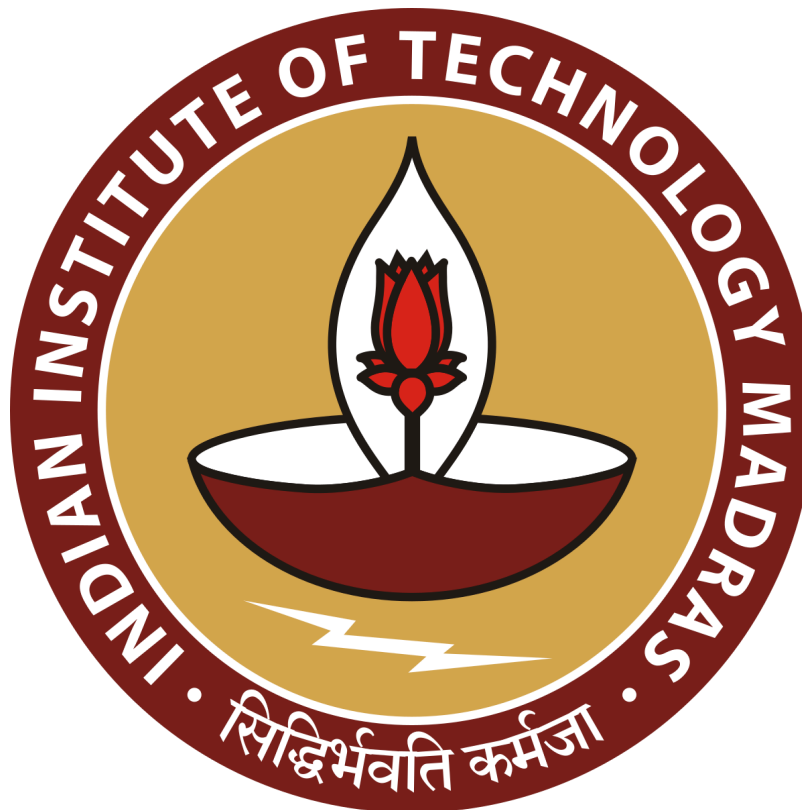# Pre Market Segmentation Analysis for Pixie Hair Salon

A Mid-Term report for BDM capstone project

Submitted by

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Contents

Executive Summary :-

This report dives into the world of Pixie Hair Salon's customers, taking a snapshot of their behavior at this mid-point in our analysis. We're wielding the power of descriptive statistics and data exploration techniques to uncover hidden gems of information. These gems could be about what services are most popular, how loyal customers are, and even the breakdown of costs. Imagine using this knowledge to make smarter decisions for the salon, like revamping marketing campaigns, tweaking service offerings, and maybe even creating a loyalty program that truly wows customers!

In this report we will be having a walkthrough of the proof of originality provided by the young Manager of the Pixie Hair Salon , Patia Branch in digital format. This will include a video of summarizing discussion of our regular meetings , a letterhead and few images which will conclude my physical presence at the salon

This report also covers details and insights on the metadata. This section will include information about the raw data provided and the data obtained after cleaning the raw data for the analysis purpose. The SKUs/Services were roughly dictated by the Manager RIhan Mallik , due to which it is stored in a .txt file inside the drive for better accessibility.

The next sections will be like putting together a puzzle. We'll examine the pieces , what makes customers choose certain services, how often they use their membership cards, and the pricing structure behind everything. We'll even identify service combos that customers frequently get together. This knowledge is gold! It can help us create targeted promotions and package deals that are like irresistible whispers in customers' ears.

By the end of this report, we'll have a crystal-clear picture of Pixie Hair Salon's customer landscape. Armed with this understanding, we can craft actionable recommendations that propel the salon towards even greater success.

Proof of Originality of Data :-

1. **Letter Head :-** The saloon didn't have their own branch stamp . So we formally agreed on preparing a custom letterhead and have the sign of the manager.
Link :- https://drive.google.com/file/d/1jZo_PI5R1iyRTKdPQlZmJRokzXz56CJA/view?usp=sharing

2. **Video proof :-** On one fine morning I visited the hair salon and summarized the previous discussions we had in a formal way. I also took consent to collect data in the same video. The language used in the video is hindi.
Link :-
https://drive.google.com/file/d/1o0a8FQ38QyuOsVzTo6cwaX4ETTqQnhEs/view?usp=sharing

3. **Images at the salon :-**

Metadata :-

1. **Raw Data :-** The raw data collected through Pixie hair salon is the most challenging part of this project. The data is quite limited in variety but ample to provide trends. The raw data originally was stored as an excel sheet inside the computer system present at the salon. The salon allowed me to extract only the permitted data on my own. I extracted the data in the most suitable format , viz. In comma separated value (CSV) format. Although the link provided below contains both the pdf and csv version for better accessibility. The Services offered by the salon are provided in a .txt file inside the link provided later in this section.

   1.1 Description of raw data :-
   - Customer ID :- This column is an integer column , which contains the ID of every customer visit. One customer is assigned a single ID , so for multiple visits by a single customer, the column may contain multiple customer IDs.
   - Services :- This a string type column , which contains a list of services availed by a customer in a single visit.
   - ISP (INR) :- (Individual Service Price) This column is a string type column , which contains the respective cost in INR of each service availed by a customer in a single visit.
   - Marginal Cost (INR) :- This column is an integer type column as it contains the total absolute cost per customer in a single visit , without considering any discount.
   - Discount Type :- This is a string type column , which contains which type of discount (Membership card or not) is availed by a customer (Remains empty for no discount).
   - Discount Amount (INR) :- This column is of float type and represents the discount amount in INR , provided for a visit.

