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# DS COURSE 2 - PROJECT

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KPMG Data Analysis Using Excel



Video Explanation: [https://drive.google.com/file/d/1hmNhjED0bZam15Do9ZW\\_A7EQfKentYy0/view?usp=sharing](https://drive.google.com/file/d/1hmNhjED0bZam15Do9ZW_A7EQfKentYy0/view?usp=sharing)

JULY 20, 2024

AMIT HIREMATH

## Course 2: Data Management and Analysis with MS Excel

**Project Title:** KPMG Data Analysis using Excel

### Project Overview:

This project aims to analyze customer demographics, transactions, and new customer data to provide insights into business performance and customer behavior. The project consists of six tasks that involve data cleaning, data analysis, and visualization using Excel.

Dataset: [KPMG Dataset](#)

### Dataset Description:

#### 1. Customer Address Dataset

**Description:** Contains information about customers' addresses and property valuation.

#### Columns:

- **customer\_id:** Unique identifier for each customer.
- **address:** The street address of the customer.
- **postcode:** Postal code for the customer's address.
- **state:** The state in which the customer resides (e.g., New South Wales, QLD).
- **country:** The country of residence, which is Australia for all entries.
- **property\_valuation:** An integer value representing the valuation of the property where the customer resides.

## 2. Customer Demographic Dataset

**Description:** Contains demographic information about customers, including their personal details, job information, and purchase behavior.

### Columns:

- **customer\_id:** Unique identifier for each customer.
- **first\_name:** Customer's first name.
- **last\_name:** Customer's last name.
- **gender:** Customer's gender.
- **past\_3\_years\_bike\_related\_purchases:** Number of bike-related purchases made by the customer in the past three years.
- **DOB:** Date of birth of the customer.
- **job\_title:** Job title of the customer.
- **job\_industry\_category:** Industry category of the customer's job.
- **wealth\_segment:** Wealth segment classification of the customer (e.g., Mass Customer).
- **deceased\_indicator:** Indicator if the customer is deceased (Y/N).
- **default:** Default status, including potential erroneous data.
- **owns\_car:** Indicates if the customer owns a car (Yes/No).
- **tenure:** The tenure of the customer.

## 3. Transactions Dataset

**Description:** Contains details of transactions made by customers, including product details and transaction dates.

### Columns:

- **transaction\_id:** Unique identifier for each transaction.
- **product\_id:** Unique identifier for each product involved in the transaction.

- **customer\_id:** Unique identifier for the customer who made the transaction.
- **transaction\_date:** The date when the transaction occurred.
- **online\_order:** Indicates if the order was made online (TRUE/FALSE).
- **order\_status:** Status of the order (e.g., Approved).
- **brand:** Brand of the product purchased.
- **product\_line:** Product line (e.g., Standard).
- **product\_class:** Product class (e.g., medium).
- **product\_size:** Size of the product.
- **list\_price:** Listed price of the product.
- **standard\_cost:** Standard cost of the product.
- **product\_first\_sold\_date:** The date when the product was first sold.

#### 4. New Customer List Dataset

**Description:** Contains information about potential new customers, including their personal details, job information, and potential value.

##### Columns:

- **first\_name:** First name of the potential new customer.
- **last\_name:** Last name of the potential new customer.
- **gender:** Gender of the potential new customer.
- **past\_3\_years\_bike\_related\_purchases:** Number of bike-related purchases made in the past three years.
- **DOB:** Date of birth of the potential new customer.
- **job\_title:** Job title of the potential new customer.
- **job\_industry\_category:** Industry category of the potential new customer's job.
- **wealth\_segment:** Wealth segment classification.

- **deceased\_indicator:** Indicator if the potential new customer is deceased (Y/N).
- **owns\_car:** Indicates if the potential new customer owns a car (Yes/No).
- **tenure:** Tenure of the potential new customer.
- **address:** Address of the potential new customer.
- **postcode:** Postal code for the address.
- **state:** State of residence.
- **country:** Country of residence.
- **property\_valuation:** Valuation of the property.
- **Rank:** Rank based on some criteria.
- **Value:** Value of the potential new customer.

Task 1 on next Page...

## Task 1: Data Cleaning (12 Marks, 3-3 for each)

**Objective:** Prepare the datasets for analysis by cleaning and correcting any inconsistencies.

### 1. Customer Address Data:

- Remove any duplicate records.
- There were no duplicates. None of the records removed.
- Ensure all state names are correctly formatted.
- There were 3 states from Australia. All formatted correctly. 3 States were – New South Wales (NSW), Victoria (VIC), Queensland (QLD). Google Map for addresses/pin-codes created. Kindly Check excel – Task 1 – Customer Address.

### 2. Customer Demographic Data:

- Identify and correct any erroneous data entries (e.g., invalid characters in default).
- Deleted the erroneous column.
- Standardize the format for missing data entries.
- For the Date column there were 87 missing entries & 1 inappropriate entry. Replaced these with Mean and Median Value = “25-07-1977”. Mode is 30-01-1978. This will be with less bias during the analysis.
- ‘Job\_Title’ column had 506 missing values with corresponding ‘job\_industry\_category’ 105 n/a entries. Replaced 105 ‘Job\_Title’ values with n/a. And 401 remained missing so Checked for Maximum count of Past\_3\_Year\_Bike\_Related\_Purchases against each ‘job\_title’ in each ‘job\_industry\_category’ and replaced with those job titles.
- Following are the details: Total Job Categories = 9.
  1. In Agriculture Category => 14 Missing Job Titles => Replaced with ‘Executive Secretary’, ‘Manager’, ‘Account Executive’, ‘Assistant Professor’ => 4 Each.
  2. In Entertainment Category => 14 Missing Job Titles => Replaced with ‘Assistant Media Planer’, ‘Librarian’ => 7 Each
  3. In Financial Services => 100 Missing Job Titles => Replaced with ‘Actuary’, ‘compensation analyst’, ‘cost accountant’, ‘financial advisor’, ‘financial analyst’, ‘paralegal’, ‘senior cost accountant’, ‘senior financial analyst’, ‘VP Accounting’ => 10 each

4. In Health Category => 56 Missing Job Titles => Replaced with 'clinical specialist', 'dental hygienist', 'food chemist', 'occupational therapist', 'pharmacist', 'Registered Nurse', 'Research Nurse', 'Social Work' => 7 each
  5. In IT Category => 36 Missing Job Titles => Replaced with 'VP sales', 'web designer', 'quality engineer', 'project manager', 'operator', 'executive secretary', 'developmental analyst' => 5 each
  6. In Manufacturing category => 100 Missing Job Titles => Replaced with 'Chemical Engineer', 'Civil Engineer', 'Electrical Engineer', 'Geological Engineer', 'Nuclear Power Engineer', 'Structural Engineer', 'Junior Executive', 'Associate Professor', 'Account Executive' => 11 Each.
  7. In Property Category => 40 Missing Job Titles => Replaced with 'Account Coordinator', 'Administrative Officer', 'Help Desk Operator', 'Internal Auditor', 'Legal Assistant', 'Office Assistant III', 'Sales Associate' => 5 each
  8. In Retail Category => 60 Missing Job Titles => Replaced with 'Assistant Manager', 'General Manager', 'Executive Secretary', 'Internal Auditor', 'Marketing Manager', 'Product Engineer', 'Sales Representative', 'VP Marketing' => 8 Each.
  9. In Telecommunication => 15 Missing Job Titles => Replaced with 'Desktop Support Technician', 'Recruiter', 'System Administrator', 'Web Designer' => 4 each.
- There were 656 'n/a' Values for Job\_Industry\_Category => Replaced Appropriately based on job title. => eg. Developer – IT, Nurse – Health, Quality Engineer – Manufacturing etc.
  - In 'Tenure' column missing values were 87. Replaced with Mean Value 10 (29), Median 11 (29) and Mode 7 (29). Tenure is nothing but years associated with the seller.
    - Correct the anomalies in Gender Column
  - There are 87 unknown genders. Standardized the Format to Male, Female and 'n/a'.

