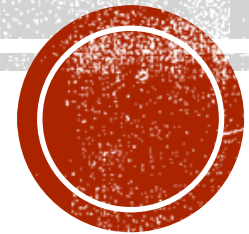


YOGESH'S DATA VISUALIZATION PROJECT

KPI DASHBOARD FOR ATLIQ SERVICES

A Case Study on Mitron bank

Duration: 15-20minutes



PROBLEM STATEMENT / PROJECT SCOPE

- Mitron Bank is a legacy financial institution headquartered in Hyderabad. They want to introduce a new line of credit cards, aiming to broaden its product offerings and reach in the financial market.
- **KPIs:**
 1. Income utilisation %
 2. Spending Insights
 3. Demographic classification
 4. Key Customer Segments



SOLUTION APPROACH

- There is Two table provided in which the first table contains dim_customers (4000 rows and 7 columns) and fact_spends (864001 rows and 5 columns).
- Power BI was the tool used for creating the visualization/dashboard
- The data was imported, analysed and transformed as per necessity
- Power query and DAX expressions are used to create different KPIs for the problem statement

- **KEY SKILLS**

- 1. Power Query**
- 2. DAX Expression**
- 3. ETL**
- 4. Visualization**
- 5. Analysis**
- 6. Report**








DATA CLEANING/TRANSFORMATION

	A ^B C customer_id	A ^B C age_group	A ^B C city	A ^B C occupation	A ^B C gender	A ^B C marital status	1 ² 3 avg_income
	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>1000 distinct, 1000 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>4 distinct, 0 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>5 distinct, 0 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>5 distinct, 0 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>2 distinct, 0 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>2 distinct, 0 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>985 distinct, 970 unique</div></div>
1	ATQCUS1825	45+	Bengaluru	Salaried IT Employees	Male	Married	73523
2	ATQCUS0809	25-34	Hyderabad	Salaried Other Employees	Male	Married	39922
3	ATQCUS0663	25-34	Chennai	Salaried Other Employees	Male	Married	37702
4	ATQCUS0452	25-34	Delhi NCR	Government Employees	Male	Married	54090
5	ATQCUS3350	21-24	Bengaluru	Freelancers	Male	Single	28376
6	ATQCUS3256	21-24	Delhi NCR	Salaried IT Employees	Male	Single	46586
7	ATQCUS3608	25-34	Chennai	Freelancers	Male	Single	34966
8	ATQCUS0611	25-34	Chennai	Salaried IT Employees	Male	Married	59078
9	ATQCUS3856	21-24	Bengaluru	Salaried Other Employees	Female	Single	30424
10	ATQCUS2640	35-45	Delhi NCR	Salaried IT Employees	Female	Married	67450
11	ATQCUS3008	45+	Mumbai	Government Employees	Female	Married	62542
12	ATQCUS2365	25-34	Chennai	Salaried IT Employees	Female	Married	62738
13	ATQCUS1141	35-45	Delhi NCR	Business Owners	Male	Married	72301
14	ATQCUS2853	35-45	Chennai	Business Owners	Female	Married	74783

Column statistics		Value distribution	
Count	1000	ATQCUS0663	
Error	0	ATQCUS3350	
Empty	0	ATQCUS3256	
Distinct	1000	ATQCUS3608	
Unique	1000	ATQCUS3856	
Empty string	0	ATQCUS2640	
Min	ATQCUS...	ATQCUS3008	
Max	ATQCUS...	ATQCUS2365	
		ATQCUS1141	
		ATQCUS2853	
		ATQCUS3020	

DATA CLEANING/TRANSFORMATION

	A _C ^B customer_id	A _C ^B month	A _C ^B category	A _C ^B payment_type	1 ₂ ³ spend
	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>896 distinct, 801 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>6 distinct, 0 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>9 distinct, 0 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>4 distinct, 0 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>679 distinct, 461 unique</div></div>
1	ATQCUS1371	July	Health & Wellness	Credit Card	1114
2	ATQCUS0368	October	Groceries	Credit Card	1466
3	ATQCUS0595	May	Health & Wellness	Credit Card	387
4	ATQCUS0667	October	Electronics	Credit Card	1137
5	ATQCUS3477	September	Bills	UPI	2102
6	ATQCUS1972	October	Health & Wellness	UPI	243
7	ATQCUS2843	June	Entertainment	Credit Card	268
8	ATQCUS2634	August	Apparel	Debit Card	737
9	ATQCUS2165	July	Food	UPI	506
10	ATQCUS0908	September	Others	UPI	380
11	ATQCUS1115	May	Food	UPI	361
12	ATQCUS1279	August	Entertainment	Debit Card	443
13	ATQCUS0108	September	Groceries	Credit Card	361
14	ATQCUS3883	May	Groceries	Credit Card	56

Column statistics	
Count	1000
Error	0
Empty	0
Distinct	4
Unique	0
Empty string	0
Min	Credit C...
Max	UPI

Value distribution

Payment Method	Value Distribution (Relative)
UPI	Highest
Net Banking	Second Highest
Debit Card	Third Highest
Credit Card	Lowest

SOLUTION APPROACH

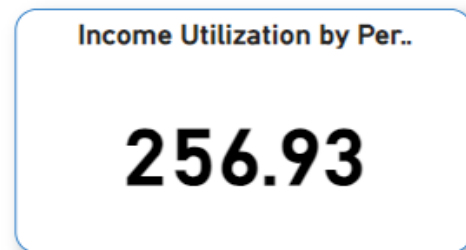
A few KPIs were created for the problem statement :

- Income utilisation % = $\text{DIVIDE}(\text{SUM}(\text{'fact_spends'[\text{spend}]}, \text{SUM}(\text{'dim_customers'[\text{avg_income}]}, 0) * 100$
- Created the Average of income KPI to show average income of peoples.
- Then we create our Average of Income spend KPI to show the income spends by peoples.
- Created a age group slicer for better filtering out data for the analysis.
- Created a treemap of Income utilization % by payment mode for better filtering and analysis our data to know the use of credit card.

