

Business Analytics –Assignment 3

Saha Debanshee Gopal

U101113FCS074

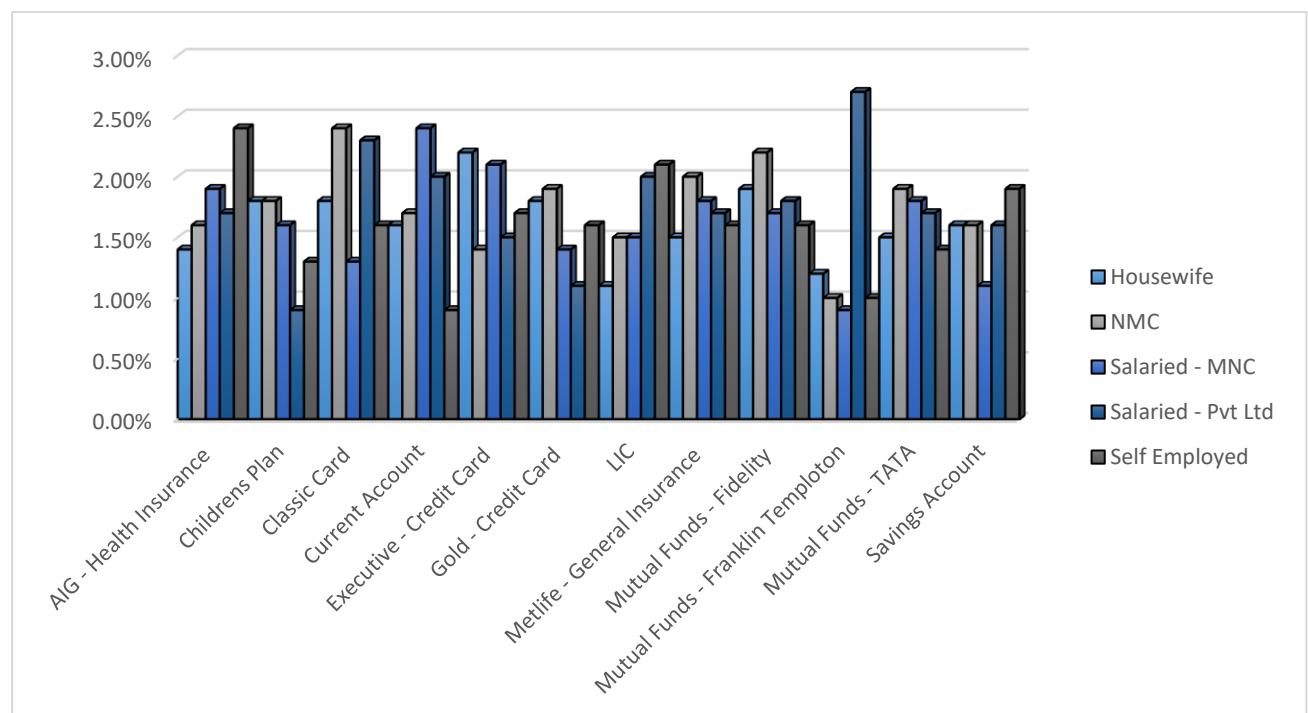
AIM:

- To analyse the data and present the results in a concise way for the Sales presentation.
- To analyse the data and answer the following questions:
 - a) At a National level which is the product which gets sold maximum at brand and category level?
 - b) Is there any demographic affinity to selecting a particular product?
 - c) Who in your view is the best agency and why?
 - d) Is there any relationship between number of sales people and business generated?
 - e) Does discount help increase sales of any product?

Maximum sale at category level:

Table 1.

