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AmedRavelo001 Created Azure Notebook

4a7c32e · 5 days ago



1351 lines (1351 loc) · 84.1 KB

PROJECT #1 : Online Sales Data Popoular Marketplace

In [2]:

```
/*Bar Chart showing monthly sales over the months available : month ex. 1 = January etc.*/  
SELECT MONTH(Date) AS Month,  
       SUM(Total_Revenue) AS [Monthly Sales]  
FROM [Online Sales Data].[dbo].[Online Sales Data]  
GROUP BY MONTH(Date)  
ORDER BY MONTH(Date);
```

(8 rows affected)

Total execution time: 00:00:00.005

Out[2]:

	Month	Monthly Sales
1		14548.319875717163
2		10803.369953155518
3		12849.239894866943



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```
7  6797.079990386963  
8  7278.109984397888
```

What months is revenue the highest? Why?

Above you can see a large flow within the first 4 months of the year (Jan-Apr) which can be a result of tax returns.

In [3]:

```
/*Pie Chart showing the distribution of sales across different product cateorgies*/  
SELECT Product_Category,  
       SUM(Total_Revenue) AS [Category Sales]  
FROM [Online Sales Data].[dbo].[Online Sales Data]  
GROUP BY Product_Category  
ORDER BY [Category Sales];
```

(6 rows affected)

Total execution time: 00:00:00.007

Out[3]:

	Product_Category	Category Sales
	Books	1861.9300003051758
	Beauty Products	2621.8999977111816
	Clothing	8128.9300537109375
	Sports	14326.519886016846
	Home Appliances	18646.15990447998
	Electronics	34982.40969085693

What product category is makes up a greater part of our revenue?

Sales within the "Electronics" category makes up close to 40%-50% of the total revenue. This cost could be due to an increase in the electronics industry. I was thinking it could also be due to the cost difference between for example, an iphone over a book or beauty product but as you can see, they are 2x the total sales of Home Appliances.

```
In [4]: /*Line Chart showing average sales over the available months*/
SELECT MONTH(Date) AS [Month],
        AVG(Total_Revenue) AS [Average Revenue]
FROM [Online Sales Data].[dbo].[Online Sales Data]
GROUP BY MONTH([Date])
ORDER BY MONTH(Date);
```

(8 rows affected)

Total execution time: 00:00:00.007

```
Out[4]:  Month      Average Revenue
        1  469.3006411521666
        2  372.52999838467304
        3  414.4916095118369
        4  415.0563304901123
        5  272.7577404822073
        6  246.15166549682618
        7  219.26064485119235
        8  269.55962905177364
```

Here is a line chart showing the average sales over the available months showing us trends caused by either seasons and sales patterns, showing the first 4 months of the year with almost double the average of the following 4 months.

```
In [2]: /*What product produces the most revenue?*/
SELECT Product_Name,
        SUM(Unit_Price*Units_Sold) AS Total_Revenue
FROM [Online Sales Data].[dbo].[Online Sales Data]
GROUP BY Product_Name
ORDER BY Total_Revenue DESC;
```

(232 rows affected)

Total execution time: 00:00:00.016

