#### **CUSTOMER ANALYTICS FOR COSMETICS MANUFACTURER**



#### **ABOUT THE CLIENT**

Client is one of the largest cosmetics manufacturer brands with a global presence



#### **SITUATION**

- Client lacked direct visibility into the customer purchasing trend and order values across different locations in the North America region
- Merilytics partnered with the CRM team of the client to deep dive into the purchasing trends of the customers and the performance of each retail store across different regions





- Extracted the retail sales data from Revel (data source), cleansed it, and created an analytical Excel model to measure the Retail Sales performance and customer purchasing trend at a store level across different time periods
- Compared the retail sales, avg. order value, items per order, and order frequency for each store with the past four-year period to identify the peak ordering hours/days trends split by stores
- Provided the distinction between new customers and returning customers in terms of their purchasing trends and frequency of repeated orders across all the stores of the region



#### **IMPACT**

- Helped the client understand the top-performing stores / regions and plan for replication of similar strategies across other stores/regions and there by acted as driver for the increase in ~30% growth in retail sales
- Client was able to estimate the frequency of repeated orders, repeated customers, and top products purchased by new customers. This data was leveraged by them to increase the frequency of returning customers by ~20% for a particular region
- The analysis has potentially enabled the client to allocate resources more effectively by scheduling more staff during peak hours and fewer staff during slower periods

# **METHODOLOGY/ APPROACH**

**DATA EXTRACTION** 

transactional data for different

stores using Revel data portal

Extract monthly POS



## **DATA PROCESSING**

#### Consolidate the client's monthly retail sales data for different stores across North America region using power query

 Cleanup the data by removing duplicates and transform it so that excel can handle the data load using power queries

#### **OUTPUTS**

- Order summary report
  - Monthly order details (no. of orders, avg. order value, items per order) for different stores
  - Monthly ranking of each store in terms of sales , avg order value, no. of orders
- Consumer summary report
  - Store wise order frequency
  - Top 10 Products ordered by returning and new customers

DATA



## **MONTHLY SALES SUMMARY**



**ILLUSTRATIVE** 

Shows monthly Retail Sales and Avg. Order Value at a store level and compares it with last year

| Monthly Sales across the fi | Monthly Sales across the fiscal period |              |        |             |             |        |             |             |        |  |  |  |
|-----------------------------|--|--------------|--------|-------------|-------------|--------|-------------|-------------|--------|--|--|--|
|                             |  | FYTD         |        |             | April       |        | May         |             |        |  |  |  |
| Establishment_Name          | This Year                              | Last Year    | % Chg. | This Year   | Last Year   | % Chg. | This Year   | Last Year   | % Chg. |  |  |  |
| Total                       | \$29,862,892                           | \$25,569,222 | 17%    | \$2,269,359 | \$2,184,361 | 4%     | \$2,515,420 | \$2,397,279 | 5%     |  |  |  |
| Establishment 1             | \$5,171,134                            | \$4,992,384  | 4%     | \$344,395   | \$409,144   | -16%   | \$363,934   | \$480,038   | -24%   |  |  |  |
| Establishment 2             | \$3,320,998                            | \$2,729,702  | 22%    | \$263,841   | \$221,417   | 19%    | \$289,985   | \$248,173   | 17%    |  |  |  |
| Establishment 3             | \$3,037,837                            | \$2,522,519  | 20%    | \$235,638   | \$215,377   | 9%     | \$251,381   | \$225,263   | 12%    |  |  |  |
| Establishment 4             | \$2,588,013                            | \$2,580,443  | 0%     | \$202,157   | \$220,945   | -9%    | \$196,849   | \$218,653   | -10%   |  |  |  |
| Establishment 5             | \$2,891,478                            | \$2,498,400  | 16%    | \$231,079   | \$205,358   | 13%    | \$282,958   | \$240,266   | 18%    |  |  |  |
| Establishment 6             | \$3,112,157                            | \$2,223,387  | 40%    | \$278,670   | \$191,528   | 45%    | \$306,420   | \$232,677   | 32%    |  |  |  |
| Establishment 7             | \$1,805,966                            | \$1,418,374  | 27%    | \$119,241   | \$117,093   | 2%     | \$134,124   | \$128,104   | 5%     |  |  |  |
| Establishment 8             | \$3,097,369                            | \$2,544,959  | 22%    | \$227,469   | \$224,298   | 1%     | \$283,140   | \$242,544   | 17%    |  |  |  |
| Establishment 9             | \$2,439,265                            | \$2,062,932  | 18%    | \$189,125   | \$196,274   | -4%    | \$207,548   | \$202,670   | 2%     |  |  |  |
| Establishment 10            | \$2,193,217                            | \$1,921,214  | 14%    | \$156,298   | \$161,620   | -3%    | \$176,707   | \$166,417   | 6%     |  |  |  |

