CARDINAL HEALTH, INC.

THE UTILIZATION OF CUSTOMER POINT OF USE DEMAND DATA

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Cardinal Health, a $120B company, is the world's largest healthcare supplier and distributor, providing medical and pharmaceutical products to more than 60,000 locations each day. Cardinal is the essential link in the healthcare supply chain, and the company works to improve the cost-effectiveness of healthcare, enhance supply chain efficiencies, and improve the quality of healthcare by allowing pharmacies, hospitals, ambulatory surgery centers, and physician offices to focus on patient care.

In the Medical Segment of the company, there is currently minimal transparency and collaboration between Cardinal's inventory management team and its customers. Apart from weekly sales orders, Cardinal has no view into hospital consumption and demand patterns on the hospital floor. The inventory management team wanted to obtain hospital point of use consumption data and utilize this data to improve inventory management processes and performance measures.

To address this opportunity, the Tauber team worked closely with Cardinal's third largest customer, the Cleveland Clinic ($157M medical sales '15). The team obtained daily supply room consumption data for six target representative SKUs of Cardinal's two largest demand classes. These target products represent items of varying price and order volume that were readily available in all hospitals and represent 85% of Cardinal's SKUs. After obtaining and processing the data, the team assessed its actual consumption accuracy to be 92%.

Using the data, the team developed two solutions. The first solution was a machine-learning predictive model. This model assessed the likelihood that future customer business predictions would actually translate into sales demand based on previous customer usage inputs. This model provided Cardinal and the customer increased transparency and accountability into their market intelligence implementation processes, improving new business usage predictions and reducing Cardinal's overbuying by 17%. This overbuying reduction could provide an estimated inventory reduction of $7.1M per year scaled across 40 distribution centers.

In addition, the team proposed to improve forecasting accuracy by using the point-of-use consumption data to generate weekly forecasts. Forecasting accuracy improved by 2% for high volume products and 7% for low volume products based on the new data source. These forecasting improvements could result in an estimated cost savings of $170K at one distribution center over a year period. The team concluded that in order to further scale these cost savings across all DCs, point-of-use data from more SKUs would need to be gathered.

Cardinal Health will look to apply these new market intelligence and forecasting strategies based on point of use data with their newest customer, the hospital system Kaiser Permanente in Oakland, CA.