```
Out[2]:
```

	Product_Name	Total_Revenue
	Canon EOS R5 Camera	3899.989990234375
	LG OLED TV	2599.97998046875
	MacBook Pro 16-inch	2499.989990234375
	Apple MacBook Pro 16-inch	2399
	iPhone 14 Pro	1999.97998046875
	Peloton Bike	1895

HP Spectre x360 Laptop	1599.989990234375
Roomba i7+	1599.97998046875
Garmin Forerunner 945	1599.969970703125
Samsung Odyssey G9 Gaming Monitor	1499.989990234375
Samsung Galaxy Tab S8	1499.97998046875
Microsoft Surface Laptop 4	1299.989990234375
Apple MacBook Air	1199.989990234375
Samsung QLED 4K TV	1199.989990234375
Apple iPad Air	1199.97998046875
Blueair Classic 480i	1199.97998046875
Apple Watch Series 8	1199.969970703125
Dyson Supersonic Hair Dryer	1199.969970703125
GoPro HERO10 Black	1199.969970703125
Sony WH-1000XM4 Headphones	1049.969970703125
Garmin Fenix 6X Pro	999.989990234375
Google Pixel 6 Pro	899.989990234375
De'Longhi Magnifica Espresso Machine	899.989990234375
Bose SoundLink Revolve+ Speaker	899.969970703125
Nintendo Switch	899.969970703125
Canon EOS Rebel T7i DSLR Camera	749.989990234375
Bowflex SelectTech 1090 Adjustable Dumbbells	699.989990234375
Samsung Odyssey G7 Gaming Monitor	699.989990234375
Shark IQ Robot Vacuum	699.97998046875
Fitbit Versa 3	689.8499908447266
Eufy RoboVac 11S	659.9700164794922
Google Pixelbook Go	649.989990234375
Garmin Edge 530	599.97998046875
Babolat Pure Drive Tennis Racket	599.9700164794922
Breville Smart Grill	599.9000244140625
Anova Precision Oven	599
Apple AirPods Max	549
Nike Air Force 1	539.9399871826172
Keurig K-Elite Coffee Maker	529.9700164794922
KitchenAid Artisan Stand Mixer	499.989990234375
Dyson V11 Vacuum	499.989990234375
Dyson Pure Cool Link	499.989990234375
Sony PlayStation 5	499.989990234375

North Face Down Jacket	499.9800109863281
Apple AirPods Pro	499.9800109863281
Breville Nespresso Creatista Plus	499.95001220703125
Polar Vantage V2	499.95001220703125
Manduka PRO Yoga Mat	479.9599914550781
Ray-Ban Aviator Sunglasses	464.9700164794922
Philips Sonicare DiamondClean Toothbrush	459.9800109863281
Google Nest Hub Max	459.9800109863281
GoPro HERO9 Black	449.989990234375
iRobot Braava Jet M6	449.989990234375
Bowflex SelectTech 552 Dumbbells	399.989990234375
Dyson V8 Absolute	399.989990234375
Yeti Tundra Haul Portable Wheeled Cooler	399.989990234375
Philips Airfryer XXL	399.9800109863281
Ninja Foodi Pressure Cooker	399.9800109863281
Cuisinart Coffee Center	399.8999938964844
Sonos Beam Soundbar	399
Anova Precision Cooker	398
Nike Metcon 6	389.9700164794922
KitchenAid Stand Mixer	379.989990234375
Adidas Ultraboost Running Shoes	359.9800109863281
Adidas Ultraboost Shoes	359.9800109863281
Apple TV 4K	358
Vitamix Explorian Blender	349.989990234375
YETI Tundra 65 Cooler	349.989990234375
Hyperice Hypervolt Massager	349
Adidas Originals Superstar Sneakers	319.9599914550781
Breville Smart Oven	299.989990234375
Bose QuietComfort 35 Headphones	299.989990234375
Garmin Forerunner 245	299.989990234375
YETI Tundra 45 Cooler	299.989990234375
Samsung Galaxy Watch 4	299.989990234375
Bose SoundSport Wireless Earbuds	299.9800109863281
Fitbit Luxe	299.8999938964844
Bose QuietComfort 35 II Wireless Headphones	299
Lululemon Align Leggings	294

Instant Pot Duo Evo Plus	279.9800109863281
Patagonia Better Sweater	279.9800109863281
Nike Air Force 1 Sneakers	270
Instant Pot Duo	269.9699935913086
Nike Air Zoom Pegasus 37	259.9800109863281
Kindle Paperwhite	259.9800109863281
