

Customer - Chips Analysis



Task 1 :- Data Preparation & Customer Analytics.

- Creating and interpreting high-level summaries of the data.
- Finding outliers and removing these.
- Checking data formats and correcting.

Transaction Data

	DATE	STORE_NBR	LYLTY_CARD_NBR	TXN_ID	PROD_NBR	PROD_QTY	TOT_SALES
count	264836.000000	264836.00000	2.648360e+05	2.648360e+05	264836.000000	264836.000000	264836.000000
mean	43464.036260	135.08011	1.355495e+05	1.351583e+05	56.583157	1.907309	7.304200
std	105.389282	76.78418	8.057998e+04	7.813303e+04	32.826638	0.643654	3.083226
min	43282.000000	1.00000	1.000000e+03	1.000000e+00	1.000000	1.000000	1.500000
25%	43373.000000	70.00000	7.002100e+04	6.760150e+04	28.000000	2.000000	5.400000
50%	43464.000000	130.00000	1.303575e+05	1.351375e+05	56.000000	2.000000	7.400000
75%	43555.000000	203.00000	2.030942e+05	2.027012e+05	85.000000	2.000000	9.200000
max	43646.000000	272.00000	2.373711e+06	2.415841e+06	114.000000	200.000000	650.000000

Purchase Behaviour

	LYLTY_CARD_NBR
count	7.263700e+04
mean	1.361859e+05
std	8.989293e+04
min	1.000000e+03
25%	6.620200e+04
50%	1.340400e+05
75%	2.033750e+05
max	2.373711e+06

Task 2 :- Experimentation And Uplift Testing.

- Total Sales Revenue – **Total Sales 1933115.0 \$**
- Total Number Of Customers – **Total Numbers of Customers 72636.**
- Average Number of Transaction Per Customer – **Average Number of Transaction Per Customer 4.**

Evaluation of Performance of Trial Store-77, Store-86, Store-88

Analysis Of Trial Store Based On -

- Average Sales per Customer.
- Total Sales By Different Life Stage.
- Most Preferred Brand By Customers.
- Most Selling Packet Size.
- Sales By Different Life Stage .



Average Sales Per Customer.

Store - 77	Store - 86	Store - 88
<div>Total Customers are 356 Total Sales done 3040.0 Avg Transaction Per Customer in Store-77 is 9.</div>	<div>Total Customers are 273 Total Sales done 10635 Avg Transaction Per Customer in Store-86 is 39.</div>	<div>Total Customers are 388 Total Sales done 16333 Avg Transaction Per Customer in Store-88 is 42.</div>

Total Sales By Different Life Stage.

Store - 77

	LIFESTAGE	TOT_SALES
0	YOUNG SINGLES/COUPLES	799.5
1	RETIREEES	714.8
2	OLDER SINGLES/COUPLES	561.1
3	OLDER FAMILIES	348.2
4	YOUNG FAMILIES	265.4
5	MIDAGE SINGLES/COUPLES	205.0
6	NEW FAMILIES	146.0

Store - 86

	LIFESTAGE	TOT_SALES
0	OLDER FAMILIES	2534.90
1	OLDER SINGLES/COUPLES	2146.70
2	YOUNG FAMILIES	1913.35
3	RETIREEES	1778.10
4	YOUNG SINGLES/COUPLES	1036.90
5	MIDAGE SINGLES/COUPLES	871.10
6	NEW FAMILIES	354.30

Store - 88

	LIFESTAGE	TOT_SALES
0	OLDER SINGLES/COUPLES	4187.65
1	OLDER FAMILIES	3232.80
2	RETIREEES	2993.90
3	YOUNG FAMILIES	2538.30
4	MIDAGE SINGLES/COUPLES	1800.20
5	YOUNG SINGLES/COUPLES	1357.40
6	NEW FAMILIES	223.00

Most Preferred Brand By Customers.