### 3. Transaction Data:

- Ensure that transaction\_date is in a consistent date format.
- Converted transaction\_date to date format.
  - Remove any records with missing or incomplete information.
- Total transactions 20000. Out of 20000, 197 were missing – 197 rows removed. (1% of data, 99% retained.)

- 358 “Online\_Order” status were missing. Replaced with “n/a” term.

#### 4. New Customer Data:

- Standardize address formatting.
- Address has been correctly formatted. Potential New Customers in 3 Australian states are: NSW- 506, VIC - 266, QLD – 228. Total potential customers 1000.
- Ensure consistent gender representation.
- Formatted gender – Male, Female & n/a categories.
- Correct any anomalies in job\_title and job\_industry\_category.
- Around 100 Job Titles missing. Replaced like before. And Similarly the Job industry category were missing replaced appropriately based on Job Titles eg. Developer – IT, Nurse – Health, Quality Engineer – Manufacturing etc.

Task 2 on next page...



## Task 2: Customer Segmentation (12 Marks, 4-4 for each)

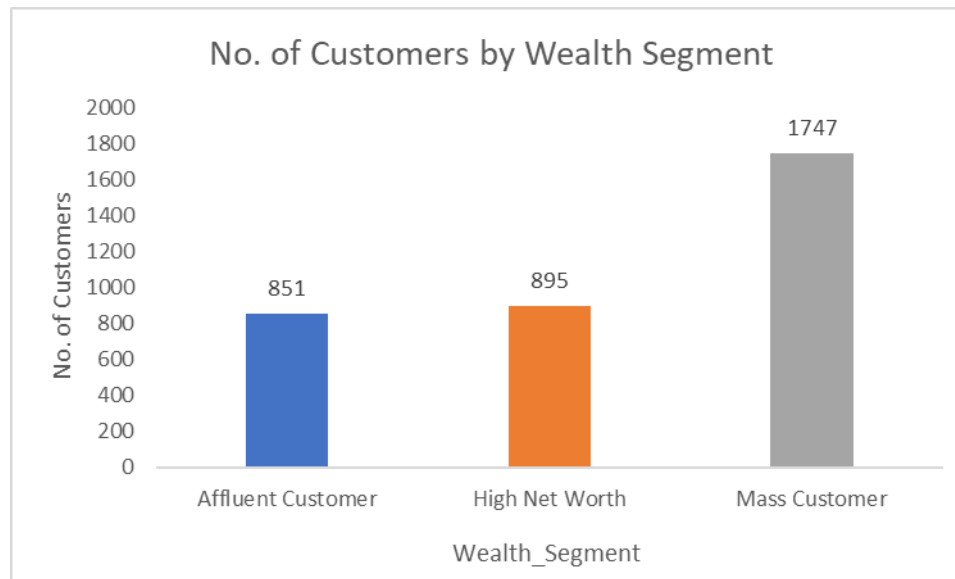
**Objective:** Segment customers based on demographic and transaction data to identify key customer groups.

- Cleaned data, Merged using power query on Customer\_ID. Excel Attached. (Transaction\_Demographic\_Address\_Clean\_Merged).
- Findings: 1. 507 Unique Customer Demography found without Customer ID & Address. 2. 510 Unique addresses found without Customer ID & Name.
- Action: These entries 1020, with missing values removed of total 20821 datapoints. ~5% of data. Safe to remove for better analysis. Total valid Transactions = 19800.

### 1. Segmentation by Wealth Segment:

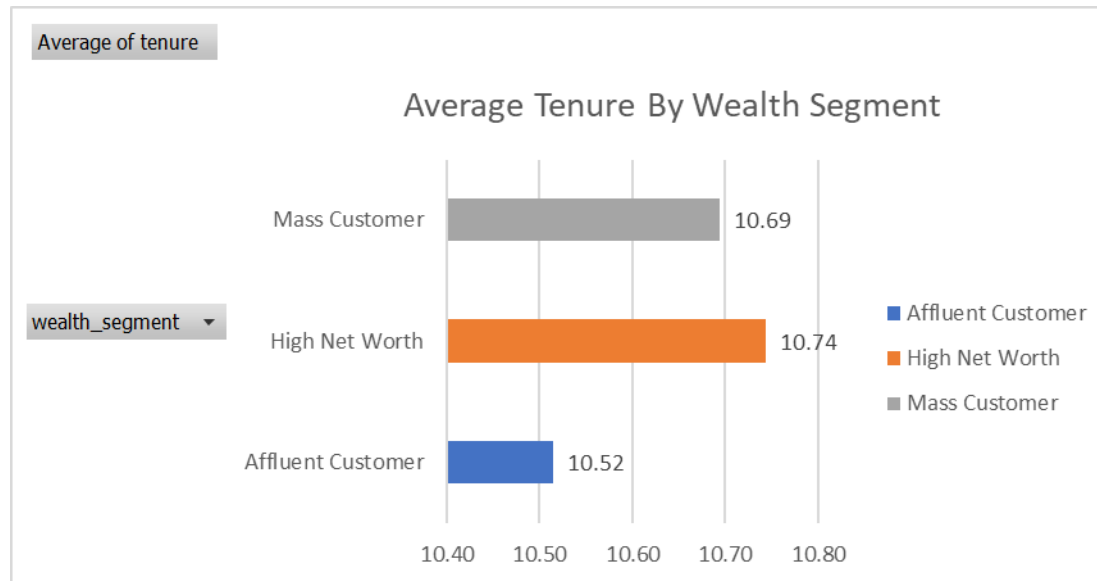
- Show the number of customers in each wealth\_segment.

- Total Unique Customers = 3493



- Calculate the average tenure for each `wealth_segment`.

