



SALES ANALYSIS PRESENTATION BY HANIFA SALIHU

STUDENT LABANO ACADEMY December 2023



INTRODUCTION

THIS IS A DATA ANALYSIS PRESENTATION FOR <u>PETALPALS</u> <u>BIKE STORE.</u>

I SEEK TO IDENTIFY THE CORRELATION THAT EXIST BETWEEN THESE VARIABLES WHICH WILL IN TURN HELP PETALPALS BIKE STORE MAKE BETTER DECISIONS AND IMPROVE EFFICIENCY.

MICROSOFT EXCEL WAS USED FOR THE ANALYZING AND VISUALIZATION.



PROCESS WORKFLOW



STEP 1

Collect & Prepare Dataset



STEP 2

Cleaning & Transformat ion of Data



STEP 3

Analysis & Visualization



STEP 4

Recommendation & Conclusion



PROBLEM STATEMENT

Petalpals Bike Store intends to optimize its income, products & allocate resources to efficient uses.

The company ask help with finding out the most profitable product, month with highest purchases, trend line, customer age group with the most profit in a geographical area.

Goal of this analysis is to give recommendations according to the trends and strategies to improve sales of bikes.



UNCLEANED DATA

	Α	ВС	D	Е	F	G	Н	I	J	K L	M	N	0	Р	Q	
1	Date D	Day Month	Year	Customer_Age	e Age_Group	Customer_Gender	Country	State	Product_Category	Sub_Cate Product	Order_Quantity	Unit_Cost	Unit_Price F	rofit (Cost	Re\
2	11/26/2013	26 Novemb	ei 2013		19 Youth (<25)	M	Canada	British Columbia	Accessories	Bike Racks Hitch Rac	k 8	45	120	590	360	
3	11/26/2015	26 Novemb	ei 2015		19 Youth (<25)	M	Canada	British Columbia	Accessories	Bike Racks Hitch Rac	k 8	45	120	590	360	
4	3/23/2014	23 March	2014		49 Adults (35-64)	M	Australia	New South Wales	Accessories	Bike Racks Hitch Rac	k 23	45	120	1366	1035	
5	3/23/2016	23 March	2016		49 Adults (35-64)	M	Australia	New South Wales	Accessories	Bike Racks Hitch Rac	k 20	45	120	1188	900	
6	5/15/2014	15 May	2014		47 Adults (35-64)	F	Australia	New South Wales	Accessories	Bike Racks Hitch Rac	k 4	45	120	238	180	
7	5/15/2016	15 May	2016		47 Adults (35-64)	F	Australia	New South Wales	Accessories	Bike Racks Hitch Rac	k 5	45	120	297	225	
8	5/22/2014	22 May	2014		47 Adults (35-64)	F	Australia	Victoria	Accessories	Bike Racks Hitch Rac	k 4	45	120	199	180	
9	5/22/2016	22 May	2016		47 Adults (35-64)	F	Australia	Victoria	Accessories	Bike Racks Hitch Rac	k 2	45	120	100	90	
10	2/22/2014	22 Februar	2014		35 Adults (35-64)	M	Australia	Victoria	Accessories	Bike Racks Hitch Rac	k 22	45	120	1096	990	
11	2/22/2016	22 Februar	2016		35 Adults (35-64)	M	Australia	Victoria	Accessories	Bike Racks Hitch Rac	k 21	. 45	120	1046	945	
12	7/30/2013	30 July	2013		32 Young Adults (25-34)	F	Australia	Victoria	Accessories	Bike Racks Hitch Rac	k 8	45	120	398	360	