- Billed Cost (INR) :- This is a float type column and represents the final billed price which is paid by the customer.
- Date :- This column represents the date of the visit of a customer. (10-04-2022 to 24-03-2024)
- Time :- This column represents the time of the customer's visit. (24 hours service)

1.2 Image samples of raw data :-

	A	B	C	D	E	F	G	H	I
1	Customer ID	Services	ISP (INR)	Marginal Cost (INR)	Discount Type	Discount Amount (IN	Billed Cost (INR)	Date	Time
2	300191	Eyebrow Threading',	74, 149	223		0	223	2022-04-10	1:41:23
3	300898	Beard Trimming', 'De	49, 249	298	Membership Card	29.8	268.2	2022-04-10	4:07:25
4	300745	Haircut (Female)'	249	249		0	249	2022-04-10	21:49:20
5	200714	Haircut (Female)'	249	249		0	249	2022-04-11	0:00:45
6	300095	Beard Trimming', 'Ha	49, 149	198		0	198	2022-04-11	1:37:39
7	100486	Haircut (Male)', 'Hair	149, 249	398		0	398	2022-04-11	13:39:04
8	200610	Haircut (Female)'	249	249		0	249	2022-04-11	14:11:04
9	200991	Beard Trimming'	49	49		0	49	2022-04-11	19:37:31
10	300087	Beard Trimming', 'Be	49, 49	98		0	98	2022-04-12	2:11:20
11	200886	Beard Trimming', 'Be	49, 49	98		0	98	2022-04-12	3:11:03
12	200252	Haircut (Male)', 'Low	149, 1399	1548		0	1548	2022-04-12	11:32:07
13	100901	Haircut (Female)'	249	249		0	249	2022-04-12	13:34:00
14	200987	Eyebrow Threading',	74, 74	148		0	148	2022-04-13	10:39:13
15	100880	Eyebrow Threading',	74, 249	323		0	323	2022-04-13	18:00:43
16	200552	Haircut (Male)', 'Oliv	149, 249	398		0	398	2022-04-14	5:17:07
17	100985	Haircut (Female)'	249	249		0	249	2022-04-14	12:25:53
18	100229	Haircut (Male)', 'Bea	149, 49	198		0	198	2022-04-14	16:15:18
19	100409	Eyebrow Threading'	74	74		0	74	2022-04-14	18:30:37
20	100923	Haircut (Female)', 'R	249, 529	778		0	778	2022-04-15	1:15:30
21	300530	Haircut (Female)'	249	249		0	249	2022-04-15	5:35:37
22	300524	Haircut (Female)'	249	249		0	249	2022-04-15	9:02:20
23	300027	Eyebrow Threading'	74	74		0	74	2022-04-15	11:00:19
24	100215	Haircut (Female)', 'O	249, 249	498		0	498	2022-04-15	14:32:29
25	100672	Haircut (Female)'	249	249		0	249	2022-04-15	16:44:30

Pixie Hair Salon , Patia , Bhubaneswar

PIXIE

WXAD212				Truncated Invoice Data			Patia Branch	
Customer ID	Services	ISP (INR)	Marginal Cost (INR)	Discount Type	Discount Amount (INR)	Billed Cost (INR)	Date	Time
300191	Eyebrow Threading', 'Haircut (Male)'	74, 149	223		0	223	2022-04-10	1:41:23
300898	Beard Trimming', 'De-tan'	49, 249	298	Membership Card	29.8	268.2	2022-04-10	4:07:25
300745	Haircut (Female)'	249	249		0	249	2022-04-10	21:49:20
200714	Haircut (Female)'	249	249		0	249	2022-04-11	0:00:45
300095	Beard Trimming', 'Haircut (Male)'	49, 149	198		0	198	2022-04-11	1:37:39
100486	Haircut (Male)', 'Haircut (Female)'	149, 249	398		0	398	2022-04-11	13:39:04
200610	Haircut (Female)'	249	249		0	249	2022-04-11	14:11:04
200991	Beard Trimming'	49	49		0	49	2022-04-11	19:37:31
300087	Beard Trimming', 'Beard Trimming'	49, 49	98		0	98	2022-04-12	2:11:20
200886	Beard Trimming', 'Beard Trimming'	49, 49	98		0	98	2022-04-12	3:11:03
200252	Haircut (Male)', 'Lower Body Waxing'	149, 1399	1548		0	1548	2022-04-12	11:32:07
100901	Haircut (Female)'	249	249		0	249	2022-04-12	13:34:00
200987	Eyebrow Threading', 'Eyebrow Threading'	74, 74	148		0	148	2022-04-13	10:39:13
100880	Eyebrow Threading', 'Haircut (Female)'	74, 249	323		0	323	2022-04-13	18:00:43
200552	Haircut (Male)', 'Olive Hair Treatment'	149, 249	398		0	398	2022-04-14	5:17:07
100985	Haircut (Female)'	249	249		0	249	2022-04-14	12:25:53
100229	Haircut (Male)', 'Beard Trimming'	149, 49	198		0	198	2022-04-14	16:15:18
100409	Eyebrow Threading'	74	7		0	74	2022-04-14	18:30:37

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1.3 Google drive link for raw data :-
https://drive.google.com/drive/folders/1jslKHxsEFX4Atj_564J67L_MfVzn_JTa?usp=sharing

2. **Cleaned Data :-** As I manually extracted the data from their system , I made sure that data was as clean as possible. As this is a franchise of an organized company , their data was well maintained. I made an effort to remove extra and trailing characters like blankspaces , unwanted apostrophes and double apostrophes , etc. I also made a new column with the name of each service provided by the salon , and stored the frequency of that service used by the customer in each visit. This made the analysis of data a lot easier. NaN values in the 'Discount Type' column are replaced by 'No Discount' for better visualization.