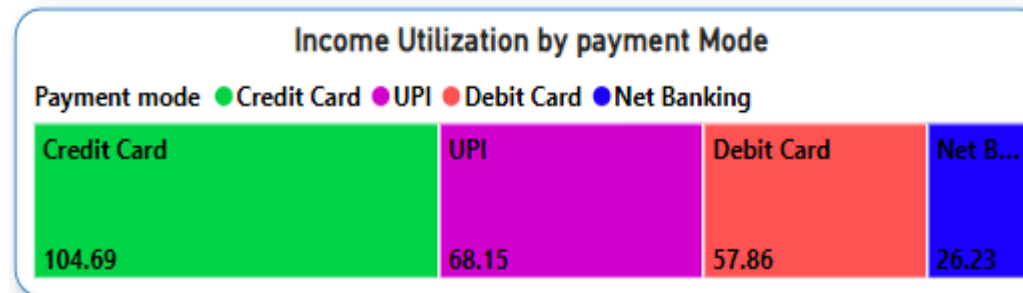


SOLUTION APPROACH

- Some key KPIs for the solution
- Income utilization %



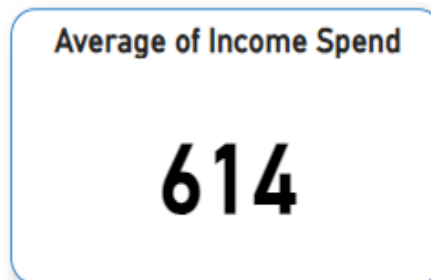
- Income utilization by payment mode



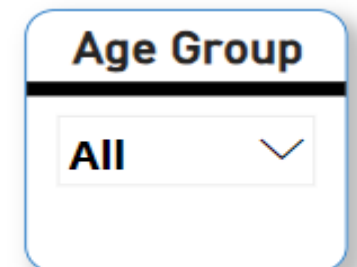
- Average of Income



- Average of spends

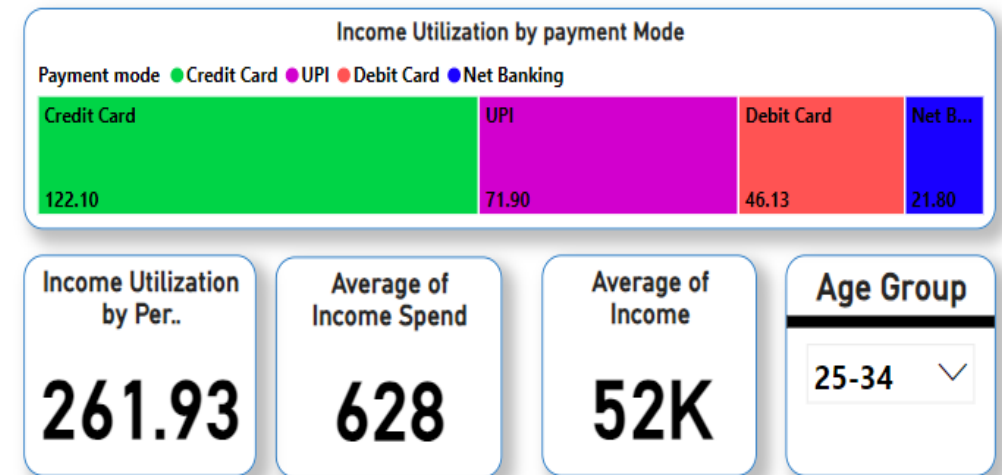
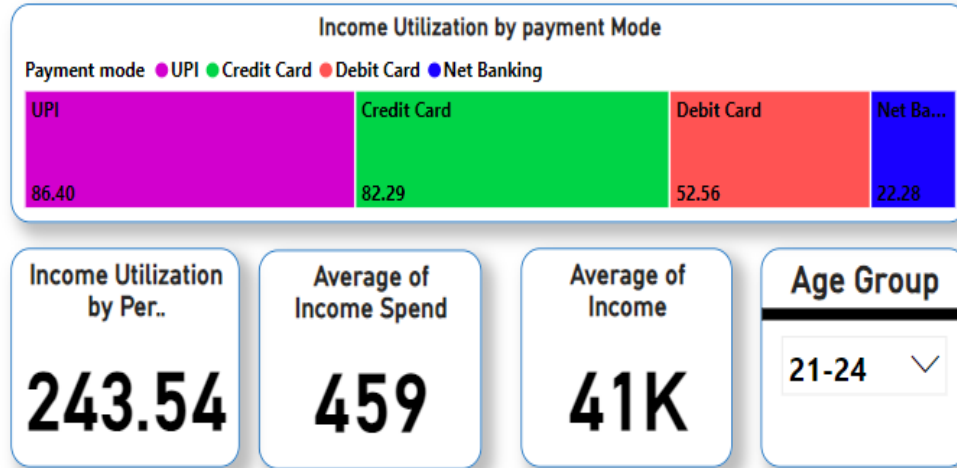


- Age Group

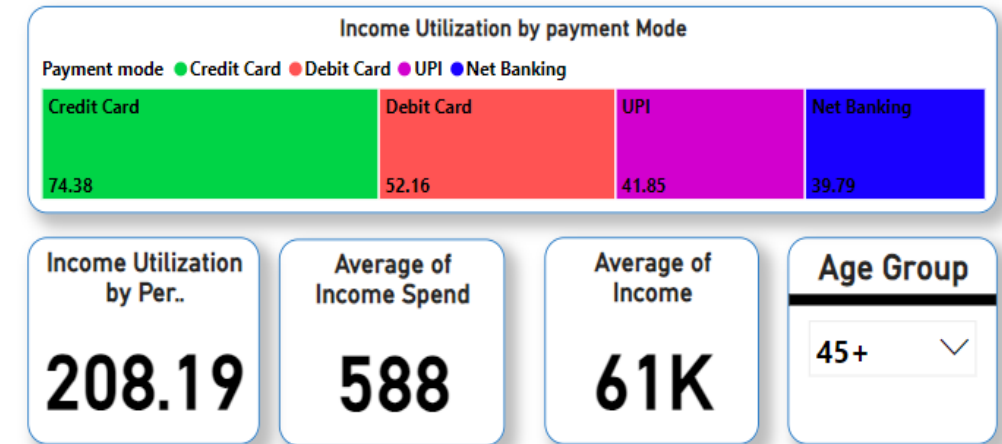
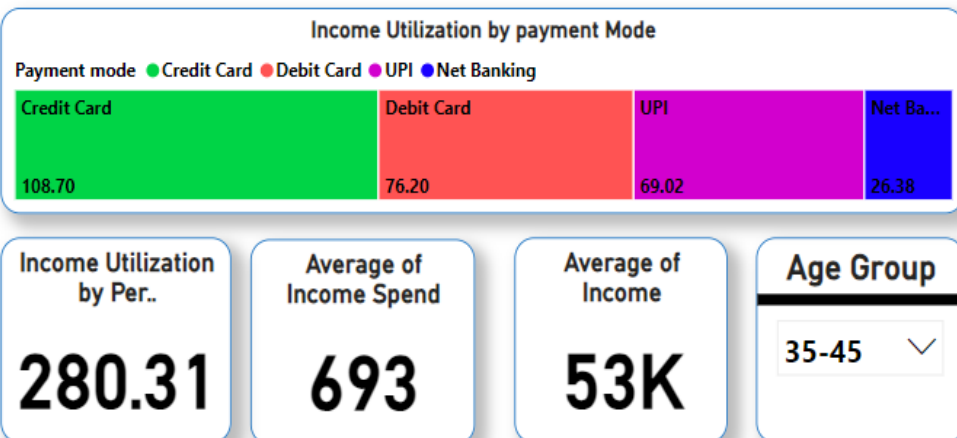


