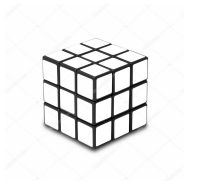


MAVEN TOY STORE SALES & INVENTORY ANALYSIS (2017-2018)

(Note: Data is available only till Quarter 3 of 2018)



BI Tool used Power BI Desktop
Submitted by: Sarthak Agarwal

EXECUTIVE SUMMARY

Key Insights

- 1) Art & Craft product showed the highest profit growth by +232% during the Q1-Q3 period of 2018 when compared to Q1-Q3 period of 2017
- 2) Maven Toy Stores at Airport accounts for 6% of the total stores, which is contributing 9.54% of total revenue & 9.42% of total profit share among all the locations. The revenue & profit per store is almost 2x higher as compared to other locations
- 3) Lego Bricks is the highest revenue generating product with a very low profit margin of 12.50% where as Colorbuds is the second highest revenue generating product with a profit margin of 53.37%
- 4) Sales revenue & profit shows seasonality trend which picks up in September and reach its peak in December(due to Christmas). Similarly, with peak in April(due to Easter) gradually descending till June. Also, it is lowest in the month of August
- 5) Electronic product showed rejection from the market throughout the period(mainly due to decreasing demand of Colorbuds which was the highest profit generating product out of all) despite being the 2nd highest contributor to the overall profit with highest profit margin. Profit of electronics product shrinks by -39.13% during the Q1-Q3 period of 2018 when compared to Q1-Q3 period of 2017
- 6) Store located at Downtown is generating 56% of total profit across all the locations. 58% of Maven toy stores are located in downtown which is the key reason of its high revenue & profit share
- 7) Seasonality: Sales revenue & profit is lowest in the month of August. It usually as per the trend picks up in September and reach its peak in December(Christmas may be the reason for this peak). Similarly, In the month of April stores are also generating a significantly high amount of revenue & profit (Easter can be the reason for this peak), gradually descending till the month of June generating significant revenue & profit

Recommendations

- 1) **Expansion Plan:** Stores Located at the Airport tends to generate highest profit per store compared to other location. The profit per store at airport is \$ 0.13 million which is x2 times higher as compared to all other locations. Currently there is only 3 cities which has stores at Airport and these 3 cities are the top 3 profit & revenue generating cities in which the profit share of airport store is significantly high as compared to other location. So, opening new stores at the Airport location of other high revenue & profit generating cities like **Hermosillo, Guanajuato, Puebla, Mexicali** can be a good idea. **Ciudad Victoria** can also be a prominent location for expansion as it has only one store currently generating around \$0.08 Million profit. Opening a new store at **Mexicali** can also be a good idea as it has the fourth highest profit per stores with only 2 stores in the entire city
- 2) **Seasonality:** When we looked at the sales data, we found presence of seasonality trend with respect to revenue & profit. September to December Period (start increasing from September and Peak in December(Christmas)) & April-June(with Peak in April then gradually decreasing till June). August is the least revenue & profit generating month except for electronic products. December & April is the highest revenue & profit generating month due to Christmas & Easter Respectively. So, as per the seasonality trend opening a new store in the month of September can be a good idea. Also, month of august is the worst time to open a new store
- 3) **Re-strategizing Product Pricing/Costing:** There are few products like Lego Bricks, Splash Ball, Rubik's cube, Magic Sand, Dart Gun, Nerf Gun which are either the most sold product or highest revenue generating product within their category but when it comes to profit generation these product are not performing up to the mark that is their profit margin is very low for example Lego Bricks is highest revenue generating and most sold product

MAVEN TOY SALES - EXECUTIVE SUMMARY



1/1/2017

9/30/2018

Year

All

YoY Profit Growth

\$1,824.24K!

Goal: \$2,179.1K (-16.28%)

Last Month Orders

41.83K✓

Goal: 40.58K (+3.08%)

Last Month Units Sold

52.15K✓

Goal: 51.19K (+1.87%)

Last Month Revenue

\$658.19K!