2.1 Google drive link for cleaned data :-

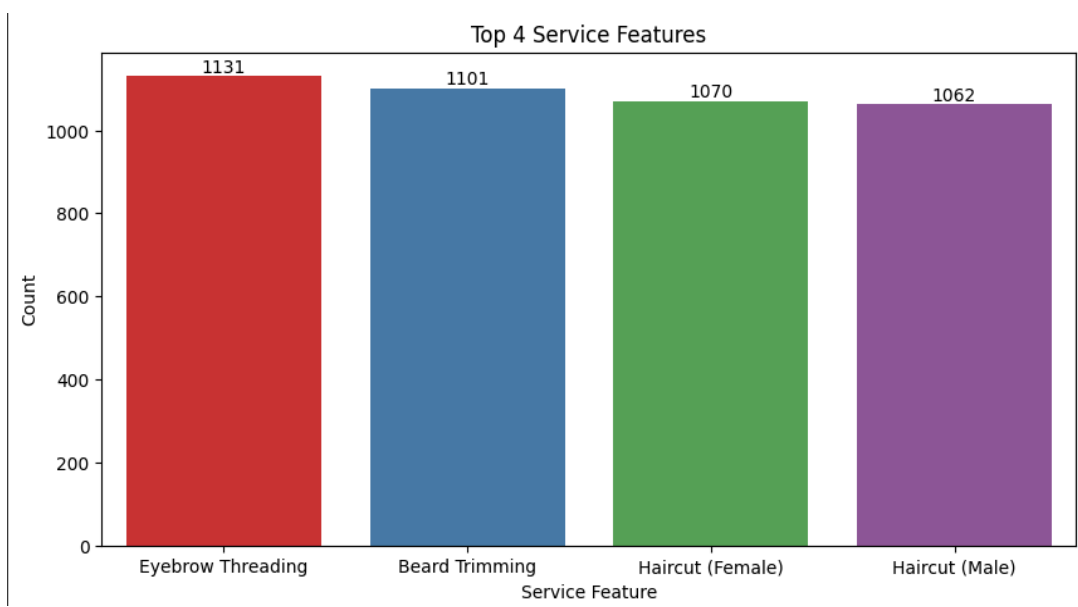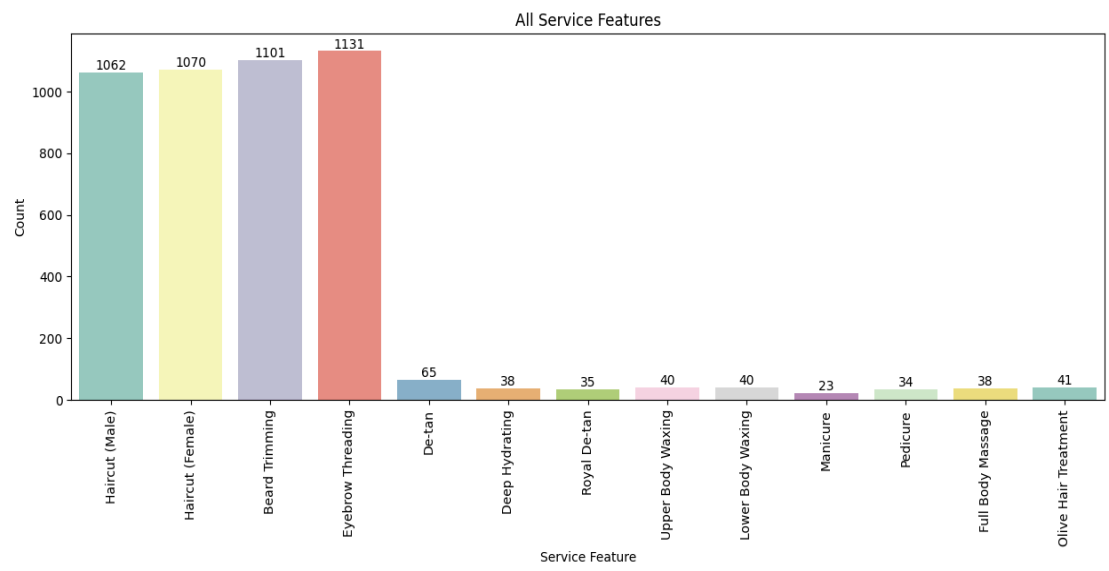https://drive.google.com/drive/folders/1pYq8kprak0MxTziwrY_offhXltBLd7aQ?usp=sharing

