

Mexican Toy Sales Analysis

Date started: January 6th, 2023

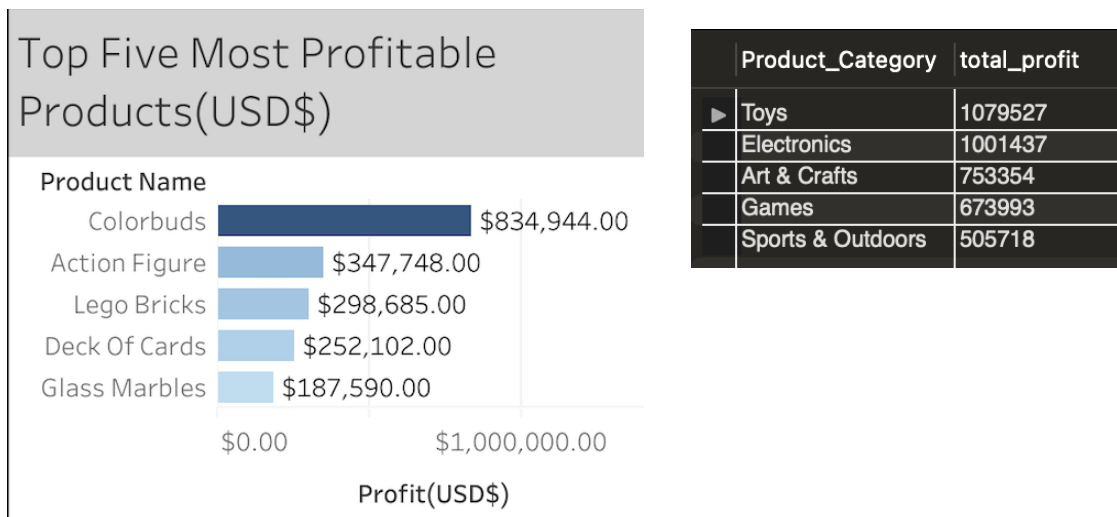
Dataset: Maven Analytics

Analysis on a toy store in Mexico (Using SQL and Tableau)

Client recommendation questions:

- Which product categories drive the biggest profits? Is this the same across store locations?
- Can you find any seasonal trends or patterns in the sales data?
- Are sales being lost with out-of-stock products at certain locations?
- How much money is tied up in inventory at the toy stores? How long will it last?

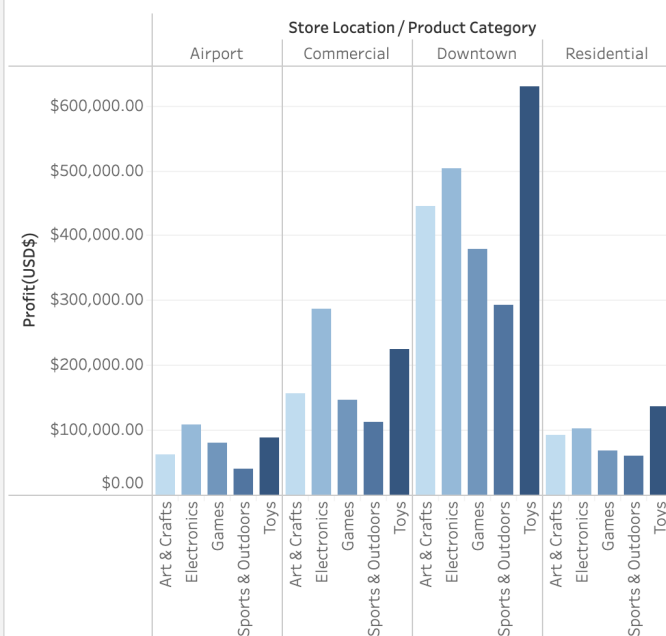
1. Which product categories drive the biggest profits (USD) ? Is this the same across store locations?



- So far Toys are the most profitable product category, generating around \$1,079,527, but electronics are a close second, generating around \$1,001,437. Also, the most profitable product are Colorbuds, generating around \$834,944.