SOLUTION APPROACH

- First lets see by age group which payment mode people is using to pay money
- 21-24
- 25-34

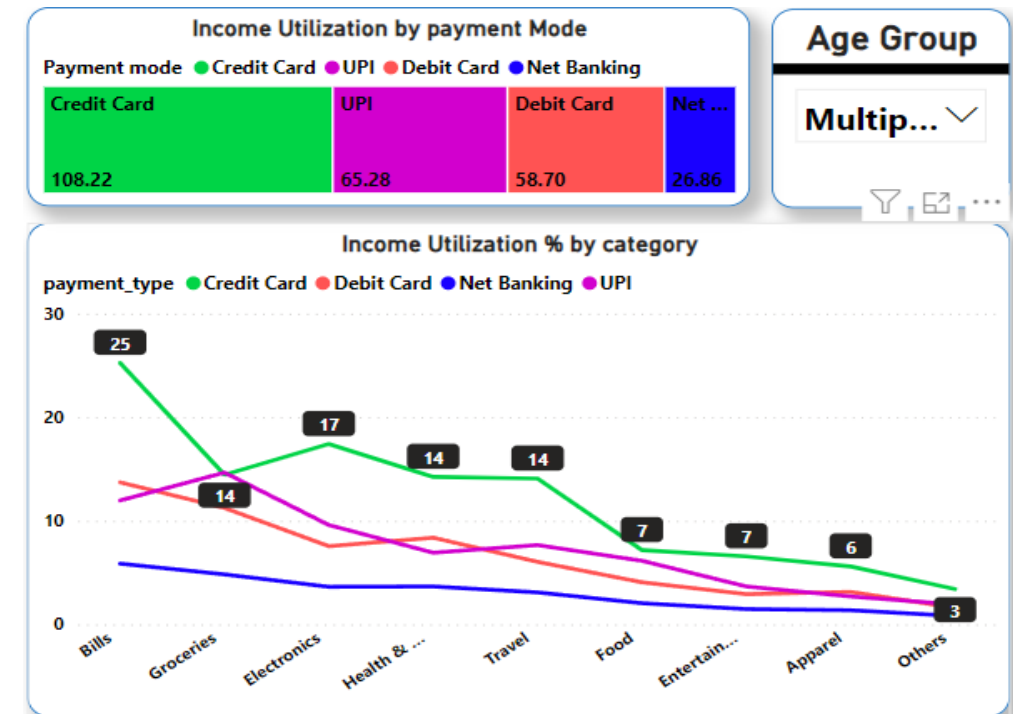
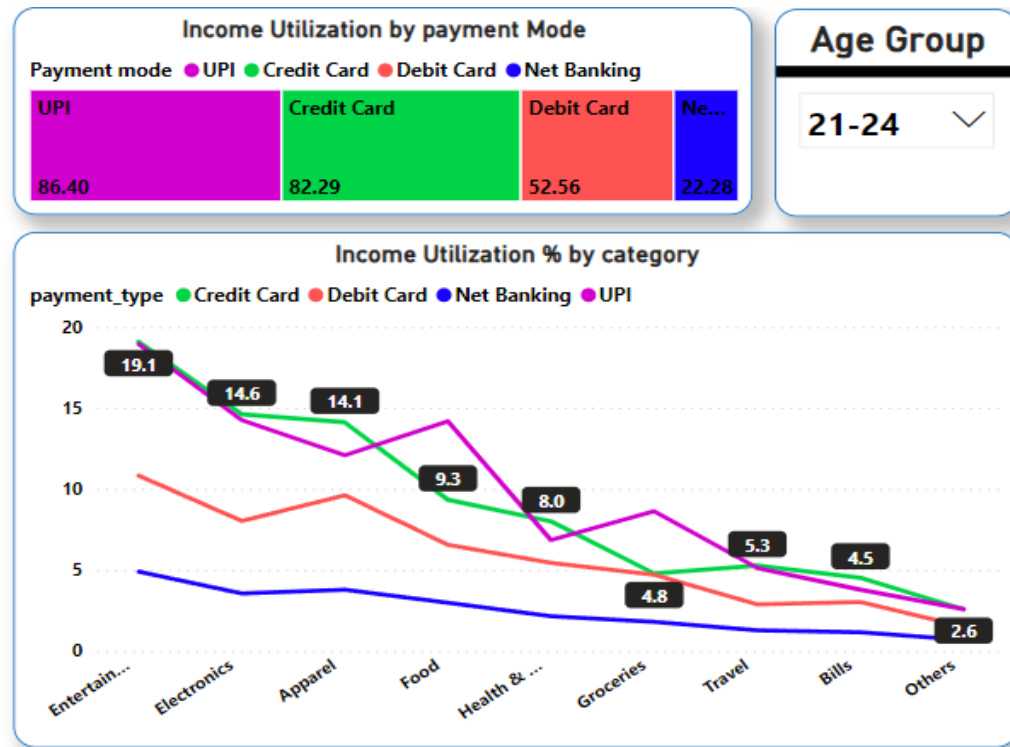


- 35-45(Most income utilization)