Store - 77

	BRAND	PREMIUM_CUSTOMER
0	SMITHS	90
1	KETTLE	73
2	RRD	51
3	WOOLWORTHS	49
4	DORITOS	44
5	PRINGLES	41
6	THINS	28
7	NATURAL	25
8	INFUZIONI	20
9	CCS	19
10	TOSTITOS	19
11	GRNWVES	18
12	TWISTIES	13
13	COBS	12
14	OLD	11
15	CHEEZELS	10
16	SUNBITES	10
17	TYRRELLS	10
18	BURGER	10
19	FRENCH	6
20	CHEETOS	4

Store - 86

	BRAND	PREMIUM_CUSTOMER
0	SMITHS	225
1	KETTLE	193
2	RRD	169
3	WOOLWORTHS	127
4	DORITOS	122
5	PRINGLES	94
6	NATURAL	81
7	THINS	74
8	INFUZIONI	70
9	CCS	45
10	COBS	44
11	TOSTITOS	40
12	TWISTIES	40
13	GRNWVES	39
14	OLD	30
15	TYRRELLS	30
16	SUNBITES	29
17	CHEETOS	28
18	CHEEZELS	25
19	BURGER	17
20	FRENCH	16

Store - 88

	BRAND	PREMIUM_CUSTOMER
0	KETTLE	429
1	PRINGLES	262
2	DORITOS	234
3	INFUZIONI	152
4	THINS	132
5	COBS	126
6	TWISTIES	101
7	TOSTITOS	99
8	SMITHS	94
9	OLD	87
10	TYRRELLS	67
11	GRNWVES	54
12	CHEEZELS	36

Top 10 Most Selling Packet Size.

Store - 77

	BRAND	PACK_SIZE	PROD_QTY
0	PRINGLES	134	41
1	KETTLE	175	38
2	RRD	150	36
3	SMITHS	175	30
4	THINS	175	28
5	SMITHS	150	27
6	KETTLE	150	27
7	NATURAL	175	25
8	WOOLWORTHS	200	21
9	DORITOS	170	19
10	TOSTITOS	175	19

Store - 86

	BRAND	PACK_SIZE	PROD_QTY
0	KETTLE	150	96
1	RRD	150	95
2	PRINGLES	134	94
3	KETTLE	175	84
4	NATURAL	175	81
5	THINS	175	74
6	RRD	165	74
7	SMITHS	150	68
8	SMITHS	170	58
9	SMITHS	175	58
10	DORITOS	170	50

Store - 88

	BRAND	PACK_SIZE	PROD_QTY
0	PRINGLES	134	262
1	KETTLE	175	202
2	KETTLE	150	184
3	INFUZIONI	110	152
4	THINS	175	132
5	COBS	110	126
6	DORITOS	170	117
7	TOSTITOS	175	99
8	OLD	300	87
9	TWISTIES	270	74
10	SMITHS	330	67

Sales By Different Life Stage.

Store - 77

LIFESTAGE		BRAND
YOUNG SINGLES/COUPLES	151	
RETIREES	136	
OLDER SINGLES/COUPLES	99	
OLDER FAMILIES	64	
YOUNG FAMILIES	46	
MIDAGE SINGLES/COUPLES	40	
NEW FAMILIES	27	

Store - 86

LIFESTAGE		BRAND
OLDER FAMILIES	371	
OLDER SINGLES/COUPLES	306	
YOUNG FAMILIES	278	
RETIREES	256	
YOUNG SINGLES/COUPLES	150	
MIDAGE SINGLES/COUPLES	127	
NEW FAMILIES	50	

Store - 88

LIFESTAGE		BRAND
OLDER SINGLES/COUPLES	480	
OLDER FAMILIES	369	
RETIREES	345	
YOUNG FAMILIES	292	
MIDAGE SINGLES/COUPLES	207	
YOUNG SINGLES/COUPLES	155	
NEW FAMILIES	25	

Thank You.

Software Used For Analysis – Python 