The table shows the monthly Retail Sales (\$) for each store and compares it with last year

| Average Order Value across the fiscal period |  |           |    |           |        |    |           |    |          |        |     |          |    |           |        |
|--|--|-----------|----|-----------|--------|----|-----------|----|----------|--------|-----|----------|----|-----------|--------|
|  |  | FYTD      |    |           |        |    |           |    | April    |        | May |          |    |           |        |
| Establishment_Name                           |  | This Year |    | Last Year | % Chg. |    | This Year | ı  | ast Year | % Chg. | 1   | his Year |    | Last Year | % Chg. |
| Total  |  | 190       | \$ | 183       | 4%     | \$ | 189       | \$ | 180      | 5%     | \$  | 195      | \$ | 183       | 6%     |
| Establishment 1                              |  | 182       | \$ | 189       | -4%    | \$ | 172       | \$ | 178      | -4%    | \$  | 186      | \$ | 184       | 1%     |
| Establishment 2                              |  | 166       | \$ | 152       | 9%     | \$ | 164       | \$ | 141      | 16%    | \$  | 157      | \$ | 151       | 4%     |
| Establishment 3                              |  | 192       | \$ | 188       | 2%     | \$ | 190       | \$ | 192      | -1%    | \$  | 191      | \$ | 202       | -5%    |
| Establishment 4                              |  | 182       | \$ | 173       | 5%     | \$ | 182       | \$ | 172      | 6%     | \$  | 183      | \$ | 164       | 12%    |
| Establishment 5                              |  | 199       | \$ | 190       | 5%     | \$ | 196       | \$ | 191      | 3%     | \$  | 201      | \$ | 193       | 4%     |
| Establishment 6                              |  | 209       | \$ | 198       | 5%     | \$ | 212       | \$ | 199      | 6%     | \$  | 208      | \$ | 211       | -1%    |
| Establishment 7                              |  | 156       | \$ | 149       | 5%     | \$ | 154       | \$ | 140      | 10%    | \$  | 170      | \$ | 142       | 20%    |
| Establishment 8                              |  | 5 241     | \$ | 232       | 4%     | \$ | 246       | \$ | 235      | 5%     | \$  | 256      | \$ | 231       | 11%    |
| Establishment 9                              |  | 192       | \$ | 180       | 6%     | \$ | 203       | \$ | 181      | 12%    | \$  | 205      | \$ | 179       | 14%    |
| Establishment 10                             |  | 183       | \$ | 177       | 3%     | \$ | 175       | \$ | 175      | 0%     | \$  | 193      | \$ | 177       | 9%     |

The table shows the monthly Average Order Value (\$) for each store and compares it with last year

This view helped the client to measure their overall performance and growth and gain insights regarding average amount customers are spending per order across different locations in North America region.





