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SWIMMING UPSTREAM

THE ART OF LEVERAGING DOWNSTREAM DATA IN TRADE MANAGEMENT

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Swimming Upstream

The Art of Leveraging Downstream Data in Trade Management

By Angélique Moon, Consumer Goods Product Strategy Director, Oracle Corporation

Trade management processes have traditionally looked to retail data to answer one key question: “How did my promotions perform in terms of retail sales?” Understanding retail promotion performance is essential, but making this single insight the driving rationale for leveraging downstream data significantly short-changes on the value this information can bring to trade management.

Analysts such as Gartner and AMR have been vocal regarding the greater business opportunities possible through increased utilization of downstream data. Notably, a 2008 AMR study asserts that the greatest value attained to date by organizations leveraging downstream retail data does not even stem from retail point of sales or syndicated consumption data, but from utilization of the retail **inventory** data available from an ever-growing number of retailers.¹ Then, beyond the variety of retailer data points available, there are the wider realms such as distributor/wholesaler, demographic, consumer, and shopper data to consider.

The application of downstream data and the demand signal insights gleaned from it offers the unique opportunity to elevate each aspect of the trade management process. It enables an evolution from merely *evaluating* the impacts of lost shelf placements, missing displays, and incorrect shelf pricing to *sensing* the potential threats and actively *resolving* them.

To achieve these goals, it is important that we remember that while measuring activities in terms of retail performance is important, it is only a portion of the total picture. For the greatest business impact, we need to redefine how we manage promotions, incorporating several key steps:

- Use downstream data as the basis for planning, deriving forecasts from historical performance
- Generate insights from that data to drive specific in-flight retail promotion execution activities
- Leverage store level compliance details to determine settlement and manage non-compliance
- Finally, use the data to perform post-promotion analysis and close the loop to inform ongoing planning.

¹ Lora Cecere, AMR Research: *The Opportunity for Demand Signal Repositories in Consumer Products*, October 2008



LNM Foods is a manufacturer of packaged ready-to-eat meals sold in major grocery and mass merchant chains. They have taken advantage of the strong recent market trends in their category to gain incremental placements with several of their key customers and are driving the new placements with significant investments in trade.

LNM Foods's largest retailer has launched the new items with both consumer advertising and in-store end-aisle display support. The launch is performing well above forecast (see new causal impact on page 7), and as a result they are now out of stock on two key promoted items and running dangerously low on three more.

In support of the launch, the LNM Foods team has been closely monitoring the in-flight performance of the promotions, leveraging the retailer's daily sales and inventory data to gain near real-time shelf insights. The team noted the dangerous stock issues and promotion forecast accuracy trend and immediately expedited stock drops to resolve the inventory problems and eliminate the potential for lost sales due to stock out.

This quick replenishment action not only made the promotion more effective, it had lasting impact to the forecasting, simulation, and optimization capabilities of both the retailer and LNM Foods, by revealing the true performance of both the items and the promotion.

With ongoing feedback from downstream data, we can move beyond simple post-promotion effectiveness analysis to enabling true closed loop Trade Management. This is a significant step towards enabling a more demand driven organization.

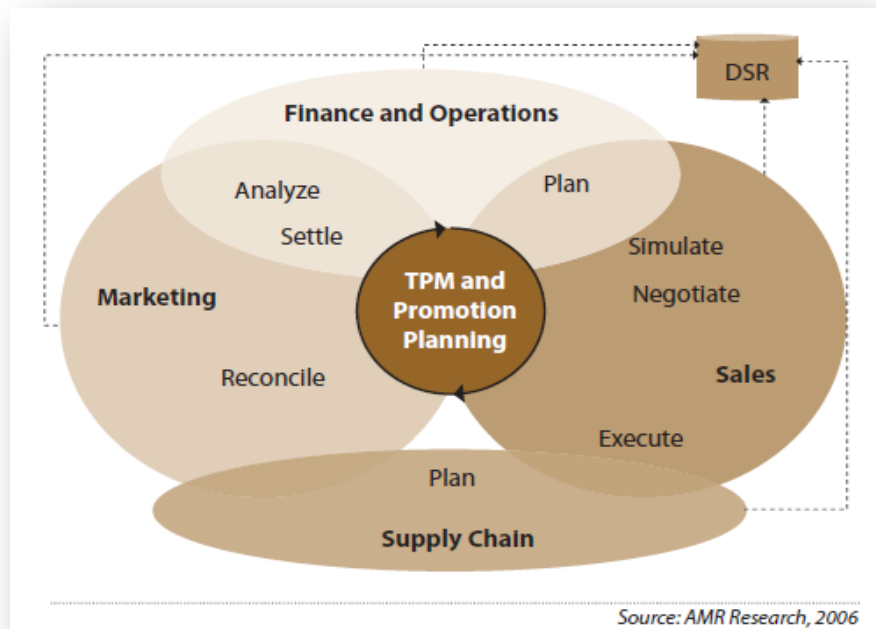


Figure 1: AMR Research, Closed Loop Trade Promotion Management diagram, showing the role of downstream data (i.e. “DSR”, the Demand Signal Repository)

Use Downstream Data as the Basis for Planning

To evolve from good planning to great planning, customer teams need the insights to answer two key business questions:

1. What has really worked before – for my customer, for my brand and products, for my consumers and shoppers?
2. What is different now – and how will that impact my plans?

