Digital Transformation at a Retail Major

Amitabha Sinha
amitabha.sinha@tcg-digital.com

Industry Focus	Expertise / Capability Used	Impact
Global Retail majors that are actively pursuing increased top-line growth and improved market share	Beacon Technology sends customized offers SKU recommendation engine suggests which SKUs should be accommodated by CPG account managers in their stores	Revenue Increase = 19% Sales Growth Increase = 8% Due to improved store footfall and customer satisfaction

Client: Major Global Retail

Problem Statement 1

Quite often in this new, digital world, merchandizing and promotion strategies go hand-in-hand. In the past, a robust communications and in-store promotions strategy has been the cornerstone of successful retail. However, in today's digital age, we are witnessing a paradigm shift as retailers leverage digital technologies to proactively enlighten customers.

While digitally-enabled promotions have traditionally been linked to online sales, retailers are increasingly using them to drive in-store sales. Based on past purchase data, retailers can leverage analytics to provide targeted and contextualized promotions which, in turn, can be "pushed" to customers via their mobile phones or wearable tech gadgets.

The client wanted to explore this paradigm shift.

Our Solution

Keeping in mind the limited success of blanket discounts, the client was advised to shift to the idea of one-to-one marketing. In this context, Beacons technology was: used on location, combined with other contextual data, personalized, made more dynamic, and was designed to create a great sense of urgency.

Approach/Methodology

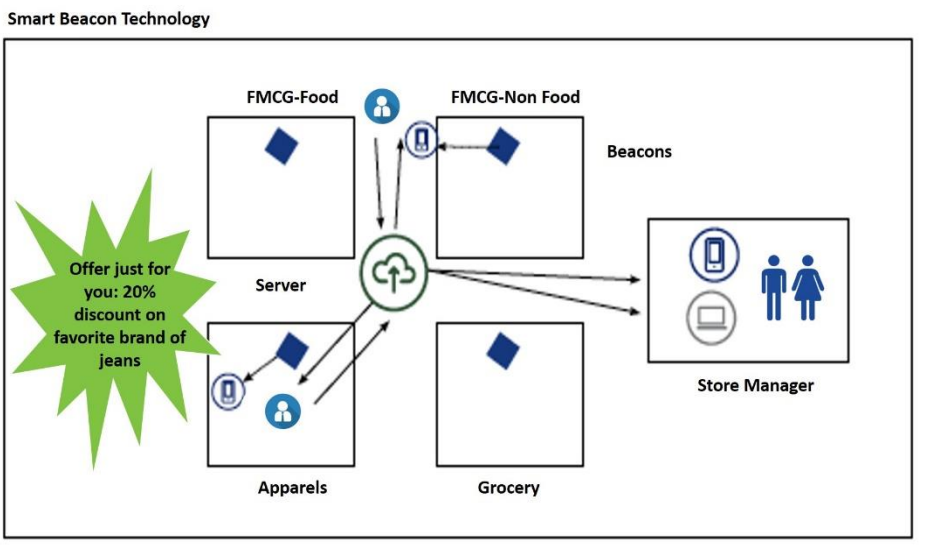
Step 1: Beacon Installation

Beacons were installed at various points in the retail store; including entry, exits, and various sections.

Step 2: Customized Offers

As and when customers with smartphones and installed apps walked by these beacons, their location was uploaded to a server. Based upon the customer's location within the store and his/her purchase history, customized offers were automatically sent to the customer's mobile phone. This happened even if customers were just passing by outside the store.

Example: Suppose a person named Alice is standing in the store's apparel department. Based on Alice's past purchase history, Beacon's technology identifies Alice's preferences and her real-time location. It then acts to send a customized discount to Alice in order to entice Alice to buy a specific apparel item. Given this detailed targeting, a higher probability of conversion is expected.



Problem Statement 2

The client was facing challenges both in managing its SKU replenishment intelligently, and in improving lagging sales growth. What was desired was to leverage a host of historical information so that the sales team could have more informed sales conversations with store owners.

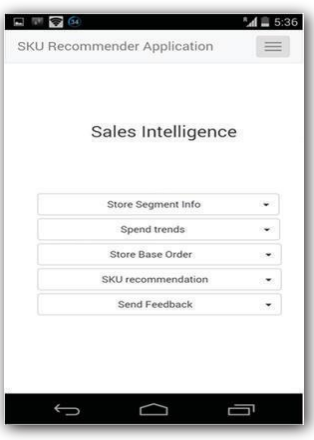
We worked with the client to design a recommendation system that uses AI/ML. At the point of ordering, the system, with the help of AI/ML, provides sales representatives with invaluable insights and recommendations that are SKU and store-specific.

