Maven Toys



Sales Analysis



About the Project

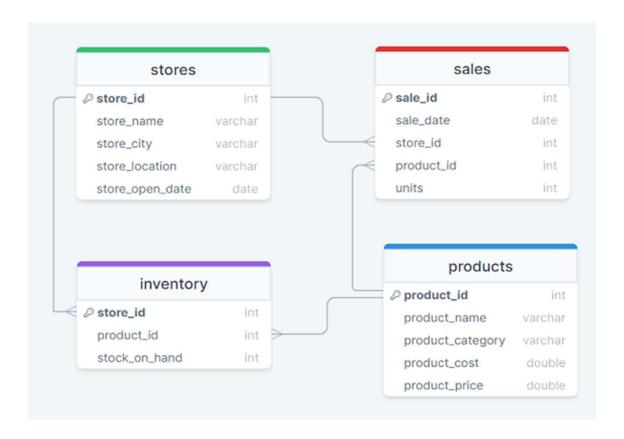
We have a dataset containing sales & inventory data for a fictitious chain of toy stores in Mexico called Maven Toys, including information about products, stores, daily sales transactions, and current inventory levels at each location.

We will summarize the sales data to calculate metrics such as profits, cost of inventory etc, plot charts to see trends in the data. We will also analyse performance across different stores in the country and prepare a report for stakeholders so they can make strategic decisions.

TOOLS:-

We will analyze the Sales data and report out insights in Excel

Entity Relationship Diagram

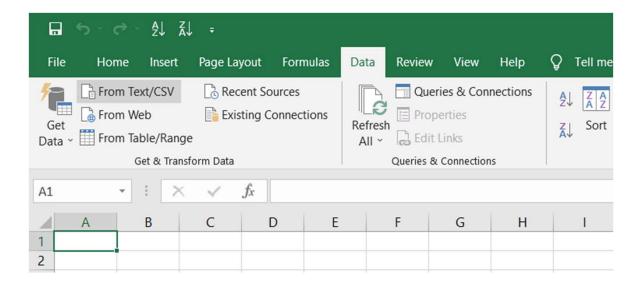


Key Insights

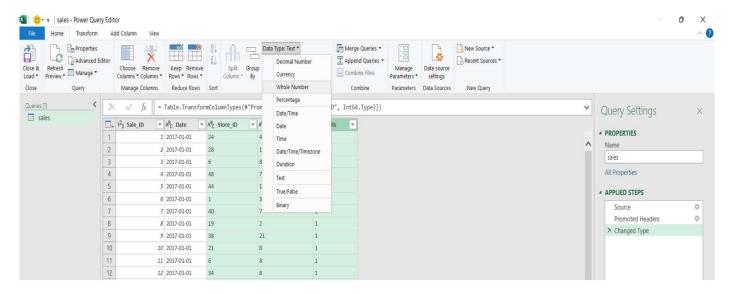
- We have calculated various metrics such as profit, orders, expected profit from stocked inventory etc.
- Toys and electronics are highest selling categories comprising over 50% of profits.
- Most popular product is 'Colorbuds' bringing 20% of profits.
- Profits every month are higher compared to previous year months.
- Sales peak over the weekends, dipping in between the weekdays (we can organize and hire staff accordingly).
- There has been consistent growth in our stores over the years.
- We have most stores in downtown area which also bring majority of our revenue.
 - However stores closer to Airport areas bring 60% more profit per store than stores in other areas on an average.

Importing & Loading the Data

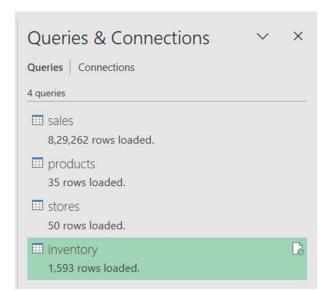
1. Import the data which is stored as a csv file



2. Transform the data in power query editor such as correcting data types, remove unwanted text characters.



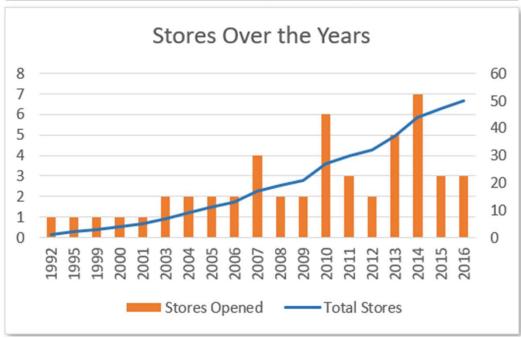
3. Close and load the Data



Store Level Analysis

- Location wise performance
- Stores growth over the years
- Most profitable stores
- Month over Month change in Profits across stores
- Revenue trend over the months

Location Analysis					
Store_Location	Stores	Profit Profit per locati			
Airport	3	\$ 3,78,049.00	\$ 1,26,016.33		
Downtown	29	\$22,48,728.00	\$ 77,542.34		
Commercial	12	\$ 9,26,864.00	\$ 77,238.67		
Residential	6	\$ 4,60,388.00	\$ 76,731.33		