What Has Really Worked Before?

The first vital step is to discover what has historically helped or hindered our customer, category, market, etc in achieving targeted business goals.

Several common elements have been found to drive performance for most consumer brands:

- **Nature of the event/tactic:** Both predictive applications and syndicated data providers tend to focus on consumer response to different delivery vehicles as a defining attribute of event performance. For example, combining an ad placement with a temporary price reduction will garner a different consumer impact than running the ad without pricing.
- **Timing of the event:** This has differing impact depending on the brand/product, notably trending for seasonality. For example, candy trends significantly higher at holidays, cough/cold remedies at flu season, and soups in colder weather/climates.
- **Consumer shelf price:** Not all predictive applications can manage this as a distinct attribute, but shelf price has a distinct and measurable impact on shopper response to the promotion.

These elements, though, form only the basis of predictive promotion trending. By directly mining the performance data, we can identify the elements that most directly affect success and failure of our specific events and products. Shopper profiles, store hot spots (from traffic pattern analysis), weather patterns, socio-economic indicators – there are many factors that play into performance at retail. For some consumer products manufacturers, this list may expand to include niche indicators. Consumer electronics manufacturers, for example, may be influenced by elements like housing



Corporate Marketing at LNM Foods regularly evaluates the success (and failure) of both corporate and trade marketing activities, based on the historical data available. Through this process they have gained key insights into such elements as minimum promoted price, SKU response to promotion, and brand tactic effectiveness.

For a pending product launch, the Marketing team evaluated the historical performance of Sales & Marketing tactics across a variety of levers including the brand profile, the target shopper, consumer media response rates, and tactic response of like products. As a result, they decided to create a trade marketing event offering the strongest tactic combination for these products. This event is backed with incremental brand funding, and the event guidelines align the timing to best capitalize on the corporate advertising activities. The event is available to the account teams through their planning tool, and thus far three of the top five retailers have added it to their trade plans.

starts and building permits. Armed with the specific elements that have the most impact for our business, we will be in a significantly better position to construct effective promotion programs.

Identifying these insights is a tremendous step, but it is by no means sufficient. Many organizations have similar information in a carefully compiled and fact checked binder that sees only little and inconsistent usage. To enable great planning, these insights must be embedded directly into both our planning process and the tool(s) we use to support that process. In particular, we should drive these insights into:

- Causals to help reinforce the healthy results
- Thresholds to help reduce the unhealthy results

What is Different Now?

The second key differentiator for great planning is the ability to quickly adapt to key changes in the factors that influence behavior and success at retail. This is a vital extension to the intelligence we generated by initially mining our data. Retail data and consumer trends are dynamic, and our trending and predictive analytics need to keep pace.

Once a stable set of drivers is identified, it is likely to remain relevant for multiple years. Periodic evaluation is sufficient to see if any new elements should be tracked or if any elements have lost their relevance to performance. The specific causals and thresholds derived against those drivers, though, may change quite frequently. A good predictive engine will consume the various elements of relevant downstream data (e.g. retail sales, inventory, display, demographic, weather, etc) and will actively discern trends and recast these causals as new data becomes available.



The LNM Foods Corporate Marketing team mined historical consumer performance for trends across all possible causals. Clustering analysis exposed a strong influence from weather patterns on the rate of sales at retail. Evaluating the resultant trend in combination with consumer panel feedback identified a significant opportunity for the ready made meals during foul weather, when consumers are likely to desire the quick convenience.

With this causal defined, the planning tool has just detected a significant weather impact on current promotions in the Northeast. Given the continuing weather pattern and the significant trend, there is reason to suspect continued outperformance and an alert has been raised to both the account teams and the internal supply team.

Generate Insights to Drive Specific Execution

Management and planning are not synonymous, and a good plan executed well will outperform a great plan executed poorly. Yet trade management processes often leap from planning to measurement, with perhaps a single external step noted as a nod to execution. This underestimates the complexities of execution at retail, but more importantly it shortcuts the opportunity offered by success in managing this aspect of the process.

Underscoring the importance of execution to promotion performance, a December 2008 IHL Group study found that almost one-fifth of reported consumer out of stocks are due to promotion mismatch, defined as reasons including a “mismatch in the price or offer between the online or promo price and that found in the store.”²

WHY DO CONSUMERS EXPERIENCE OUT-OF-STOCKS?