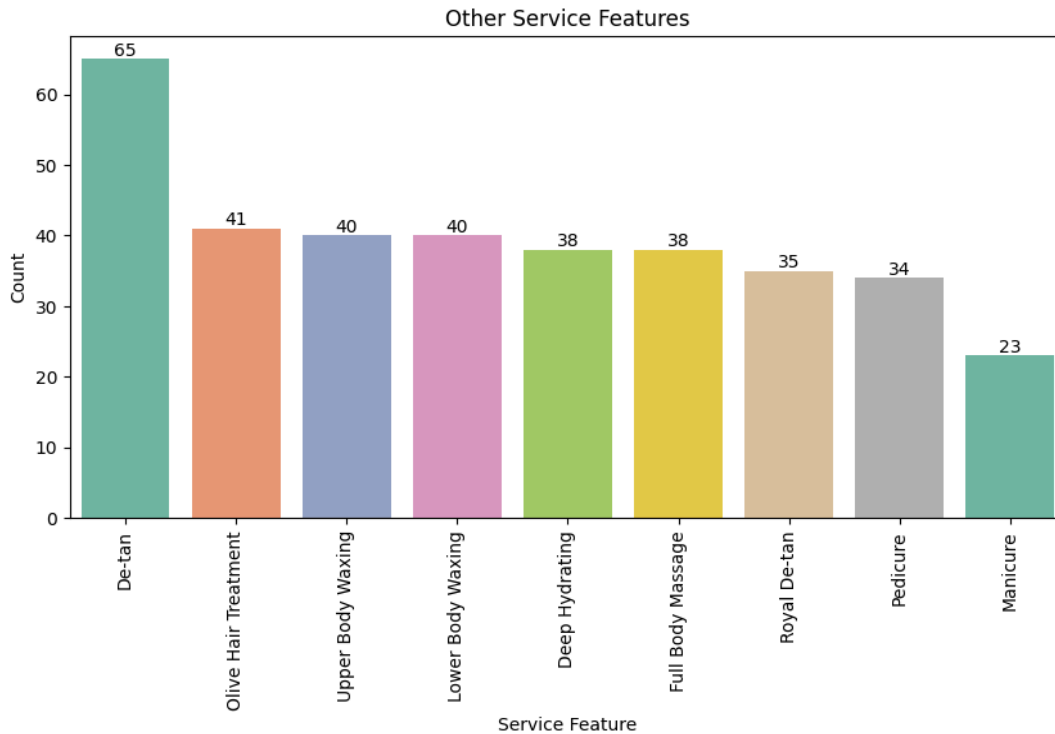## 2.2 Image samples for cleaned data :-

Customer Data			Service Data													Biling and Discount Data			
Customer ID	Date	Time	Haircut (Male)	Haircut (Female)	Beard Trimming	Eyebrow Threading	De-tan	Deep Hydrating	Royal De-tan	Upper Body Waxing	Lower Body Waxing	Manicure	Pedicure	Full Body Massage	Olive Hair Treatment	Marginal Cost (INR)	Discount Type	Discount Amount (INR)	Billed Cost (INR)
300191	2022-04-10	1:41:23	1	0	0	1	0	0	0	0	0	0	0	0	0	223	No Discount	0	223
300898	2022-04-10	4:07:25	0	0	1	0	1	0	0	0	0	0	0	0	0	298	Membership Card	29.8	268.2
300745	2022-04-10	21:49:20	0	1	0	0	0	0	0	0	0	0	0	0	0	249	No Discount	0	249
200714	2022-04-11	0:00:45	0	1	0	0	0	0	0	0	0	0	0	0	0	249	No Discount	0	249
300095	2022-04-11	1:37:39	1	0	1	0	0	0	0	0	0	0	0	0	0	198	No Discount	0	198
100486	2022-04-11	13:39:04	1	1	0	0	0	0	0	0	0	0	0	0	0	398	No Discount	0	398
200610	2022-04-11	14:11:04	0	1	0	0	0	0	0	0	0	0	0	0	0	249	No Discount	0	249
200991	2022-04-11	19:37:31	0	0	1	0	0	0	0	0	0	0	0	0	0	49	No Discount	0	49
300087	2022-04-12	2:11:20	0	0	2	0	0	0	0	0	0	0	0	0	0	98	No Discount	0	98
200886	2022-04-12	3:11:03	0	0	2	0	0	0	0	0	0	0	0	0	0	98	No Discount	0	98
200252	2022-04-12	11:32:07	1	0	0	0	0	0	0	0	1	0	0	0	0	1548	No Discount	0	1548
100901	2022-04-12	13:34:00	0	1	0	0	0	0	0	0	0	0	0	0	0	249	No Discount	0	249
200987	2022-04-13	10:39:13	0	0	0	2	0	0	0	0	0	0	0	0	0	148	No Discount	0	148
100880	2022-04-13	18:00:43	0	1	0	1	0	0	0	0	0	0	0	0	0	323	No Discount	0	323
200552	2022-04-14	5:17:07	1	0	0	0	0	0	0	0	0	0	0	0	1	398	No Discount	0	398
100985	2022-04-14	12:25:53	0	1	0	0	0	0	0	0	0	0	0	0	0	249	No Discount	0	249
100229	2022-04-14	16:15:18	1	0	1	0	0	0	0	0	0	0	0	0	0	198	No Discount	0	198
100409	2022-04-14	18:30:37	0	0	0	1	0	0	0	0	0	0	0	0	0	74	No Discount	0	74
100923	2022-04-15	1:15:30	0	1	0	0	1	0	1	0	0	0	0	0	0	778	No Discount	0	778
300530	2022-04-15	5:35:37	0	1	0	0	0	0	0	0	0	0	0	0	0	249	No Discount	0	249
300524	2022-04-15	9:02:20	0	1	0	0	0	0	0	0	0	0	0	0	0	249	No Discount	0	249
300027	2022-04-15	11:00:19	0	0	0	1	0	0	0	0	0	0	0	0	0	74	No Discount	0	74
100215	2022-04-15	14:32:29	0	1	0	0	0	0	0	0	0	0	0	0	1	498	No Discount	0	498
100672	2022-04-15	16:44:30	0	1	0	0	0	0	0	0	0	0	0	0	0	249	No Discount	0	249
300759	2022-04-15	19:45:33	0	0	1	0	0	0	0	0	0	0	0	0	0	49	No Discount	0	49
100481	2022-04-16	5:02:10	0	1	0	0	0	0	0	0	0	0	0	0	0	249	No Discount	0	249
200552	2022-04-16	6:09:05	0	0	0	1	0	0	0	0	0	0	0	0	0	74	No Discount	0	74
100511	2022-04-16	8:28:11	1	0	0	1	0	0	0	0	0	0	0	0	0	223	No Discount	0	223
200207	2022-04-16	12:34:09	0	0	0	1	0	0	0	0	0	0	0	0	0	74	No Discount	0	74
100068	2022-04-16	13:38:32	0	1	0	0	0	0	0	0	0	0	0	0	0	249	No Discount	0	249
200503	2022-04-17	10:00:34	1	0	0	1	0	0	0	0	0	0	0	0	0	223	No Discount	0	223
200676	2022-04-17	11:57:35	0	0	1	0	0	0	0	0	0	0	0	0	0	49	No Discount	0	49
300759	2022-04-18	5:05:51	1	0	1	0	0	0	0	0	0	0	0	0	0	198	No Discount	0	198
200380	2022-04-18	8:05:24	2	0	0	0	0	0	0	0	0	0	0	0	0	298	No Discount	0	298
100655	2022-04-18	8:11:05	0	0	1	0	0	0	0	0	0	0	0	0	0	49	No Discount	0	49
100421	2022-04-18	13:14:32	1	0	0	0	0	0	0	0	0	0	0	0	0	149	No Discount	0	149
300988	2022-04-18	19:49:56	0	0	1	0	0	0	0	0	0	0	0	0	0	49	No Discount	0	49
100215	2022-04-18	22:16:12	0	0	0	1	0	0	0	0	0	0	0	0	0	74	No Discount	0	74
200612	2022-04-19	0:55:49	1	0	0	0	0	0	0	0	0	0	0	0	0	198			198