Fitbit Charge 5	259.9800109863281
On Running Cloud Shoes	259.9800109863281
Adidas Originals Trefoil Hoodie	259.9599914550781
Amazon Echo Show 10	249.99000549316406
YETI Hopper Flip Portable Cooler	249.99000549316406
Titleist Pro V1 Golf Balls	249.95000839233398
Tommy Hilfiger Polo Shirt	249.95000839233398
Uniqlo Ultra Light Down Jacket	239.9699935913086
Puma Suede Classic Sneakers	239.9600067138672
Anker PowerCore Portable Charger	239.9600067138672
Columbia Fleece Jacket	239.9600067138672
Yeti Rambler Tumbler	239.94001007080078
Under Armour HOVR Sonic 4 Shoes	219.97999572753906
Rogue Fitness Kettlebell	209.9699935913086
Levi's 501 Jeans	209.9699935913086
Logitech G Pro X Wireless Gaming Headset	199.99000549316406
Nespresso VertuoPlus	199.99000549316406
Cuisinart Custom 14-Cup Food Processor	199.99000549316406
Yeti Roadie 24 Cooler	199.99000549316406
Logitech MX Master 3 Mouse	199.97999572753906
Amazon Echo Dot (4th Gen)	199.9600067138672
Breville Smart Coffee Grinder Pro	199.9499969482422
Fitbit Inspire 2	199.89999389648438
Lululemon Wunder Under High-Rise Leggings	196
Levi's Sherpa Trucker Jacket	196
La Mer Crème de la Mer Moisturizer	190
Instant Pot Duo Crisp	179.99000549316406
Panasonic NN-SN966S Microwave	179.99000549316406
Levi's Trucker Jacket	179.97999572753906
Levi's 511 Slim Fit Jeans	179.9700050354004
Gap 1969 Original Fit Jeans	179.9700050354004

Gap 1995 Original Jeans	179.97000050354004
Zara Summer Dress	179.97000050354004
TRX All-in-One Suspension Training System	169.9499969482422
Google Nest Wifi Router	169
Nike Sportswear Club Fleece Hoodie	164.97000050354004
Nespresso Vertuo Next Coffee and Espresso Maker	159.99000549316406
Cuisinart Griddler Deluxe	159.99000549316406
Keurig K-Mini Coffee Maker	159.97999572753906
Hydro Flask Wide Mouth Water Bottle	159.8000030517578
Gap High Rise Skinny Jeans	149.97000050354004
Champion Reverse Weave Hoodie	149.97000050354004
Amazon Fire TV Stick 4K	149.97000050354004
Yeti Rambler Bottle	149.97000050354004
Wilson Evolution Basketball	149.94999885559082
Under Armour HeatGear T-Shirt	149.94999885559082
Adidas 3-Stripes Shorts	149.94999885559082
Calvin Klein Boxer Briefs	149.94999885559082
Spalding NBA Street Basketball	149.93999862670898
Oakley Holbrook Sunglasses	146
Instant Pot Ultra	139.99000549316406
Nike Dri-FIT Training Shorts	139.9600067138672
Gap Crewneck Sweatshirt	139.9600067138672
Adidas Essential Track Pants	134.97000050354004
The Silent Patient by Alex Michaelides	134.94999885559082
Becoming by Michelle Obama	130
Chanel No. 5 Perfume	129.99000549316406
Bose SoundLink Color Bluetooth Speaker II	129
Tom Ford Black Orchid Perfume	125
H&M Slim Fit Jeans	119.970000503540039
Gap Essential Crewneck T-Shirt	119.93999862670898
Salt, Fat, Acid, Heat by Samin Nosrat	107.970000503540039
Sunday Riley Good Genes	105
Estee Lauder Advanced Night Repair	105
Nike Tempo Running Shorts	104.970000503540039
Lancome La Vie Est Belle	102
Charlotte Tilbury Magic Cream	100
Ninja Professional Blender	99.98999786376953

Ring Video Doorbell	99.98999786376953
Crock-Pot 6-Quart Slow Cooker	99.9800033569336
Under Armour Tech 2.0 T-Shirt	99.95999908447266
Instant Pot Duo Nova	99.94999694824219
Hanes ComfortSoft T-Shirt	99.89999771118164
Hydro Flask Standard Mouth Water Bottle	98.85000228881836
Hamilton Beach FlexBrew Coffee Maker	89.98999786376953
Neutrogena Skincare Set	89.98999786376953
