

TV Analysis



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OBJECTIVES



1. To analyze the consumers brand preferences for television
2. To evaluate consumers attitude towards the usage and utility of television
3. To evaluate consumers perception about the important factors pertaining to television purchase decision

HYPOTHESIS



1. Sales of different brand of televisions are uniformly distributed i.e. there is no significant difference in the sales of different television brands.
2. There is no significant difference among the consumers of television on the factors like age, gender etc. towards their attitude about the usage of television.
3. Different factors which are important in the purchase decision of television for consumers do not differ significantly.
4. Different factors for which TV are viewed do not differ significantly

HYPOTHESIS -1



Hypothesis 1:

Sales of different brand of television are uniformly distributed i.e. there is no significant difference in the sales of different television brands.

To test hypothesis 1, chi square test was applied

CONTD..



BRAND	COUNT
SONY	52
SAMSUNG	20
LG	13
SANSUI	1
VIDEOCON	5
SHARP	0
BPL	0
ONIDA	6
PANASONIC	3

- Chi square value (calculated) = 200.96
- Critical Chi square value (0.05, 9) = 16.92
- Chi square value (calculated) is greater than critical chi square value, hence hypothesis is rejected and it can be concluded that sales of different brand of televisions are not uniformly distributed

HYPOTHESIS 2-



Hypothesis 2(a):

- TV Consumers of different age group do not differ significantly on their attitude towards the usage of television.
- To test this hypothesis ANOVA was applied with following results

CONTD..



Anova : Single Factor

SUMMARY

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
Under 18 - 25	53	3701	69.83019	29.37446
26-35	19	1321	69.52632	20.7076
36-45	18	1243	69.05556	29.58497
46-55	9	613	68.11111	32.11111

CONTD..



ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	26.645	3	8.881665	0.317197	0.812909	2.700409
Within Groups	2660.042	95	28.00044			
Total	2686.687	98				

Since F calculated is less than F critical at 95% significance level, hence Null hypothesis is accepted.

So, it can be concluded that consumers of different age group do not differ significantly on their attitude towards the usage of television

Contd..



Hypothesis 2 (b):

- Male and female consumers do not differ significantly on their attitude towards the usage and utility of television
- To test this hypothesis z test was applied with following results

	Mean	n	Z value	Z value critical at .05 and 125 df	Result
Male	69.93	61	1.14	1.95	Insignificant accept the null hypothesis
Female	68.69	39			

Contd..



- Since the calculated z value is less than z critical (two tailed) at .05 significance level, hence null hypothesis is accepted and it can be said that there is no significant difference in the attitude of male and female consumers on their attitude towards the usage of television.

Contd..



Hypothesis 2(c):

- TV Consumers of different income group do not differ significantly on their attitude towards the usage of television.
- To test this hypothesis ANOVA was applied with following results

Contd..



- Anova: Single Factor

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
Below 20,000	20	1450	72.5	20.47368
20,000-40,000	45	3124	69.42222	32.20404
40,001-60,000	22	1495	67.95455	23.85498
Above 60,000	13	876	67.38462	7.923077

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	290.7408	3	96.91358	3.873301	0.011591	2.699393
Within Groups	2402.009	96	25.02093			
Total	2692.75	99				

Contd..



- Since F calculated is greater than F critical at 95% significance level, hence Null hypothesis is rejected.
- So, it can be concluded that consumers of different income group differ significantly on their attitude towards the usage of television.

Hypothesis 3-



- Hypothesis 3:
- Different factors which are important in the purchase decision of television for consumers do not differ significantly.

Contd..



- To test this hypothesis ANOVA was applied with following results
- Anova: Single Factor
- **SUMMARY**

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
Price	100	420	4.2	0.646465
Sound Quality	100	475	4.75	0.25
Picture Quality	100	486	4.86	0.182222
Size of Screen	100	398	3.98	0.726869
Looks and appearance	100	381	3.81	0.741313
HD Ready	100	379	3.79	1.016061
Settop Box	100	317	3.17	1.980909

Contd..



- Anova

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	206.68	6	34.44667	43.49453	3.7E-45	2.111645
Within Groups	548.84	693	0.791977			
Total	755.52	699				

Since F calculated is greater than F critical at 95% significance level, hence Null hypothesis is rejected.