	Customer ID	Marginal Cost (INR)	Discount Type	Discount Amount (IN	Billed Cost (INR)	Date	Time	Haircut (Male)	Haircut (Female)	Beard Trimming	Eyebrow Threading	De-tan	Deep Hydrating	Royal De-tan	Upper Body Waxing	Lower Body Waxing	Manicure
0	300191	223	No Discount	0	223	2022-04-10	1:41:23	1	0	0	1	0	0	0	0	0	0
1	300898	298	Membership Card	29.8	268.2	2022-04-10	4:07:25	0	0	1	0	1	0	0	0	0	0
2	300745	249	No Discount	0	249	2022-04-10	21:49:20	0	1	0	0	0	0	0	0	0	0
3	200714	249	No Discount	0	249	2022-04-11	0:00:45	0	1	0	0	0	0	0	0	0	0
4	300095	198	No Discount	0	198	2022-04-11	1:37:39	1	0	1	0	0	0	0	0	0	0
5	100486	398	No Discount	0	398	2022-04-11	13:39:04	1	1	0	0	0	0	0	0	0	0
6	200610	249	No Discount	0	249	2022-04-11	14:11:04	0	1	0	0	0	0	0	0	0	0
7	200991	49	No Discount	0	49	2022-04-11	19:37:31	0	0	1	0	0	0	0	0	0	0
8	300087	98	No Discount	0	98	2022-04-12	2:11:20	0	0	2	0	0	0	0	0	0	0
9	200886	98	No Discount	0	98	2022-04-12	3:11:03	0	0	2	0	0	0	0	0	0	0
10	200252	1548	No Discount	0	1548	2022-04-12	11:32:07	1	0	0	0	0	0	0	0	1	0
11	100901	249	No Discount	0	249	2022-04-12	13:34:00	0	1	0	0	0	0	0	0	0	0
12	200987	148	No Discount	0	148	2022-04-13	10:39:13	0	0	0	2	0	0	0	0	0	0
13	100880	323	No Discount	0	323	2022-04-13	18:00:43	0	1	0	1	0	0	0	0	0	0
14	200552	398	No Discount	0	398	2022-04-14	5:17:07	1	0	0	0	0	0	0	0	0	0
15	100985	249	No Discount	0	249	2022-04-14	12:25:53	0	1	0	0	0	0	0	0	0	0
16	100229	198	No Discount	0	198	2022-04-14	16:15:18	1	0	1	0	0	0	0	0	0	0
17	100409	74	No Discount	0	74	2022-04-14	18:30:37	0	0	0	1	0	0	0	0	0	0
18	100923	778	No Discount	0	778	2022-04-15	1:15:30	0	1	0	0	1	0	1	0	0	0
19	300530	249	No Discount	0	249	2022-04-15	5:35:37	0	1	0	0	0	0	0	0	0	0
20	300524	249	No Discount	0	249	2022-04-15	9:02:20	0	1	0	0	0	0	0	0	0	0
21	300027	74	No Discount	0	74	2022-04-15	11:00:19	0	0	0	1	0	0	0	0	0	0
22	100215	498	No Discount	0	498	2022-04-15	14:32:29	0	1	0	0	0	0	0	0	0	0
23	100672	249	No Discount	0	249	2022-04-15	16:44:30	0	1	0	0	0	0	0	0	0	0
24	300759	49	No Discount	0	49	2022-04-15	19:45:33	0	0	1	0	0	0	0	0	0	0
25	100481	249	No Discount	0	249	2022-04-16	5:02:10	0	1	0	0	0	0	0	0	0	0
26	200552	74	No Discount	0	74	2022-04-16	6:09:05	0	0	0	1	0	0	0	0	0	0
27	100511	223	No Discount	0	223	2022-04-16	8:28:11	1	0	0	1	0	0	0	0	0	0
28	200207	74	No Discount	0	74	2022-04-16	12:34:09	0	0	0	1	0	0	0	0	0	0
29	100068	249	No Discount	0	249	2022-04-16	13:38:32	0	1	0	0	0	0	0	0	0	0
30	200503	223	No Discount	0	223	2022-04-17	10:00:34	1	0	0	1	0	0	0	0	0	0
31	200676	49	No Discount	0	49	2022-04-17	11:57:35	0	0	1	0	0	0	0	0	0	0
32	300759	198	No Discount	0	198	2022-04-18	5:05:51	1	0	1	0	0	0	0	0	0	0
33	200380	298	No Discount	0	298	2022-04-18	8:05:24	2	0	0	0	0	0	0	0	0	0
34	100655	49	No Discount	0	49	2022-04-18	8:11:05	0	0	1	0	0	0	0	0	0	0
35	100421	149	No Discount	0	149	2022-04-18	13:14:32	1	0	0	0	0	0	0	0	0	0
36	300988	49	No Discount	0	49	2022-04-18	19:49:56	0	0	1	0	0	0	0	0	0	0