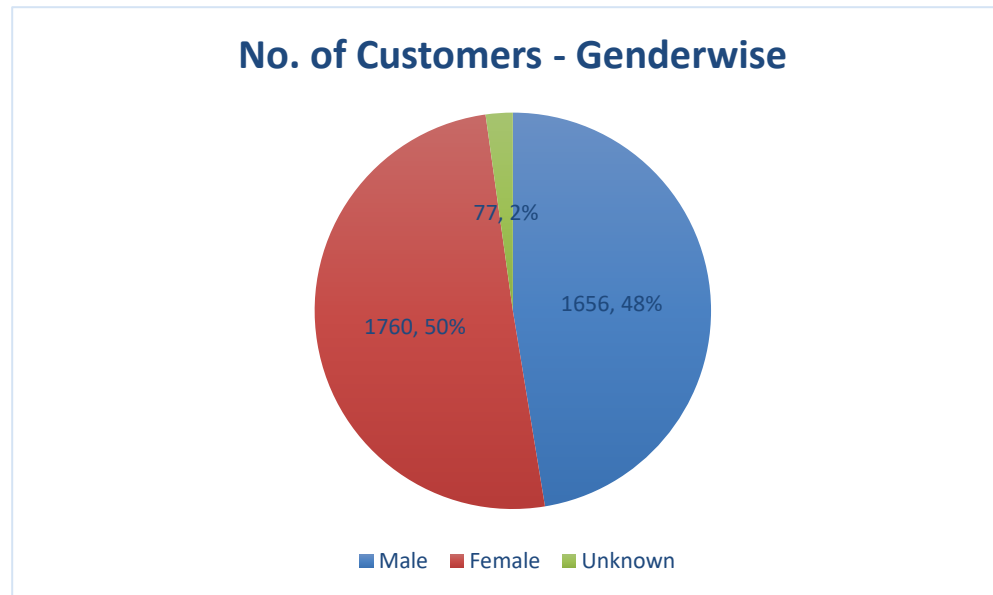
➤ Average tenure for the 3 segments is around 10.6 Years. Tenure is nothing but number of years the customer is associated with the seller.



## 2. Segmentation by Gender:

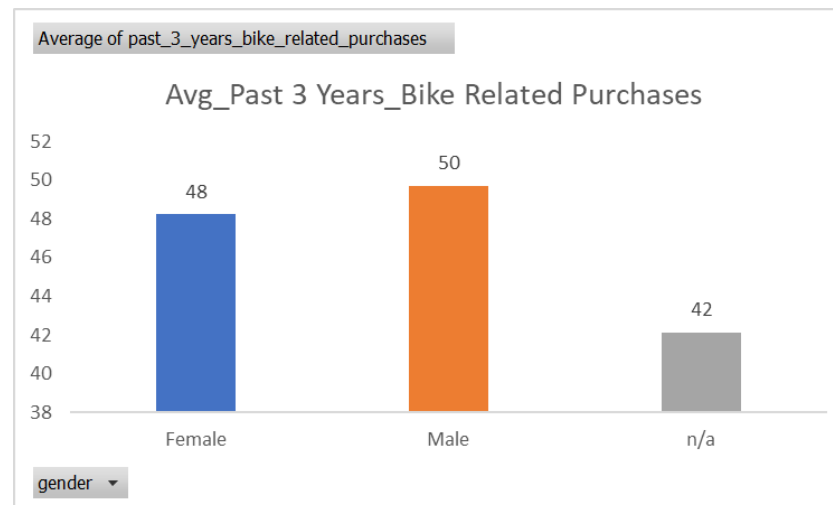
- Showing the number of customers by gender.

➤ Male and Female Genders are approximately equal (~50%). 2% i.e 77 Number of customers are with unknown gender.



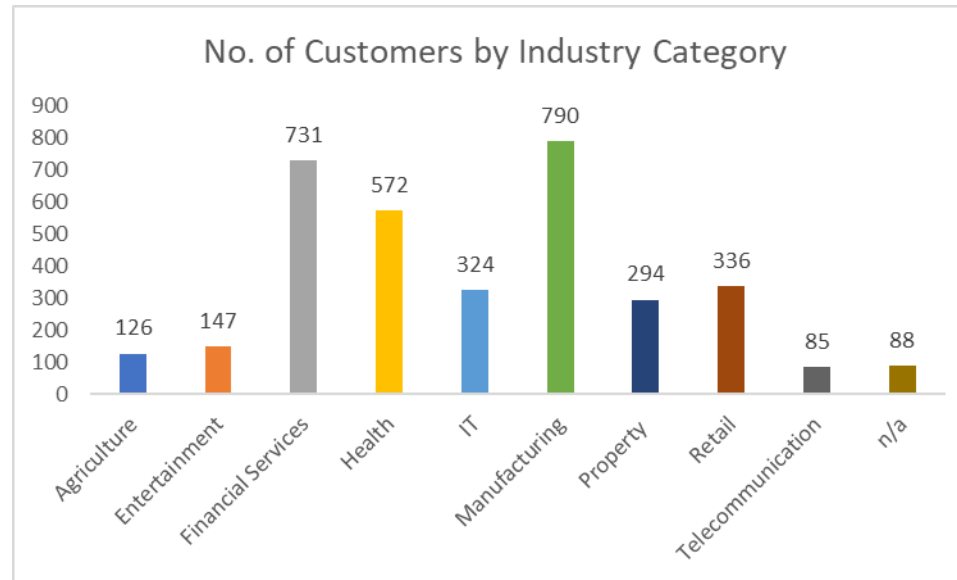
0 Calculate the average past\_3\_years\_bike\_related\_purchases for each gender.

➤ Avg\_past 3 years\_bike related purchases are approximately same for both male and female. ~50 Nos.



### 3. Segmentation by Job Industry:

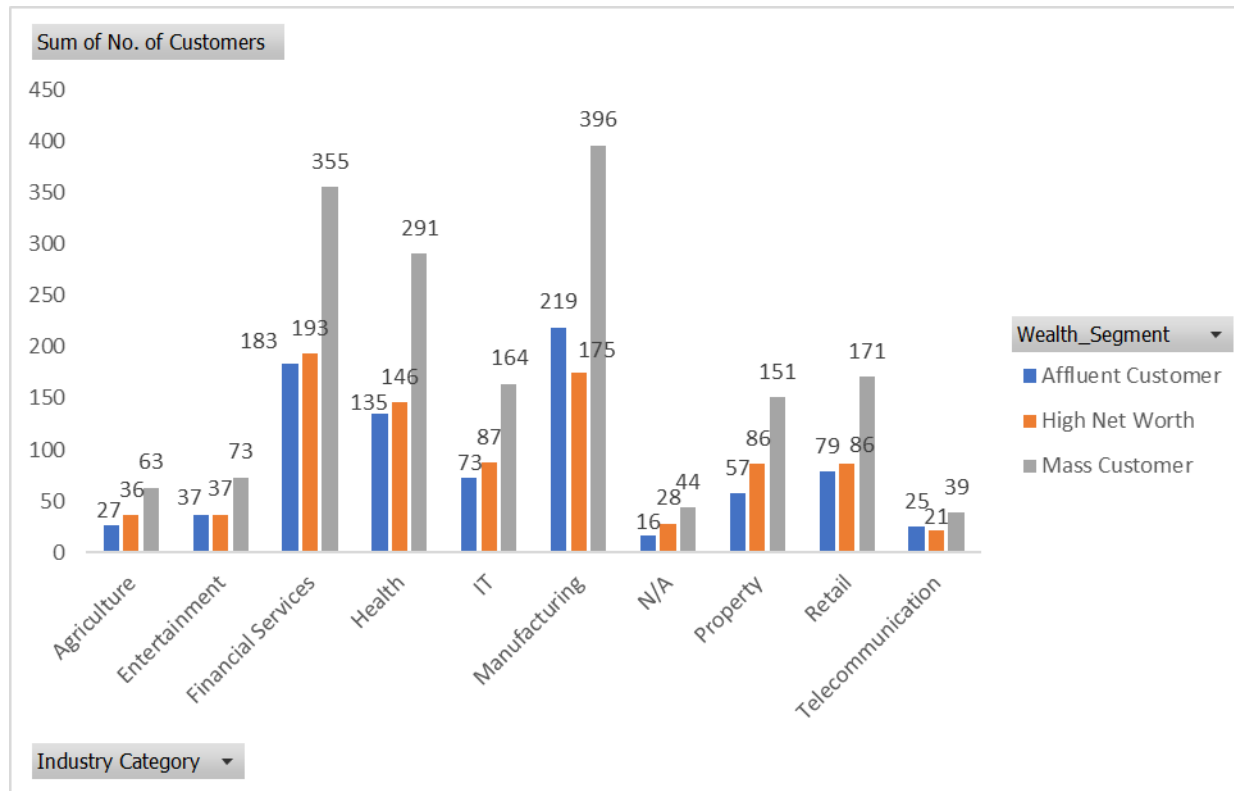
- Showing the number of customers in each job\_industry\_category.