Why an Out-of-Stock?	Grocery/Food	Home Improvement	Consumer Electronics
Empty Shelf	27%	24%	24%
Stock, with No Help	16%	19%	17%
Stock, with No Access	16%	17%	17%
Promo Mismatch	18%	18%	21%
Other	23%	21%	22%

Figure 2: IHL Group, Why Do Consumers Experience Out-of-Stocks table, illustrating consumer perception of reported store out of stocks

There are historical reasons for the separation of execution from the planning and measurement aspects of trade management, many of which stem from a lack of transparency and control on the execution at retail. To this day, retail execution is frequently managed by a separate department or perhaps even an external organization (in the case of brokered sales teams). Additionally, performance evaluation has historically been an arduous process requiring that an analysis team manually pull together disparate pieces of information from various sources – particularly syndicated POS data providers and clearing houses. The effort involved dictated that only the largest customer teams would receive such attention – and that performance results and evaluation came well after the event was over.

²Lee Holman and Greg Buzek, IHL Group: *What's The Deal With Out-of-Stocks*, December 2008

This is perhaps one of the most significant benefits to be gained from the retail data revolution. With the daily store level data now available from key trading partners, manufacturers can evaluate performance as of (at minimum) yesterday. That is a tremendous step forward – but it is purposeless unless the insight drives action.

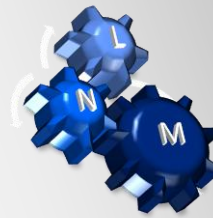
The steps are conceptually simple, but rich in complexity to implement:

- **Establish performance benchmarks**

It is impossible to measure without a yardstick. Start with the values planned in generating the promotion, but allow for some variation. Consider whether benchmarks should be uni-directional or bi-directional. For example, it could make sense from a promotion performance perspective to raise alarms only if volume/revenue performance is under forecast. Thinking to the full impacts, though, perhaps a significant trend over forecast should also raise flags to ensure that there is sufficient stock available to handle the increased demand and/or believe that it will net out within the promotion period. For each attribute to be tracked, then, begin with the planned promotion forecast values and establish acceptable variances and the directionality of the measure.

- **Gather, measure, assess – and alert**

Every piece of this step should be automated for the customer team. Pushing this work on the teams and analysts is non-value add to the organization. The algorithms exist. The mathematics are achievable. The technology is capable. We should automate the delivery of the report and devote our energies to the interpretation of the results and determination of the follow-up actions needed.



LNM Foods has recently signed a contract with a major sales broker to manage in store execution for their top five customers.

The daily outlet data for these customers is evaluated with exception detection routines, mining for potential issues. In the latest data, several key out of stock situations were identified at the second largest retail chain, which root cause analysis indicates stem from incorrect inventory counts.

As a result, a new retail activity was generated calling for a shelf audit and forwarded for scheduling. Given the projected severity of lost sales impact (due to the current promotion activities), the audit activity was assigned a high weighted priority to drive scheduling prioritization.

The scheduled retail activity is forwarded to the broker firm for execution and the ultimate results brought back into LNM Foods, where they can be used in measurements for both account compliance and broker effectiveness.

- **Turn insight into action**

Up to this point, everything has been informational. It is valuable and insightful information, but still simply information. The truly vital step is to actually **do** something with it. Establish action plans for the various exceptions that can arise – then strive to automate them.

Leverage Store Level Compliance

The act of managing compliance has essentially become an art backed by conjecture, extrapolation, and in the best case some firsthand knowledge of activity. An oft-attempted method for influencing compliance is to link it through to settlement policies. The reality of this practice often falls far short of expectation, though, given the difficulties involved in measuring and managing compliance.

Those best at managing compliance have established requirements for elements that can more easily be tracked – for example a manufacturer may require that copies of ad placements must be received for validation. Compliance for non-feature based event tactics then shifts back toward the realm of art even for these vigilant trade marketers. This is another aspect of trade management where downstream data insights add considerable layers of capability:

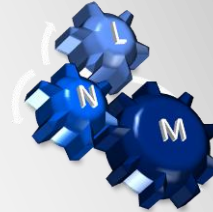
- Activity on the selling floor is of course the easiest place to assess promotion performance. Evaluating the uplift received during the promotion time period and tracking that measurement against the forecast provides an indicator of overall event performance. It misses many subtleties though, and offers very little by way of guidance. If the event is not performing as expected, how do we know what is wrong? It may indeed be a compliance/execution issue, but it could also be impact from competitor activity, general market behavior (e.g. impact of the market's economic health slimming wallets), or even simply that consumers do not find the promotion compelling. Sales performance is certainly an important metric, but it does not give us much to work with in deciding how best to ensure success at retail.
- We can immediately improve on the value by combining retail sales with inventory and sell-through patterns to assess whether current behavior warrants attention. The addition of shelf/display audit information from our (owned/brokered) retail sales force enables a significant advance in assessing execution. This information is not available in all cases, of course, given the expense of having personnel touch each outlet. Many times though, there is data available in the organization, but it is held in a separate data store and used only for management of sales field activities and personnel. This is vital information, but only when considered in context. It should be brought in alongside our retail demand signal data, where it can be leveraged for both in-flight promotion checks and ultimate compliance – as well as

feeding category management, SKU rationalization, assortment planning, and other key organization goals and processes.

