items, that number jumps consistently to well over 10 percent.¹

Consumer responses to these conditions indicate that out-of-stock events are non-trivial issues. When confronted with an out-of-stock condition, 21 to 43 percent of consumers will make a purchase at another store and an additional 7 to 25 percent will not make a purchase at all. In aggregate, studies show that retailers are likely to

¹ Sundar, Bharadwaj, Thomas W. Gruen, and Daniel S. Corsten, "Retail Out of Stocks: A Worldwide Examination of Extent, Causes, and Consumer Responses," Goizueta Business School, Emory University, 2002

lose almost one half of the intended sales when consumers encounter an out of stock.²

Expensive as these out-of-stocks are, research from the National Retail Federation indicates that spending on promotions increased nearly 46 percent between 1995 and 2000 [based on most current data available]. Juxtaposing these three data points—out of stock rates, the consumer response, and escalating promotional spend—results in a disturbing picture. Retailers are spending more to bring consumers into the store, but when customers get there, high out-of-stock rates are compelling them to seek competitive alternatives. This is not a formula for success.



SIZE PROBLEMS—THE LEADING INDICATOR OF ASSORTMENT AND ALLOCATION CHALLENGES

Responding to these challenges, retailers are seeking ways to move to a more localized execution of their merchandising plans. These initiatives, whether they are regionalized pricing or regional store assortments, are designed to capture variances in consumer demand in local markets and to make every store the “perfect store” for that customer base.

However, as retailers delve into the area of below-chain execution—or at least track store and item performance more closely in preparation for this move—they are becoming acutely aware of symptoms of execution inefficiencies. Most often, these inefficiencies center around a broad class of conditions commonly referred to as

² *ibid.*

“size problems.” This term could refer to a number of particular circumstances, among them:

- Stock-outs in key sizes
- Broken presentations
- Overstocks of certain items in particular size runs
- Excessive markdowns needed to “clean up” inventory and meet seasonal transition dates

In reality, these “size problems” are not the real problems that need to be fixed. Rather they are symptoms of inaccurate decisions made long before the inventory hit the stores. What’s needed instead is to focus on the chain of decisions and the resulting conditions that lead to size imbalances—all in an attempt to uncover the root cause of the problem. Typically that decision chain looks something like this:

- Size problems in the store arise from the store receiving too much or too little inventory of a given size, or from inventory that arrives out of synch with the rates at which customers are buying goods,
- which was caused by allocations that did not consider the size-specific demand and the available inventory;
- which was caused by buy quantities, case pack composition, and receipt flow not aligning with customer demand;
- which was caused by a lack of understanding of the appropriate size level needed for different stores.

AVERAGE-BASED PLANNING PRODUCES AVERAGE RESULTS

Faced with the high degree of complexity required to answer many of these tactical decisions, retailers traditionally have fallen back on chain/class/size profiles based on historical size performance to inform size-level buy quantities. Too often, however, these approaches result in large size imbalances in local stores, which equate to either markdowns or missed sales, declining gross margins, and slower inventory turns.

When it comes to serving local market needs, average-based planning is at a disadvantage for three primary reasons:

- Chain averages obscure the unique selling opportunities at each store
- Planning based on class averages does not expose how merchandise attributes below class can drive sales
- Using raw history to make decisions can cause repetition of past mistakes

By using an “average” construct, the likelihood that any one store will have the precise size makeup it needs to satisfy demand is greatly diminished. Certainly, it comes as no surprise that average-based planning has weaknesses. Retailers have

Three Primary Disadvantages of Average-Based Planning:

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long recognized that by smoothing out multiple inputs from a variety of locations, they are by definition virtually surrendering the possibility of serving any one store perfectly. However, given that the ideal of crisp localized execution presents challenges of staggering decisional and logistical complexity, retailers, being practical, have had no choice but to employ an averages approach just to get the job done. “Close enough was good enough” became the rationalization.

By stripping away a great deal of this complexity through average-based planning, retailers have successfully avoided “analysis paralysis” and moved forward with running their operations. Perhaps the results were not ideal, but they were satisfactory at the time. But not any longer. As competition continues to ramp up, the game is changing. Retailers can no longer afford to sacrifice margin points in the name of simplification.

TIME, LOCATION, AND PRODUCT: CRITICAL DIMENSIONS FOR THE MOST PROFITABLE EXECUTION

To accurately serve the needs of each local market, retailers are moving to extraordinary levels of sophistication in the way they assess, analyze and act on store level demand. To do this successfully, retailers are seeking to understand how consumer demand will arise based on the following three key dimensions:

- **Product:** How does customer demand vary between products? From casual pants to capris? What’s the anticipated demand for each product in the assortment?
- **Location:** How does customer demand vary by location? What’s the demand for swimwear in Florida versus in Minnesota?
- **Time:** When will customer demand materialize? Should I flow all inventory to the stores upfront or stagger receipts out through the course of the season?