Descriptive Statistics :-
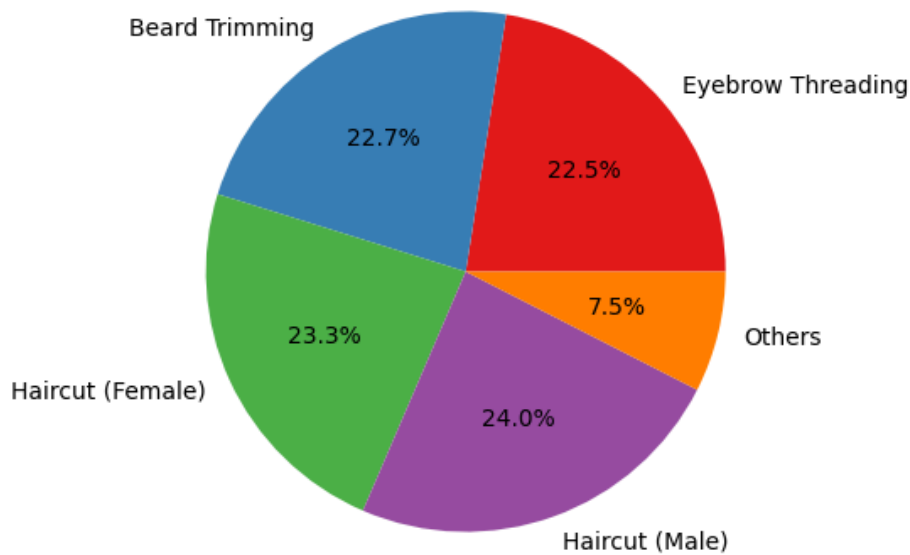
1. **Frequency distribution of each service :-** The frequency distribution of the services is highly skewed around the top 4 popular service

All Service Features

Top 4 Service Features
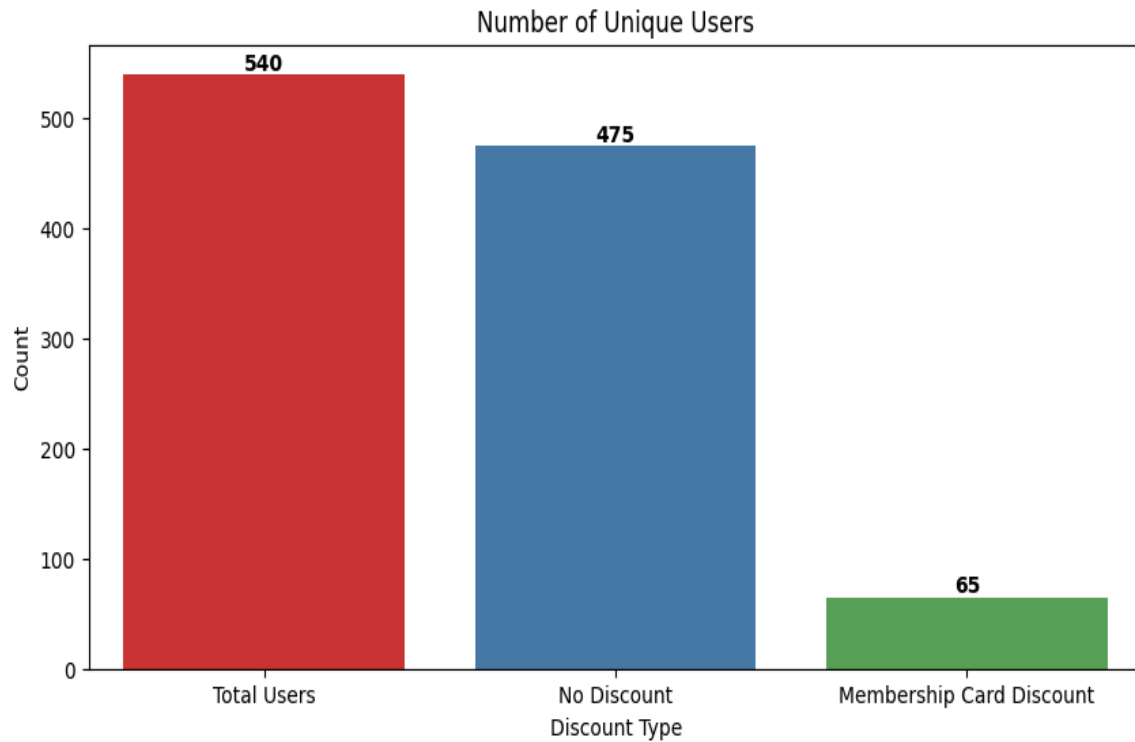
Other Service Features

