COGNITIVE COMMERCE: DRIVING EFFICIENCY & CUSTOMER ENGAGEMENT

December 2016

Knowledge is power. However, despite an abundance of data, many employees struggle with access to the relevant information they need to do their jobs. This document will highlight how cognitive computing capabilities such as machine learning and AI can help companies empower their employees to make better business decisions, resulting in happy customers and improved operational efficiency.

Companies today have more information at their fingertips than ever before. The ability to analyze and act on this information determines organizational success.

Trend analysis of Aberdeen’s customer experience management (CEM) surveys conducted from 2012 to 2016 reveals that, on average, companies have increased the number of channels they use to interact with buyers from four to eight. This represents a doubling of the number of sources providing valuable insights into customer behavior and sentiment. Despite such an increase in the volume of data, findings from Aberdeen’s May 2016 study, CEM Executive’s Agenda 2016: Aligning the Business Around the Customer, show that employees in only 15% of organizations are fully satisfied with their ability to use data to do their jobs. Use of cognitive computing capabilities (see sidebar) helps alleviate this challenge.

Figure 1: Using Cognitive Capabilities See Real Returns

Source: Aberdeen Group, November 2016

Definition: Cognitive Commerce

For the purposes of this research, Aberdeen defines “cognitive commerce capabilities” as those technologies (specifically artificial intelligence (AI) and machine learning) that companies use to automate the processes used to capture and analyze data. Thanks to such capabilities, digital marketers, fulfillment professionals, merchandisers, sellers, and others can put data-driven insights to work with minimal to no IT involvement.

Furthermore, enabling the line-of-business (LoB) with cognitive capabilities allows reducing (or eliminating) the need for data scientists as LoB employees can now use technology to extract relevant insights from complex sets of data without relying on data scientists.
Companies use a variety of key performance indicators (KPIs) to evaluate their performance. While some metrics, such as shopping cart abandonment rate, relate more to B2C firms, metrics such as customer lifetime value and inventory turnover are top of mind for both B2B and B2C organizations. Figure 1 shows that companies with cognitive commerce capabilities attain far superior year-over-year improvements across all these KPIs, compared to those without them.

So, how does cognitive computing help companies achieve better results? The answer lies in employee empowerment, specifically with empowering line-of-business employees such as digital marketers, merchandisers, fulfillment teams, store associates, and sales representatives. These employees are empowered by eliminating or reducing the need for data scientists to analyze vast datasets to reveal hidden trends, correlations, and generate actionable insights. Instead, cognitive computing capabilities put the power in the hands of line-of-business employee by giving them direct access to the relevant insights needed to do their jobs.

Data shows that Best-in-Class companies (both B2B and B2C) are 43% more likely to use automated systems such as machine learning to analyze data across numerous systems and to enable their knowledge workers with recommended actions based on the resulting insights. As a result, employees across these top-performing firms (see sidebar on next page) are 20% more likely to indicate that they are fully satisfied with their ability to use data to do their jobs.

How to Maximize Performance through Cognitive Commerce

To attain the results shown in Figure 1, companies must employ cognitive capabilities across the following three areas:

1. **Digital commerce:** This refers to buying and selling of products / services across all channels, including the web, social media, mobile applications and in-store. Both B2B and B2C buyers today expect interactions to be fully personalized and
In Aberdeen’s Next-Generation Retail: Blend the Power of Big Data & Omni-Channel study, we used four performance metrics to separate participants into two cohorts:

- Best-in-Class: Top 20% of respondents based on performance
- All Others: Bottom 80% of respondents

The performance metrics used as part of this analysis, and the respective results for both cohorts in each category, are as follows:

- Customer retention rate:  
  - Best-in-Class: 81%  
  - All Others: 46%
- Year-over-year change in customer satisfaction rate:  
  - Best-in-Class: 15.0%  
  - All Others: 0.3%
- Year-over-year change in annual company revenue:  
  - Best-in-Class: 14.7%  
  - All Others: 7.1%
- Year-over-year improvement in average customer spend:  
  - Best-in-Class: 13.8%  
  - All Others: -2.9%

consistent across all channels – an activity commonly described as “Omni-channel” customer interaction. While these rapid changes in consumer expectations pose challenges for B2C firms, their B2B counterparts are often challenged with a comparable level of complexity when it comes to managing an ecosystem of partners and distributors.