**ILLUSTRATIVE** 

Shows Day wise order details at a store level and total orders across different time of the day

| Inique Orders per month across the days of the week |         |        |        |        |        |        |        |       |       |       |       |       |       |       |
|---|---------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|
|   | FYTD 23 |        |        |        |        |        | May    |       |       |       |       |       |       |       |
| Establishment_Name                                  | Sun     | Mon    | Tue    | Wed    | Thu    | Fri    | Sat    | Sun   | Mon   | Tue   | Wed   | Thu   | Fri   | Sat   |
| Total   | 26,047  | 18,077 | 17,573 | 18,318 | 19,029 | 24,739 | 33,320 | 2,342 | 1,515 | 1,519 | 1,640 | 1,665 | 1,847 | 2,370 |
| Establishment 1                                     | 4,989   | 3,209  | 3,108  | 3,204  | 3,207  | 4,441  | 6,279  | 328   | 245   | 233   | 256   | 225   | 297   | 369   |
| Establishment 2                                     | 3,640   | 2,237  | 2,010  | 2,196  | 2,289  | 3,024  | 4,652  | 348   | 193   | 203   | 242   | 219   | 281   | 362   |
| Establishment 3                                     | 2,444   | 1,966  | 1,861  | 1,966  | 1,958  | 2,550  | 3,052  | 264   | 147   | 150   | 160   | 183   | 171   | 239   |
| Establishment 4                                     | 2,448   | 1,564  | 1,659  | 1,678  | 1,765  | 2,216  | 2,855  | 223   | 109   | 113   | 137   | 153   | 156   | 186   |
| Establishment 5                                     | 2,502   | 1,618  | 1,477  | 1,644  | 1,695  | 2,350  | 3,269  | 267   | 153   | 170   | 157   | 190   | 189   | 283   |
| Establishment 6                                     | 1,866   | 1,804  | 2,036  | 2,101  | 2,232  | 2,335  | 2,550  | 197   | 192   | 211   | 238   | 211   | 220   | 207   |
| Establishment 7                                     | 2,006   | 1,216  | 1,257  | 1,307  | 1,414  | 1,708  | 2,678  | 150   | 99    | 83    | 79    | 92    | 115   | 171   |
| Establishment 8                                     | 1,803   | 1,696  | 1,629  | 1,588  | 1,699  | 2,017  | 2,427  | 162   | 161   | 160   | 132   | 153   | 155   | 181   |
| Establishment 9                                     | 2,120   | 1,426  | 1,321  | 1,362  | 1,452  | 2,113  | 2,942  | 196   | 106   | 109   | 116   | 145   | 148   | 193   |
| Establishment 10                                    | 2,229   | 1,341  | 1,215  | 1,272  | 1,318  | 1,985  | 2,616  | 207   | 110   | 87    | 123   | 94    | 115   | 179   |

The table shows the monthly unique Orders for each store across different days of the week