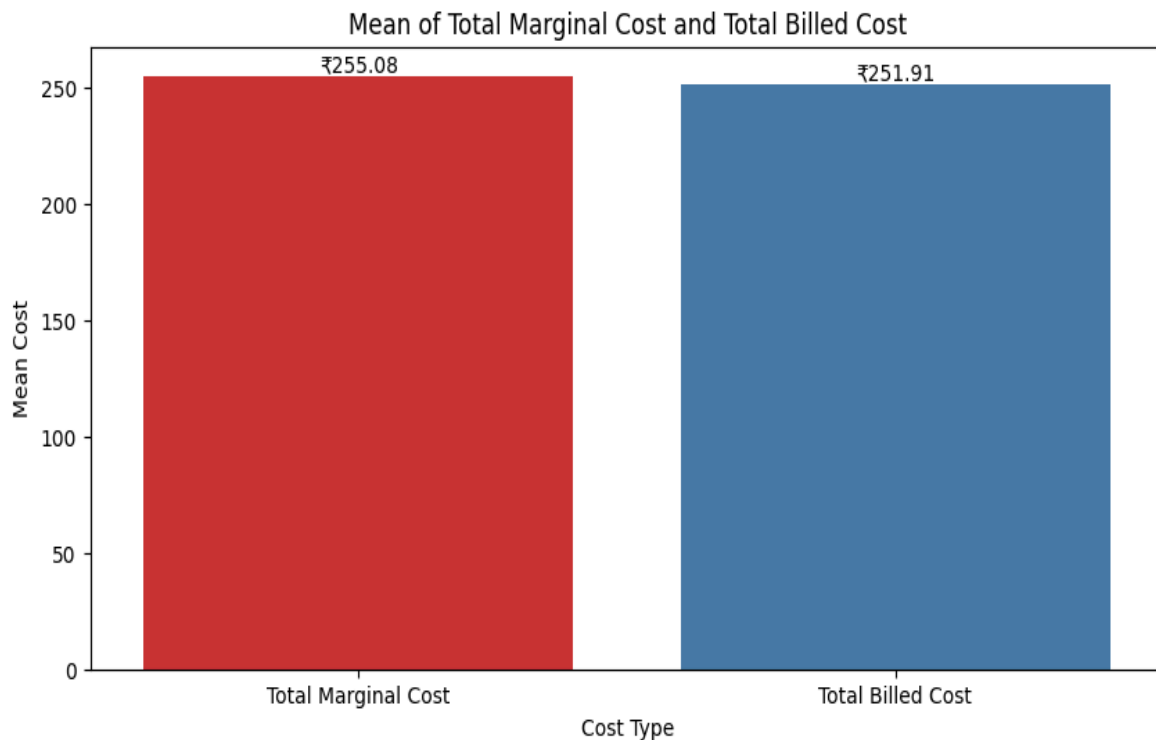We can also observe that the top 4 services contributes 92.5% in the overall frequency
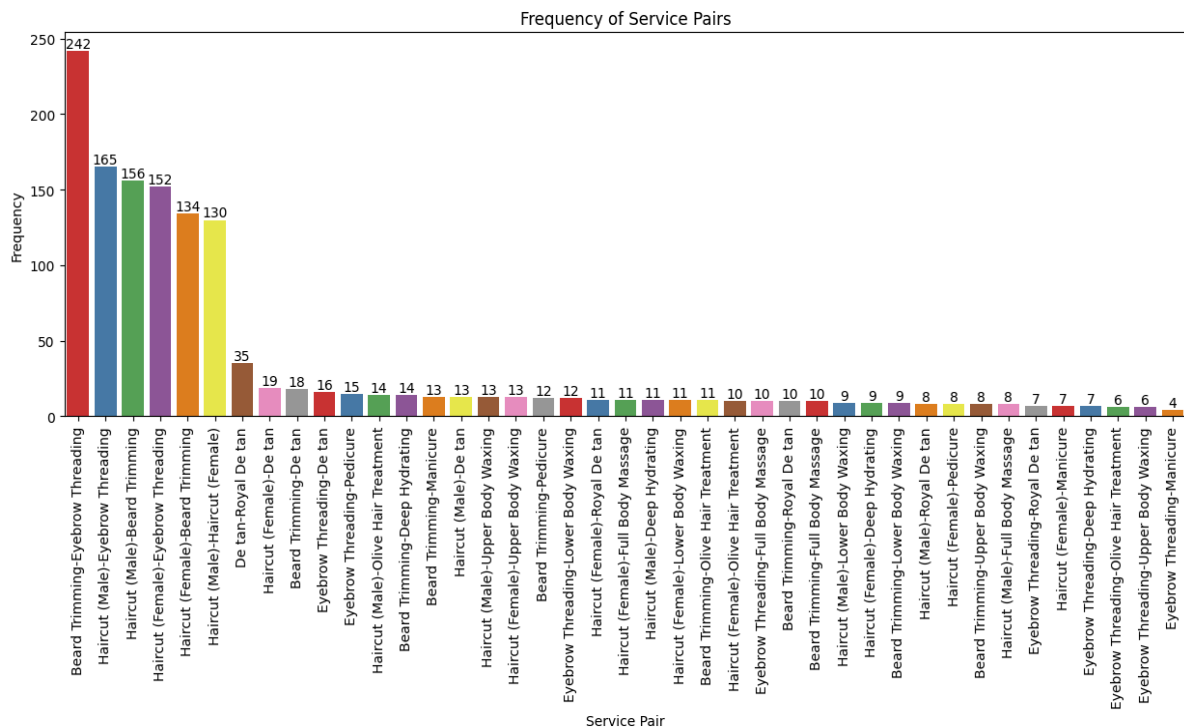

Service Feature Percentages

2. **Membership Card used :-** 12% people out of total unique customers of Pixie hair salon have a membership card. Which depicts 12% confirmed loyalty by the customers.