- Analyze the distribution of wealth\_segment within each industry.

➤ Number of Mass Customers is significantly higher in each of Job\_Industry\_Category.

Industry\Wealth_Seg	Affluent Customer	High Net Worth	Mass Customer	Grand Total
Agriculture	27	36	63	126
Entertainment	37	37	73	147
Financial Services	183	193	355	731
Health	135	146	291	572
IT	73	87	164	324
Manufacturing	219	175	396	790
N/A	16	28	44	88
Property	57	86	151	294
Retail	79	86	171	336
Telecommunication	25	21	39	85
<b>Grand Total</b>	<b>851</b>	<b>895</b>	<b>1747</b>	<b>3493</b>



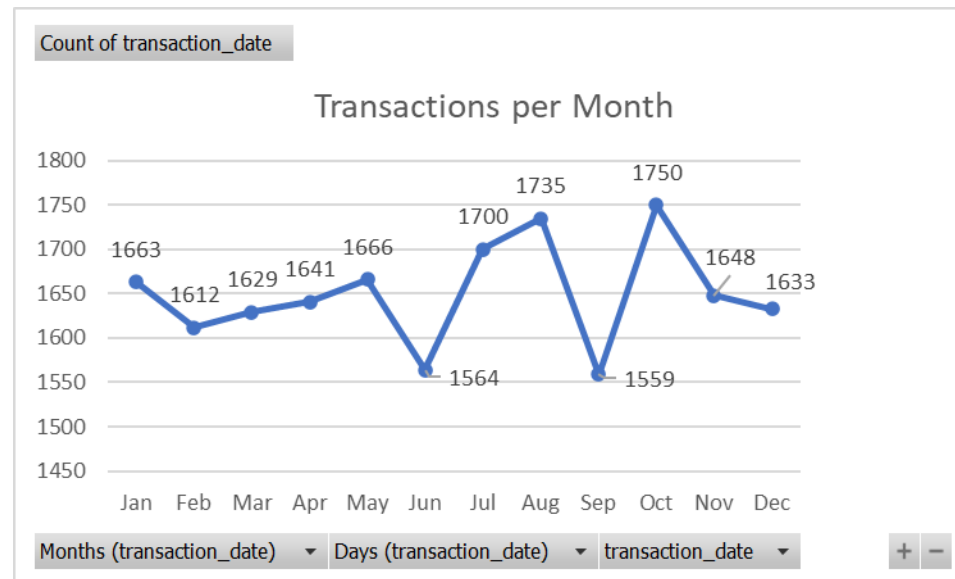
Task 3 on Next Page...

### Task 3: Transaction Analysis (12 Marks, 4-4 for each)

**Objective:** Analyze transaction data to identify trends and patterns.

#### 1. Sales Trend Analysis:

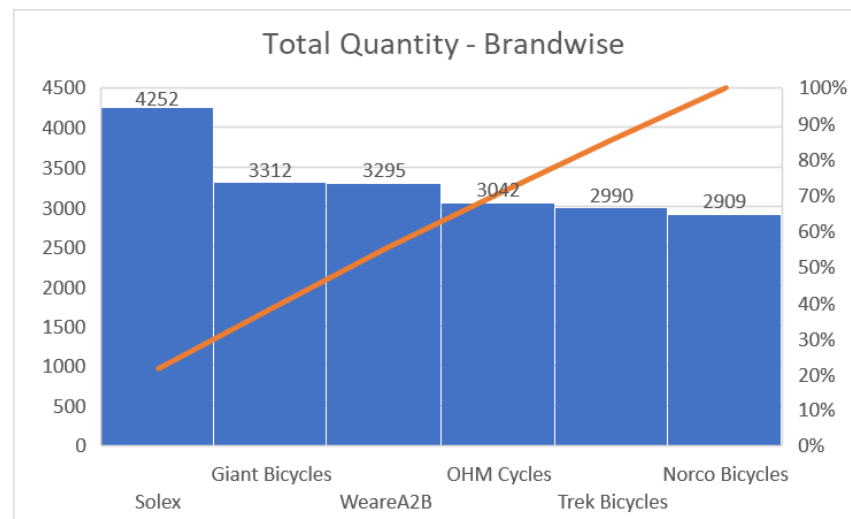
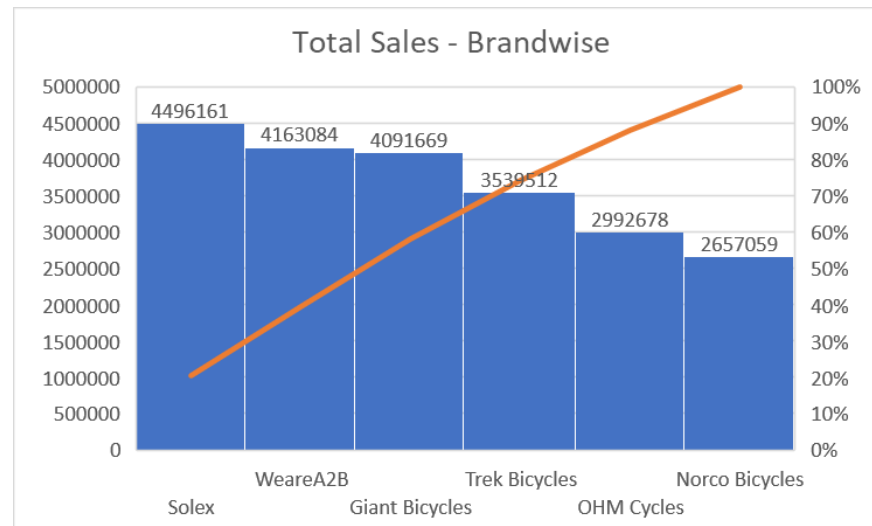
- Create a chart showing the total sales per month.