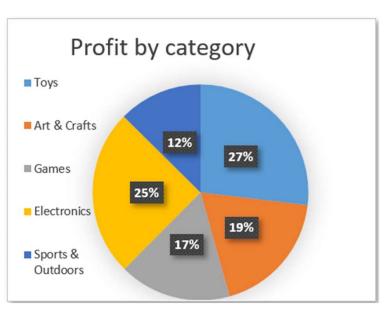
Month over Month Change in Profits							
	2017			2018			
Store_ID	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Revenue Trend
1	31.31%	-10.82%	30.49%	21.09%	-9.56%	13.19%	
2	5.26%	-33.73%	38.84%	-13.09%	-23.01%	17.44%	~~
3	1.45%	-1.66%	-12.08%	26.07%	-15.33%	-16.44%	
4	-11.30%	-17.56%	28.00%	4.52%	-0.44%	0.00%	<u></u>
5	-25.10%	-2.65%	48.04%	1.82%	-8.26%	0.06%	
6	-9.49%	4.51%	25.84%	-13.61%	-8.09%	-39.45%	
7	3.85%	-12.15%	25.47%	-6.54%	23.57%	-11.06%	~~
8	-15.98%	7.80%	11.49%	60.78%	-24.74%	-27.05%	
9	11.96%	-25.38%	35.83%	11.77%	-2.56%	-28.34%	~
10	21.87%	4.00%	24.16%	-19.38%	2.84%	-16.24%	

Product & Inventory

- How many products in each category
- Category wise profit distribution
- Most & least profitable products
- How much inventory in stock

Category wise Profits				
Product_Category	Products	Profit		
Toys	9	\$10,79,527.00		
Art & Crafts	8	\$ 7,53,354.00		
Games	8	\$ 6,73,993.00		
Electronics	3	\$10,01,437.00		
Sports & Outdoors	7	\$ 5,05,718.00		

Most Profitable & least profitable products					
Rank & Name	% of Profit	Profit			
1 Colorbuds	20.8%	\$	8,34,944.00		
2 Action Figure	8.7%	\$	3,47,748.00		
3 Lego Bricks	7.4%	\$	2,98,685.00		
4 Deck Of Cards	6.3%	\$	2,52,102.00		
32 Teddy Bear	0.3%	\$	12,832.00		
33 Chutes & Ladders	0.3%	\$	11,487.00		
34 Uno Card Game	0.3%	\$	10,840.00		
35 Classic Dominoes	0.2%	\$	8,942.00		



Inventory					
Cost of Inventory stored	\$	3,00,209.58			
Expected Revenue	\$	4,10,240.58			
Expected Profit	\$	1,10,031.00			

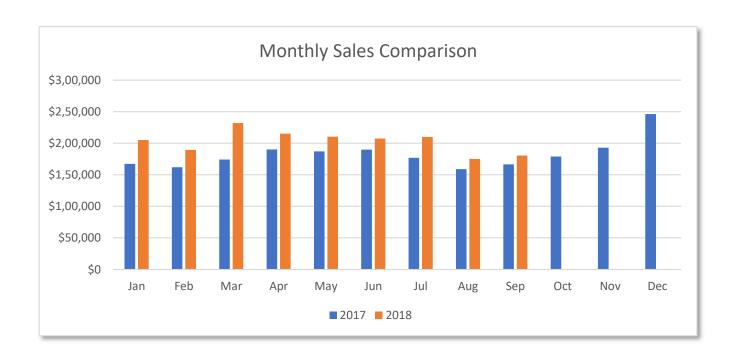
Sales Analysis

- Orders, Revenue, Profit, Average order value, Profit margins.
- Monthly profits
- Sales trend by day of week
- Monthly Sales comparison
- Sales Trend over the months

Sales					
Number of orders		829262			
Total Revenue	\$	1,44,44,572.35			
Total Profit	\$	40,14,029.00			
Profit Margin		28%			
Avg Order Value	\$	17.42			

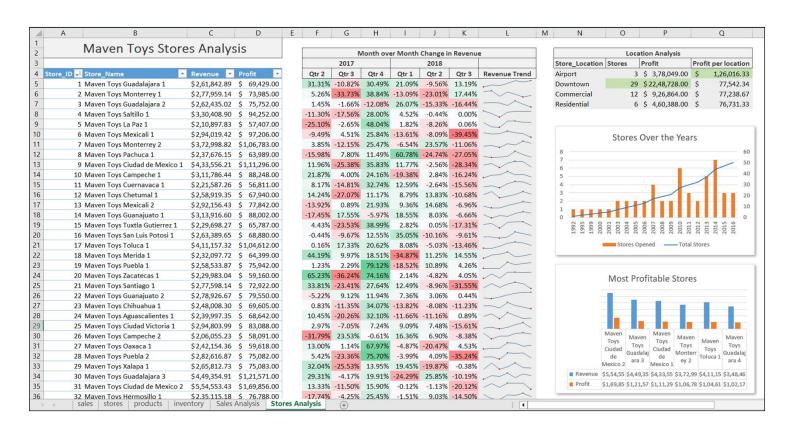
Sales Trend by Day of week
\$10,00,000
\$8,00,000
\$6,00,000
\$4,00,000
\$2,00,000
\$-
Monday Luesday Friday Friday Saturday Sunday

Monthly Profits				
Month	Profit			
January 2017	\$	1,67,126		
February 2017	\$	1,61,861		
March 2017	\$	1,73,992		
April 2017	\$	1,90,099		
May 2017	\$	1,86,894		
June 2017	\$	1,89,815		
July 2017	\$	1,76,922		
August 2017	\$	1,58,931		
September 2017	\$	1,66,397		
October 2017	\$	1,78,799		
November 2017	\$	1,92,873		
December 2017	\$	2,46,078		
January 2018	\$	2,05,074		
February 2018	\$	1,89,314		
March 2018	\$	2,31,909		
April 2018	\$	2,15,096		
May 2018	\$	2,10,347		
June 2018	\$	2,07,212		
July 2018	\$	2,09,807		
August 2018	\$	1,75,038		
September 2018	\$	1,80,445		





Store Analysis Worksheet



Sales Analysis Worksheet