Goal: \$660.88K (-0.41%)

Last Month Profit

\$180.45K✓

Goal: \$175.04K (+3.09%)

Product Range

5

Products

35

Stores

50

Units Sold

1.09M

Revenue

\$14.44M

Profit

\$4.01M

Profit Margin

27.79%

Inventory

30K

Stock Revenue

\$410.24K

Stock Profit

\$110.03K

Total Unit Sold, Cost, Revenue & Profit by Product Category

Product_Category	Units Sold	Total Cost	Total Revenue	Profit	%CT Profit
Toys	267.20K	\$4.01M	\$5.09M	\$1.08M	26.89%
Electronics	134.08K	\$1.25M	\$2.25M	\$1.00M	24.95%
Art & Crafts	325.57K	\$1.95M	\$2.71M	\$0.75M	18.77%
Games	194.67K	\$1.55M	\$2.23M	\$0.67M	16.79%
Sports & Outdoors	169.04K	\$1.67M	\$2.17M	\$0.51M	12.60%
Total	1090.57K	\$10.43M	\$14.44M	\$4.01M	100.00%

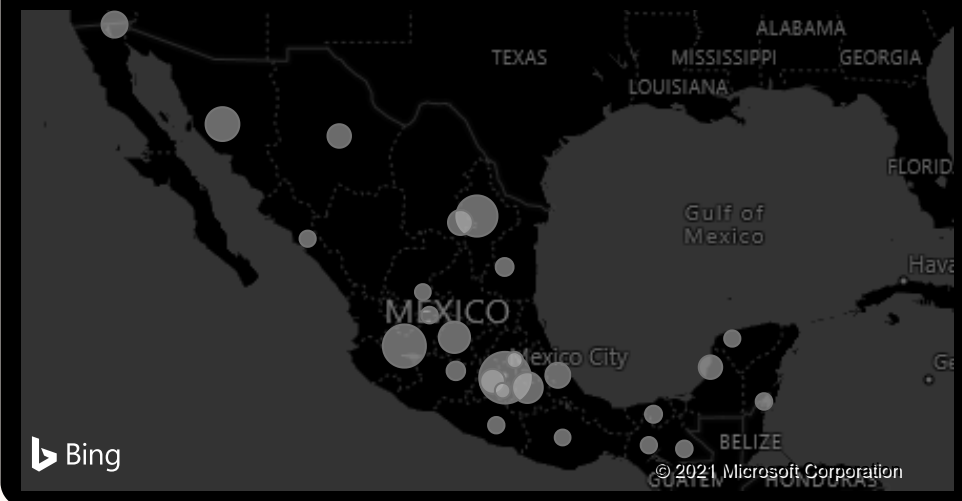
Total Orders, Unit Sold, Revenue & Profit by Location

Store_Location	Total Orders	Weekend Orders	Units Sold	Total Revenue	Profit	%CT Profit
Airport	68457	27017	96.44K	\$1.29M	\$0.38M	9.42%
Residential	95876	36948	125.40K	\$1.66M	\$0.46M	11.47%
Commercial	184705	73005	240.65K	\$3.28M	\$0.93M	23.09%
Downtown	480224	180282	628.07K	\$8.22M	\$2.25M	56.02%
Total	829262	317252	1090.57K	\$14.44M	\$4.01M	100.00%

Tabular

Visual

Citywise Product Sales Detail



Top Category(by Profit)

Toys

Top Product(by Profit)

Colorbuds

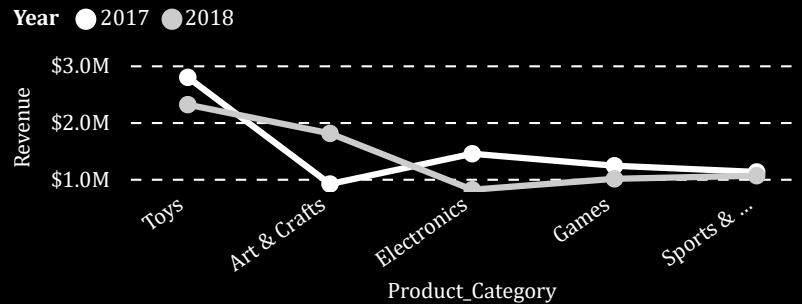
Top City(by Profit)

Ciudad de Mexico

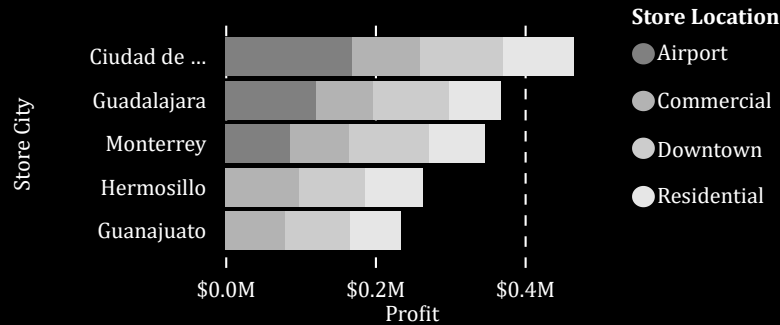
Top Store Location(by Profit)