13	7/30/2015	30 July	2015		32 Young Adults (25-34)	F	Australia	Victoria	Accessories	Bike Racks Hitch Rac	k 8	45	120	398	360	
14	7/15/2013	15 July	2013		34 Young Adults (25-34)	M	Australia	Victoria	Accessories	Bike Racks Hitch Rac	k 7	45	120	349	315	
15	7/15/2015	15 July	2015		34 Young Adults (25-34)	M	Australia	Victoria	Accessories	Bike Racks Hitch Rac	k 7	45	120	349	315	
16	8/2/2013	2 August	2013		29 Young Adults (25-34)	M	Canada	British Columbia	Accessories	Bike Racks Hitch Rac	k 5	45	120	369	225	
17	8/2/2015	2 August	2015		29 Young Adults (25-34)	M	Canada	British Columbia	Accessories	Bike Racks Hitch Rac	k 7	45	120	517	315	
18	9/2/2013	2 Septem	e 2013		29 Young Adults (25-34)	M	Canada	British Columbia	Accessories	Bike Racks Hitch Rac	k 2	45	120	148	90	
19	9/2/2015	2 Septem	e 2015		29 Young Adults (25-34)	M	Canada	British Columbia	Accessories	Bike Racks Hitch Rac	k 1	. 45	120	74	45	
20	1/22/2014	22 January	2014		29 Young Adults (25-34)	M	Canada	British Columbia	Accessories	Bike Racks Hitch Rac	k 1	. 45	120	74	45	
21	1/22/2016	22 January	2016		29 Young Adults (25-34)	M	Canada	British Columbia	Accessories	Bike Racks Hitch Rac	k 1	45	120	74	45	
22	5/17/2014	17 May	2014		29 Young Adults (25-34)	M	Canada	British Columbia	Accessories	Bike Racks Hitch Rac	k 6	45	120	443	270	
23	5/17/2016	17 May	2016		29 Young Adults (25-34)	M	Canada	British Columbia	Accessories	Bike Racks Hitch Rac	k 8	45	120	590	360	
24	3/27/2014	27 March	2014		51 Adults (35-64)	M	United States	Oregon	Accessories	Bike Racks Hitch Rac	k 9	45	120	524	405	
25	3/27/2016	27 March	2016		51 Adults (35-64)	M	United States	Oregon	Accessories	Bike Racks Hitch Rac	k 7	45	120	407	315	
26	8/25/2013	25 August	2013		49 Adults (35-64)	M	Canada	British Columbia	Accessories	Bike Racks Hitch Rac	k 3	45	120	221	135	
27	8/25/2015	25 August	2015		49 Adults (35-64)	M	Canada	British Columbia	Accessories	Bike Racks Hitch Rac			120	74	45	
	12/26/2013	26 Decemb			49 Adults (35-64)	M	Canada	British Columbia	Accessories	Bike Racks Hitch Rac			120	443	270	
	12/26/2015	26 Decemb			49 Adults (35-64)	M	Canada	British Columbia	Accessories	Bike Racks Hitch Rac	-		120	369	225	
30	1/2/2014		2013		48 Adults (35-64)	F	Canada	British Columbia	Accessories	Bike Racks Hitch Rac			120	295	180	
		2 January			` '											
31	1/2/2016	2 January	2016		48 Adults (35-64)	F	Canada	British Columbia	Accessories	Bike Racks Hitch Rac			120	295	180	
32	3/13/2014	13 March	2014		48 Adults (35-64)	F	Canada	British Columbia	Accessories	Bike Racks Hitch Rac	k 20	45	120	1476	900	▼
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DATA CLEANING PROCESS

