FINDING THE RIGHT BALANCE

JAMES GURNEY EXPLAINS HOW TO OPTIMISE INVENTORY MANAGEMENT WITH A HYBRID REPLENISHMENT FRAMEWORK
The challenge for organizations is to efficiently harness knowledge without creating excessive manual interventions to forecast models and other planning elements.

While retailers are making significant progress to control variability in their supply chains, most still have room for improvement when it comes to establishing a centralized model that incorporates local influence to ensure true customer centricity. This is especially true of retailers operating multiple banners or those with diverse product offerings. But what do we mean by customer centricity? Simply put, it means having the right product in the right place at the right price for a chosen customer segment. Store managers are important feedback mechanisms in this process. The challenge for organizations then, is to efficiently harness this knowledge without creating excessive manual interventions to forecast models and other planning elements.

To begin our analysis, the concept of centralized replenishment has been used for decades and is well understood. By taking a ‘push’ approach to suggest and place orders, retailers can benefit from consolidated buying and the advantages afforded by economic order quantities (EOQs) while driving smoother invoice processing. Further value is derived through greater inventory visibility across the system and improved product strategy execution at the stores. But what about the impacts of an automated ‘push’ system? In addition to the need for regular maintenance of forecasts and parameters, common issues involve both over and under stocking due to mismatch of demand and supply – a well understood scenario, but the impact of reducing localized input is not as clear. We cannot forget that local managers are well aware of local demand, shelf capacity and display requirements, which can be difficult, if not impossible, to capture in a centralized system. These factors can also make the maintenance of forecasts and parameters at a discrete level overwhelming, but the alternative of managing individual store assortments is also not realistic.

So how can localization be achieved efficiently? Traditional tools and techniques have included business analytics, clustering SKU rationalization and eligibility. Let's look at clustering as a popular example. Clustering protects store localization by grouping ‘like stores’ with common characteristics. Early clustering parameters included performance at the store and nested clusters such as store size, climate and ownership (corporate vs franchise). More recently, stores have become grouped by merchandise hierarchies whereby categories, departments and classes are assigned their own clusters of stores. Yet, two primary factors that continue to inhibit effective localization include the fact that clusters are based on historical performance and are typically non-dynamic, locked in for a season or similar time period with minimal review.

Given these limitations of existing clustering models, particularly for products with no history, store input could certainly be valuable. For a moment, consider a continuum of replenishment models that stretches from entirely store-driven decision making to complete centralization. A hybrid system lies somewhere in between these poles and involves a centralized system to generate orders, some being pushed directly to stores without any input, while others are subject to store review prior to order confirmation. This customer centric approach balances the benefits of a purely centralized model, such as order suggestions based on EOQs, while reducing employee workload (versus a purely store-driven model).

Yet, there are still weaknesses in this model as store input can be distracting, store reviews can be cursory, and centralized elements still require maintenance of forecasts and parameters. So then, how do you maintain an efficient enterprise that makes the most out of store manager time? Ultimately, decision makers must centralize certain items, typically those with consistent demand patterns, while leaving the replenishment system open to store input for more complex categories. The end result is a system well equipped to strike a balance between improved control and the flexibility of localization to deliver a more customer-centric solution across even the most diverse retailer.