Airport

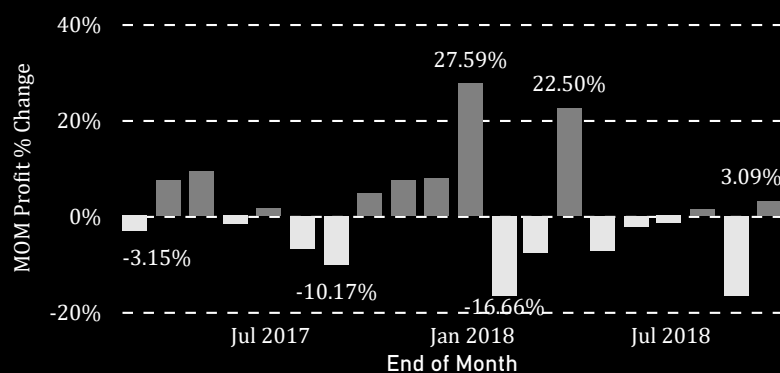
Last Year and Current Year Revenue by Product_Category



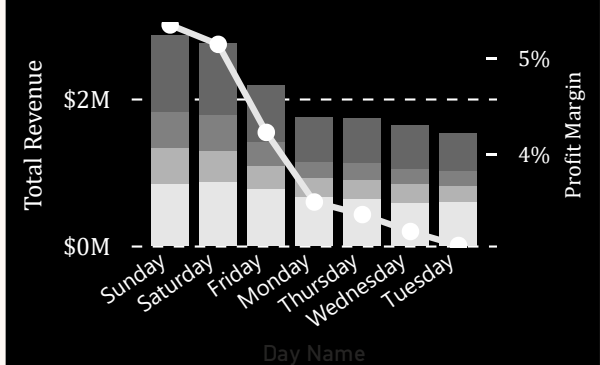
Top 5 Profitable City & Location



Month over Month Profit % Change



Profit & Revenue Distribution by Day



Store Overall Performance

Early Term 2018 over 2017 shows profit growth of **+16.04%**

Product Category Performance

- 1) Toys has shown a significant profit growth in Early Term period of 2018 as compared to 2017 by +6.13%. Toys have the biggest share of revenue at 35.36% and profit at 26.89% with positive trend in sales volume performing consistently, mainly due to the sale of Lego Bricks & Action Figure contributing 60% of the total profit within the category
- 2) Similarly when we look at Art and Craft there is a +232% profit growth during the early term period of both year making it a Rising Star
- 3) Electronic Category showed rejection from the market throughout the period (mainly due to decreasing demand of Colorbuds)

PRODUCT ANALYSIS

1/1/2017

9/30/2018

Product Category

Electronics

Category wise Product Analysis

Product_Name	Units Sold	Total Cost	Total Revenue	Profit	%CT Profit
Colorbuds	104.37K	\$0.73M	\$1.56M	\$0.83M	83.37%
Gamer Headphones	17.96K	\$0.27M	\$0.38M	\$0.11M	10.76%
Toy Robot	11.75K	\$0.25M	\$0.31M	\$0.06M	5.87%
Total	134.08K	\$1.25M	\$2.25M	\$1.00M	100.00%

Store City wise Product Analysis

Store_City	Units Sold	Total Revenue	Profit	%CT Profit
Ciudad de Mexico	14.74K	\$0.25M	\$0.11M	10.99%
Guadalajara	13.75K	\$0.23M	\$0.10M	10.25%
Hermosillo	11.88K	\$0.19M	\$0.09M	9.04%
Monterrey	11.61K	\$0.19M	\$0.09M	8.71%
Mexicali	8.75K	\$0.15M	\$0.07M	6.51%
Puebla	7.91K	\$0.13M	\$0.06M	5.97%
Guanajuato	7.38K	\$0.12M	\$0.06M	5.56%
Total	134.08K	\$2.25M	\$1.00M	100.00%

Store Location Analysis

Downtown	Commercial	Airp...	Res...
\$502.49K	\$287.57K	\$10...	\$10...