So, it can be concluded that different factors which are important in the purchase decision of television for consumers differ significantly.

Hypothesis 4-



- Hypothesis 4: Different factors for which TV are viewed do not differ significantly
- Anova: Single Factor
- Summary

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
Family Entertainment	100	441	4.41	0.668586
Playing games	100	179	1.79	1.500909
Presentation Display	100	256	2.56	1.501414
Personal entertainment	100	398	3.98	1.151111

Contd..



- Anova

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	446.93	3	148.9767	123.5803	1.69E-56	2.627441
Within Groups	477.38	396	1.205505			
Total	924.31	399				

Since F calculated is greater than F critical at 95% significance level, hence Null hypothesis is rejected.

So, it can be concluded that different factors for which TV are viewed differ significantly.

Descriptive statistics analysis

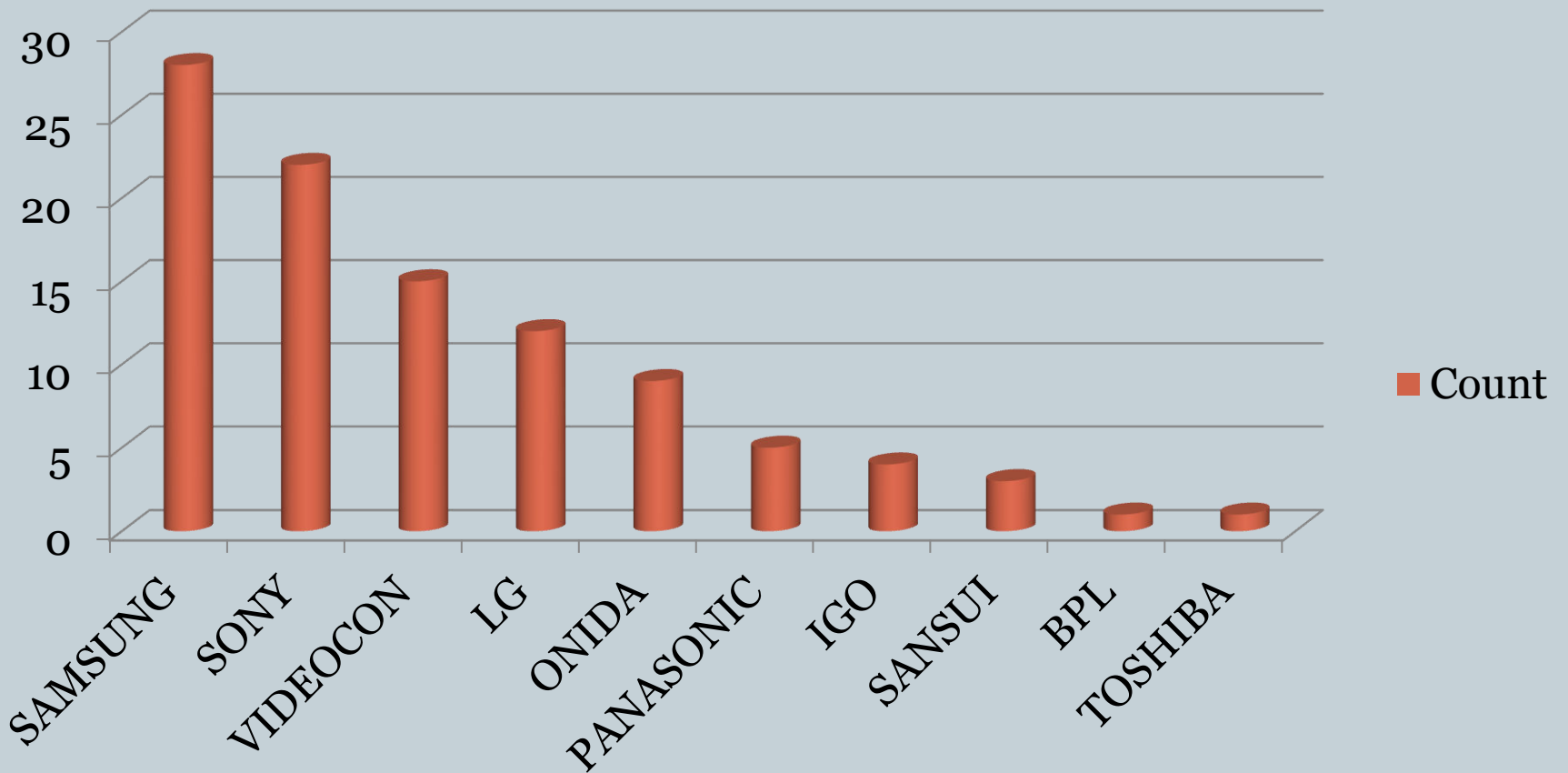


- 1. Which brand of TV do you own?