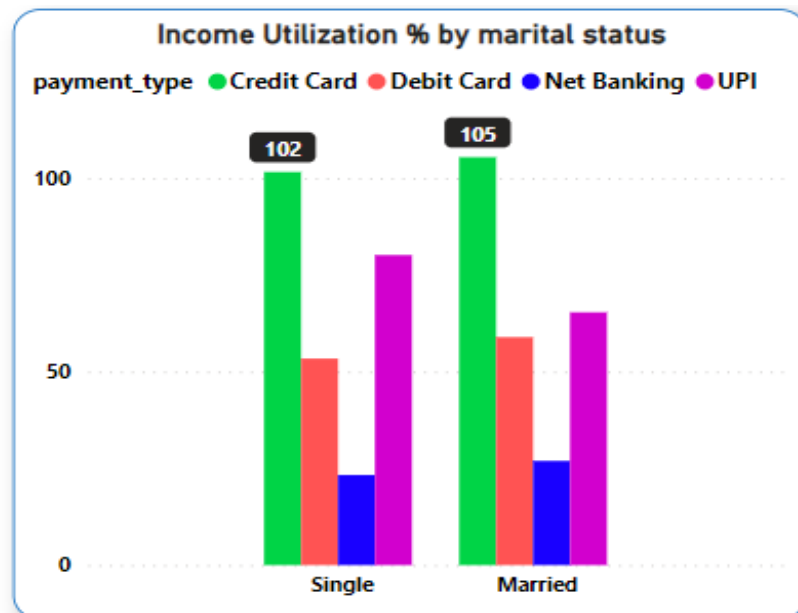
SOLUTION APPROACH

- Now we see income utilization by category ,we see this by two age groups
- 21-24
- 25-45+

