

## SECTION 1: Identify and extract spending habits of customers by time-of-year (SQL)

### SECTION 1:

The goal of this section is to find the item category that brings in the most revenue in order to allocate inventory space dependent on the time-of-year to maximize revenue for the upcoming year.

1. Download the reports from eBay.
2. View the reports in Excel.

Notes

Gross transaction amount: The total payment for a transaction before any fees or credits are applied.

Gross transaction amounts and fees are listed in the transaction currency. Net amounts are listed in the payout currency.

All fee amounts shown include taxes.

Transaction report

This report order, refund, claim, payment dispute, shipping label, charge, transfer, hold, other fee, adjustment, purchase, payout, secondary payout, withheld tax, reserve

Seller

Start date Jan-01-2020 00:00:00 AM PST

End date Jan-01-2021 23:59:59 PM PST

Transactio	Type	Order num	Legacy or	Buyer nam	Net amou	Payout cui	Payout ID	Payout sta	Item ID	Item title	Custom la	Quantity	Seller colle	eBay colle	Final Valu	Final Valu	Very high	Below sta	In
1-Jan-21	Order	14-06335-	14-06335-	Daryl Kent	39.64 USD	5.06E+09	Funds sen	2.94E+11	2004-2008	--	--	1--	--	3.15	-0.3	-5.06	--	--	--
1-Jan-21	Order	10-06336-	10-06336-	Patrick Ha	96.97 USD	5.06E+09	Funds sen	3.04E+11	GENUINE	--	--	1--	--	7	-0.3	-12.23	--	--	--
1-Jan-21	Order	07-06335-	07-06335-	james kno	52.58 USD	5.06E+09	Funds sen	3.04E+11	RINEHART	--	--	1--	--	3.57	-0.3	-6.62	--	--	--
1-Jan-21	Shipping	129389803	--	--	-6.94 USD	5.06E+09	Funds sen	--	--	--	--	--	--	--	--	--	--	--	--
1-Jan-21	Shipping	1293911051	--	--	-12.8 USD	5.06E+09	Funds sen	--	--	--	--	--	--	--	--	--	--	--	--
1-Jan-21	Order	07-06335-	07-06335-	richard kr	61.4 USD	5.06E+09	Funds sen	2.94E+11	GENUINE	--	--	1--	--	4.8	-0.3	-7.8	--	--	--
1-Jan-21	Order	05-06335-	05-06335-	Timothy S	326.38 USD	5.06E+09	Funds sen	2.94E+11	GENUINE	--	--	1--	--	--	-0.3	-38.32	--	--	--
1-Jan-21	Shipping	129382927	--	--	-3.39 USD	5.06E+09	Funds sen	--	--	--	--	--	--	--	--	--	--	--	--
1-Jan-21	Shipping	130381219	--	--	-6.94 USD	5.06E+09	Funds sen	--	--	--	--	--	--	--	--	--	--	--	--
1-Jan-21	Hold	03-06281-	03-06281-	Robert Cy	100 USD	5.06E+09	Funds sen	3.04E+11	GENUINE	--	--	1--	--	--	--	--	--	--	--
1-Jan-21	Payout	--	--	--	-690.27 USD	5.06E+09	Funds sen	--	--	--	--	--	--	--	--	--	--	--	--
#####	Order	12-06331-	12-06331-	Wael Asfo	74.6 USD	5.06E+09	Funds sen	2.94E+11	05 HARLE	--	--	1--	--	6.97	-0.3	-9.6	--	--	--

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3. There are 6 types of transactions, but we only want to focus on “Order” and “Refund” when determining an item's performance. We used the Insert Table and Filter features to narrow our scope.

Sort A to Z

Sort Z to A

Sort by Color

Clear Filter From "Type"

Filter by Color

Text Filters

Search

☒ (Select All)

☐ Adjustment

☐ Claim

☐ Hold

☒ Order

☐ Payout

☒ Refund

☐ Shipping label

OK Cancel

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4. Let's compare the number of returns we have with the number of orders. We used the PivotTable feature to quickly view the number of returned orders and the amount of money that was lost.

**PivotTable Fields**

Choose fields to add to report:

Search

☒ Transaction creation date  
☒ Type  
☐ Order number  
☐ Legacy order ID  
☐ Buyer name  
☐ Net amount  
☐ Payout currency

Drag fields between areas below:

**FILTERS**

**COLUMNS**

**ROWS**

**VALUES**

Σ Values

Count of Transactions by Type

Sum of Transactions (USD)

a.

Type of Transaction	Count of Transactions by Type	Sum of Transactions (USD)
Adjustment	1	\$2.62
Claim	2	-\$174.50
Hold	86	-\$238.50
Order	921	\$108,658.50
Payout	105	-\$84,891.24
Refund	35	-\$3,766.00
Shipping label	751	-\$6,738.19
<b>Grand Total</b>	<b>1901</b>	<b>\$12,852.69</b>

b.

Type of Transaction	Count of Transactions by Type	Sum of Transactions (USD)
Order	921	\$108,658.50
Refund	35	-\$3,766.00
<b>Grand Total</b>	<b>956</b>	<b>\$104,892.50</b>

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- Let's now import the data into SSMS for further analysis. We are filtering the transactions so that we are only focusing on orders that were placed.