Brand	Count
SAMSUNG	28
SONY	22
VIDEOCON	15
LG	12
ONIDA	9
PANASONIC	5
IGO	4
SANSUI	3
BPL	1
TOSHIBA	1



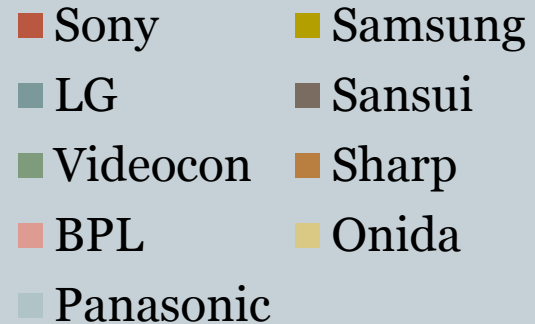
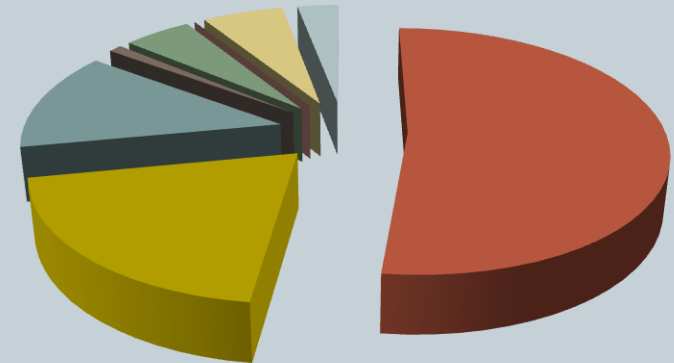
Count