Open and Duplicate Dataset

Freeze Top Panes & Adjust Columns.

Format date to m/d/y
Then Sort from Oldest to Newest.

Use IFS Function to confirm the Age & Age Group.

Then Copy & Paste in New Column.

Apply Conditional Formatting to Revenue & Profit using AVG. and Data Validation to Order Quantity using MAX.

Add Table to Excel document, Create New Worksheet for Pivot Tables and Dashboard.

Create charts with pivot tables, Use CTRL X & CTRL V to paste in Dashboard for Visualization. & Calculate Statistical Totals.

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12/24/2023

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CLEANED DATA

	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N
1	Date	Age Group	Gender	Country	State	Product_Category	Sub_Category		Order_Quantity	Unit_Cost	Total Cost	Unit_Price	Revenue	Gross Profit
2	1/1/2011	Youth (<25)	M	Australia	Victoria	Bikes	Mountain Bikes	Mountain-200 Black, 46	1	£1,252	£1,252	£2,295	£1,813	£561
3	1/1/2011	Young Adult(25-34)	F	France	Yveline	Bikes	Road Bikes	Road-150 Red, 48	2	£2,171	£4,342	£3,578	£5,439	£1,097
4	1/1/2011	Youth (<25)	М	Canada	British Columbia	Bikes	Road Bikes	Road-250 Red, 44	1	£1,519	£1,519	£2,443	£2,419	£900
5	1/1/2011	Adults(35-64)	M	United States	California	Bikes	Road Bikes	Road-750 Black, 44	1	£344	£344	£540	£529	£185
6	1/1/2011	Adults(35-64)	М	United States	Washington	Bikes	Road Bikes	Road-550-W Yellow, 38	3	£713	£2,139	£1,120	£2,621	£482
7	1/2/2011	Adults(35-64)	F	Australia	Queensland	Bikes	Road Bikes	Road-250 Red, 58	3	£1,555	£4,665	£2,443	£6,156	£1,491
8	1/2/2011	Adults(35-64)	F	United States	California	Bikes	Road Bikes	Road-550-W Yellow, 48	1	£713	£713	£1,120	£1,098	£385
9	1/2/2011	Young Adult(25-34)	M	United Kingdom		Bikes	Road Bikes	Road-550-W Yellow, 38	1	£713	£713	£1,120	£1,075	£362
10	1/2/2011	Adults(35-64)	М	Australia	Victoria	Bikes	Road Bikes	Road-550-W Yellow, 40	4	£713	£2,852	£1,120	£3,539	£687
11	1/3/2011	Adults(35-64)	М	United Kingdom		Bikes	Mountain Bikes	Mountain-200 Silver, 42	_	£1,266	£1,266	£2,320	£2,227	£961
12	1/3/2011	Young Adult(25-34)	М	United Kingdom		Bikes	Mountain Bikes	Mountain-200 Black, 38	_	£1,252	£5,008	£2,295	£8,813	£3,805
13	1/3/2011	Young Adult(25-34)	F	United States	California	Bikes	Mountain Bikes	Mountain-200 Silver, 42	1	£1,266	£1,266	£2,320	£2,274	£1,008
14	1/3/2011	Adults(35-64)	F	Australia	South Australia	Bikes	Road Bikes	Road-750 Black, 48	2	£344	£688	£540	£886	£198
15	1/3/2011	Adults(35-64)	М	Australia	South Australia	Bikes	Road Bikes	Road-550-W Yellow, 44	1	£713	£713	£1,120	£918	£205
16	1/3/2011	Adults(35-64)	F	Australia	Victoria	Bikes	Road Bikes	Road-750 Black, 48	1	£344	£344	£540	£427	£83
17	1/3/2011	Adults(35-64)	M	Canada	British Columbia	Bikes	Road Bikes	Road-750 Black, 44	3	£344	£1,032	£540	£1,604	£572
18	1/3/2011	Adults(35-64)	F	United States	California	Bikes	Road Bikes	Road-150 Red, 48	4	£2,171	£8,684	£3,578	£14,026	£5,342
19	1/4/2011	Young Adult(25-34)	М	United Kingdom		Bikes	Mountain Bikes	Mountain-200 Black, 38		£1,252	£3,756	£2,295	£6,610	£2,854
20	1/4/2011	Young Adult(25-34)	F	France	Nord	Bikes	Road Bikes	Road-150 Red, 52	2	£2,171	£4,342	£3,578	£6,226	£1,884
21	1/4/2011	Adults(35-64)	F	United States	California	Bikes	Road Bikes	Road-650 Red, 62	2	£487	£974	£783	£1,535	£561
22	1/4/2011	Adults(35-64)	М	United States	Washington	Bikes	Road Bikes	Road-550-W Yellow, 38	2	£713	£1,426	£1,120	£1,747	£321
23	1/4/2011	Adults(35-64)	F	United States	Washington	Bikes	Road Bikes	Road-150 Red, 44	1	£2,171	£2,171	£3,578	£2,791	£620
24	1/5/2011	Adults(35-64)	M	United States	California	Bikes	Road Bikes	Road-650 Red, 48	1	£487	£487	£783	£767	£280
25	1/5/2011	Young Adult(25-34)	М	Germany	Hessen	Bikes	Road Bikes	Road-350-W Yellow, 48	1	£1,083	£1,083	£1,701	£1,582	£499
26	1/5/2011	Adults(35-64)	М	Canada	British Columbia	Bikes	Road Bikes	Road-650 Black, 60	3	£487	£1,461	£783	£2,326	£865
27	1/6/2011	Young Adult(25-34)	F	Canada	British Columbia	Bikes	Mountain Bikes	Mountain-500 Black, 44	3	£295	£885	£540	£1,604	£719
28	1/6/2011	Adults(35-64)	F	United States	California	Bikes	Road Bikes	Road-550-W Yellow, 48	1	£713	£713	£1,120	£1,098	£385
29	1/6/2011	Young Adult(25-34)	M	United States	Washington	Bikes	Road Bikes	Road-750 Black, 48	1	£344	£344	£540	£421	£77
<	>	DATASET EXERCISE	Dupli		Process +			_1 (1					

INSIGHTS & ANALYSIS

HIGHEST SALES YEAR 2015

LEAST SALES MONTH JULY MEN BOUGHT MORE BY 51%

TOTAL MALE 58,312



TOTAL FEMALE 58,724

FEMALE BOUGHT LESS BY 49% HIGHEST SALES MONTH DEC

LEAST PROFIT YEAR 2011

BEST & WORST PROFIT (QUARTERS)