| Unique Orders across the hours of the day for the days of the week |         |        |        |        |        |        |        |       |       |       |       |       |       |       |
|--|---------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|
| Unique Orders  | FYTD 23 |        |        |        |        |        |        | May   |       |       |       |       |       |       |
| Hour of the Day  | Sun     | Mon    | Tue    | Wed    | Thu    | Fri    | Sat    | Sun   | Mon   | Tue   | Wed   | Thu   | Fri   | Sat   |
| Total  | 26,047  | 18,077 | 17,573 | 18,318 | 19,029 | 24,739 | 33,320 | 2,342 | 1,515 | 1,519 | 1,640 | 1,665 | 1,847 | 2,370 |
| 10AM   | 78      | 208    | 189    | 213    | 231    | 297    | 294    | 14    | 26    | 14    | 21    | 19    | 29    | 25    |
| 11AM   | 1,568   | 1,805  | 1,665  | 1,772  | 1,883  | 2,402  | 3,096  | 153   | 156   | 148   | 164   | 173   | 214   | 247   |
| 12PM   | 3,226   | 1,979  | 1,840  | 1,955  | 2,087  | 2,531  | 3,709  | 322   | 164   | 164   | 190   | 184   | 234   | 281   |
| 1PM  | 3,801   | 2,224  | 2,045  | 2,096  | 2,197  | 2,940  | 4,361  | 350   | 186   | 182   | 210   | 199   | 243   | 278   |
| 2PM  | 4,046   | 2,204  | 2,073  | 2,138  | 2,310  | 3,110  | 4,799  | 370   | 188   | 175   | 187   | 214   | 228   | 346   |
| 3PM  | 4,132   | 2,233  | 2,095  | 2,176  | 2,259  | 3,250  | 4,851  | 391   | 196   | 176   | 198   | 189   | 252   | 315   |
| 4PM  | 3,885   | 2,257  | 2,188  | 2,294  | 2,342  | 3,247  | 4,517  | 365   | 193   | 198   | 199   | 207   | 225   | 333   |
| 5PM  | 3,144   | 2,179  | 2,313  | 2,367  | 2,380  | 3,029  | 3,527  | 292   | 187   | 227   | 244   | 240   | 205   | 280   |
| 6PM  | 791     | 1,941  | 2,100  | 2,195  | 2,161  | 2,585  | 2,492  | 77    | 201   | 211   | 201   | 218   | 184   | 230   |
| 7PM  | 132     | 252    | 275    | 278    | 288    | 362    | 331    | 9     | 18    | 25    | 26    | 23    | 34    | 34    |

The table shows the monthly unique Orders across different days of the week and hours of the day

This view summarizes the patterns of order activity throughout the day and week and helped the client allocate resources more effectively based on rush hours and low traffics hours

## MONTHLY STORE PERFORMANCE AND RANKINGS



**ILLUSTRATIVE** 

Shows the ranking of different stores for different KPIs like Retail Sales, Average Order Value, Order Placed, Items per Order and Top 5 most Ordered products.

|                  |    | Retail Sales |      |    | AOV Orde |      |       | ced  | Items Per Order |      | Emails Captured |     |
|------------------|----|--------------|------|----|----------|------|-------|------|-----------------|------|-----------------|-----|
| Establishment    |    | \$           | Rank |    | \$       | Rank | Units | Rank | Units           | Rank | #               | %   |
| Establishment 1  | \$ | 363,934      | - 1  | \$ | 186      | 7    | 1,953 | - 1  | 1.9             | 10   | 124             | 6%  |
| Establishment 2  | \$ | 289,985      | 3    | \$ | 157      | 10   | 1,848 | 2    | 2.0             | 9    | 413             | 22% |
| Establishment 3  | \$ | 251,381      | 6    | \$ | 191      | 6    | 1,314 | 5    | 2.0             | 8    | 10              | 1%  |
| Establishment 4  | \$ | 196,849      | 8    | \$ | 183      | 8    | 1,077 | 7    | 2.1             | 6    | 12              | 1%  |
| Establishment 5  | \$ | 282,958      | 5    | \$ | 201      | 4    | 1,409 | 4    | 2.0             | 7    | 630             | 45% |
| Establishment 6  | \$ | 306,420      | 2    | \$ | 208      | 2    | 1,476 | 3    | 2.2             | 4    | 105             | 7%  |
| Establishment 7  | \$ | 134,124      | 10   | \$ | 170      | 9    | 789   | 10   | 2.3             | 3    | 349             | 44% |
| Establishment 8  | \$ | 283,140      | 4    | \$ | 256      | 1    | 1,104 | 6    | 2.4             | 1    | 209             | 19% |
| Establishment 9  | \$ | 207,548      | 7    | \$ | 205      | 3    | 1,013 | 8    | 2.3             | 2    | 173             | 17% |
| Establishment 10 | S  | 176,707      | 9    | \$ | 193      | 5    | 915   | 9    | 2.1             | 5    | 10              | 1%  |