• 2. Which TV brand you prefer most?: **Sony**

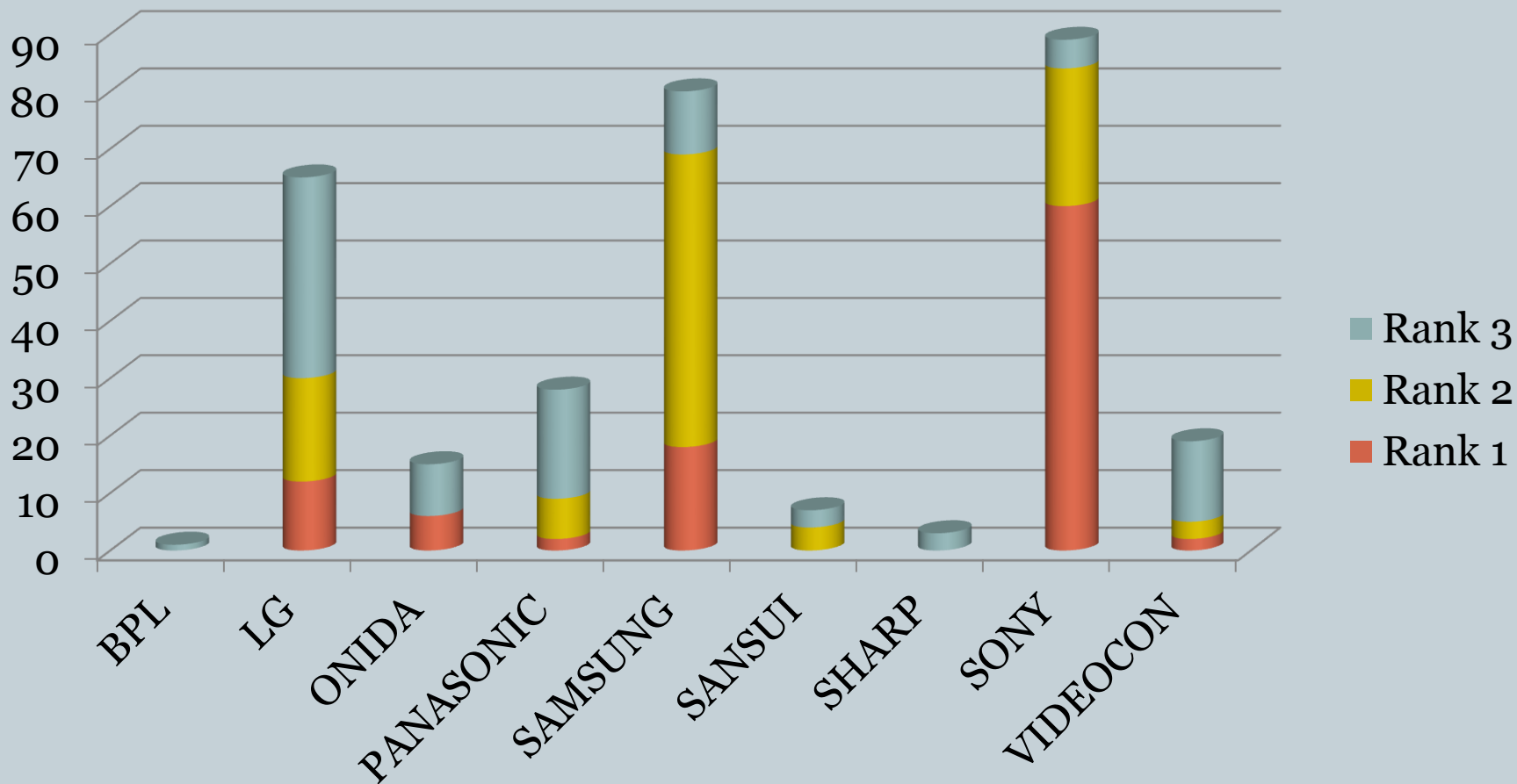
Brand	Count
Sony	52
Samsung	20
LG	13
Sansui	1
Videocon	5
Sharp	0
BPL	0
Onida	6
Panasonic	3





3. Top three Rank Brand of TVs

Brand	Rank 1	Rank 2	Rank 3
BPL	0	0	1
LG	12	18	35
ONIDA	6	0	9
PANASONIC	2	7	19
SAMSUNG	18	51	11
SANSUI	0	4	3
SHARP	0	0	3
SONY	60	24	5
VIDEOCON	2	3	14

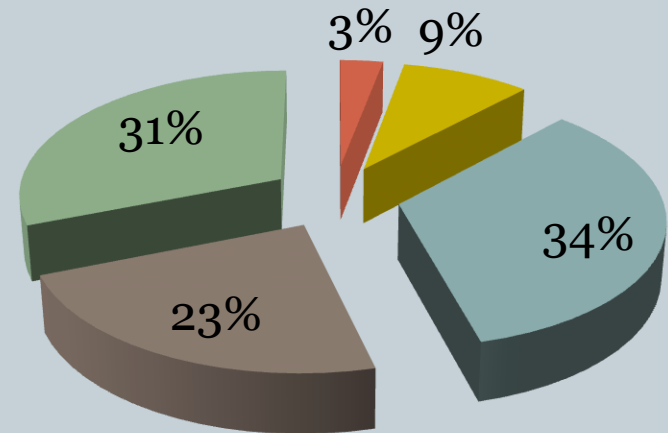


• 4. What time of the day do you most often watch TV?

