

## Volume #5: Managing Consumer Demand and Competition across Channels

Online transparency (price & product) enabled by online/mobile technology has created an “always-on” shopping experience for consumers which has altered the basis of competition in retail. Retailers today require an integrated approach for assortment, price & promotions across channels, which is more “demand-driven”, responsive to competition and takes a single view of the OmniChannel enterprise.

The shift to demand-driven Omni-Channel retail requires a more dynamic analysis of consumer demand and competitive data - regardless of channel or consumer touch-point. Emerging solutions now leverage near real-time access to data with inventory visibility inside a platform which **centralizes** data, **understands** demand, **automates** pricing, and **integrates** demand-driven planning strategies - across channels!



*OmniChannel Demand Management* (ODM) is a new category of solutions which answers the needs for this evolving retail supply chain so consumers enjoy a seamless shopping experience and retailers compete effectively. This whitepaper explains the premise of ODM and the benefits to retailers.

### OmniChannel Demand Management. More than Price.



*OmniChannel Demand Management* delivers a rigorous level of data-driven merchandising which leverages the growing volume of consumer and competitive data, including a new element, [clickstream data](#). *OmniChannel Demand Management* uses evolved technology and retail science together with [richer demand models](#) to deliver more relevant and actionable merchandise intelligence which answers the four “P’s” of merchandising and marketing; product (assortment), price, promotion and place (channel). By understanding consumer demand and the competitive context inside and

across channels, retailers can optimize sales and profitability by channel and generate a strong technology return on investment (ROI).

### OmniChannel Demand Management Answers Fundamental Retail Strategy Questions

- [How do I execute merchandise strategy consistently across channels?](#)
- [What products should I carry and in which channels?](#)
- [At what prices should they be presented and when?](#)
- [Where am I competitive or not competitive and how do I respond?](#)
- [How do I integrate OmniChannel Demand Management without disrupting my business process?](#)

### OmniChannel Retail Business Needs and Corresponding ODM Innovations

Business Need	Innovation
<a href="#">Demand analysis across channels</a>	Product attribute modeling
<a href="#">Assess competitive threat</a>	Cross competitive price elasticity
<a href="#">Competitive response speed</a>	Automated merchant alerts and response
<a href="#">Pricing consistency across lines</a>	Automation of product line rules
<a href="#">Merchant acceptance</a>	Science which complies with merchant rules
<a href="#">Limited business disruption</a>	Architecture which inter-operates and adapts

### ***Retail Strategy Questions Expanded***

The strategy questions posed on Page 1 have broad implications which require more explanation in the context of OmniChannel Demand Management (ODM).

#### **How do I execute my merchandise strategy consistently across channels?**

- *How does demand transfer across channels and can I measure?*
- *How can I turn the physical store into a strategic asset by expanding fulfillment options and modeling their impact on consumer demand?  
Examples of popular fulfillment options include reserve online – pick-up in-store and order online at in-store kiosks for home delivery?*
- *What is the product demand across banners, channels and formats and can strategies be established uniquely and managed discretely within a single enterprise view?*

*“Brick and mortar stores fight back as 88 percent of consumers admit to ‘webrooming’ – browsing online and then buying in a store.”*

*Accenture  
Seamless Retail Study*

#### **What products should I carry and in which channels?**

- *What attributes (product specification, channel, price, shipping, store pick-up, same day delivery, ship online from store, etc.) do my shoppers value, what is their monetary value and how should these be used for pricing and assortment planning?*
- *How do I know whether product sales from one channel are cannibalizing sales from another channel?*
- *How do I use price in conjunction with competitive data to inform product line assortment decisions?*

#### **At what prices should they be presented and when?**

- *At what prices and promotions can I accomplish category objectives for profit and revenue while maintaining my price image?*
- *Are my pricing decisions taking into account real-time enterprise-wide inventory visibility?*

#### **Where am I competitive or not competitive and how do I respond?**

- *Do my merchants receive daily alerts on competitive pricing intelligence that can be prioritized according to sensitive items, sales impact, etc.?*
- *Where does competition come from: channels, products, product attributes and prices?*
- *What amount of competitive pressure is exerted on my products across channels, and what affect does that have on my sales?*

#### **How do I integrate OmniChannel Demand Management without disrupting my business process?**

- *Can OmniChannel Demand Management integrate with legacy systems and disparate data sources?*
- *Can the price recommendations populate within my price management system?*
- *What pricing frequency is possible for online and store channels?*

**OmniChannel Demand Management Innovations Explained**

Business Need	Innovation
Demand analysis across channels	Product attribute modeling

**Enterprise Attribution Platform** (single OmniChannel platform for measuring attribute value)

Online/mobile technology has expanded the number of attributes which contribute to consumer purchases, necessitating a shift from SKU-based to attribute-based demand modeling. It is now possible to capture any factor (attribute) which affects a product purchase and then model the impact of those attributes in order to forecast demand. Examples of attributes include product specifications, price/promotion, competitor prices, channel, product placement and fulfillment (e.g. reserve online – pick-up in-store).