% Pricing	Category					
Product	Housewife	NMC	Salaried - MNC	Salaried - Pvt Ltd	Self Employed	Grand Total
AIG - Health Insurance	1.40%	1.60%	1.90%	1.70%	2.40%	9.00%
Children's Plan	1.80%	1.80%	1.60%	0.90%	1.30%	7.40%
Classic Card	1.80%	2.40%	1.30%	2.30%	1.60%	9.40%
Current Account	1.60%	1.70%	2.40%	2.00%	0.90%	8.60%
Executive - Credit Card	2.20%	1.40%	2.10%	1.50%	1.70%	8.90%
Gold - Credit Card	1.80%	1.90%	1.40%	1.10%	1.60%	7.80%
LIC	1.10%	1.50%	1.50%	2.00%	2.10%	8.20%
MetLife - General Insurance	1.50%	2.00%	1.80%	1.70%	1.60%	8.60%
Mutual Funds - Fidelity	1.90%	2.20%	1.70%	1.80%	1.60%	9.20%
Mutual Funds - Franklin Templeton	1.20%	1.00%	0.90%	2.70%	1.00%	6.80%
Mutual Funds - TATA	1.50%	1.90%	1.80%	1.70%	1.40%	8.30%
Savings Account	1.60%	1.60%	1.10%	1.60%	1.90%	7.80%
Grand Total	19.40%	21.00%	19.50%	21.00%	19.10%	100.00%



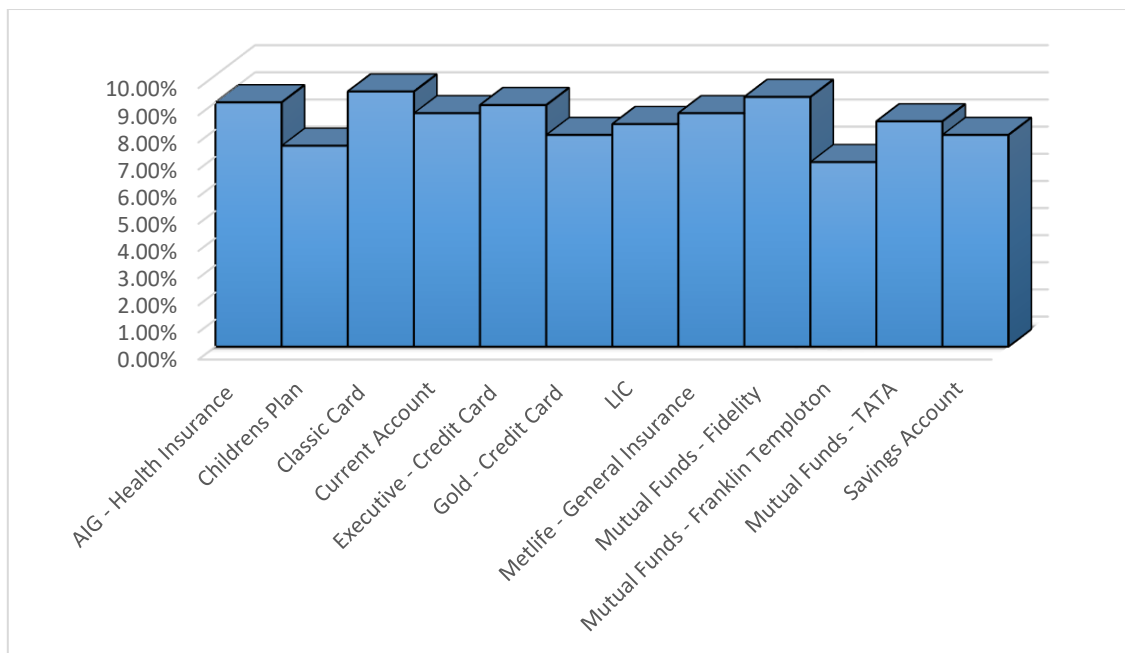
Graph 1. Category vs Sales

- Table 1 and Graph 1 describes which product is sold maximum at category level. Mutual Funds- Franklin Templeton sells the most, 2.70%, at Salaried Pvt Ltd category followed by Current Accounts in Salaried MNC category, Classic Card in NMC and AIG Health Insurance in Self Employed category with 2.40% of the total sales.

Maximum sale at brand level:

Table 2.