Time	Count
Morning	3
Afternoon	9
Evening	34
Late night	23
No fix pattern	31

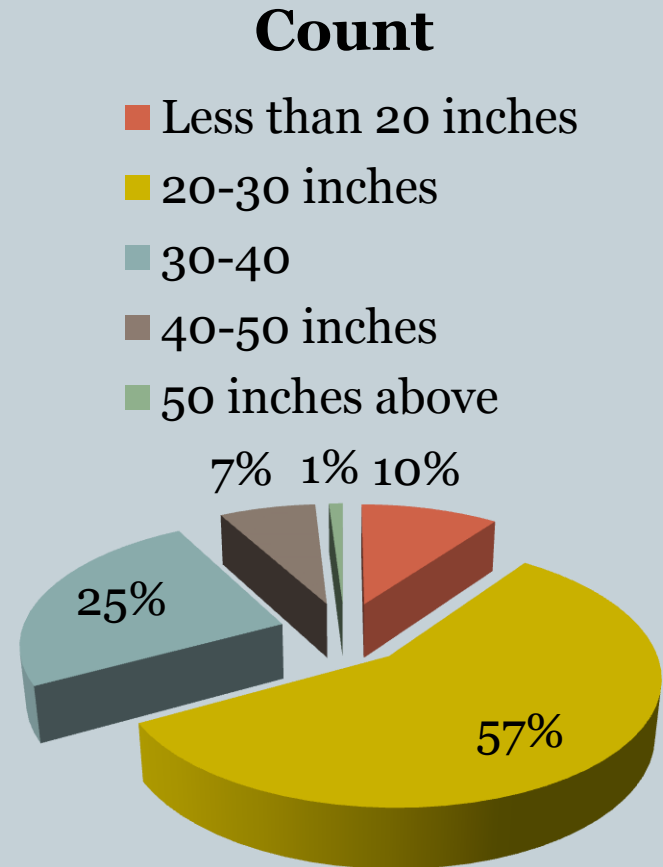
Count

- Morning
- Afternoon
- Evening
- Late night
- No fix pattern



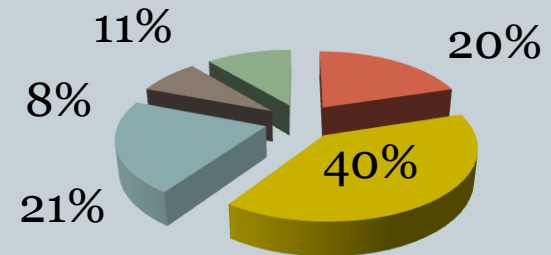
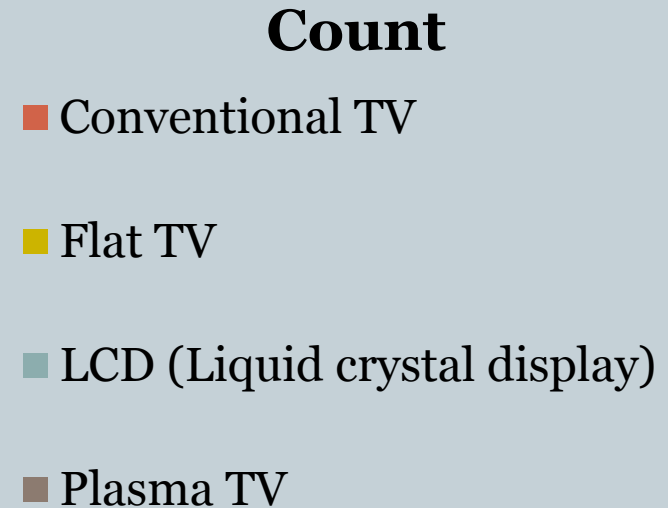
5. What is the size of the screen that your TV has?

Size	Count
Less than 20 inches	10
20-30 inches	57
30-40	25
40-50 inches	7
50 inches above	1



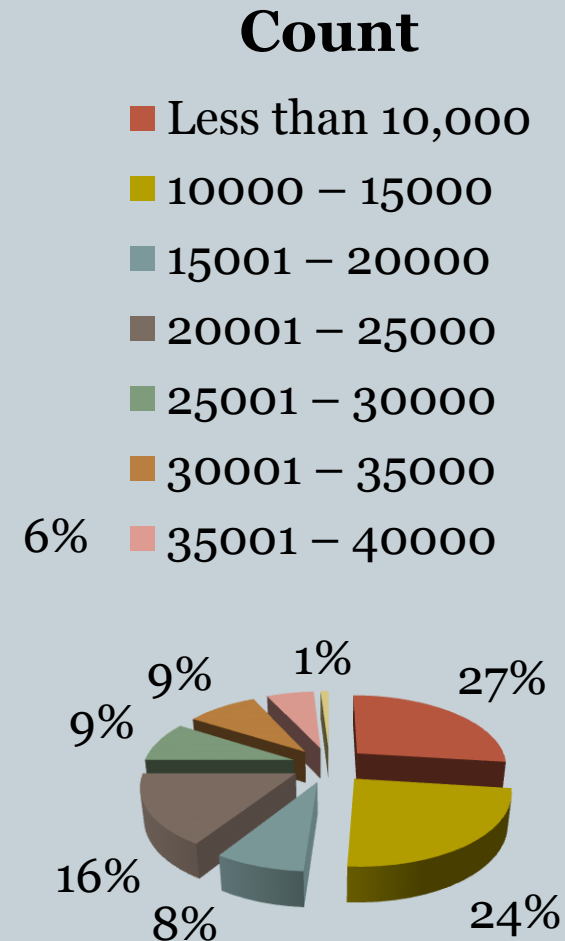
6. What kind of TV you own?

