



Make Empty Shopping Carts a Thing of the Past with **Analytics in Stock!**



The exponential growth in the retail industry is bringing about homogeneity, making it difficult for retailers to create differentiation. Increasing competition is also creating the need for more convenience and value-added services for newage customers who are more discerning and are constantly exposed to innovative retail experiences globally. Retailers realize that their existing customers are likely to switch over to their competitor if they cannot create a sustainable advantage and value.

Enhancing products and customized offerings, introducing innovative pricing models, offering a differentiated shopping experience and being more customer-centric are some of the ways in which retailers can retain and win customers. While doing so, retailers need to ensure that the cost-to-serve per customer is reduced and the margins are protected. Retailers are also maintaining their margins by continuously creating efficiencies in their sourcing, supply chains and store operations. Keeping a check on promotional spends is another important area for retailers to focus on existing customers and target new ones.

Online retailing and the emergence of concepts like Big Data, Cloud, Mobile Platforms and Social Media have further complicated the dynamics of the retail industry.

Going Back to the Basics

Understanding the customer's needs – and in most cases – pre-empting the needs is a sure way of winning the customer's attention and wallet share. So, a retailer's immediate goal should be to re-channelize the organizational approach from managing customer relationships to building new customer relationships, retaining and nurturing them.

This necessitates an in-depth understanding and knowledge of customer behavior and the product, which should be mapped to emerging trends and executed with superior levels of service. The retailer's residual data presents the best opportunity to understand patterns of customer behavior to seek decision-enabling insights. These insights should be used to meet the retailer's goal, which is to make a radical shift from knowing a customer to predicting and influencing his / her behavior.

The Role of Insights in Retailing

Where do insights come from? They are generated through the rigorous use of research and analytics (R&A). Research refers to the process of gathering and synthesizing information from primary sources (directly from customers or opinion leaders) and / or secondary sources (from published content). Analytics refers to the quantitative methods, both investigative and predictive, that explain and identify trends and causal relationships between economic outcomes and their drivers. R&A processes can be conducted on an ad-hoc basis, such as one-off piece of research or spreadsheet

exercise, or inside more rigorous 'knowledge processes' where standard operating procedures for process delivery are hard-coded into the organization.

Most business decisions are made in an environment where a variety of forces are in play at the same time: competition, consumer behavior, economics and demographics are just a few of the vectors that impact the shape of the decision.

The data captured through the research and the key learnings arising out of analytics contribute to the knowledge bank of the organization. In order to aid better research and analytics, the processes to develop knowledge should be highly developed around the core disciplines of a retailer; for example, capturing the sale of a particular brand and accurately forecasting future demand, or analyzing the effectiveness of a loyalty program. These processes are critical to the retailer's business. These processes typically reside within functional silos; hence these knowledge processes do not draw upon the greatest depth of institutional knowledge. Often the resources that deliver the processes have a range of skills that focus only on the core discipline. As a result, the approach lacks a full 360° view, a full set of insights.

Making decisions on price-points or every day low cost on competitor behavior alone gives a one-dimensional view. Adding an analysis of demand, including a new analysis of consumer elasticity curves, cannibalization analysis or positioning on a brand equity map adds new dimensions. And even more insights could be generated by determining the impact of trade promotions, displays and packaging changes on demand. Assembling the entire picture requires skills and models that analyze all these factors in totality, and the capacity and discipline to respond in real time.

Leveraging Analytics to Drive Retail Insights

Although the concept of analytics is not new to the business world, the definition and role of analytics have changed over the years. A few years back, analytics meant a bunch of data mining exercises. Now analytics means an integrated offering which connects people, processes and systems in a structured, measureable framework in order to leverage every information point arising out of a customer's interaction or transaction. Be it a banking activity, pricing a CPG item, packaging an airline ticket, customer servicing a telephone query – at each point of time, information is collected, appropriately stored, filtered, analyzed, processed and streamlined to be used as an effective output system for the benefit of the people, processes and systems involved in the business.

Analytics enables an organization to squeeze the best Rol on the large amount of data in its repository and converts into actionable knowledge. Analytic techniques like statistical analysis, cross tabulations and data mining can unearth patterns and trends within large databases. When it comes to



predicting customer behavior and taking decisions with long-term implications, such analyses can provide the edge to decision-making.

While retailers have used investigative analytics to understand failures, successes and root cause analysis, they are warming up to the idea of deploying predictive analytics to enhance the accuracy of their decisions and influence the end-result to their business benefit.