Business Need	Innovation
Assess competitive threat	Cross competitive price elasticity

**Competitive Price Demand Modeling** (assess competitive pressure and impact on demand)

Historically, price sensitivity at the store-SKU level was the predominant variable used in pricing science. Evolved pricing science now reveals the discrete impact that competitive prices have on unit sales, based on modeling cross-competitive price affects.

Business Need	Innovation
Competitive response speed	Automated merchant alerts and response

**Dynamic Competitive Pricing** (real-time automated competitive response system)

Price surveillance technology can now process competitive pricing data feeds from any source (online, in-store) at any frequency, compare prices with the retailers’ pricing rules and provide alerts for merchants when prices are out of compliance with rules.

Business Need	Innovation
Pricing consistency across lines	Automation of product line rules

**Product Line Optimization** (assess line structure for inconsistencies and opportunities)

Evolved data science can “reverse engineer” product relationships from a retailer’s sales data and automate consistency for product line structures across channels. Applicable for product line parity across product families; private label gaps with corresponding national brand product lines; up-purchase incentives within product families for larger pack sizes; competitive price gaps relative to competitors’ price families; and assortment gaps relative to competitors’ offerings.

Business Need	Innovation
Merchant acceptance	Science which complies with merchant rules

**Compliant Optimization** (price optimization constrained for merchant rules)

Evolved optimization now constrains prices with retailers’ rules for competition, margin, product line relationships and other rules and minimizes or eliminates pricing rules violations.

Business Need	Innovation
Limited business disruption	Architecture which inter-operates and adapts

**Adaptive Big Data Architecture** (distributed configurable architecture)

Retail technology is now more “adaptive” based on the use of big data, distributed architecture (SaaS) and web services for seamless integration with existing systems, processing speed and flexibility.

***What's new with the demand science? Richer Demand Models.***

The fundamental retail science breakthrough supporting OmniChannel Demand Management is a more rigorous merchandise intelligence and demand analysis which combines 1) traditional price elasticity for retailers' own-products, 2) competitive cross- elasticity with competitors' products, 3) substitution effects from a retailers' own-assortment, across channels, and 4) discrete demand impacts associated with own-product attributes. This rigorous approach to analyzing and forecasting demand delivers more precise and repeatable competitive intelligence with which to plan assortments, prices and promotions.

***What's new for incorporating online consumer demand? The Intersection of Clickstream and Price.***

Traditional pricing solutions historically focused on three primary inputs to build demand models for establishing price elasticity: sales data, prices and promotional information. While effective in modeling demand, the approach did not incorporate "clickstream" data for analyzing online consumer demand - a rich input for enhancing OmniChannel demand models. Recent

*"The customer doesn't live in channels, so you need to bring all of that data together."*

*Peter Sheldon  
Principal Analyst, Forrester Research*

innovations can analyze the relationship between online shopping behavior "inside or outside the cart" and price, to forecast demand based on price and promotions occurring in the clickstream on the path to purchase (conversion funnel). This pricing science answers the question, what effect does price have when:

1. SKUs are viewed but not put in carts?
2. SKUs are viewed and/or purchased together?
3. SKUs are put in the cart and checked out or not checked out?
4. SKUs are viewed from a Social Media visit, Google search, or other search (paid, organic)?
5. Purchase decisions involve national brands relative to similar private labels and vice versa?
6. Shoppers login and/or use an online promotion code?
7. Visitor segments demonstrate similar shopping behaviors?

***About Clear Demand***

Clear Demand's mission is to help retailers compete more effectively by leveraging a long history of retail domain expertise together with current technology and practical innovations which promote speed and flexibility. Clear Demand's omnichannel demand management solutions are architected on Big Data and delivered as a SaaS solution to simplify adoption and use. Visit us on the web at [www.ClearDemand.com](http://www.ClearDemand.com).