Hitachi Consulting

Getting Started with Demand Signal Repository

Part 1 – Understanding the Benefits of DSR

Many consumer product companies have years of experience working with downstream point-of-sale data from their retail sales channel. But a Demand Signal Repository (DSR) approach represents a more optimal way of leveraging that data to achieve greater consumer insights and market responsiveness.

What is downstream data?

Point-of-sale (POS) data, wholesaler data (Electronic Data Interchange (EDI) 852,867), inventory movement, promotional data, and customer loyalty data – for use by decision support technologies (category management, account team joint value creation, shopper insight analysis, etc.)

In this two-part piece, we'll answer several key questions:

- **How is DSR different from the current downstream data analysis approaches?**
- **What benefits can DSR initiatives offer to improve efficiency and deliver ROI?**
- **How can you evaluate the potential benefits of a DSR for your organization?**
- **How can you begin to implement a DSR initiative?**

Many consumer product companies have been able to obtain useful consumer insights from downstream data that can be shared internally and with their most valued retailers. The process has some drawbacks and limitations, however, and few companies are deriving the full measure of value from downstream data.

What is DSR?

Demand Signal Repository (DSR) is the common term for the collection and use of downstream data in a systematic way that allows the data to be integrated with other relevant data, analyzed and used to improve demand planning, forecasting, channel inventory and replenishment, promotions, sales force account targeting, and more.

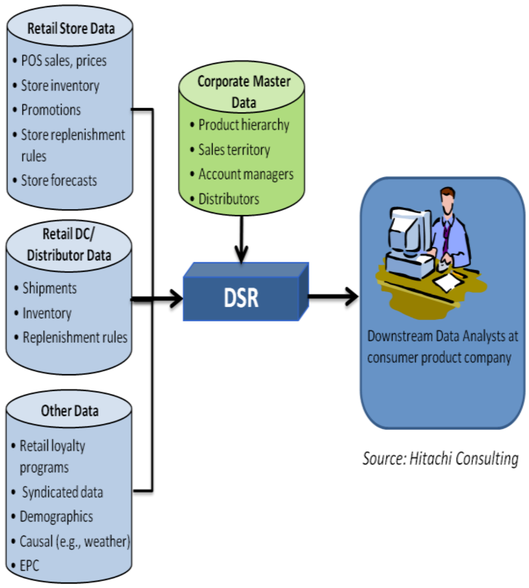
Source: AMR Research

Traditionally, the process of cleaning and harmonizing downstream data has been slow and tedious. Additionally, most of these initiatives are difficult to replicate, as they focus on a single business issue or a single retailer. For example, a company might implement a data analysis project to solve an out-of-stock problem for one retailer customer. Knowledge gained from this exercise can be applied to help mitigate out-of-stock issues for other similar retailers but is often too specific to apply broadly across a company's customer base.

In contrast, an integrated downstream data management and analysis approach – or Demand Signal Repository (DSR) – allows companies to address a variety of issues affecting sales revenue across all key retailer customers in a consistent manner.

The Value of a DSR Approach
The availability of downstream data is no longer an issue, but making sense of it in a meaningful way is. The evolution towards DSR in the consumer products industry is about using data in a more systematic and programmatic way.

DSR Integrated Data Sourcing



Source: Hitachi Consulting

In recent years, an increasing number of consumer product companies have begun to focus on building robust, integrated analytical capabilities with downstream POS data. A DSR adds a level of precision to a consumer product company's business intelligence processes that simply can't be achieved through analyzing shipment data (manufacturer-to-retailer sales) alone.

Downstream data (retailer-to-consumer sales) allows companies to get a much better read on actual consumer demand. First, point of sale data flowing into a DSR is typically more granular (in terms of level of detail) and more comprehensive (in terms of the number of retailer stores covered). Thus, it can be more useful than the shipment data or even the syndicated data that consumer product companies have relied on for so many years.

A large amount of the downstream data used by companies today is available only at an aggregated level, with limited store-level specificity. In addition, latency (time delay) severely limits the usefulness of the data, as companies receive averages or rolled-up averages that span a week or even an entire month of data, well after the fact.

In contrast with a DSR, companies can receive daily data on a daily basis from some retailers or at a minimum, daily data on a weekly or monthly basis from most of the largest retailers. This allows more granular and immediate analysis of sales trends and consumer response. This timeliness of data – frequency and recency – allows companies to analyze and understand sales activity almost as it happens: across key retailer channels; with core products as well as new product launches; with specific trade promotions and events; and even how key competitor activity is impacting sales. The depth and richness of insights derived from a DSR are significant.

Long-Term Benefits

So why should your company consider a DSR? How is it superior to the traditional methods for leveraging retailer POS data? Most importantly, the current approaches foster an environment of silos in the organization – multiple teams working in parallel, duplicating activities and addressing similar issues, but each within their own teams.

While companies can often get a quick win looking at downstream data for a particular account team, these results aren't repeatable. For example, if your company is going to make the investment to build an out-of-stock reporting solution or a mobile application for store performance measurement, why not do it in a way that can be scaled across all account teams?

If companies integrate, manage and attribute all of the data received, in the same way, then global reporting becomes possible. Your data analysts can lay reporting templates across different sets of retailer data uniformly, yielding new insights and patterns that enhance decision making. This will allow the company to scale solutions quickly and effectively and become more responsive to market demands.

Another factor to consider with regard to DSR is the way account teams typically attribute retailer POS data to make it more useful to the end user. Account teams take POS data and add attributes (e.g., organizational and product hierarchy data) that will enable them to slice and dice the data along different dimensions. When data is managed in silos and teams are left to attribute data on their own, the result is a set of fragmented environments that are difficult to coordinate at an enterprise level.

When the company needs to address more global issue like out-of-stocks, just harmonizing the different downstream data sets can present a huge barrier. With an integrated DSR approach, data attribution can be done in a consistent fashion across account teams, because data flowing into the DSR goes through a standardized harmonization and attribution process. This allows for consistency across retailers, data sets, channels, account teams, and then there's little need to "recreate the wheel" for each retailer.

An additional benefit of a unified DSR approach is that it fosters collaboration and sharing of "best practices" among teams. The sales teams focused on key retailers have many nuances that set them apart from each other, but overall there are more similarities than differences. For example, one account team might add 100 different attributes to the data from their retailer in order to analyze it. Other account teams may not currently be working with all of those attributes; nevertheless it can be useful to see how others are using the data to glean new techniques/insights. This is apparent when tackling large-scale strategic issues like trade promotion effectiveness, where it can be highly beneficial to look at the data across all the teams. Effective tactics can be replicated, yielding a more aggregated effect across the supply chain, instead of incremental improvement in discrete areas.

Conclusion

While some companies may be tempted to dismiss DSR as just a new flavor of data crunching, saying "we've been using downstream data for years," now is the time to take another look and enable your company to reap the benefits. The majority of companies who have already begun using a DSR are finding that the upside value is tremendous. A recent AMR Research study revealed that, among consumer products firms with a DSR, *58 percent saw improvements in on-shelf availability*, and many also noted *benefits of anticipating product category changes and required lower inventory levels*. Fully 70 percent of Consumer Products firms with an active DSR plan to increase their investment in 2010 to reap even greater benefits.

NEXT: In Part 2 of "Getting Started in DSR", we provide a set of steps to evaluate the benefits of DSR for your organization and take it for a test drive.

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