- In some cases, we may even be able to receive information from the retailer's promotion calendar as part of our retail data feeds. This provides new layers of capability for comparative analysis – tracking the intent to execute by store and then layering on all of the above elements to track the actual execution.

When we combine these varied sources of data, we have a relatively granular view of what is happening in those stores on our items. We can leverage that depth to evaluate aspects like performance and lift trends, price compliance and sensitivity, and shelf and display placements. This is the richest compliance data ever available to the account team.

Again though, it is not enough to simply measure performance – to really impact the business we need to **influence** it. By monitoring compliance on an on-going basis, we can identify and resolve issues early. For example, if we know while the promotion is running that we are not getting the ACV% participation we agreed to in negotiation, then we can act on that measurement. We can turn those insights into action and get the event back on track.



Contrary to the trend for the current LNM Foods promotions, daily exception monitoring has identified an absence of sales within a key account.

Root cause analysis shows that all stores served by the southwestern distribution center never received the product and displays to support the event. The displays are still at the distribution center, and the product appears to have been transferred to the northwestern distribution center for allocation in the northern markets. These supplies are being replenished based on earlier activities, but the account team needs to follow up to ensure the displays are sent to store to meet up with this new inventory. An alert is sent to the Key Account Manager to ensure supporting actions are taken.

Perform Analysis and Close the Loop to Planning

We then finally arrive at that common starting point: post-promotion analysis. Of course, every preceding step has involved analysis as well, because business analysis pervades today's planning and management processes.

Applications have been slow to catch up to this point. The top promotion management applications have crossed the technical divide to combine transactional promotion tracking with at least core elements of analysis. Most are bringing back only planning account level information, and largely in terms of straight sales performance. There is then a new jump to be made in terms of bringing the richness of these retail demand signals into context within management of individual promotions.

With this information embedded directly within the promotion and enabling the new paradigm of pervasive analysis, account teams can manage the full life cycle of promotions: from internal conception through customer proposal and approval, into and through execution and any needed course-corrections, and straight to payment and close. At this point, the process step reserved for evaluation becomes almost equally about a) evaluation of the promotion and b) evaluation of our interim assessments of that promotion. Forecast accuracy finally gains a meaningful place in evaluation criteria, and can be turned to inform future planning.

Of course, we should be evaluating not just in terms of sales impact on the promotion, but for profit and downstream impacts as well. For example, assume that a promotion was drastically under-forecast and we caught it in-flight and rushed product to the store in order to meet burgeoning demand. One might consider this “a good problem to have”, but it is still a problem. Traditional means of evaluating the promotion – and of compensating the account manager – would note only that the promotion exceeded forecast and it would thus be judged a success. That rush shipment, though, likely had impact on logistics scheduling, may have pulled product that was designated for delivery elsewhere, and potentially impacted margin due to the cost of last minute expedited shipping.

The methods of defining success will not truly change until compensation models are refined. If we want account managers to focus on new goals, we need to construct compensation models that reward performance at the retail shelf and that consider margin and profit based successes rather than volume based. Changing this side of the equation will then pull the change back into how promotions are planned, managed, and evaluated.

Conclusion

Trade management was one of the first business areas to which manufacturers applied retail data. Yet to this day, it remains one of the great bastions of gut feel decision-making.

Ultimately, the use of downstream data in trade management enables the evolution to truly “fact-based” decision making, empowered by a wealth of insights. This becomes much easier to accomplish when armed with processes, solutions, and applications that bring together the many disparate pieces

of internal and external data needed, harmonize them into a cohesive picture of the customer and market, and provide meaningful insight on the specifics of managing each single customer.

DSM is more than just a single version of the truth. It can also be a critical tool to identify new sales opportunities, to manage stock more effectively, to drive agile responses, and to provide more timely and accurate data for business forecasting and planning.

*Peter Bambridge
Gartner Research*

Merely enabling reporting and analysis is the continuation of the spreadsheet and binder approach that has long been utilized without fulfilling on the promise of the available information. Analysis must convert to insight, with applications driving the charge to deliver this automatically identified, defined, and analyzed insight directly to the customer teams. Insight must in turn drive action directly at the retail shelf. Only then will we begin to close the loop on trade planning and management and truly be able to impact success at retail.

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