Year

All

Early Term Profit Growth

\$327.03K!

Goal: \$537.29K (-39.13%)

Last Month Orders

3.45K!

Goal: 4.14K (-16.85%)

Last Month Units Sold

4.08K!

Goal: 4.81K (-15.17%)

Last Month Revenue

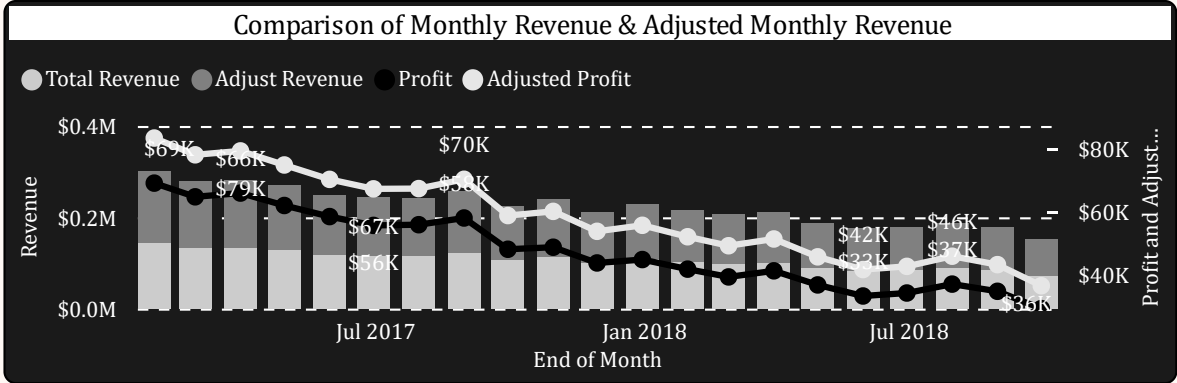
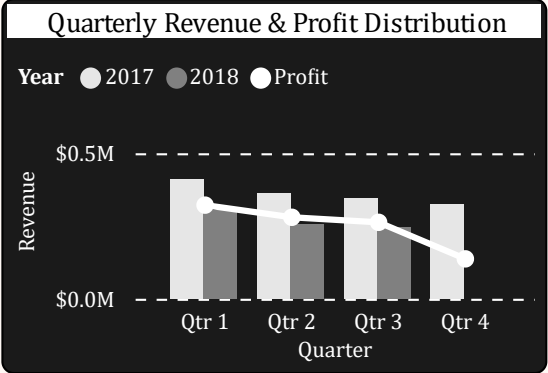
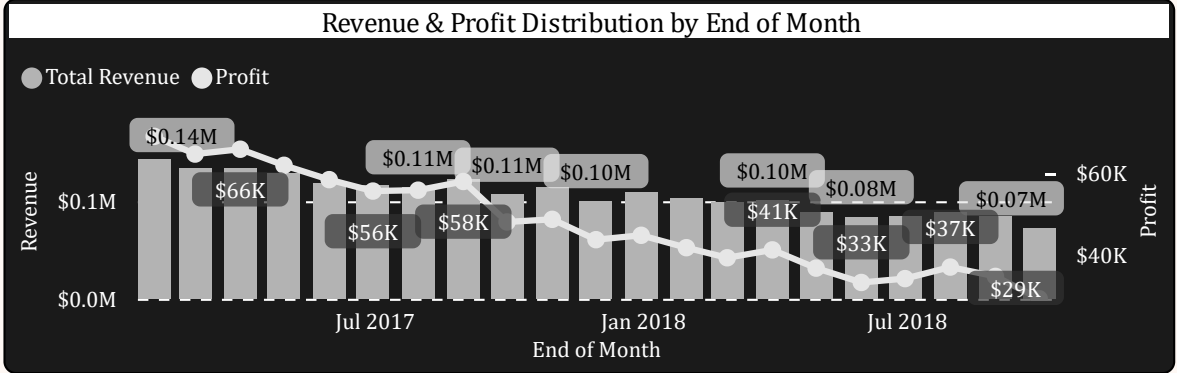
\$72.55K!

Goal: \$84.6K (-14.25%)

Last Month Profit

\$29.19K!