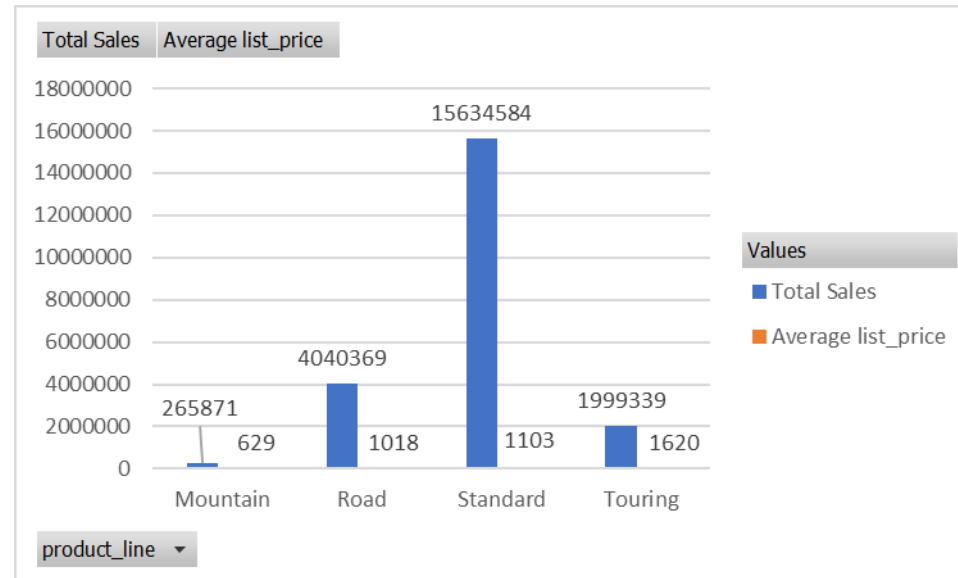
- Identify any seasonal trends or significant spikes in sales.
- Average sales per month is 1650. There is a dip in sales in the months of Jun-2017 and Sep-2017. Also, the sales peaked in the months of Aug-2017 and Oct-2017. No significant dip or spike in any of the months.

## 2. Product Performance Analysis:

- Show the total sales for each brand.
- Average Sales is \$ 3.65 million. Highest Sales is for Solex Brand \$ 4.5 million (Qty – 4252).
- Average Quantity is 3300. Lowest sales is for Narco Bicycles \$ 2.65 million. (Qty – 2909)



- Calculate the total sales and average list\_price for each product\_line.
- Of total \$ 21.9 million, \$ 15.6 million (71.2%) is contributed by Standard product line & \$ 4 million (18.2%) by Road product line.





### 3. Customer Purchase Behavior:

- Identify the top 10 customers based on total transaction value.



Rank	Customer_ID	Full Name	Total Purchase, \$	Lasr 3 Year Purchases
1	2183	Jillie Fyndon	19071	61
2	1129	Hercule	18349	2
3	1597	Jeffry Slowly	18053	93
4	941	Tye Doohan	17898	13
5	2788	Melantha Pickburn	17259	45
6	936	Raffaello Godleman	17160	64
7	1887	Kynthia Purcer	17134	22
8	1302	Ericka Eggers	17036	29
9	1140	Deana Rathbourne	16199	32
10	2309	Herc McIlhone	16122	40

- Calculate the average number of purchases per customer.
- Total number of Purchases = 19800 (total transactions)
- Total number of Customers = 3493
- Average number of purchases per customer in 2017 =  $19800/3493 = 5.67$  (~6 Nos)

Task 4 on Next Page...

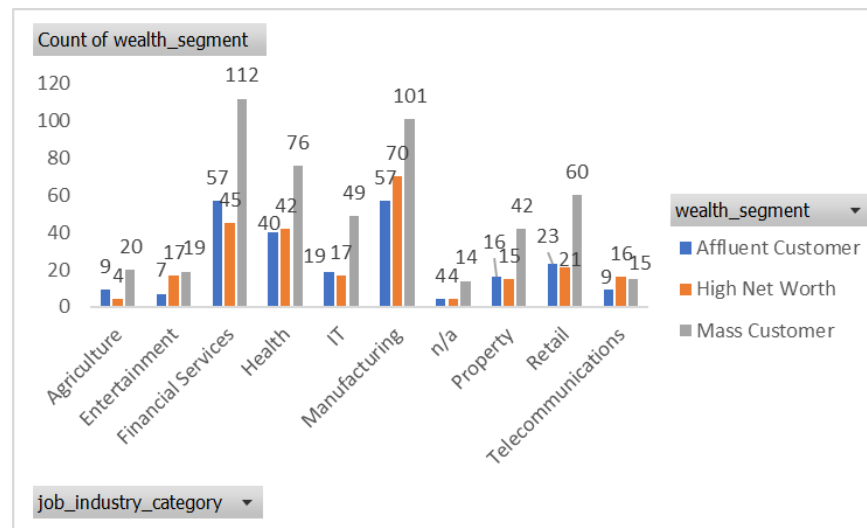
#### Task 4: New Customer Insights (12 Marks, 4-4 for each)

**Objective:** Analyze the new customer dataset to provide insights into potential new customer behavior and value.

##### 1. New Customer Demographics:

- Show the distribution of new customers by wealth\_segment and job\_industry\_category.
- Mass customer count is double than each of Affluent customer or High Net worth.
- In all the categories (except Telecommunications) the mass customer count is significantly higher than remaining two.

Job Industry\Wealth Segment	Affluent Customer	High Net Worth	Mass Customer	Grand Total
Agriculture	9	4	20	33
Entertainment	7	17	19	43
Financial Services	57	45	112	214
Health	40	42	76	158
IT	19	17	49	85
Manufacturing	57	70	101	228
n/a	4	4	14	22
Property	16	15	42	73
Retail	23	21	60	104
Telecommunications	9	16	15	40
<b>Grand Total</b>	<b>241</b>	<b>251</b>	<b>508</b>	<b>1000</b>



0 Calculate the average past\_3\_years\_bike\_related\_purchases for new customers.

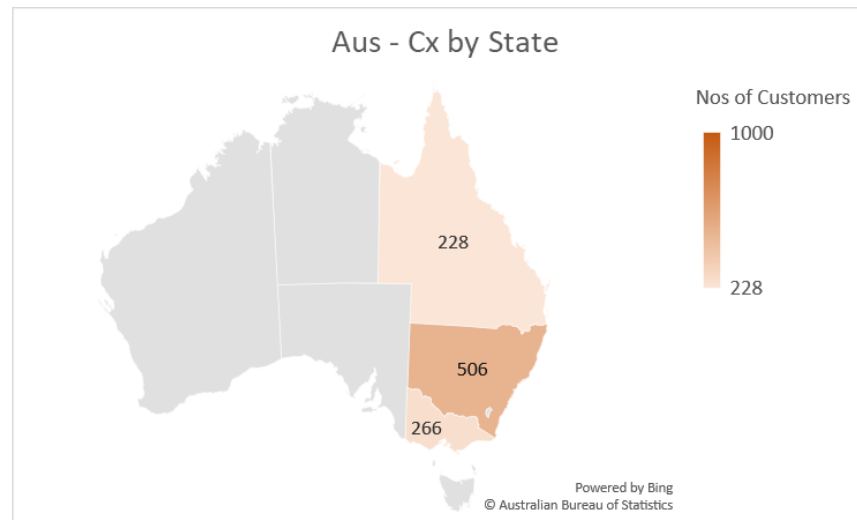
- Total past\_3\_years\_bike\_related\_purchases = 49836
- Total Customers = 1000
- Average Bike Related Purchases (Past 3 Years) =  $49836/1000 = 49.836$  (~ 50 Nos).