Product	% Pricing
AIG - Health Insurance	9.00%
Children's Plan	7.40%
Classic Card	9.40%
Current Account	8.60%
Executive - Credit Card	8.90%
Gold - Credit Card	7.80%
LIC	8.20%
MetLife - General Insurance	8.60%
Mutual Funds - Fidelity	9.20%
Mutual Funds - Franklin Templeton	6.80%
Mutual Funds - TATA	8.30%
Savings Account	7.80%
Grand Total	100.00%



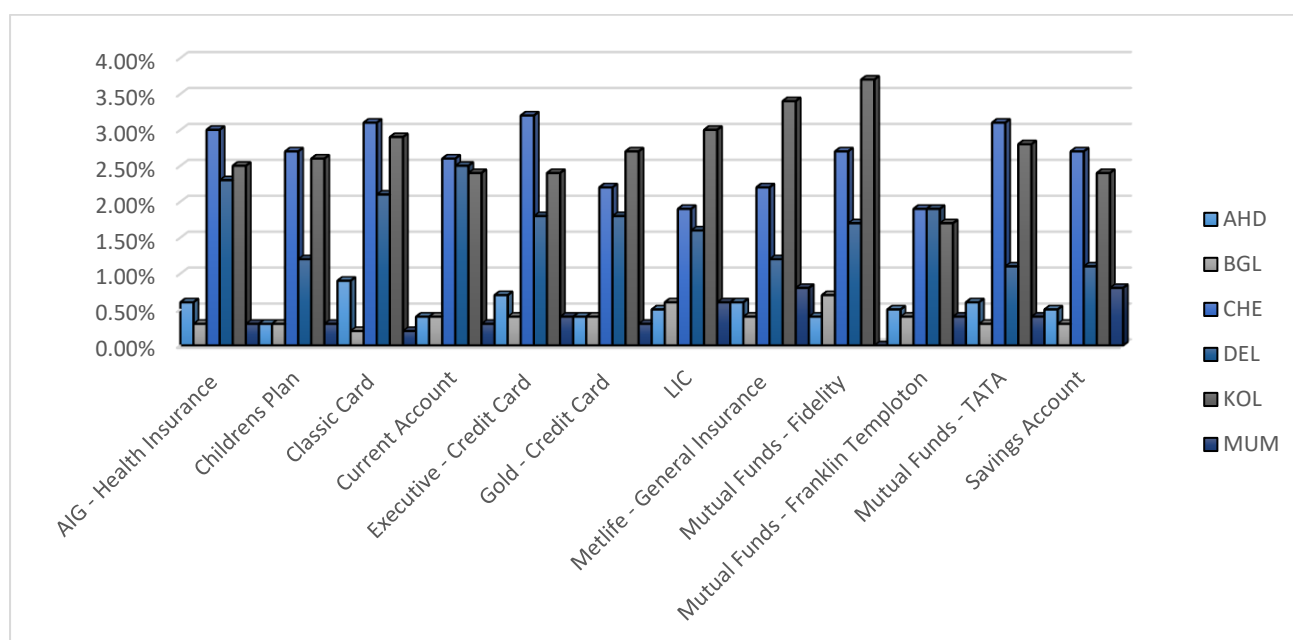
- At brand level, Class card sells the most with 9.40% of the total sales followed by MetLife Fidelity and AIG- Health Insurance with 9.20% and 9.00% of the total sales.

Demographic Affinity of the products:

a) CITY:

Table 3.

% Pricing Product	City						
	AHD	BGL	CHE	DEL	KOL	MUM	Grand Total
AIG - Health Insurance	0.60%	0.30%	3.00%	2.30%	2.50%	0.30%	9.00%
Children's Plan	0.30%	0.30%	2.70%	1.20%	2.60%	0.30%	7.40%
Classic Card	0.90%	0.20%	3.10%	2.10%	2.90%	0.20%	9.40%
Current Account	0.40%	0.40%	2.60%	2.50%	2.40%	0.30%	8.60%
Executive - Credit Card	0.70%	0.40%	3.20%	1.80%	2.40%	0.40%	8.90%
Gold - Credit Card	0.40%	0.40%	2.20%	1.80%	2.70%	0.30%	7.80%
LIC	0.50%	0.60%	1.90%	1.60%	3.00%	0.60%	8.20%
MetLife - General Insurance	0.60%	0.40%	2.20%	1.20%	3.40%	0.80%	8.60%
Mutual Funds - Fidelity	0.40%	0.70%	2.70%	1.70%	3.70%	0.00%	9.20%
Mutual Funds - Franklin Templeton	0.50%	0.40%	1.90%	1.90%	1.70%	0.40%	6.80%
Mutual Funds - TATA	0.60%	0.30%	3.10%	1.10%	2.80%	0.40%	8.30%
Savings Account	0.50%	0.30%	2.70%	1.10%	2.40%	0.80%	7.80%
Grand Total	6.40%	4.70%	31.30%	20.30%	32.50%	4.80%	100.00%