What’s important to note about these planning dimensions is that it is not optional to forego any one dimension because it is too difficult to plan across all three simultaneously.

Omit the time dimension and a retailer could send the right product to the right locations, but out of synch with demand, creating inventory surpluses or stockouts. Omit location, and one is left with an even spread across all locations, a recipe that has proven costly in the past. Omit rich information at the item level and retailers will be obscuring the very selling variances they are trying to exploit.

THREE PLANNING DIMENSIONS MANIFEST THEMSELVES DIFFERENTLY THROUGH MAJOR EXECUTION PHASES

In the course of translating the assortment strategy to the store, retailers go through four major phases—planning, ordering, allocating, and managing inventory through the season. Successful execution at any one of these phases requires retailers to answer some exceedingly complex questions at the intersection of time product and

location. These answers offer to be a major driver of profitability—or chief detractor—depending on their accuracy.

Some of the complex tactical issues are presented below by major phase of the assortment and allocation process.

Leading Specialty Apparel Retailer Deploys Assortment Execution to Allocate By Size More Effectively

For a leading specialty apparel retailer, cracking the code on the size challenge not only offered to add a few margin points; it was core to their business strategy as well. As part of this retailer's growth plan, it had chosen to broaden its assortment, keeping the same total inventory quantity, but diversifying its inventory portfolio. This strategy meant that it would carry significantly less inventory in any one customer choice (style – color), increasing the likelihood that presentations would “break size.” Unfortunately, this retailer's legacy practice of determining size need at the class/chain level could not inform store level demand.

To address this problem, this retailer engaged Oracle to take a deeper look at its historical sales data and derive an understanding of true size demand by store, capturing the customer's size preference by category/color for each local market. Using this information, Oracle enables creations of pack configurations that best meet the size-selling demand by store and determines the right composition of pre-packs and “eaches” that match local market demand. As the president of this retailer said, “Our goal is to improve customer satisfaction by ensuring that our customers find what they want, in the right sizes, and increase returns on our inventory investments.” Understanding size needs at the local level is the cornerstone of that strategy.

Planning

Objective: Once the high-level financial and assortment plans are set, create a detailed assortment plan that supports financial and merchandising objectives.

Required Activities:

- Extend the assortment strategy to identify item-level accountability for financial performance
- Determine sales forecast for each item in the assortment (which will later form the basis of an properly-sized buy quantity)
- Set promotion plans, including anticipated impacts on item sales
- Build receipt plan (time-based flow from suppliers to warehouse to stores) for each item in the assortment

Ordering

Objective: Generate orders by size and pre-pack that meet store demand and lead to highly efficient allocation.

Required Activities:

- Forecast size needs by item and store
- Build pack compositions that deliver lowest costs of inventory delivery while also meeting presentation minimums and store demand
- Translate receipt plan into order quantities

Allocation

Objective: Carrying forward the strategic intent of the assortment plan and sending available inventory to the stores to maximize sales and margin.

Required Activities:

- Send initial allocations that fill presentation goals and store demand, without creating potential overstocks
- Plan and manage holdback at the DC to fill in to store performance through the course of the season.

In-Season Management

Objective: Manage inventory and sales through the course of the season to maximize performance.

Required Activities:

- Reallocate in-season to meet demand
- Manage open-to-buy dollars
- Promote in season to drive traffic and manage inventory
- Clear through underperforming merchandise
- Cancel orders with suppliers

ASSORTMENT EXECUTION AND ITS ROLE IN TODAY'S RETAIL PRACTICES

In the face of pressures to find new opportunities and better ways to improve financial performance, a new breed of solutions is emerging. Called “assortment execution,” these solutions represent a range of analytically driven applications whose purpose is to simplify the complexities of planning and executing at the intersection of product, time, and location. By tackling this complexity, assortment execution enables retailers to adopt successful strategies.

Built on core competencies of understanding customer behavior and demand at the store-, SKU-, and week-level, these assortment execution solutions are providing retailers with the ability to tackle some the opportunity areas that have previously been too complex and too time-consuming to approach. Some of these are as follows.

Tailoring Assortments To Local Market Demand

Most planners would welcome the opportunity to customize their assortments to local needs. However, most have no choice but to rely heavily on averages and key item plans because they don't have the tools or systems in place to take local market needs into consideration.