Type	Count
Conventional TV	20
Flat TV	39
LCD (Liquid crystal display)	21
Plasma TV	8
OLED (Organic Light emitting diode)	11



7. What is the price range (in Rs) of your TV?

Value of the TV	Count
Less than 10,000	27
10000 – 15000	24
15001 – 20000	8
20001 – 25000	16
25001 – 30000	9
30001 – 35000	9
35001 – 40000	6
more than 40000	1

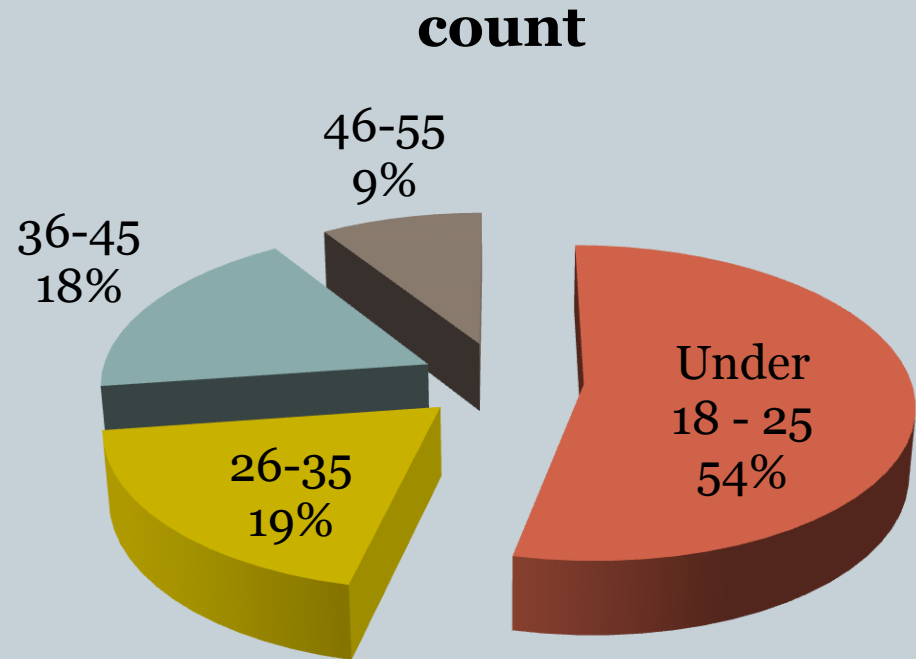


Consumer Profiles



1. Age Profile:

Under 18 - 25	53
26-35	19
36-45	18
46-55	9

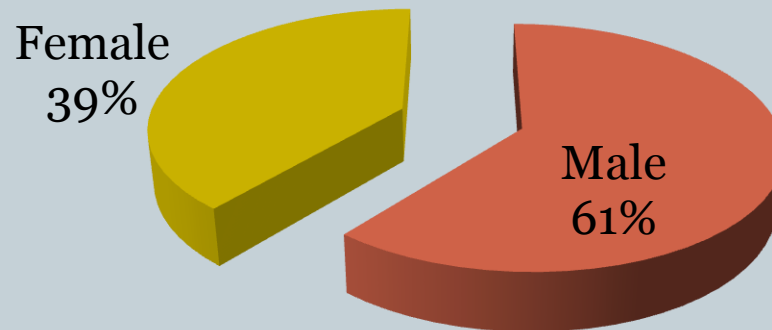