SQLQuery3.sql - lo...G2OK7\diemo (65)\* SQLQuery2.sql - lo...G2OK7\diemo (63)\*

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1 /***** Script for SelectTopNRows command from SSMS *****/
2 SELECT TOP (1000) [Transaction_creation_date]
3     ,[Type]
4     ,[Order_number]
5     ,[Legacy_order_ID]
6     ,[Buyer_name]
7     ,[Net_amount]
8     ,[Payout_currency]
9     ,[Payout_ID]
10    ,[Payout_status]
11    ,[Item_ID]
12    ,[Item_title]
13    ,[Custom_label]
14    ,[Quantity]
15    ,[Seller_collected_tax]
16    ,[eBay_collected_tax]
17    ,[Final_value_fee_fixed]
18    ,[Final_value_fee_variable]
19    ,[Very_high_item_not_as_described_fee]
20    ,[Below_standard_performance_fee]
21    ,[International_fee]
22    ,[Charity_donation]
23    ,[Gross_transaction_amount]
24    ,[Transaction_currency]
25    ,[Exchange_rate]
26    ,[Reference_ID]
27    ,[Description]
28 FROM [Chopper Shop].[dbo].[parts_sales_2020]
29 WHERE type = 'Order'

```

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Results Messages

	Transaction_creation_date	Type	Order_number	Legacy_order_ID	Buyer_name	Net_amount	Payout_currency	Payout_ID	Payout_status	Item_ID	Item
1	2021-01-01	Order	14-06335-97526	14-06335-97526	Daryl Kent	39.6399993896484	USD	5059513541	Funds sent	293835997184	20C
2	2021-01-01	Order	10-06336-58360	10-06336-58360	Patrick Hauptert	96.9700012207031	USD	5059513541	Funds sent	303782985728	"GF
3	2021-01-01	Order	07-06335-92590	07-06335-92590	james knowles	52.5800018310547	USD	5059513541	Funds sent	303743008768	"RII
4	2021-01-01	Order	07-06335-21526	07-06335-21526	richard krebs/moyer ford	61.4000015258789	USD	5059513541	Funds sent	293897994240	"GF
5	2021-01-01	Order	05-06335-44570	05-06335-44570	Timothy Shallow	326.380004882813	USD	5059513541	Funds sent	293911003136	GE
6	2020-12-31	Order	12-06331-51940	12-06331-51940	Wael Asfour	74.5999984741211	USD	5058724181	Funds sent	293828984832	05 I

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- Let's differentiate between car parts and motorcycle parts for each transaction. We will use the Case When function to help categorize items. For the cases, we are using common part names and popular motorcycle and car brands, respectively. Furthermore, we are using the CTE function to create a temporary table called "Orders" with only the date, part category, and the price fields to prepare our data for analysis in the next step.

WITH Orders AS (

```

SELECT type AS "Transaction Type"
, transactions_2020.transaction_creation_date AS "Transaction Date"
, item_title AS "Item Name"
, FORMAT(gross_transaction_amount,'C') AS "Price"
, CASE
    WHEN item_title LIKE '%harley%'
      OR item_title LIKE '%indian%'
      OR item_title LIKE '%touring%'
      OR item_title LIKE '%honda%'
      OR item_title LIKE '%rod%'
      OR item_title LIKE '%memphis%'
      OR item_title LIKE '%kawasaki%'
      OR item_title LIKE '%yamaha%'
      OR item_title LIKE '%dyna%'
    THEN 'Bike'
    WHEN item_title LIKE '%astro%'
      OR item_title LIKE '%porsche%'

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        OR item_title LIKE '%benz%'
        OR item_title LIKE '%chrysler%'
        OR item_title LIKE '%chevy%'
        OR item_title LIKE '%ford%'
        OR item_title LIKE '%jaguar%'
        OR item_title LIKE '%cayenne%'
        OR item_title LIKE '%infiniti%'
        OR item_title LIKE '%van%'
        OR item_title LIKE '%audi%'
        OR item_title LIKE '%bmw%'
        OR item_title LIKE '%buick%'
        OR item_title LIKE '%jeep%'
        OR item_title LIKE '%foose%'
        THEN 'Car'
    ELSE 'Uncategorized'
    END AS 'Part Category'
```

```
FROM [Chopper Shop].[dbo].[parts_sales_2020] transactions_2020
```

```
WHERE type = 'Order'
AND Gross_transaction_amount IS NOT NULL
AND item_title != '--'
)
```

```
SELECT "Transaction Date"
,"Part Category"
, Price
FROM Orders
```

	Transaction Date	Part Category	Price
1	2021-01-01	Car	\$45.00
2	2021-01-01	Bike	\$109.50
3	2021-01-01	Bike	\$59.50
4	2021-01-01	Bike	\$69.50
5	2021-01-01	Bike	\$365.00
6	2020-12-31	Bike	\$84.50
7	2020-12-31	Bike	\$44.50
8	2020-12-31	Car	\$190.00
9	2020-12-30	Car	\$145.00
10	2020-12-30	Bike	\$130.00
11	2020-12-30	Bike	\$109.50
12	2020-12-30	Bike	\$39.50
13	2020-12-30	Bike	\$270.00
14	2020-12-30	Bike	\$109.50
15	2020-12-29	Bike	\$265.00

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