Goal: \$34.69K (-15.83%)



Total Revenue

\$2.25M

New Total Revenue

\$2.47M

Total Profit

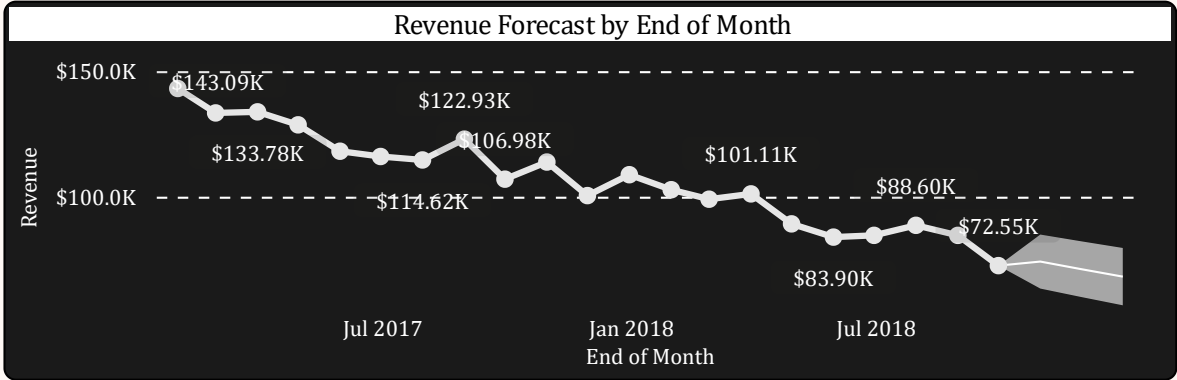
\$1M

New Total Profit

\$1.23M

Price Adjustment (%)

0.10



INSIGHT

Price Adjustment at 10% of Current Product Price

Toys: Revenue change +10% & Profit Change +47%

Games: Revenue change +9.8% & Profit Change +34%

Art & Craft: Revenue change +9.9% & Profit Change +36%

Category wise Seasonality.

1) Toys: This category shows seasonal trend with regards to profit & revenue in the periods of April to June(Start increasing from March) & September to December(start increasing from August)

2) Electronics: Sees a downward trend with respect to both revenue & profit Within Electronics, Colorbuds shows a shrink in its profit with decreasing demand and Gamer Headphones seems to be its replacement

3) Art & Craft : Sees a upward moving trend with respect to its revenue & profit



LOCATION ANALYSIS

1/1/2017

9/30/2018

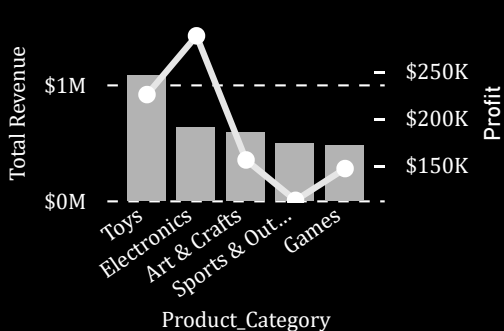
Product Category

Commercial

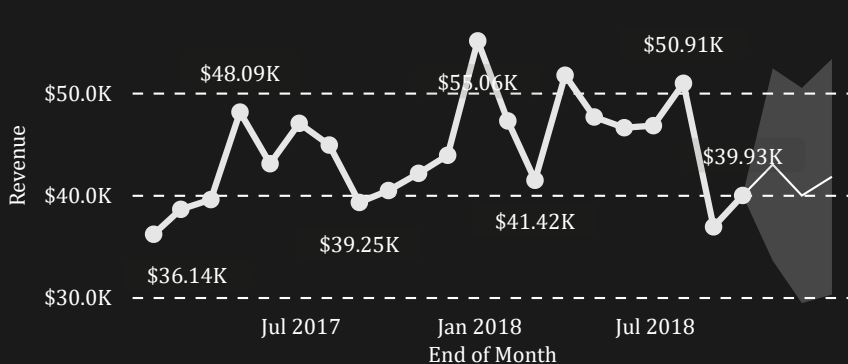
Location wise Store Details

Store_Name	Store Age	Total Revenue	Profit	%CT Profit
Campeche 2	11	\$0.21M	\$0.058M	6.27%
Chihuahua 1	11	\$0.25M	\$0.070M	7.51%
Ciudad de Mexico 4	6	\$0.32M	\$0.090M	9.75%
Guadalajara 2	22	\$0.26M	\$0.076M	8.17%
Guanajuato 2	11	\$0.28M	\$0.080M	8.58%
Total	127	\$3.28M	\$0.927M	100.00%