Ranking the stores on different KPIs and percentage of orders with email information

|                  |           | Top 5 Products Ordered |           |           |           |  |  |  |  |  |  |
|------------------|-----------|------------------------|-----------|-----------|-----------|--|--|--|--|--|--|
| Establishment    | Product 1 | Product 2              | Product 3 | Product 4 | Product 5 |  |  |  |  |  |  |
| Establishment 1  | Product 1 | Product 5              | Product 3 | Product 4 | Product 7 |  |  |  |  |  |  |
| Establishment 2  | Product 2 | Product 4              | Product 6 | Product 1 | Product 5 |  |  |  |  |  |  |
| Establishment 3  | Product 2 | Product 3              | Product 1 | Product 5 | Product 7 |  |  |  |  |  |  |
| Establishment 4  | Product 1 | Product 3              | Product 6 | Product 5 | Product 7 |  |  |  |  |  |  |
| Establishment 5  | Product 2 | Product 1              | Product 6 | Product 3 | Product 8 |  |  |  |  |  |  |
| Establishment 6  | Product 4 | Product 1              | Product 6 | Product 4 | Product 5 |  |  |  |  |  |  |
| Establishment 7  | Product 1 | Product 2              | Product 6 | Product 5 | Product 7 |  |  |  |  |  |  |
| Establishment 8  | Product 5 | Product 1              | Product 2 | Product 3 | Product 8 |  |  |  |  |  |  |
| Establishment 9  | Product 2 | Product 4              | Product 1 | Product 5 | Product 8 |  |  |  |  |  |  |
| Establishment 10 | Product 2 | Product 4              | Product 3 | Product 5 | Product 7 |  |  |  |  |  |  |

Top 5 products ordered at each store

Through this view, client was able to identify high and low performing stores, enabling businesses to focus on expansion in the locations with higher revenue and make decisions to drive the sales in areas with low revenue

## **ORDER FREQUENCY AND EMAIL SUMMARY**



**ILLUSTRATIVE** 

Shows Order Frequency of a returning customer & % of orders with email information

## Order Frequency (in days) and % of orders with Email Information

|                    | FYTD      |               |        |                      |           |  |  |  |  |  |  |
|--------------------|-----------|---------------|--------|----------------------|-----------|--|--|--|--|--|--|
| Establishment Name | 10        | der Frequency | у      | % orders with emails |           |  |  |  |  |  |  |
| Establishment Name | This Year | Last Year     | % Chg. | This Year            | Last Year |  |  |  |  |  |  |
| Total              | 172       | 173           | -1%    | 21%                  | 20%       |  |  |  |  |  |  |
| Establishment 1    | 188       | 227           | -17%   | 8%                   | 25%       |  |  |  |  |  |  |
| Establishment 2    | 208       | 220           | -6%    | 35%                  | 24%       |  |  |  |  |  |  |
| Establishment 3    | 91        | 104           | -13%   | 1%                   | 1%        |  |  |  |  |  |  |
| Establishment 4    | 70        | 68            | 2%     | 1%                   | 1%        |  |  |  |  |  |  |
| Establishment 5    | 209       | 204           | 2%     | 53%                  | 55%       |  |  |  |  |  |  |
| Establishment 6    | 212       | 231           | -8%    | 15%                  | 16%       |  |  |  |  |  |  |
| Establishment 7    | 216       | 241           | -11%   | 23%                  | 18%       |  |  |  |  |  |  |
| Establishment 8    | 199       | 191           | 4%     | 26%                  | 33%       |  |  |  |  |  |  |
| Establishment 9    | 177       | 193           | -8%    | 54%                  | 47%       |  |  |  |  |  |  |
| Establishment 10   | 123       | 119           | 4%     | 1%                   | 2%        |  |  |  |  |  |  |

The table shows the Order Frequency for each establishment in Days

The table shows the percentage of orders with email information available

This view enabled the client to identify the purchasing habits of customers and design targeted retention strategies and loyalty programs to reward and incentivize frequent customers.