What brings both B2B and B2C organizations together is that both partners and consumers are increasingly looking to work with companies that truly understand their needs and make it easier for them to purchase products and receive post-sale support. Cognitive computing capabilities give employees across the business the ability to turn complex sentiment and behavioral data into the digestible insights needed to deliver Omni-channel experiences. Figure 1 validates that cognitive commerce capabilities help companies deliver Omni-channel interactions, and hence achieve far superior year-over-year increase in customer lifetime value, compared to those without these capabilities.

It’s important to note that delivering Omni-channel experiences requires a seamless integration of enterprise systems. When companies lack such integration, employees in one department might see a different view of customer data than colleagues in another department due to the different systems they might use. This increases the risk of delivering inconsistent conversations. Data shows that only 46% of businesses currently have this level of integration across their digital commerce and back-office systems. Best-in-Class businesses are in fact 59% more likely than All Others to enjoy such integration. (Read Aberdeen’s July 2016 study, Customer Intelligence: Using Data to Drive Loyalty & Advocacy, on how to establish such seamless integration.)

2. **Sales enablement**: The scope of activities within this category refer primarily to managing the sales process. Specifically, for B2C firms this means delivering a highly-personalized in-store experience. For B2B firms, sales enablement activities include
optimizing the quote-to-cash process where businesses can easily pick the right product configuration that meets their budget and quickly get a quote to streamline the sales process.

Both B2B and B2C firms must manage certain complexities to accomplish their respective sales enablement goals. Cognitive computing allows B2C firms, for example, to provide store associates with alternative product recommendations, based on purchase data, when a specific product is out-of-stock. Similarly, cognitive computing can help B2B firms more efficiently tailor configurations early in the sales process, hence reducing customer effort, increasing sales rep productivity, and shortening the sales cycle.

3. **Fulfillment:** Omni-channel customer experience refers to companies using multiple channels to deliver a consistent customer experience. Its cousin, Omni-channel fulfillment, refers to companies receiving and fulfilling customer orders through any channel. To be able to do this, companies must establish a single view of customer orders regardless of channel. They must also establish a single view of inventory across the entire fulfillment network. Fulfillment professionals empowered with cognitive computing capabilities are able to use actionable insights to monitor inventory levels across different warehouses and identify the optimal delivery options – while meeting the fulfillment obligations of timely and safe delivery to customers. Figure 1 validates that companies using cognitive capabilities improve (reduce) average order delivery times by 0.8% year-over-year, compared to 11.2% worsening (increase) by All Others.

**Key Takeaways**

The ability to manage the three areas discussed above determines whether or not an organization will attain the performance results depicted earlier in this document. While companies have access to more data than ever, employees still experience challenges when...
navigating the systems use to capture this data or when it comes to analyzing complex datasets.

Cognitive computing capabilities such as machine learning and AI finally allow digital marketers, fulfillment teams, and merchandisers to adopt a truly data-driven approach to do their jobs. In addition to significant performance benefits, such as growth in customer spend and greater operational efficiency, use of cognitive computing capabilities ultimately reduces reliance on costly data scientists. If your company is currently struggling with improving customer satisfaction or finding opportunities to improve operational efficiency, then we highly recommend considering how cognitive computing might transform your business.

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About Aberdeen Group

Since 1988, Aberdeen Group has published research that helps businesses worldwide improve their performance. Our analysts derive fact-based, vendor-agnostic insights from a proprietary analytical framework, which identifies Best-in-Class organizations from primary research conducted with industry practitioners. The resulting research content is used by hundreds of thousands of business professionals to drive smarter decision-making and improve business strategy. Aberdeen Group is headquartered in Waltham, MA.

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