## 2. New Customer Location Analysis:

0 Create a map or chart showing the distribution of new customers by state.

- NSW has highest number of customers (506 of 1000) (~50%).
- <https://www.google.com/maps/d/u/0/edit?mid=13mzrU4PIFPO-12KIDlrUSkBXbRVlcBY&ll=-25.048264284898945%2C136.12624396551377&z=5>
- The above map shows distributions of Addresses based on pincodes of Australia. Most of the customers are located on East Coast.

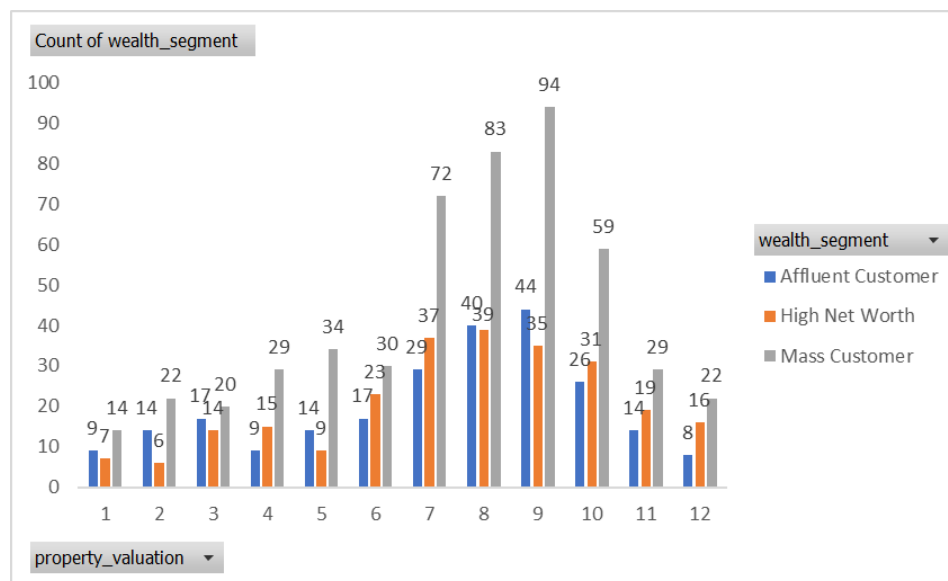
State	Nos of Customers
NSW	506
QLD	228
VIC	266
<b>Grand Total</b>	<b>1000</b>



0 Analyze the correlation between property\_valuation and customer wealth\_segment.

- There is no correlation between property valuation and wealth segment.
- Even for higher level of property valuation the mass customer segment is higher in proportion than the other two segments.

Property_Valuation	Affluent Customer	High Net Worth	Mass Customer	Grand Total
1	9	7	14	30
2	14	6	22	42
3	17	14	20	51
4	9	15	29	53
5	14	9	34	57
6	17	23	30	70
7	29	37	72	138
8	40	39	83	162
9	44	35	94	173
10	26	31	59	116
11	14	19	29	62
12	8	16	22	46
<b>Grand Total</b>	<b>241</b>	<b>251</b>	<b>508</b>	<b>1000</b>



### 3. Potential Revenue from New Customers:

- Estimate potential revenue based on past\_3\_years\_bike\_related\_purchases and value.
- Total Nos of Purchases in 3 Years = 49836
- Summation (Purchases\*Value) = 43981
- Total Nos of Purchases in 1 Year =  $43981/3 = 14660.3$
- Average Listed Price = \$ 1108/-
- Potential Revenue per annum =  $14660.3 * 1108 = \$ 16,243,649.3$  (~\$ 16.2 million)
- With these 1000 new customers, if converted, potential revenue generated will be \$ 16.2 million in addition to the current \$ 21 million by existing 3493 customers.

Task 5 on Next Page...

## Task 5: Customer Lifetime Value (CLV) Analysis (16 Marks)

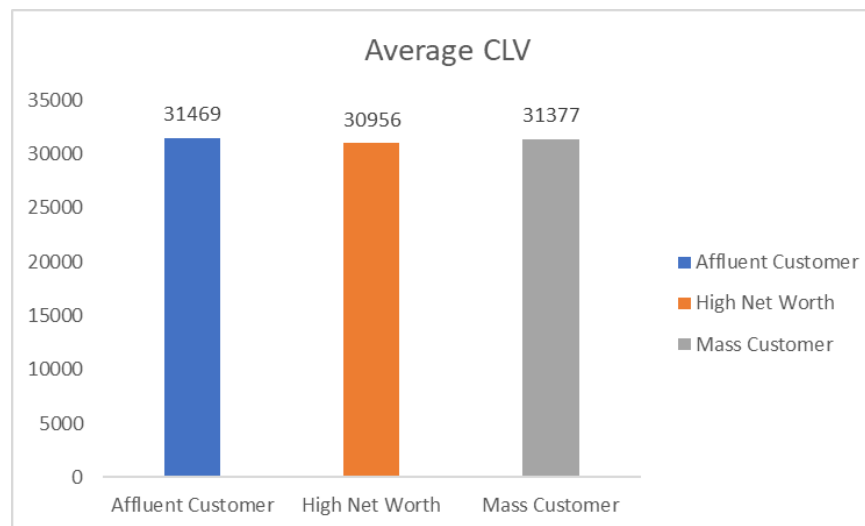
**Objective:** Calculate and analyze the customer lifetime value to identify the most valuable customers.

### 1. CLV Calculation:

- Use the formula
  - $\text{Customer Lifetime Value} = \text{Average Purchase (Profit) Value per annum} * \text{Purchase Frequency per annum} * \text{Customer Lifespan}$
  - Customer Lifespan is nothing but number of years the customer will remain in business with the company. There can be lot of analysis like Kaplan-Meier & Cox => Survival analysis to calculate churn date in the future for the customer.
  - We can assume, for every customer, Customer Lifespan = 10 Years (Based on Average Tenure).
- Calculate CLV for each customer using transaction data.
  - CLV Table Created in Excel (Task\_5).
  - Top 10% customers identified using conditional formatting – in Excel – CLV sheet (Highlighted in Red).

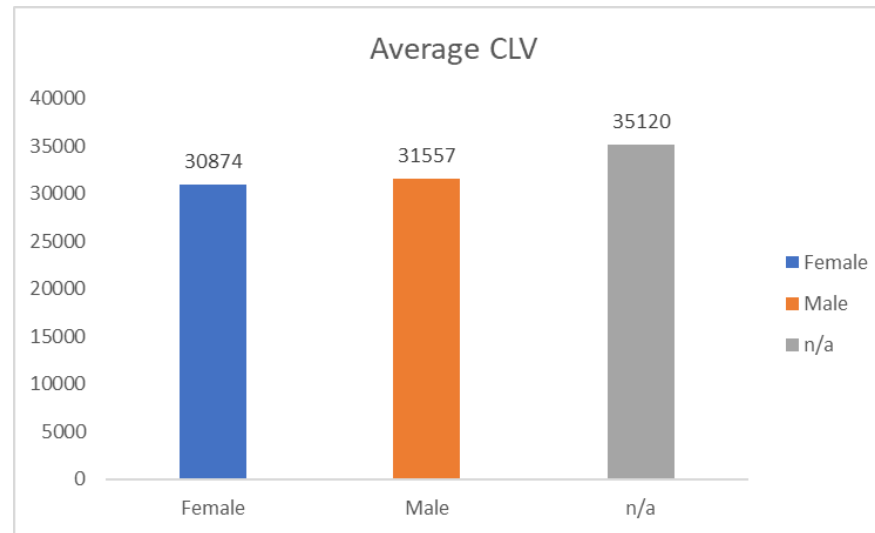
### 2. Segment CLV Analysis:

- Show average CLV by wealth\_segment.
  - The average CLV by wealth\_segment is approximately \$ 31200. Actual Values are shown in the Graph.