Graph 3.

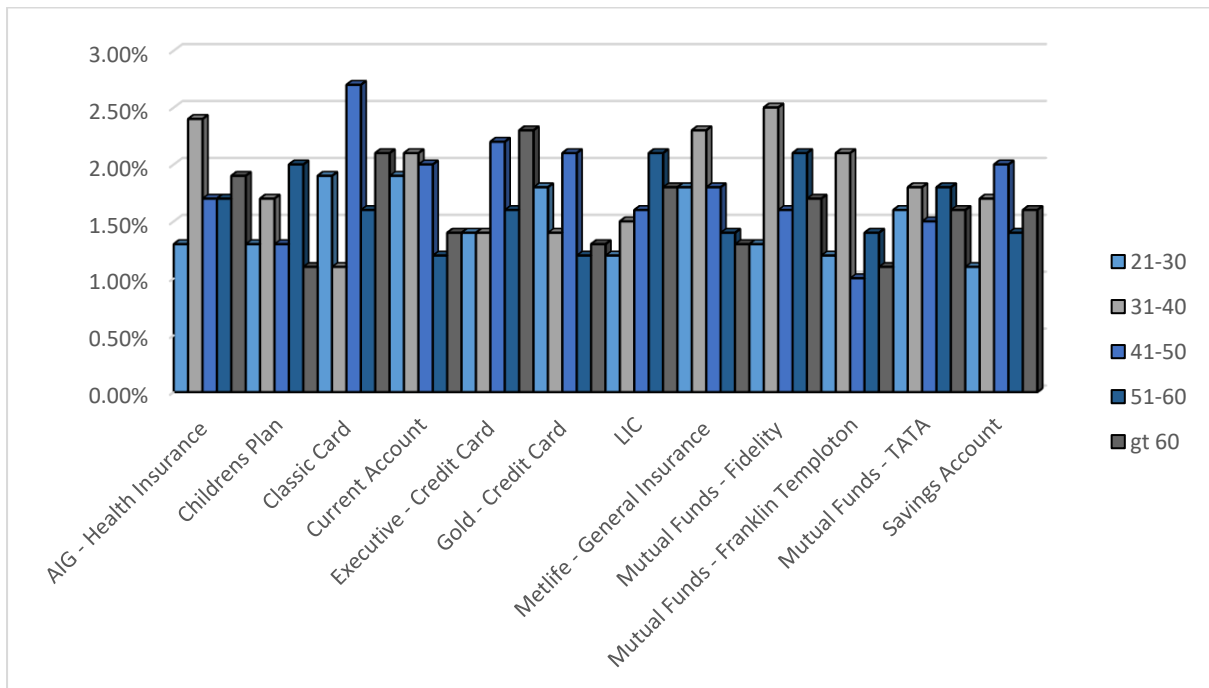
- Cities don't have a demographic affinity towards a certain product. The sale of a product differs from city to city. For example, Classic Card contributes to 0.90% of the total sales in Ahmedabad, 0.20% in Bangalore, 3.10% in Chennai, 2.10% in Delhi, 2.90% in Kolkata and only 0.20% in Mumbai. The sales in Chennai (3.10%) and that in Mumbai and Bangalore (0.20%) show that the city does not have an impact on a particular product.

- However, the percentage of sales is high for all products in Kolkata, Delhi and Chennai as compared to other cities.
- Thus, we can conclude that city has an impact on all the products when it comes to sales (higher sales in some cities) but there is no particular product which sells the highest in all cities.

b) AGE:

Table 4.