Assortment execution allows planners to optimize assortments by location along three primary dimensions—product mix, product quantities, and product flow—enabling retailers to match consumer demand at the store level as that demand materializes through the course of the season.

Flowing Merchandise to the Stores

The challenge to flow planning is predicting how demand by market will unfold over the season and then creating an inventory flow that both satisfies demand and stays within the bounds of operational constraints.

Assortment execution solves this problem in two ways. First, it assesses the true demand of all merchandise over time, going beyond the traditional crutch of key

Assortment Execution Benefits

Financial

- **As much as 9% to 16% improvement in gross margin dollars**
- **As much as 8% to 14% reduction in markdown expense**
- **As much as 4% to 7% improvement in sales**

Merchandising

- **Store assortments that reflect the visions of the assortment strategy**
- **Cleaner seasonal transitions and fresher merchandise in stores**

Process

- **Consistent decisions focused on key merchandising goals**

item planning. Second, by understanding how demand will materialize by store by time, assortment execution enables retailers to stagger receipts—from suppliers to warehouses, and warehouses to stores—in pace with customer demand. It understands the impact of seasonality, price, low inventory, and promotion effects on demand at the local market-level and bases recommendations on real-world constraints such as presentation and shipment minimums, transit times, and safety stocks. This eliminates the need to take full receipt at the start of the season, reducing inventory-carrying costs and improving the retailer's ability to allocate in season to actual store performance. The result? A timely executed receipt plan that effectively manages cash flow, improves return on inventory investments, and drives increased turns.

Providing Continuity between Preseason and In-season

Planning shouldn't stop at the start of the season. The key to effective execution is allocating based on the assortment's intent with an updated picture of how demand by store may have changed since the purchase order was cut.

Additionally, selling seasons rarely go exactly as planned, and even the best assortment plans need to be adjusted in the face of unforeseen circumstances.

Assortment execution provides merchants with:

- Integrated assortment planning and allocation
- Continual comparisons of actual performance against plan
- Allocation recommendations that best match supply to future demand
- Early visibility into opportunities (such as rebuys) and risks (such as potential overstocks)

WHY ORACLE RETAIL?

Given the high visibility and high potential benefit of a move to advanced assortment execution, retailers would be well-advised to proceed carefully with their selection process by evaluating not only software technology (which must possess significant levels of scalability) but also the underlying expertise in retailing and analytic disciplines.

The pressures to understand customer demand at the level of product, time, and location places a premium on a vendor/partner's ability to deliver. Specifically, retailers should narrow their focus on a vendor's strength across three primary dimensions. These are as follows:

Analytic Expertise

To understand customer behavior and to offer high impact recommendations, it is critical to apply the highest-quality and most appropriate analytical approaches to a specific problem.

In reality, the quality of an application’s “science” is often difficult to evaluate, but the best indicator of quality is the track record behind it. Has this company worked with several dozen different retail data sets? Does it have a track record of success?

Retail scientists have long said that certain approaches that at first look promising for a specific problem can have dire consequences if applied to the wrong decision or merchandise type. There is no substitute for experience “operationalizing” analytics in actual retail situations in order to evaluate a vendor’s analytical quality.

Systems and Data Scalability

At a higher level, most commercial systems can accommodate standard data volumes. In retailing, it’s different. With hundreds of store locations and thousands of SKUs, retailing databases can quickly encompass trillions of data points, swamping traditional IT systems. It’s important to ensure that your chosen vendor can accommodate the unprecedented volumes while delivering the performance and responsiveness you need.

With over 16 terabytes of retail data under management, Oracle technology has scaled to meet the world’s largest data environments, including one customer using data from over 1,000 stores and 250,000 items.

Retail Experience

It’s essential that your vendor or partner understand the nuances and unique aspects of the retailing challenge. The foundation of all Oracle solutions is the ability to achieve customer-demand insight that yields a detailed understanding of customer demand at the chain-, region-, and store-level—and also by department, class, and SKU. Refined over the course of 20 years of forecasting demand in short-lifecycle environments, this demand insight enables you to understand, anticipate, and capitalize on market demand for each and every item.

CONCLUSION

The irony behind today’s challenges of localized assortments is that what retailers need most in order to reap margin points in the future is the same time-tested store-level intelligence that existed when they were just Mom-and-Pop stores: knowledge of what products customers want and need in the store, and accurate decisions about how much to buy and when to offer it. The only change is that the scale of today’s monolithic retail organizations, along with the veritable sea of data that they produce, has clouded this local market vision. It’s the role of advanced retail analytics and assortment execution solutions to restore this vision and allow retailers once again to treat every store as if it were their only store.



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