	Store_Locati...	Product_Category	total_profit
▶	Airport	Electronics	108197
	Commercial	Electronics	287574
	Downtown	Toys	630029
	Residential	Toys	136214

Location Profit



- When it comes store locations, we can see similar trends with how toys and electronics are reoccurring as top profitable products. The Airport and Commercial areas have electronics as their most profitable category, while Downtown and Residential Areas have toys as their category that drives their biggest profits.

- Also, the Downtown area has the most profit compared to all of the Toy Store locations in Mexico

2. Can you find any seasonal trends or patterns in the sales data?

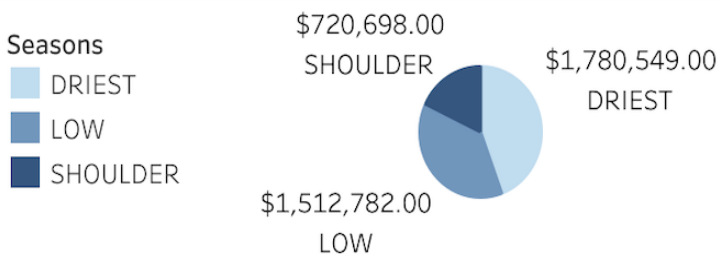
So, I've done some research that Mexico has two seasons, 'Rainy' and 'Dry'. However, I've also found that there is basically like a "connection" season, which is called the 'Shoulder season'

The three seasons will be:

- "Driest" as Mexico experiences it's most driest months (December-April)

- “Low” as Mexico experiences it’s most rainy months (May, June, and September - November)
- “Shoulder” as connection to dry and low season (July and August)
- Source: <https://www.travelandleisure.com/trip-ideas/best-time-to-visit-mexico>

Profit Generated by Season



- The Driest season has the highest total profit among the three seasons. It does have a correlation with months such as December and April, which are the months that have Christmas, New years, and Easter, especially since a majority of Mexican citizens are Roman Catholic. Low season is a close second, especially, since Cinco De Mayo is also apart of that season. Shoulder season is the lowest, however there’s only two months that occur in that season alone.
- There’s correlation between the weather in the Driest season, since this is when Mexico is at it’s driest, there can be a correlation that there are more people that are more encouraged to go out and shop since the weather is much nicer, however that is just an assumption.