% Pricing	Age					Grand Total
Product	21-30	31-40	41-50	51-60	gt 60	
AIG - Health Insurance	1.30%	2.40%	1.70%	1.70%	1.90%	9.00%
Children's Plan	1.30%	1.70%	1.30%	2.00%	1.10%	7.40%
Classic Card	1.90%	1.10%	2.70%	1.60%	2.10%	9.40%
Current Account	1.90%	2.10%	2.00%	1.20%	1.40%	8.60%
Executive - Credit Card	1.40%	1.40%	2.20%	1.60%	2.30%	8.90%
Gold - Credit Card	1.80%	1.40%	2.10%	1.20%	1.30%	7.80%
LIC	1.20%	1.50%	1.60%	2.10%	1.80%	8.20%
MetLife - General Insurance	1.80%	2.30%	1.80%	1.40%	1.30%	8.60%
Mutual Funds - Fidelity	1.30%	2.50%	1.60%	2.10%	1.70%	9.20%
Mutual Funds - Franklin Templeton	1.20%	2.10%	1.00%	1.40%	1.10%	6.80%
Mutual Funds - TATA	1.60%	1.80%	1.50%	1.80%	1.60%	8.30%
Savings Account	1.10%	1.70%	2.00%	1.40%	1.60%	7.80%
Grand Total	17.80%	22.00%	21.50%	19.50%	19.20%	100.00%



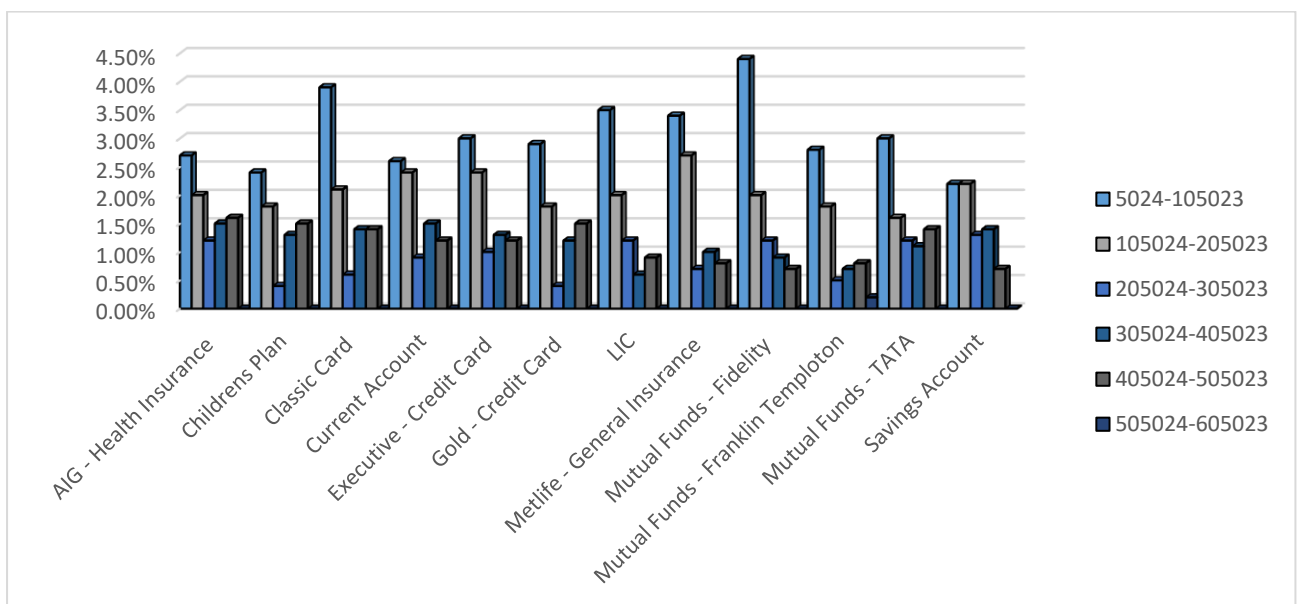
Graph 4.