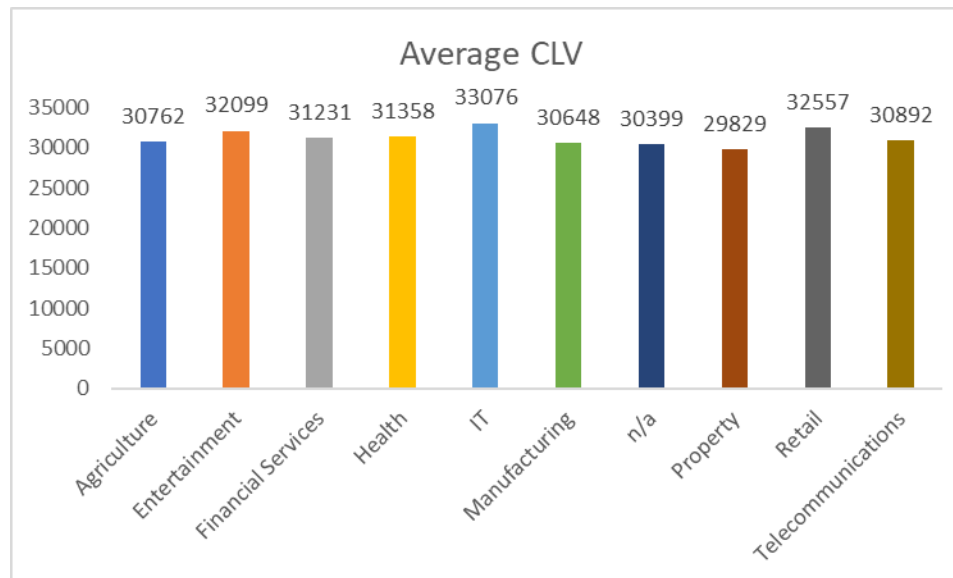


0 Analyze the relationship between CLV and customer demographics (e.g., gender, job industry).

➤ The average CLV for Male and Female is same & is approximately \$ 31000. Values are in the Map.



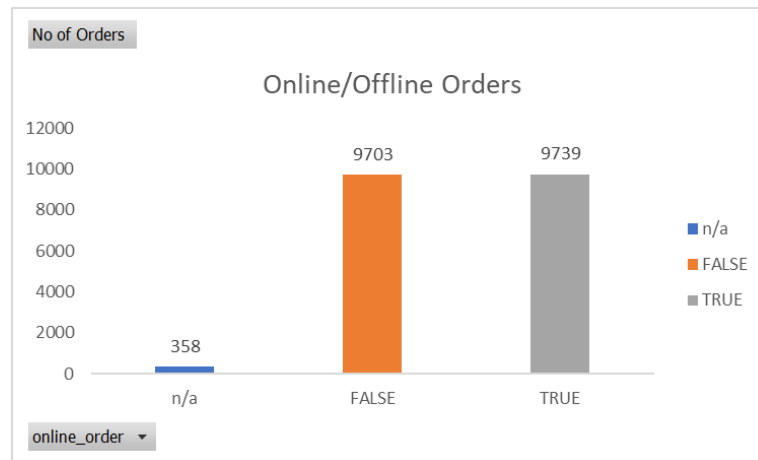
➤ Average CLV is same for all industry categories & is approximately \$ 31200. Actual values are in the Graph.



## Additional Analysis

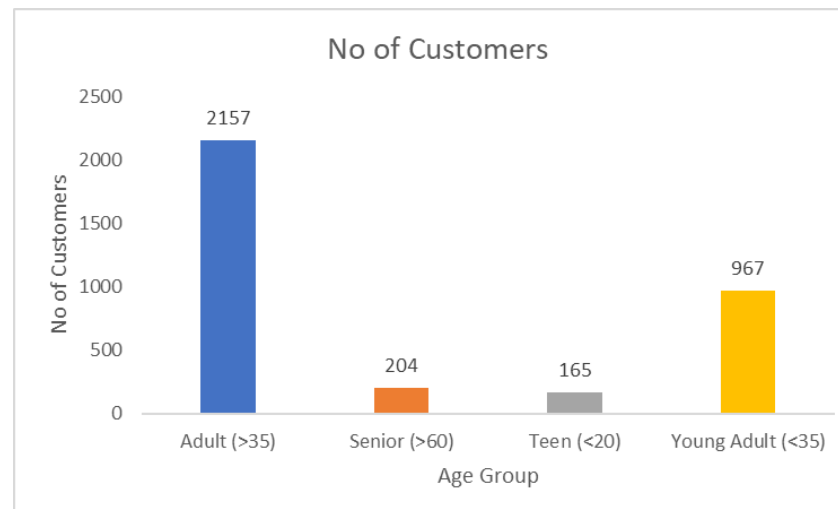
### 1. Online Vs Offline Sales

- The number of Online and Offline orders is same, approximately 9700 (50% of total).



### 2. Age\_Group wise Number of Customers

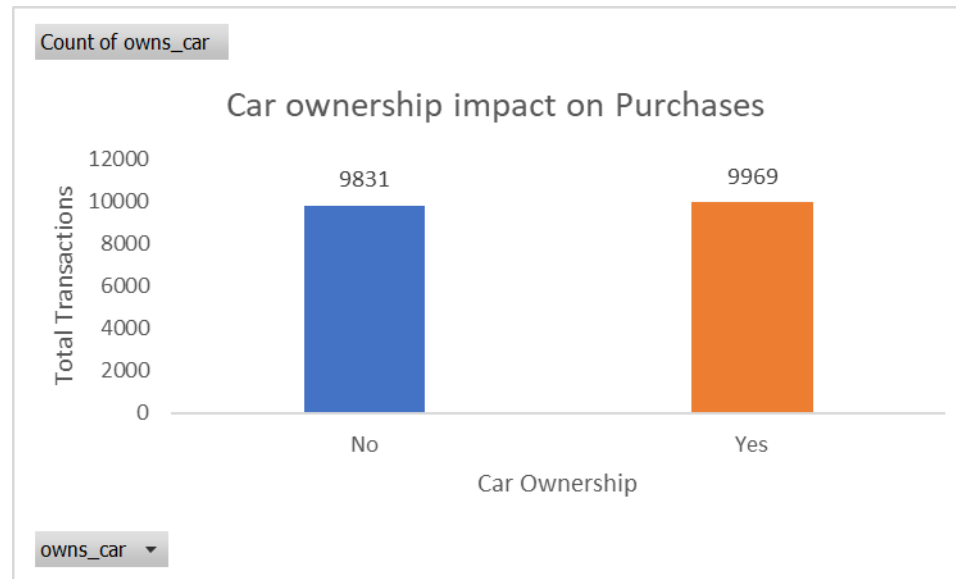
- Approximately 50% of the customers are between 35 & 60 years of age (Adult), 20% between 20 and 35 (Young Adult).





