



Off the shelf // Smart retail strategies for competitive grocers

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The movement toward customer awareness is a growing trend in today's retail market. As grocers seek new business tactics, they will find that one of the most profitable strategies is creating a customer-driven supply chain. For grocery chains, the secret to success lies in the balance of two things – shelf life management and localized inventory.



This white paper will discuss how grocery retailers would thrive with a better understanding of the local variables that impact demand forecasts. It will also give guidelines of how to develop a real-time response plan for customer behavior.

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Strategies to drive grocery success

According to the Food Marketing Institute (FMI), the grocery industry generated \$547 Billion in the United States in 2008. The number seems large until you consider that the 2008 net profit after tax averaged only 1.84% (source FMI 2008 Report). Grocers participate in a highly competitive marketplace with complex timing issues, volatile product lifecycles, competing price wars and assortment choices.

On such slim margins, an inventory mistake in one category can totally wipe out the profit earned from another category. Likewise, an error in one store can erase the profit earned by a neighboring store. As a result, the quality of each inventory decision becomes that much more important, leaving no room for error in building an inventory strategy. Good inventory planning and fulfillment practices should emphasize the need to improve replenishment and allocation by limiting store generalizations and should be based on a strategy that localizes demand.

Scarcity and abundance

The concept of scarcity and abundance is based upon the fact that there will always be an inventory imbalance in retail operations. No matter how accurate forecasts are, how experienced a planning team is, or how much time spent with spreadsheets, there will always be scarcity (under-stocks) or abundance (over-stocks). In situations of 'scarcity,' grocers face issues like low customer service levels, higher commodity procurement costs and missed revenue opportunities. In situations of 'abundance,' perishable inventory will expire and erode margins by adding to a retailer's shrink. Non-perishable items can tie up cash, thus hurting liquidity ratios and access to capital. Balancing these two extremes of the inventory spectrum is a compelling reason for grocers to create strategies for allocation, forecasting, and assortment/range planning that take local shopper behaviors into account.

Local demand signals



There are a variety of demand signals that need to be monitored on a local level, these signals include: the time of day activity occurs, local events, sports schedules, weather, seasonality, social trends and local buying habits. To add to this already complex problem, this must be done at a SKU/store level in real-time to optimize profit from perishables. Grocers are one of the only retailers who have a legitimate need to plan inventory by the hour in order to avoid situations of 'scarcity and abundance'.

Departments like dairy, meat, produce, seafood, bakery, deli, etc. sometimes have a lifecycle that is measured in days (or even hours). The key to optimizing profit with this merchandise is timing. Integrating time-phased planning for fresh products requires a strategy and an execution that aligns store-specific assortments with localized signals of demand. In order for stores to execute on their strategy, they must have the ability to plan in advance for known demand signals and to execute quickly for signals that change on a day to day basis.

Local demand insight for perishables

When grocers have local demand insight, they can optimize their recipes and manage their yield in order to align their fresh produce to that localized need. They can manage orders based on transit costs and locality of suppliers, as well as understand local factors that drive the demand of specific product types. Grocers will notice immediate increases in margin with their fresh and perishable goods because they will be minimizing waste while achieving their availability goals.

Local demand insight for non-perishables

Because the majority of non-perishables are shelf stable with long code dates, the time-phased element to the demand, delivery and sale is related to carrying cost, customer service levels and the cost of money invested. The majority of allocation/distribution projects tend to focus on determining how much inventory to push to a given store. Theoretically these items can remain in the store until someone buys them or until they are marked down as part of a clearance initiative.

Non-perishables are typically divided into two groups, fast moving consumer goods (FMCG) and slow moving consumer goods (SMCG). FMCG are typically intended to be completely consumed by the customer (like paper towels, charcoal, pet food, etc.). SMCG are intended to be replaced someday, but on a far less predictable buying curve (like flatware, dishes, light bulbs, decorations, home décor items, etc.).

What is most important for FMCG is the replenishment strategy. FMCG are typically replenished based upon a combination of assortment, demand and time. Having local demand insight on how to most efficiently pack and move those goods during the replenishment cycle will help grocers reduce costs. Grocers usually do not mind carrying some additional inventory for FMCG because demand is usually high and sell through is complete soon after delivery.

Since slow moving goods typically remain in the store for a long period of time, demand is less important. However, these goods can cost a tremendous amount of money in inventory carrying costs and often end up eroding the overall margins of the store through markdowns and inventory reduction initiatives. The strategy for SMCG relies on having an efficient initial allocation that takes into consideration local transit vs. national transit as well as size and pack optimization.