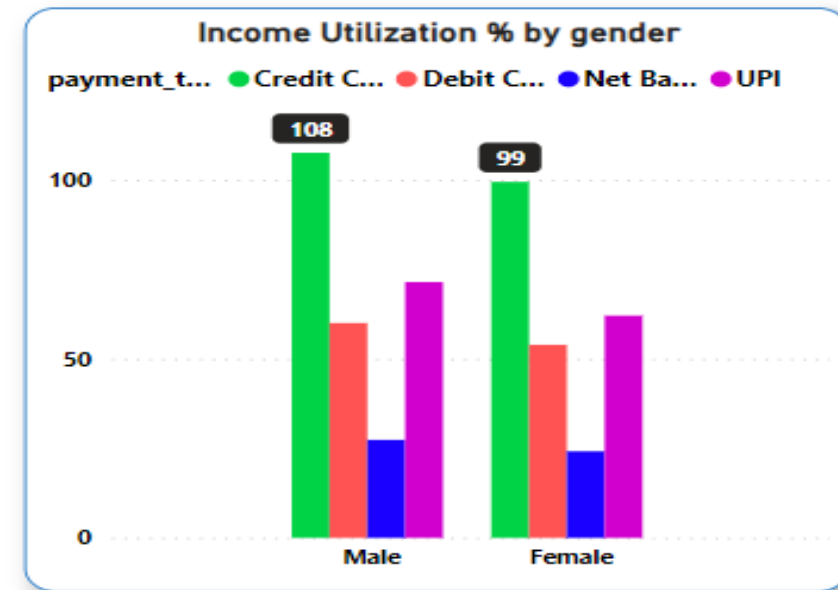


SOLUTION APPROACH

- Marital status



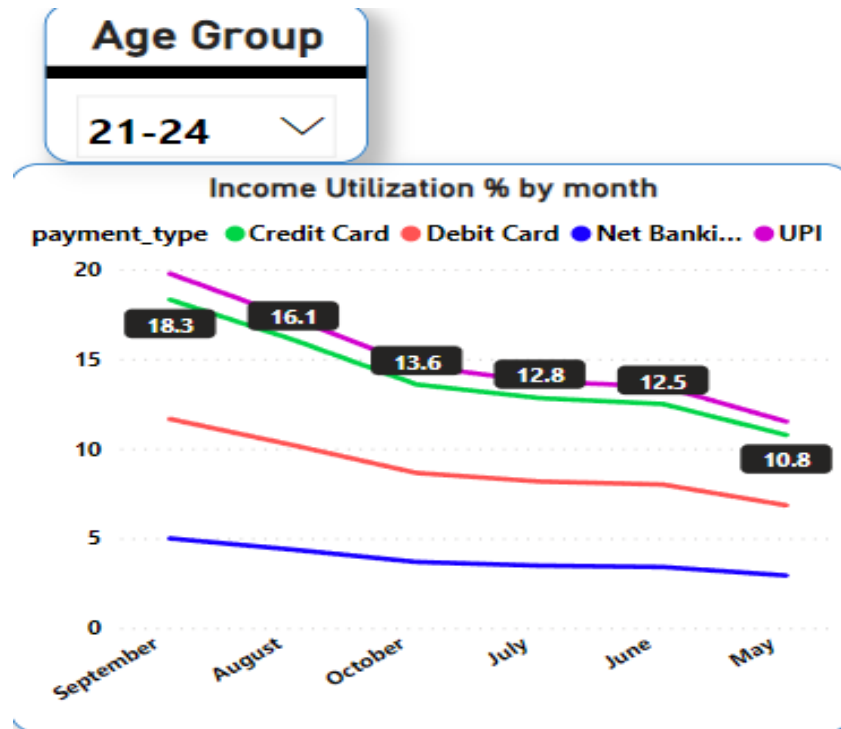
- Gender



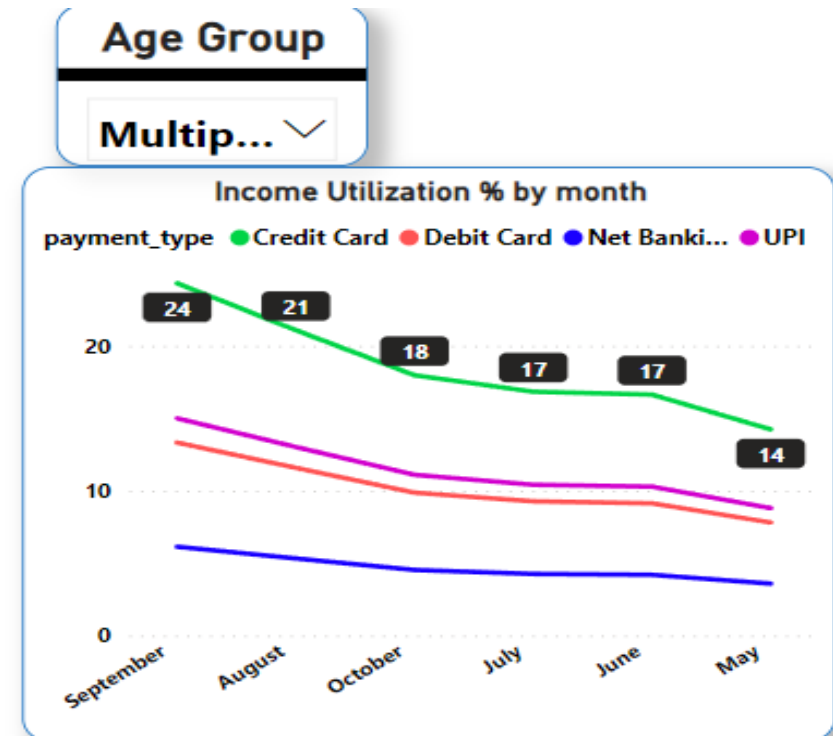
SOLUTION APPROACH

- Income utilization by month filtered by age group

- 21-24



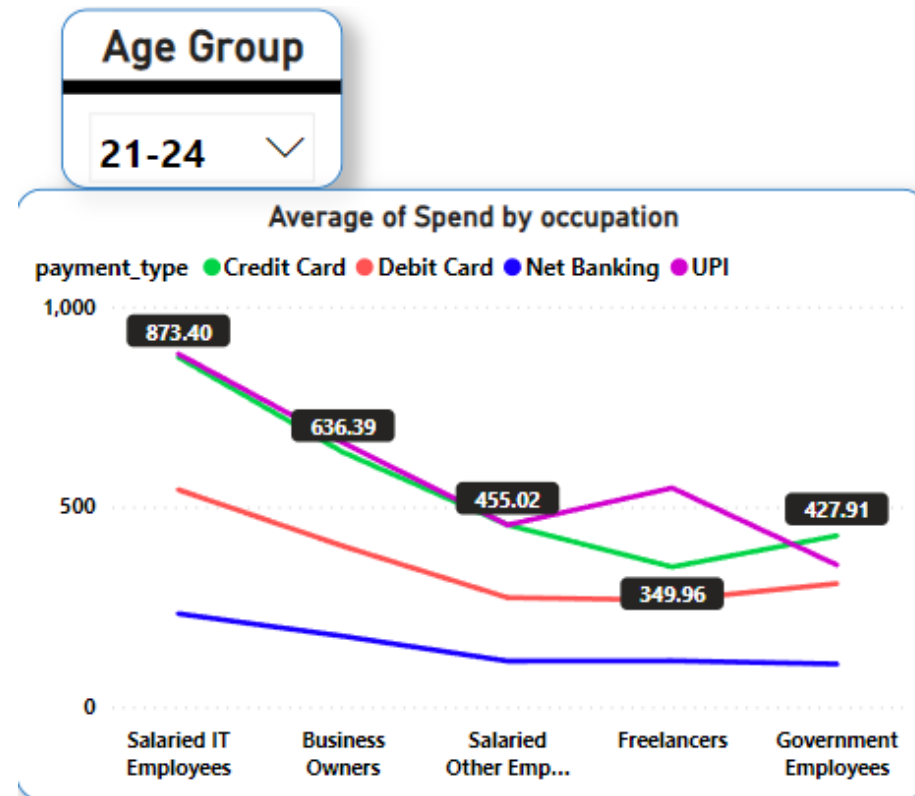
- 21-45+



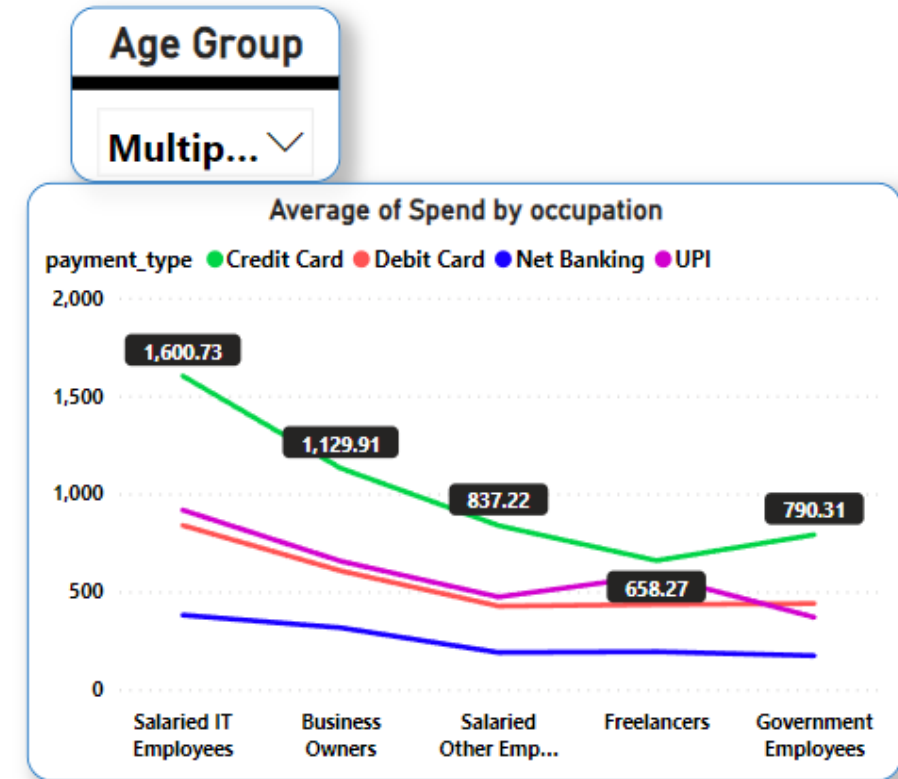
SOLUTION APPROACH

- Occupation filtered by age group

- 21-24



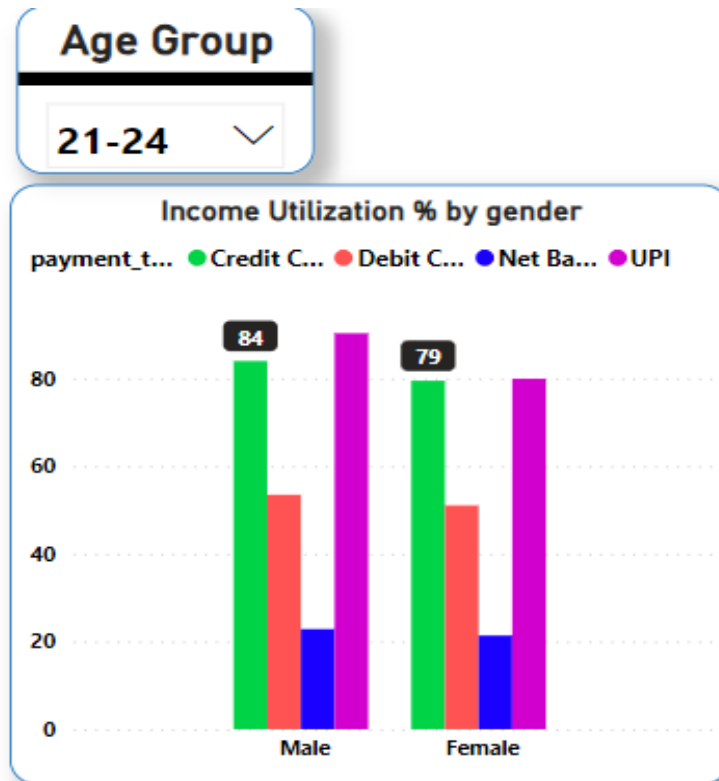
- 21-45+



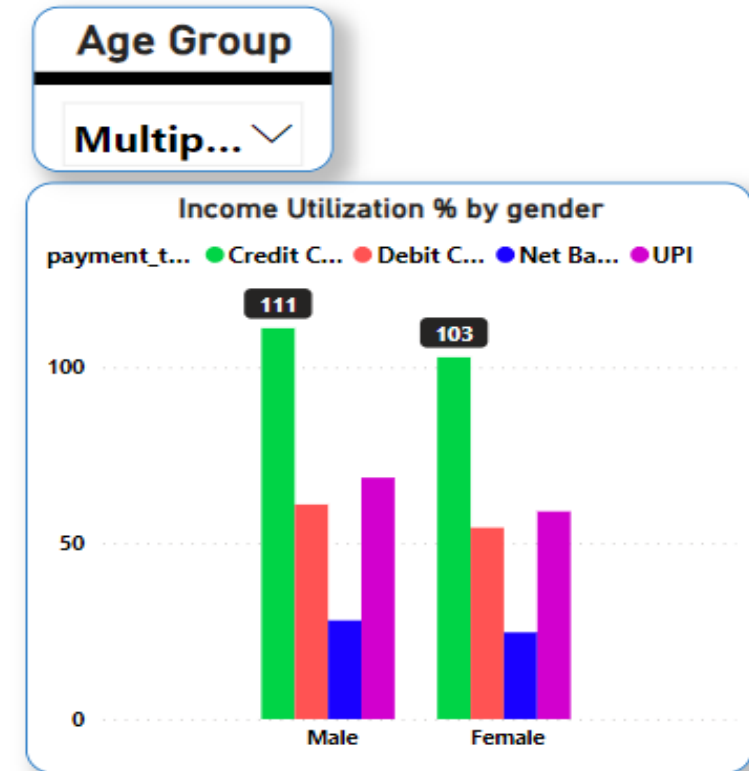
SOLUTION APPROACH

- Gender filtered by age group

- 21-24



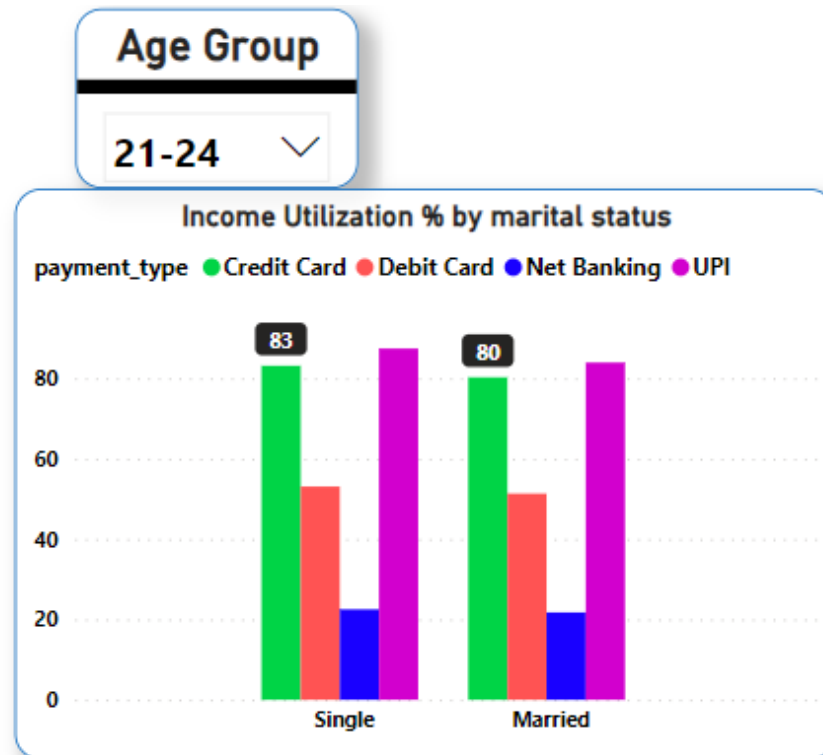
- 21-45+



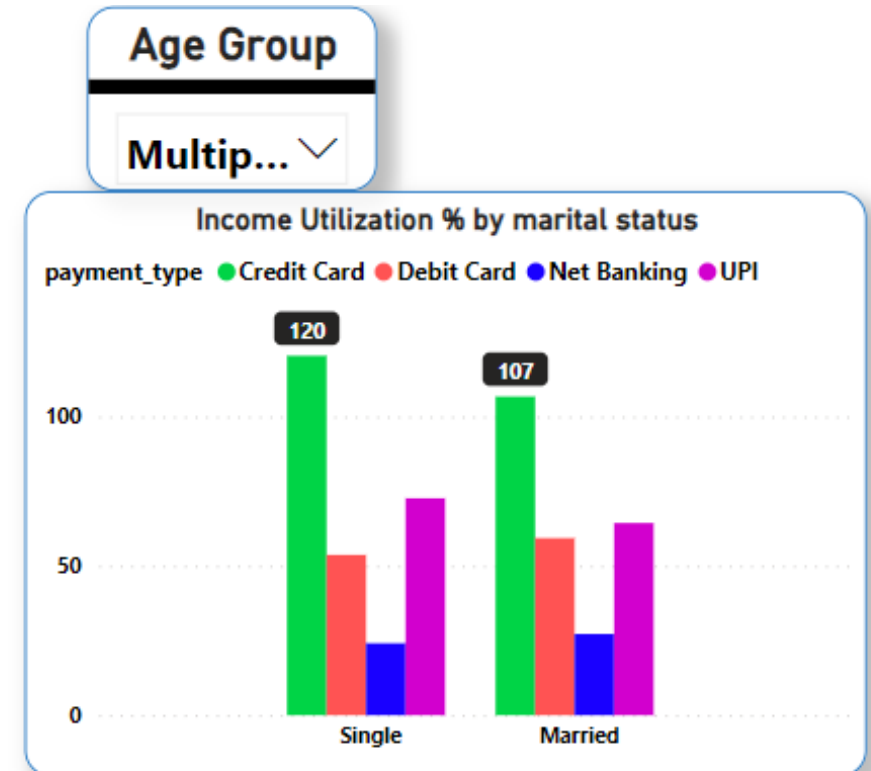
SOLUTION APPROACH

- Gender filtered by age group

- 21-24



- 21-45+



FEATURES OF THE DASHBOARD

- The following 3 KPIs were provided:
 - **Income utilization %** = Tells about the total income utilization .
 - **Average income spend** =Tells us about the Average income spends.
 - **Average of income** =Shows the average of income earned.
- **There are six visuals provided in the dashboard for analysis**
- **There is one tree map provided which tells us about the how much income utilization is done by each payment type .**
- **And lastly there is one slicer for age group which we will use to filter out the data given to us it is also a key aspect regarding the problem which we are given.**



DASHBOARD

Income Utilization by Per..