### 3. Car ownership impact on Bike related Purchases

- The car ownership has negligible impact on Bike related purchases.



Task 6 on Next Page...

## Task 6: Executive Summary and Recommendations (16 Marks)

**Objective:** Summarize findings and provide actionable recommendations for business strategies.

### 1. Summary of Key Insights:

- Highlight key findings from customer segmentation, transaction analysis, new customer insights, and CLV analysis.
- Cleaned and Merged 3 Sheets – Transactions, Customer Demographics and Customer Address. The New customer data cleaned and kept separate for analysis.
- Total Transactions = 19800.
- Total Number of Customers = 3493.

#### Segmentation:

- 3 Segments are Affluent Customer, High Net Worth, and Mass Customer – Average Tenure is 10.6 Years. (Tenure is association of the customer with the Company). All the 3 Segments have same Tenure = 10.6 Years approx. Check graph.
- Male and Female Genders are approximately equal (~50%). Approximately 1700 each. Avg\_past\_3\_years\_bike related purchases are approximately same for both male and female. ~50 Nos.
- There are 9 Job Industries – Namely – Agriculture, Entertainment, Financial Services, Health, IT, Manufacturing, Property, Retail and Telecommunication. Of total 3493 customers, 60% of customers are in 3 Industries – Manufacturing (790), Financial Services (731) and Health (572). Number of Mass Customers is significantly higher in each of Job\_Industry\_Category. Check graph.

#### Sales Analysis:

- Average sales per month is 1650. There is a dip in sales in the months of Jun-2017 and Sep-2017. Also, the sales peaked in the months of Aug-2017 and Oct-2017. No significant dip or spike in any of the months.
- There are 6 Brands – Namely – Solex, WeAreA2B, Giant Bicycles, Trek Bicycles, Ohm cycles, and Norco Bicycles. Average Sales is \$ 3.65 million. Highest Sales is for Solex Brand \$ 4.5 million (Qty – 4252). Average Quantity of Sales is 3300. Lowest sales is for Narco Bicycles \$ 2.65 million. (Qty – 2909)
- Of total \$ 21.9 million business in 2017, \$ 15.6 million (71.2%) is contributed by Standard product line & \$ 4 million (18.2%) by Road product line.

- Top 10 customers by total sales value lay between \$ 16000 & \$ 20000 per year (for 2017).
- Average number of purchases per customer in 2017 =  $19800/3493 = 5.67$  (~6 Nos)

#### New Customer Demographics:

- In all the industry categories (except Telecommunications) the mass customer count is significantly higher than affluent customer or High Net Worth customers.
- `Total past_3_years_bike_related_purchases` = 49836. Total Customers = 1000
- Average Bike Related Purchases (Past 3 Years) =  $49836/1000 = 49.836$  (~ 50 Nos).
- NSW (New South Wales) has highest number of customers (506 of 1000) (~50%). Victoria (266) and Queensland (228). Most of the customers are located on the coast in these 3 states.
- There is no correlation between property valuation and wealth segment. Even for higher level of property valuation the mass customer segment is higher in proportion than the Affluent Customer or High Net Worth customers. (In graph).
- With these 1000 new customers, if converted, potential revenue generated will be \$ 16.2 million in addition to the current \$ 21.9 million by existing 3493 customers.

#### CLV: (Profit is considered for Value)

- Average CLV for each customer is \$ 31200.
- The average CLV by wealth\_segment is approximately \$ 31200.
- The average CLV for Male and Female is same & is approximately \$ 31000.
- Average CLV is same for all industry categories & is approximately \$ 31000.

#### Additional Analysis:

- The number of Online and Offline orders is same, approximately 9700 (50% of total).
- Approximately 50% of the customers are between 35 & 60 years of age (Adult), 20% between 20 and 35 (Young Adult).
- The car ownership has negligible impact on Bike related purchases.

## 2. Recommendations:

- 0 Provide recommendations for marketing strategies targeting high-value customer segments.

### Marketing Strategies for High-Value Customers:

#### 1. Leveraging the Customer Lifetime Value (CLV):

Since CLV is similar across segments (wealth, gender, industry), we can focus on retaining existing customers across all segments. Implement loyalty programs with tiered benefits based on purchase history (e.g., exclusive discounts, early access to new products, personalized recommendations).

#### 2. Targeted Upselling and Cross-selling:

Analyzing past purchases of high-value customers (top 10% by CLV) identified – in excel sheet and recommending relevant products (e.g., accessories, maintenance services) for upselling.

Using purchase history to identify complementary product bundles (e.g., bike and helmet) for cross-selling.

#### 3. Personalized Communication:

Tailoring marketing messages based on customer preferences and purchase history. Offer targeted promotions or early access to new products for high-value segments (Affluent, High Net Worth). Consider segment-specific email campaigns or loyalty program communications.

#### 4. Customer Experience Focus:

Providing exceptional customer service to high-value customers (top 10% by CLV). This could include dedicated support lines, priority service during peak hours, or special events. Gather feedback through surveys or direct communication and address their concerns promptly.

- Suggest potential areas for business expansion based on new customer location analysis.

#### Business Expansion based on New Customer Location Analysis:

##### 1. Focus on Coastal Regions:

Since the majority of new customers are located on the coast in NSW, Victoria, and Queensland, considering expanding physical stores or strengthening online presence in these regions.

##### 2. Targeted Online Marketing:

Utilizing location-based advertising to target potential customers in high-concentration areas (coastal NSW, Victoria, Queensland). Partnering with local businesses in these regions to cross-promote products or services.

##### 3. Pop-up Stores or Events:

Organizing pop-up stores or promotional events in areas with high concentrations of potential customers (identified through new customer data). This can help brand awareness and customer acquisition in those locations.

- Recommend improvements in product offerings based on transaction analysis.

#### Product Offering Improvements based on Transaction/Sales Analysis:

##### 1. Focus on Standard and Road Product Lines:

Since Standard and Road product lines contribute significantly to overall sales (71.2% and 18.2% respectively), ensure adequate stock and consider expanding product offerings within these lines.

##### 2. Analyze Low-Selling Brands:

Investigating reasons behind lower sales for brands like Norco Bicycles. This could involve product pricing, marketing strategies, or brand awareness. Consider targeted promotions or strategic partnerships to boost sales for these brands.

### 3. Analyze Online vs. Offline Sales:

Since online and offline sales are balanced, ensuring a seamless omnichannel experience for customers. Allowing easy online purchase with options for in-store pickup or delivery.

### 4. Explore New Product Categories:

Analyzing customer demographics (age groups) and consider introducing new product categories catering to specific segments (e.g. electric bikes). Leveraging past purchase data to identify potential customer interest in new product lines (electric bikes).

### Additional Recommendations:

1. Analyzing Online Order Behavior: Investigating online order behavior (abandoned carts, product browsing patterns) to identify areas for improvement in the online ordering process.

2. Customer Segmentation by Age: While car ownership has minimal impact, exploring further segmentation by age group (Young Adult, Adult) to tailor marketing messages and product recommendations effectively.

3. Social Media Marketing: Leveraging social media platforms to target specific customer segments and promote brand awareness, new products, and special offers.

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