Assortment and SKU rationalization

Assortment and SKU rationalization ensures that every product serves a purpose at each store. Grocery chains need to align their inventory with regional and cultural product preferences. Grocers will find that in some stores - natural products sell more rapidly; in others - cultural products perform best; while in some - discount items move quickest. To understand this level of SKU/store analysis in real-time with 46,000+ SKUs and over 500 stores would be impossible with spreadsheets. Grocers need the right technology to ensure they are able to get their order right.

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Metrics to drive grocery success

In order to adapt to those differing habits, grocers need to have the ability to turn transaction data into an action plan for the store and customer. Grocers must first consider what detail of transaction data is necessary and then compare the factors of demand to the conditions of the transaction.

In an industry where one mistake can wipe out hundreds of good decisions, shopper behavior and local buying habits are the most important metrics for grocers to utilize in their inventory decisions. The quicker a grocer can understand and react to this information, the quicker they will increase sales and service levels while reducing inventory waste.

5 tips for developing a real-time response plan for customer behavior:

1. Set objectives –

Each product should have a role with specific objectives that can be measured and executed to. A product may be in your assortment to drive traffic, to generate profitability, to present an image or to opportunistically acquire impulse sales. Each of these roles come with unique objectives that can result in different inventory requirements.

2. Shift focus –

While forecast accuracy is important, it is not the only way to improve inventory placement. If you are adjusting forecasts to achieve different inventory results, you're already reacting to this fact. Shift focus to finding the best way to utilize inventory to achieve goals while understanding forecast accuracy and variability are realities.

3. Waste not –

Get a deeper understanding of the impact of waste on your inventory decisions and act on it. Depending on margin, it may be more profitable to accept additional waste on some products, while other products would be better served accepting an occasional lost sale.

4. Get local –

There is no substitute for understanding product behavior at local levels. There are many ways to improve this understanding but consider those which have the most impact including:

Seasonality - If you're working to static, periodically generated seasonality profiles, you have a great opportunity for improvement.

Time of day - Did you stock out? When? What did that mean in missed opportunities for sales? Can you replenish again today? The more detail you have in answering these questions the more efficient you can make your inventory - especially for short life, short lead time merchandise.



Day of week - Does this location have a weekend traffic boost? Does that product respond to the pattern? Understand these interactions invariably leads to better performance.

Weather impact - Does this product react differently on cold days or wet days? What does that mean to demand? And how should that affect how stores are supplied? If I can ship it tomorrow and I know it's going to be hot, what's the right decision? We all know these realities exist, but have you been able to execute to the reality?

5. Revisit and rationalize –

Product behavior constantly changes with the changing consumer. The item that fulfilled its role last year or last quarter may not be doing so now. You need to be alerted to situations where this change is happening, and have a mechanism to understand and react to the way that impacts your offerings to customers.

New answers for grocery

The market is asking new questions of grocers - questions about customer preference - questions about the right amount of stock - questions about waste - questions about local products - questions about availability. The market is moving at an incredibly rapid pace that requires grocers to have an advanced awareness of every store in their chain. That awareness comes from a mix of store strategy and technology.

Quantum's system, Q understands and considers the impact of potential waste on every inventory decision it makes, and balances that with the availability that the retailer shows the customer. Q considers waste not only in historical sales, but converts it into true demand forecasts which utilize local demand to decide how much inventory to place in each location to meet financial objectives and fulfill the demand appropriately.

Q can also take in and analyze data as fast as the grocer can provide it - whether that's hourly, daily, or multiple days at once. Q uses this understanding of sales, inventory positions and stock outs to

create a very granular picture of demand and product behavior that allows Q to do a superior job of determining what the appropriate inventory support should be for each product in every store. Q projects that understanding forward to create a demand forecast and inventory recommendation going forward.

The system also has the smarts to take input of actual weather forecasts to understand the effect that weather has on sales, deriving much more accurate representations of local demand based on the influence of weather.

To place inventory in the most efficient and profitable way, merchants can define product objectives in simple terms with Q, which then evaluates those objectives by SKU and store for each inventory placement decision. This enables much more sophisticated, automated execution of SKU optimization - and superior demand insight to create rapid results.

Q is the answer for grocers with an urgency to align their inventory, reduce waste and gain consumer insight. When a merchant is able to fulfill customer needs at a local level - they will quickly become profitable and gain a competitive advantage.

Quantum Retail Technology, Inc.

The market is asking new questions... you need new answers.

Q answers the new questions facing grocers and retailers today with solutions that enable them to profitably buy, move and sell merchandise, solving the most complex and costly problems they face - **quickly and permanently.**

Q is the answer for: Assortment and Range Planning - Forecasting and Order Planning - Replenishment and Allocation

Every Quantum Retail customer has achieved 100% return on investment in less than 6 months. For more information visit <http://www.quantumretail.com>. Follow Quantum Retail on Twitter at <http://twitter.com/quantumretail>.