Old Navy Mid-Rise Rockstar Super Skinny Jeans	89.9800033569336
Adidas FIFA World Cup Football	89.96999931335449
The Catcher in the Rye by J.D. Salinger	88.92999839782715
Educated by Tara Westover	84
Kiehl's Midnight Recovery Concentrate	82
L'Oreal Revitalift Serum	79.9800033569336
1984 by George Orwell	79.95999908447266
Caudalie Vinoperfect Radiance Serum	79
Drunk Elephant C-Firma Day Serum	78
Where the Crawdads Sing by Delia Owens	75.95999908447266
Harry Potter and the Sorcerer's Stone	74.96999931335449
Dune by Frank Herbert	71.95999908447266
TriggerPoint GRID Foam Roller	69.9800033569336
Tatcha The Water Cream	68
First Aid Beauty Ultra Repair Cream	68
Atomic Habits by James Clear	67.95999908447266
Forever 21 Graphic Tee	64.94999885559082
The Da Vinci Code	63.959999084472656
Yeti Rambler 20 oz Tumbler	59.97999954223633
To Kill a Mockingbird by Harper Lee	59.959999084472656
Old Navy Relaxed-Fit T-Shirt	59.959999084472656
Uniqlo Airism Mesh Boxer Briefs	59.599998474121094
GlamGlow Supermud Clearing Treatment	59
L'Occitane Shea Butter Hand Cream	58
Sunday Riley Luna Sleeping Night Oil	55
The Girl with the Dragon Tattoo by Stieg Larsson	52.94999885559082
Clinique Moisture Surge	52
Dr. Jart+ Cicapair Tiger Grass Color Correcting Treatment	52

The Great Alone by Kristin Hannah	50.96999931335449
Olay Regenerist Face Cream	49.9900016784668
Shiseido Ultimate Sun Protector	49
Anastasia Beverly Hills Brow Wiz	46
Gone Girl by Gillian Flynn	45.97999954223633
The Alchemist by Paulo Coelho	44.96999931335449
The Subtle Art of Not Giving a F*ck by Mark Manson	44.96999931335449
The Girl on the Train by Paula Hawkins	43.959999084472656
Uniqlo Airism Seamless Boxer Briefs	39.599998474121094
The Hobbit by J.R.R. Tolkien	38.96999931335449
Pride and Prejudice by Jane Austen	38.96999931335449
Sapiens: A Brief History of Humankind by Yuval Noah Harari	37.97999954223633
Youth to the People Superfood Antioxidant Cleanser	36
Fenty Beauty Killawatt Highlighter	36
The Sun Also Rises by Ernest Hemingway	35.96999931335449
The Hunger Games by Suzanne Collins	35.959999084472656
The Night Circus by Erin Morgenstern	33.97999954223633
The Handmaid's Tale by Margaret Atwood	32.96999931335449
The Outsiders by S.E. Hinton	32.96999931335449
Glossier Boy Brow	32
NARS Radiant Creamy Concealer	30
MAC Ruby Woo Lipstick	29.989999771118164
CeraVe Hydrating Facial Cleanser	29.979999542236328
The Goldfinch by Donna Tartt	29.979999542236328
Think and Grow Rich by Napoleon Hill	29.969999313354492
Paula's Choice Skin Perfecting 2% BHA Liquid Exfoliant	29.5
Clinique Dramatically Different Moisturizing Lotion	29.5
Tarte Shape Tape Concealer	27
The Power of Now by Eckhart Tolle	25.979999542236328
The Nightingale by Kristin Hannah	25.979999542236328
The Martian by Andy Weir	25.979999542236328
Laneige Water Sleeping Mask	25
Fresh Sugar Lip Treatment	24
The Road by Cormac McCarthy	23.979999542236328
The Power of Habit by Charles Duhigg	23.979999542236328
The Art of War by Sun Tzu	23.969999313354492
The Great Gatsby by F. Scott Fitzgerald	21.979999542236328

Glossier Cloud Paint	18
The Four Agreements by Don Miguel Ruiz	17.979999542236328
Neutrogena Hydro Boost Water Gel	16.989999771118164
Biore UV Aqua Rich Watery Essence Sunscreen	15
The Ordinary Hyaluronic Acid Serum	6.800000190734863
The Ordinary Caffeine Solution 5% + EGCG	6.699999809265137
The Ordinary Niacinamide Serum	6.5