Investigative Analytics: Taking Stock

As the term suggests, investigative analytics is the process of unearthing the causes after a particular event has occurred – in a retailer's case, a promotional activity or the performance of a loyalty program. Investigative analytics is usually applied to the following situations:

- Fraud analytics
- Assortment analysis
- Store location analysis
- Promotion campaign effectiveness
- Loyalty program performance
- Out-of-stock analysis
- Competition and industry benchmarking and analysis

Predictive Analytics: Crystal-gazing

Business Intelligence (BI) and investigative analytical techniques cannot address the predictive need of the retailer's business. For example, how will a customer respond to an 'end of season sale', or will an activity for kids help increase sales? Predictive analytics can synthesize the data collated from a similar activity in the past and analyze the results to throw up a scenario, which can enable a retailer to take an informed decision. Such analytical rigor multiplies the power of insight-based decision-making.

Predictive analytics enables:

- Demand forecasting and stock planning
- Increasing customer lifetime value through churn and conversion
- Identifying prospective customers for campaigns
- Increasing human resource productivity
- Increasing the agility to respond to market changes
- Enhancing in-store customer service levels

With marketing budgets getting squeezed in an increasingly tough economic environment, companies are looking at getting the most from their existing research data. Research reuse allows retailers to unearth new insights from current research, eliminating or limiting the need to make heavy investments in new research.

Intuition versus Insights

Intuition alone is an inferior driver of business decisions, even though making decisions based on intuition alone is incredibly alluring. While intuition-based decision-making is seen as swift and attractive, knowledge-based decision-making is anything but slow and dull. Competing with generated insights is not merely working with spreadsheets and income statements, planning and number crunching; it is about using what corporations know (based on research and analysis) to drive business decisions, which is sparked and illuminated by intuition.

Given that analytics deals with data, the results are both driven and limited by what kind of data an organization collects or has access to. For consumer analytics, the most typical data sets involve market research data and / or transactional data. Transactional data can be internally generated by retailers that deal directly with their consumers or can be purchased from third-party vendors (such as retailers that sell shopper data). Broadly, these types of analytics are focused around revenue and marketing-oriented issues such as:

- Who is buying?
- What are they buying
- Why are they buying?
- When are they buying?
- How frequently are they buying it?
- What are their buying habits?
- What are the triggers of their purchase?
- What is the basket size and average ticket size?

Retailers striving to develop a deeper insight into customer behavior will typically augment their information on consumers with internal data from other parts of their organization (such as the data that can be derived from their call centers) or meta-data (environmental data such as demographics and wealth information). Ideally, they will gather information from market research or shopper data on their competitors as well so that their models are more fully informed.

Analytic techniques also support supply chain decision-making where companies strive to optimize their supply chain and distribution network, looking to minimize the costs incurred in this part of the value chain and achieve every day low cost. Data generated by company ERP systems is the basis on which analytics are performed; therefore ERP systems have sophisticated analytic tools built on top of their core systems. Evolved organizations also consider the demand element when optimizing what is shipped where so as to minimize inventory, stock-outs and returns. With the advent of just-in-time supply chains, manufacturers deploy predictive models that use historical demand, stock positions and



environmental factors to modulate the speed with which replenishment is taking place. Optimizing networks and a focus on the financial costs of making and moving products are the key analytic imperatives in operational analytics.

Proof of the Pudding

Tesco, the UK's leading retailer, is a good example of an organization which gained competitive advantage over its peers by using research and analytics in sales to drive customer retention decisions. One of the world's largest food retailers, operating in 13 countries and through every type of retail format, the company began its transformation through analytics in 1995 when it introduced its loyalty card, the Clubcard. With the customer insights it derives from Clubcard purchase data, Tesco creates promotions tailored specifically to its customers' priorities and interests, issuing seven million targeted variations of product coupons each year. As a result, Tesco has outstripped its competitors in terms of coupon redemption rates, customer loyalty and financial performance.

Retail banks such as Wells Fargo routinely 'score' their customers to predict the likelihood that an existing customer would be interested in purchasing another product from its diversified product slate. As a result, while most customers of retail financial services organizations buy between two and three discrete products from their service provider, Wells Fargo boasts of a cross-sell rate of over five products per retail customer. Its scoring models are not the only reason why Wells Fargo is able to achieve such path-breaking experience. Wells Fargo has researched and analyzed the very process by which consumers can be induced into consuming more products and has aligned the organization to support this process.

Get the Power of Analytics by Your Side

Being a highly customer-centric industry with several channels of engagement, the retail industry is an ideal candidate for application of analytics. As data from online retailing, Social Media, mobile transactions, Cloud, point-of-sales, terminals, credit cards, loyalty cards, etc. converge and are mapped with customer behavior, the results can throw up a fascinating range of insights. These insights can empower retailers to take critical decisions which can positively impact their bottom line and create a sustainable competitive advantage.