3. Are sales being lost with out-of-stock products at certain locations?

Store_Name	Store_Locati...	Product_Name	Stock_On_Hand	units_sold_in_Mexico
Maven Toys Monterrey 3	Airport	Gamer Headphones	0	15543
Maven Toys Monterrey 3	Airport	Hot Wheels 5-Pack	0	20776
Maven Toys Mexicali 1	Commercial	Action Figure	0	48497
Maven Toys Guanajuato 2	Commercial	Barrel O' Slime	0	54078
Maven Toys Ciudad de Mexico 4	Commercial	Dino Egg	0	28181
Maven Toys Puebla 1	Commercial	Etch A Sketch	0	11205
Maven Toys Guanajuato 2	Commercial	Hot Wheels 5-Pack	0	20776
Maven Toys Puebla 1	Commercial	Hot Wheels 5-Pack	0	20776
Maven Toys Guadalajara 2	Commercial	Hot Wheels 5-Pack	0	20776
Maven Toys Hermosillo 3	Commercial	Jenga	0	12143
Maven Toys Ciudad de Mexico 4	Commercial	Playfoam	0	2812
Maven Toys Hermosillo 3	Commercial	Playfoam	0	2812
Maven Toys Toluca 2	Commercial	Playfoam	0	2812
Maven Toys Guanajuato 2	Commercial	Playfoam	0	2812
Maven Toys Guadalajara 2	Commercial	Plush Pony	0	5328
Maven Toys Saltillo 2	Commercial	Teddy Bear	0	6034
Maven Toys Puebla 1	Commercial	Teddy Bear	0	6034
Maven Toys Mexicali 2	Downtown	Action Figure	0	48497
Maven Toys Xalapa 2	Downtown	Action Figure	0	48497
Maven Toys Puebla 2	Downtown	Animal Figures	0	32250
Maven Toys Culiacan 1	Downtown	Animal Figures	0	32250
Maven Toys Morelia 1	Downtown	Chutes & Ladders	0	3700
Maven Toys Hermosillo 2	Downtown	Chutes & Ladders	0	3700
Maven Toys Mexicali 2	Downtown	Dino Egg	0	28181
Maven Toys Villahermosa 1	Downtown	Dino Egg	0	28181
Maven Toys Monterrey 2	Downtown	Dino Egg	0	28181
Maven Toys Pachuca 1	Downtown	Dino Egg	0	28181
Maven Toys Mexicali 2	Downtown	Etch A Sketch	0	11205
Maven Toys La Paz 1	Downtown	Etch A Sketch	0	11205
Maven Toys Oaxaca 1	Downtown	Etch A Sketch	0	11205
Maven Toys Hermosillo 2	Downtown	Etch A Sketch	0	11205
Maven Toys La Paz 1	Downtown	Foam Disk Launcher	0	6812
Maven Toys Mexicali 2	Downtown	Foam Disk Launcher	0	6812
Maven Toys Tuxtla Gutierrez 1	Downtown	Foam Disk Launcher	0	6812
Maven Toys Aguascalientes 1	Downtown	Foam Disk Launcher	0	6812
Maven Toys Chihuahua 2	Downtown	Foam Disk Launcher	0	6812
Maven Toys Pachuca 1	Downtown	Gamer Headphones	0	15543
Maven Toys Pachuca 1	Downtown	Glass Marbles	0	24507
Maven Toys Puebla 2	Downtown	Hot Wheels 5-Pack	0	20776
Maven Toys Aguascalientes 1	Downtown	Hot Wheels 5-Pack	0	20776
Maven Toys Chilpancingo 1	Downtown	Hot Wheels 5-Pack	0	20776
Maven Toys Xalapa 2	Downtown	Hot Wheels 5-Pack	0	20776
Maven Toys Culiacan 1	Downtown	Hot Wheels 5-Pack	0	20776
Maven Toys La Paz 1	Downtown	Hot Wheels 5-Pack	0	20776
Maven Toys Guanajuato 1	Downtown	Hot Wheels 5-Pack	0	20776

no_Airport	no_Commercial	no_Downtown	no_Residential
2	15	46	14

- The location that had the most stores with lost sales was the **downtown** area (46 stores in total) . They lost sales in Action figures, Animal figures, Chutes and Ladders, Dino Eggs, Etch A Sketch, Foam Disk Launchers, Gamer Headphones, Glass Marbles, Hot Wheels 5-packs, Mini Ping Pong Sets, Playfoams, Plush Ponys, Splash Balls, and Toy Robots.
- Only 2 **airport** stores had lost sales
- 15 **commercial** area stores had lost sales
- 14 **residential area** stores had lost sales

4. How much money is tied up in inventory at the toy stores? How long will it last?

		avg_days_in_invent...
total_inventory	▶	52.03797402597399
▶ 300209.58		

- Total inventory at the toy stores is \$300,209.58
- It would last around 52 days

What I would recommend Mexican Toy Stores to reach peak profit

- Have most of your sales occur during the Dry season
 - The highest season occurred during the Dry season and it can be due to the weather and the Holidays that are in this specific season, including Christmas, New Years and Easter!
- Increase prices in products that are in the “Toys” and “Electronics” Category
 - These are the products that drive the biggest profits
- If you want to relocate or open a new Toy Store, the best bet is to open in **Down Town** areas
 - Since it has so many lost sales that occur in this area, your business can definitely benefit since customers will most likely go to you for products that are out-of-stock in other stores
 - Also it generated the most profit compared to the other locations.
 - If you can’t relocate or open a store in the downtown area, you can also reside in **Commercial areas**, since they generated the second most profit in store locations.
- Inventory should last around 52 days
 - Efficiently manage inventory and have a good cash flow

- If it exceeds more than 60-70 days, it can be harmful to your business since you're not getting money from the products that you've bought, hence not generating a profit!