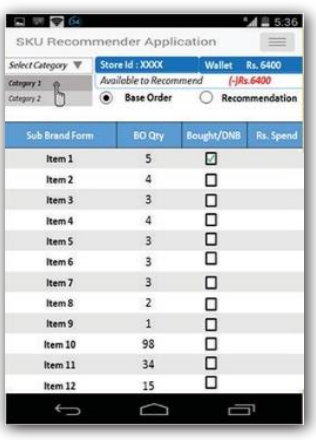
Business Challenges

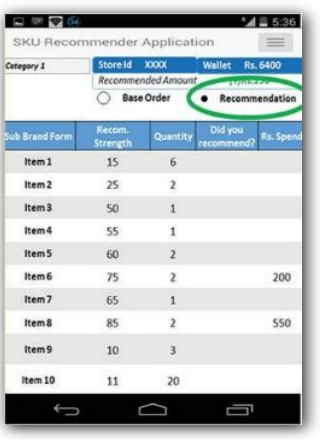
The sales representative's current ordering system was based on a simple, replenishment model. That model did not create enough scope for the client to identify specific sales-growth opportunities.

Additionally, the client was not in a position to justify why a store owner should purchase one particular SKU vs. another.

Our Solution





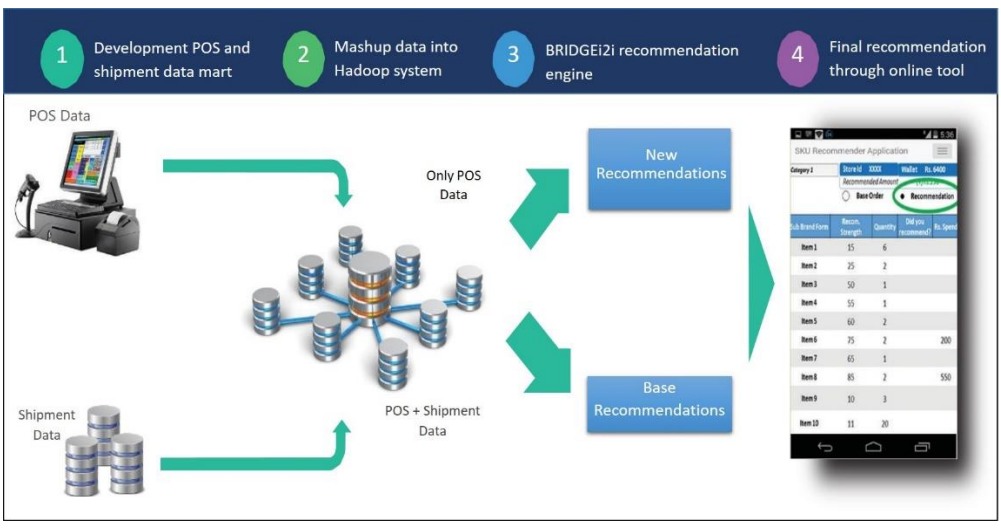


The decision engine leveraged advanced statistical and ML techniques to make intelligent, personalized, sales

recommendations.

The sales representatives used recommendations to have logical, convincing conversations with store owners; thereby achieving higher conversion rates.

Approach/Methodology



Step 1: Store segmentation

- Segmented stores based on interpretable factors, such as wallet size, value, and variety of SKUs purchased
- Identified look-up stores that have consistently purchased new SKUs
- The behavior of these stores is deemed the expected behavior

Step 2: Store similarity

- Based on certain pre-defined attributes, our algorithms identified stores that are similar to the look-up stores.
- Stores most similar to a look-up store are likely to buy the same set of SKUs originally purchased by the look-up store.

Step 3: Base order

- Based on historical transactions, our algorithms identified SKUs that the store owners are likely to order; without any recommendations from the sales representatives.
- The expected quantity of SKUs, for both base orders and recommended orders, are computed based on likelihood of distribution.

Step 4: Recommendations

- Created specific business rules that control recommendations in different situations
- Identified the weightage mechanism that optimizes specific success metrics; to be used by the organization to create the final set of recommendations.
- After using the recommendations, the historical transactions are fed into our existing algorithms.
- AI and ML capabilities enable the algorithms to learn store-ordering patterns.