Product Category Revenue & Profit



Profit Forecast by End of Month



Year

All

Early Term Profit Growth

\$408.97K✓

Goal: \$376.88K (+8.51%)

Last Month Orders

8.99K✓

Goal: 8.56K (+5.08%)

Last Month Units Sold

11.34K✓

Goal: 10.51K (+7.89%)

Last Month Revenue

\$139.54K✓

Goal: \$137.58K (+1.43%)

Last Month Profit

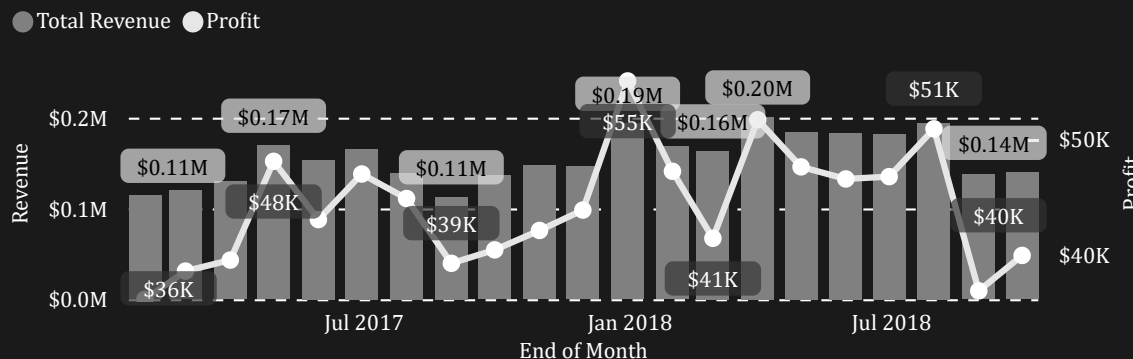
\$39.93K✓

Goal: \$36.86K (+8.33%)

Store wise Products Cost, Revenue, Profit & Inventory Analysis

Product_Name	Units Sold	Total Cost	Total Revenue	Profit	Average Units Sold per Day	Stocks Inventory	Total Revenue in Stocks	Profit in Stocks
Colorbuds	30495	\$0.21M	\$0.46M	\$0.24M	49	212	\$3.18K	\$1.70K
Lego Bricks	13264	\$0.46M	\$0.53M	\$0.07M	26	253	\$10.12K	\$1.27K
Action Figure	10833	\$0.11M	\$0.17M	\$0.06M	22	102	\$1.63K	\$0.61K
Deck Of Cards	19951	\$0.08M	\$0.14M	\$0.06M	35	606	\$4.24K	\$1.82K
Kids Makeup Kit	5766	\$0.08M	\$0.12M	\$0.03M	17	129	\$2.58K	\$0.77K
Glass Marbles	6369	\$0.04M	\$0.07M	\$0.03M	18	104	\$1.14K	\$0.52K
Total	240648	\$2.35M	\$3.28M	\$0.93M	377	6997	\$98.68K	\$26.07K

Store Revenue & Profit Distribution by End of Month



1) Expansion Plan: Stores Located at the Airport tends to generate highest profit per store compared to other location. The profit per store at airport is \$ 0.13 Millions which is x2 times higher as compared to all other stores. Currently there is only 3 cities which has stores at Airport and these 3 cities are the top 3 profit & revenue generating cities in which the profit share of airport store is significantly high as compared to other location. So opening new stores at the Airport location of other high revenue & profit generating cities like **Hermosillo, Guanajuato, Puebla, Mexicalli** can be a good idea.

Ciudad Victoria can also be a prominent location for expansion as it has only one store currently generating around \$0.08 Million profit

Opening a new store at **Mexicalli** can also be a good idea as it has the fourth highest profit per stores with only 2 stores in the entire city



INSIGHT

Commercial

- 1) All the store in this location as a whole recorded 2nd highest profit among all the store location But the market seems to be saturated at this location as compared to other locations because this location has seen Early Term 2017 vs 2018 profit growth of only 8.51%
- 2) These Stores shows Seasonality trend with respect to revenue & profit in the period of September to December(growing with peak in December) and July to September(decreasing then increasing pattern making august the least profitable month)
- 3) At top 3 most profitable stores the top 2 most profitable products like Action Figure, Colorbuds, Lego Bricks, Deck of cards are going to be out of stock in 1-3 days
- 4) At Commercial Stores Electronic Product are the most profitable products among all, accounting 31% of the total profit share. This