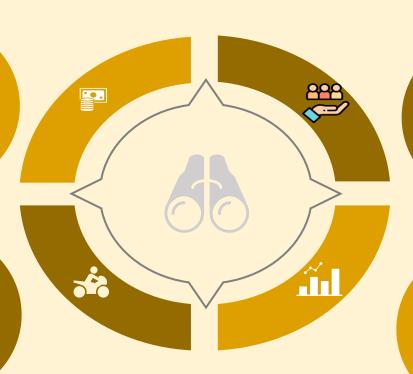
2ND Quarter & 3rd Quarter

PROFIT MADE

MIN #-30 MAX #15,096 AVG PROFIT #285

TOP 3 BIKES

Road Bikes Mountain Bikes Touring Bikes



TOTAL AGE GROUP 4

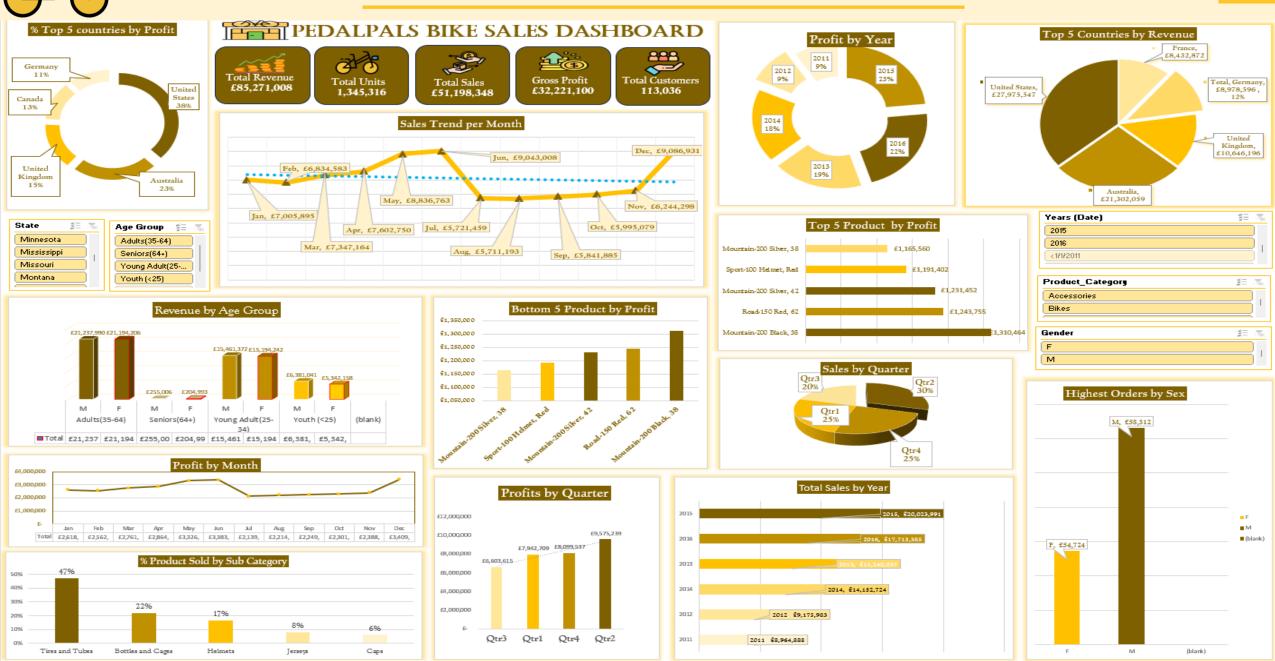
Seniors Rarely buy
Under 25 Seldom buy
Young Adult Sometimes buy
Adults Often buys

HIGHEST REVENUE

United States 40%
Australia 21%
Canada 18%
France 9%



DATA VISUALIZATION





RECOMMENDATION

- United States market should be prioritized as they buy more products more than other locations.
- Strategy should be put in place to encourage buyers from the younger age group and older age group to increase sales in these groups.
- Rewards and Loyalty program ideas should be introduced so this can encourage existing customer to continue patronage.(aftercare services)
- More customers are looking for businesses that focus on sustainability, like reducing carbon footprint.



LIMITATIONS

- Insufficient online presence may result in opportunities missed for reaching a more customers.
- There is a limited choices of products for the range of customers, e.g. seniors age group barely patronize the store.
- The non-availability of demand in certain regions could be caused by weather changes in these areas.



CONCLUSION

- This project created a comprehensive sales analysis dashboard using the provided dataset.
- Through various perspectives, the dashboard will allow users to gain valuable insights into sales performance, customer behavior, and product trends.
- The dashboard will enable users to make data-driven decisions, identify growth opportunities, and optimize sales strategies.