256.93

Average of Income Spend

614

Average of Income

52K

Age Group

All

Income Utilization by payment Mode

Payment mode ● Credit Card ● UPI ● Debit Card ● Net Banking



Income Utilization % by marital status

payment_type ● Credit Card ● Debit Card ● Net Banki... ● UPI



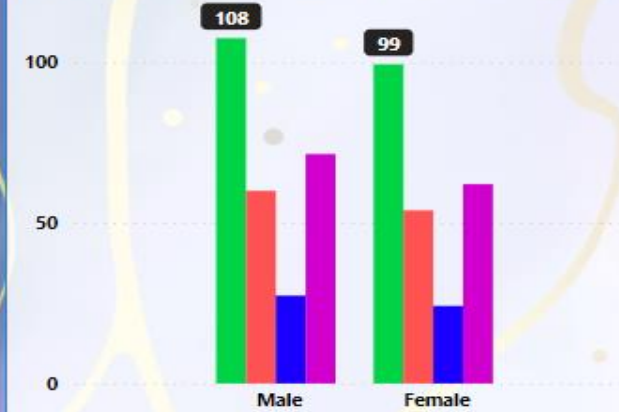
Income Utilization % by category

payment_type ● Credit Card ● Debit Card ● Net Banking ● UPI



Income Utilization % by gender

payment_t... ● Credit C... ● Debit C... ● Net Ba... ● UPI



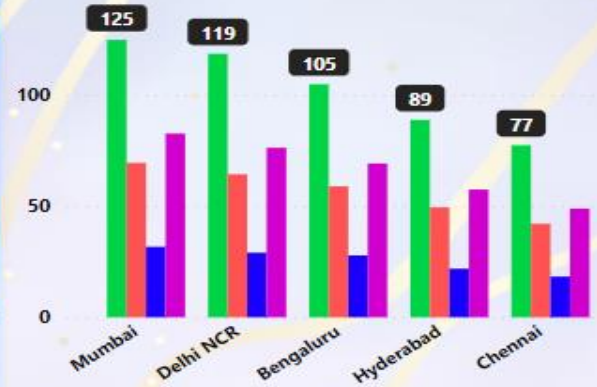
Income Utilization % by month

payment_type ● Credit Card ● Debit Card ● Net Banki... ● UPI



Income Utilization % by city

payment_t... ● Credit C... ● Debit C... ● Net Ba... ● UPI



Average of Spend by occupation

payment_type ● Credit Card ● Debit Card ● Net Banking ● UPI



DASHBOARD (21-24)

Income Utilization by Per..

243.54

Average of Income Spend

459

Average of Income

41K

Age Group

21-24

Income Utilization by payment Mode

Payment mode



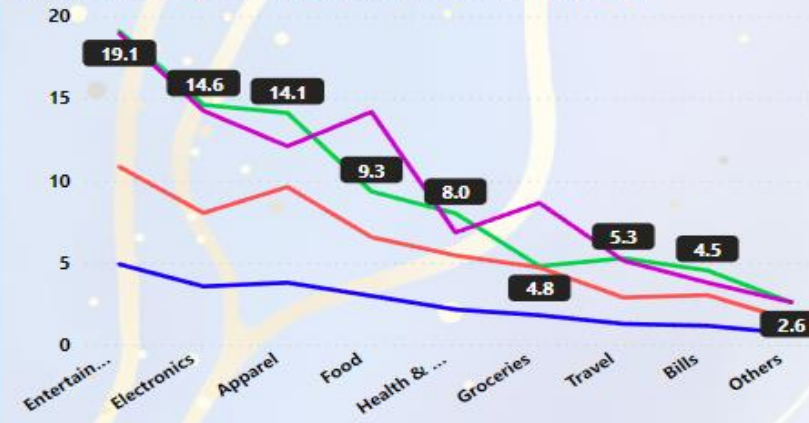
Income Utilization % by marital status

payment_type



Income Utilization % by category

payment_type



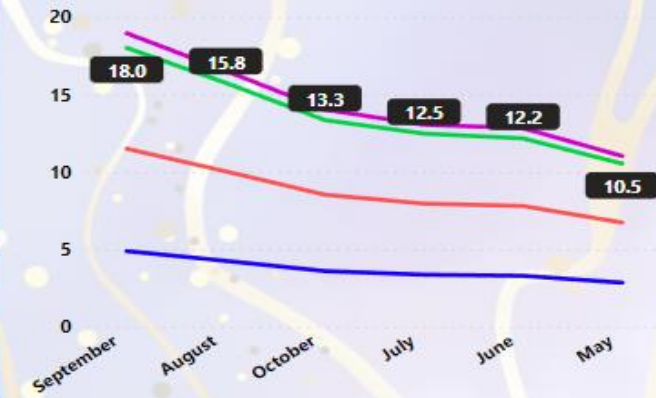
Income Utilization % by gender

payment_t...



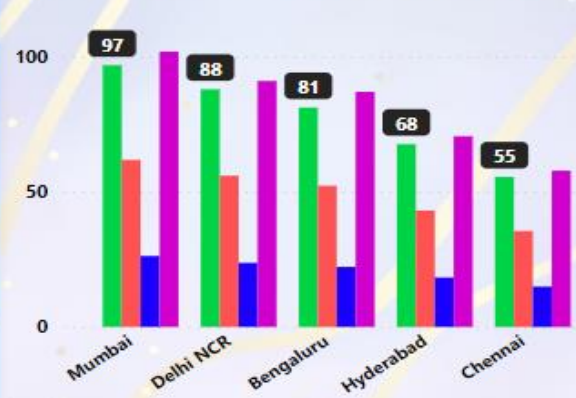
Income Utilization % by month

payment_type



Income Utilization % by city

payment_t...



Average of Spend by occupation

payment_type



DASHBOARD(25-45+)

Income Utilization by Per..