- 2. Gender

Male	61
Fmale	39

Count

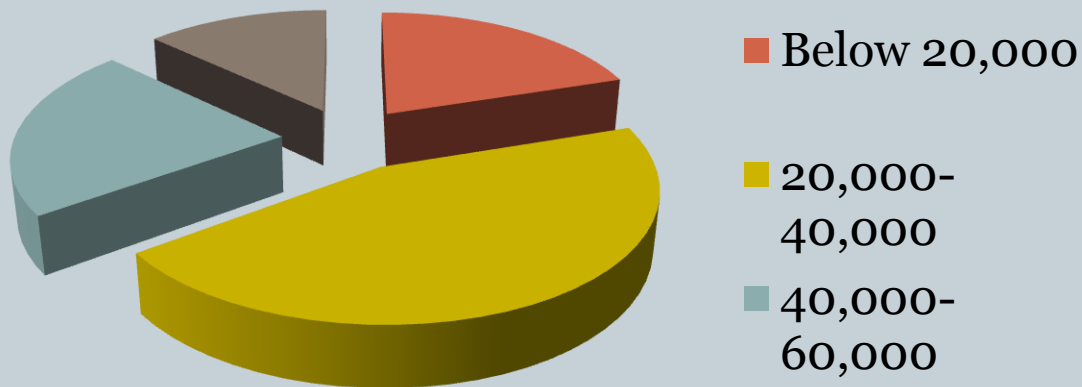




• 3. Monthly Family income (Rs.):

Below 20,000	20
20,000-40,000	45
40,000-60,000	22
Above 60,000	13

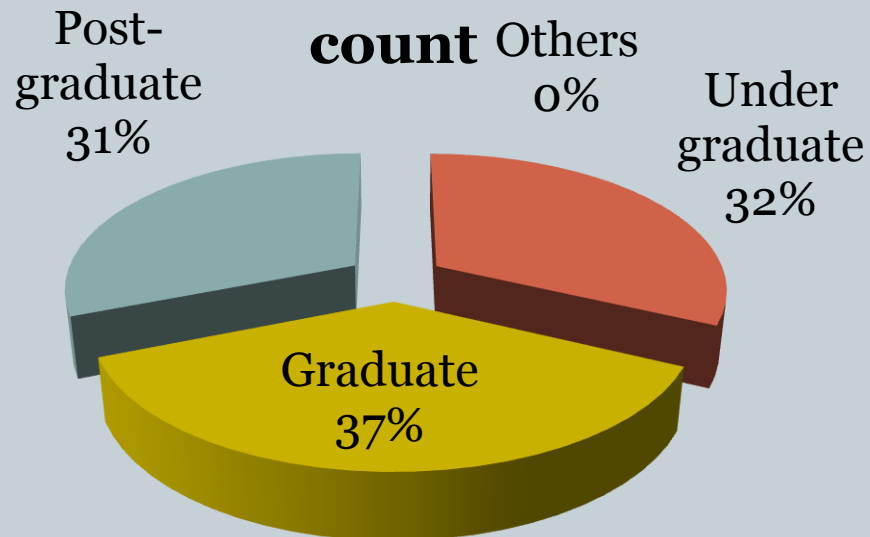
count





- 4. **Educational qualification:**

Under graduate	32
Graduate	37
Post-graduate	31
Others	0

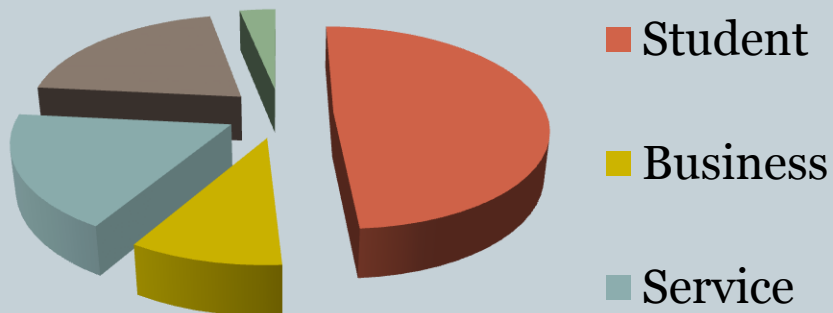




• 5. Occupation:

Student	46
Business	9
Service	17
Professionals	19
Others	3

count



THANK
YOU