Number of Unique Users

3. **Difference between means of Marginal and Billed costs :-** Although the shop is providing a 10% discount on the Membership card , the difference in the mean of Billed cost and Marginal cost doesn't get affected by the 10% factor. The difference caused in the Billed price is 1.24%.

Mean of Total Marginal Cost and Total Billed Cost

4. **Best combination of services:-** After pairwise frequency analysis of the data , following was the trend observed in the combination trending services provided by the salon. Beard Trimming and Eyebrow Threading makes the most opted combinations by the customers.

Frequency of Service Pairs

Detailed Explanation of Analysis method / process used :-

1. Popularity of Services: Unveiling the Customer Favorites

Tools: I used powerful Python libraries like Pandas to organize the customer data and Matplotlib to create insightful charts.
Process: Gathering the Data: First, I loaded the data containing information about customer visits and the services they availed of. Pandas helped me structure this data into a neat and organized table.Next, I used Pandas' magic function .value_counts() to count how many times each service appeared in the data. This revealed which services were the most popular among customers.Finally, I leveraged Matplotlib's Bar Plot and Pie plot to create a histogram. This chart visually represented the popularity of each service, making it easy to identify the clear favorites and any less frequently chosen options.

2. Membership Card Usage: How Many See the Value?

Tools: Here, I relied on the trusty Pandas library again.
Process: I identified customers with a membership card by sifting through the data using a specific column that indicated membership status. Pandas made filtering this data a breeze.

Then, I used some simple Python calculations to determine the total number of unique customers and the number who held memberships. To express this as a percentage (like the 12% we found), I divided the number of members by the total number of unique customers and multiplied by 100.

3. Unveiling the Cost Mystery: Billed vs. Marginal Costs

Tools: Pandas, our data manipulation champion, was again the star here.
Process: Finding the Right Numbers: I pinpointed the columns in the data that contained the marginal cost (cost per visit) and the billed cost (final price paid) for each customer visit. Using Pandas' .mean() function, I calculated the average marginal cost and average billed cost across all customer visits. This gave me a clear picture of the typical costs involved.

4. Service Combos: What Services Do Customers Often Pair Up?

Tools: Once again, Pandas , seaborn and matplotlib proved its worth for data manipulation.
Process: Depending on the data structure, I might have created new columns in the Pandas DataFrame for each service offered. Alternatively, I could have worked with existing service columns if they were already present.I used loops (like for loops) to go through each customer visit (represented by a row in the DataFrame).Within each loop, I figured out which services the customer opted for during that specific visit. This might have involved checking the values in the service columns or using string manipulation techniques on the service information. I created a dictionary to store service pairs (e.g., "Beard Trimming-Eyebrow Threading") as keys and the number of times they appeared together as values. Every time a service pair was found in a visit, I incremented the corresponding count in the dictionary.
Spotting the Trends: By analyzing the final dictionary containing service pair frequencies, I was able to identify the most frequently chosen combinations, revealing which services customers often paired together.

Detailed Insights Concluded from the Descriptive Analysis :-

1. Popularity of Services:
   - Our analysis revealed a skewed distribution in service popularity. This means a small number of services are significantly more popular than others.
   - The top 4 services contribute to a whopping 92.5% of the overall service frequency. Identifying these top services is crucial for focusing marketing efforts and highlighting them to potential customers.
   - It's also important to understand the less frequently chosen services. Are they under-promoted? Do they cater to a specific niche clientele that hasn't been targeted effectively? Analyzing these services can help identify potential revenue opportunities.

2. Membership Card Usage:
   ● Only 12% of unique customers hold a membership card at Pixie Hair Salon. This suggests a potential for increased customer loyalty through more targeted membership program benefits or promotions that incentivize enrollment.
   ● It would be beneficial to understand the demographics of membership card holders (age, gender, etc.) to tailor marketing efforts and promotions accordingly.
   ● Analyzing the spending habits of members compared to non-members could reveal if the membership program effectively drives higher spending.

3. Comparison of Marginal and Billed Costs:
   ● The difference between the average billed cost and marginal cost doesn't directly reflect the 10% discount offered with a membership card. This could be due to several factors:The low percentage (12%) of membership card holders might not significantly impact the average billed cost across all customers.
   ● There might be other factors influencing pricing beyond the membership discount, such as service package deals or promotions.
   ● Further investigation into specific customer segments (members vs. non-members) and their billed cost distribution could provide more insights. Analyzing the pricing structure for services and packages could also reveal cost factors beyond the marginal cost.

4. Pairwise Frequency Analysis:
   ● Identifying the most frequently chosen service combinations can be extremely valuable. For example, if Beard Trimming and Eyebrow Threading emerge as a popular combination, Pixie Hair Salon could:Promote these services together in package deals or highlight them on marketing materials.
   ● Train stylists to recommend these services to customers who opt for one of them.
   ● Consider offering a discount for customers who choose both services in the same visit.

Further Investigation Plan:-

For further investigation , the plan is to establish a foundational research on Time-Series data analysis which will provide further analysis of current trends as these trends are a common mixture of the past two years. There is a very high possibility that current trends for service popularity , customer preferences might be changing. We will also focus more on the affinity of the services , which will combine the visualization of customer segmentation and service segmentation.