259.05

Average of Income Spend

647

Average of Income

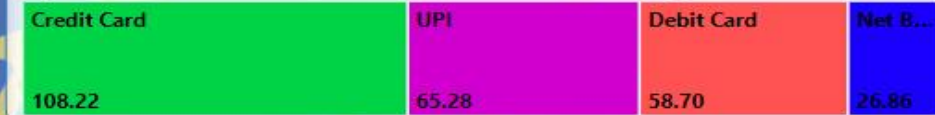
54K

Age Group

Multip... ▾

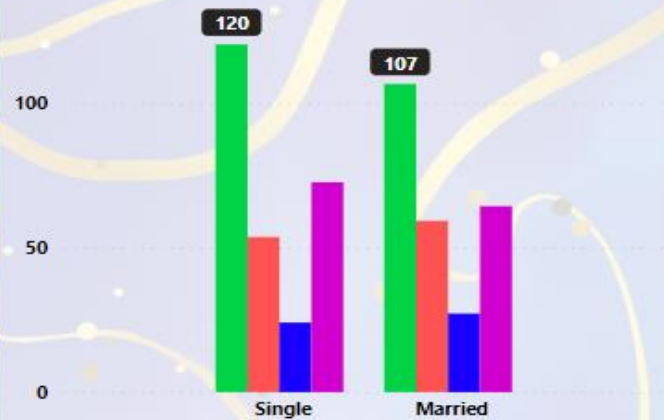
Income Utilization by payment Mode

Payment mode ● Credit Card ● UPI ● Debit Card ● Net Banking



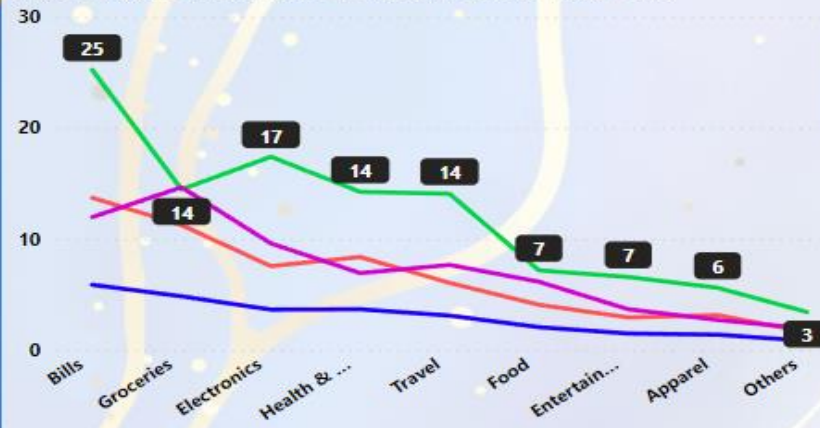
Income Utilization % by marital status

payment_type ● Credit Card ● Debit Card ● Net Banki... ● UPI



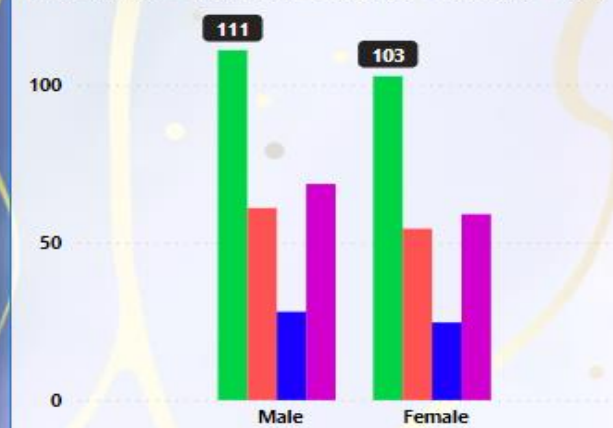
Income Utilization % by category

payment_type ● Credit Card ● Debit Card ● Net Banking ● UPI



Income Utilization % by gender

payment_t... ● Credit C... ● Debit C... ● Net Ba... ● UPI



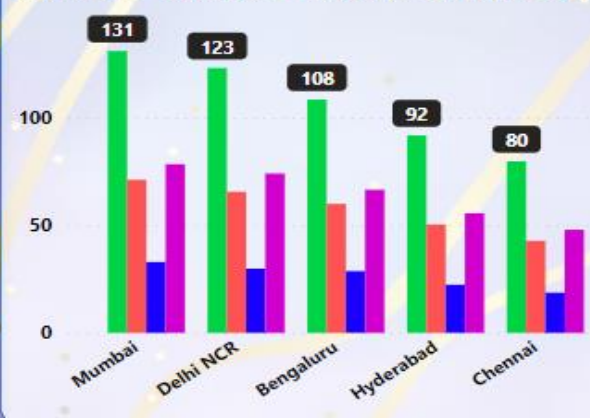
Income Utilization % by month

payment_type ● Credit Card ● Debit Card ● Net Banki... ● UPI



Income Utilization % by city

payment_t... ● Credit C... ● Debit C... ● Net Ba... ● UPI



Average of Spend by occupation

payment_type ● Credit Card ● Debit Card ● Net Banking ● UPI



PROBLEM OUTCOME

- As we noticed above that people from age group 21-24 are mostly using UPI mode for payment .
- Mostly credit cards are used by the age group 25-34.
- 25 – 45 + are using mostly credit cards for almost every things and mostly for bills , but still for Groceries they equally use Credit card and UPI.
- Peoples in Mumbai are spending the most in any age group followed by Delhi NCR .
- Single people are preferring UPI Payment mode Followed by Credit card.
- Married people are preferring Credit card Payment mode Followed by UPI .
- Both Female and Male From age group 21-24 are using UPI rest 25 – 45+ are using credit cards .
- Freelancers of age group 21-24 prefer using credit cards and rest equally using both credit card and UPI.
- IT employees followed by Business owner from age group 25-45+ are using credit card the most .



CONCLUSION

- A dashboard was built for Stakeholders depicting its various KPIs visually
- Relevant filters and interactions was provided in the dashboard
- This dashboard can be used for both high-level and in-depth analysis of KPIs across various dimensions
- This dashboard is filtered into there main divisions first age group all ,second 21-24 and third 25-25+ .
- Based on the analysis we see that most people are using credit card for bigger payment and older people (as people aging)and mostly young people are using UPI and credit card.
- But younger people are mostly using UPI payment method for Entertainment and Electronics but as they age they tend to spend less on entertainment and electronics and more on bills and groceries using credit cards.
- Overall people are using credit cards more than any other payment mode it just younger people are using mostly UPI for smaller payment and at the same time Credit card for a bigger type of payment .



THANK YOU!