- The table and graph show that maximum sales is in the 31-40 age group, 22.0%, followed by 41-50 and 51-60 with 21.50% and 19.50% of the total sales.
- Age group, as an individual factor, does not affect the sales of a particular product.
- Thus, we can conclude that no product sells the best in all age groups and a particular age group is not favourable (maximum sales) for the sale of all products. The sales differs from product to product in each age category.

c) INCOME:

Table 5.

% Pricing	Income Group						Grand Total
Product	5024-105023	105024-205023	205024-305023	305024-405023	405024-505023	505024-605023	
AIG - Health Insurance	2.70%	2.00%	1.20%	1.50%	1.60%	0.00%	9.00%
Children's Plan	2.40%	1.80%	0.40%	1.30%	1.50%	0.00%	7.40%
Classic Card	3.90%	2.10%	0.60%	1.40%	1.40%	0.00%	9.40%
Current Account	2.60%	2.40%	0.90%	1.50%	1.20%	0.00%	8.60%
Executive - Credit Card	3.00%	2.40%	1.00%	1.30%	1.20%	0.00%	8.90%
Gold - Credit Card	2.90%	1.80%	0.40%	1.20%	1.50%	0.00%	7.80%
LIC	3.50%	2.00%	1.20%	0.60%	0.90%	0.00%	8.20%
MetLife - General Insurance	3.40%	2.70%	0.70%	1.00%	0.80%	0.00%	8.60%
Mutual Funds - Fidelity	4.40%	2.00%	1.20%	0.90%	0.70%	0.00%	9.20%
Mutual Funds - Franklin Templeton	2.80%	1.80%	0.50%	0.70%	0.80%	0.20%	6.80%
Mutual Funds - TATA	3.00%	1.60%	1.20%	1.10%	1.40%	0.00%	8.30%
Savings Account	2.20%	2.20%	1.30%	1.40%	0.70%	0.00%	7.80%
Grand Total	36.80%	24.80%	10.60%	13.90%	13.70%	0.20%	100.00%



Graph 5.

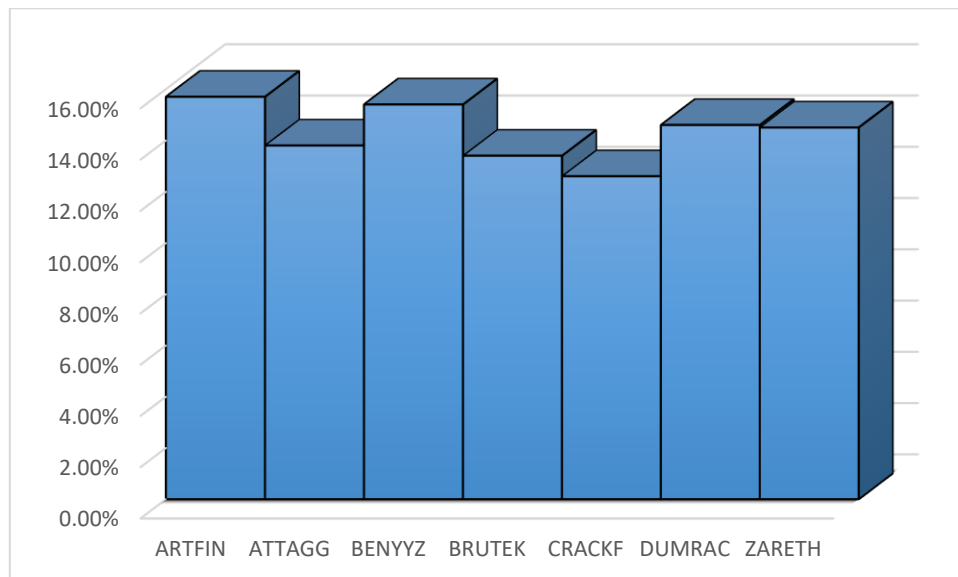
- The graph above shows how income effects the product sales. The graph shows that each product has the maximum sales in the 5024-105023 income group followed by the second highest sales in the 105024-205023 income group. Also, each product has the lowest sales in the 505024-605023 income group. This is true for all 12 products (AIG - Health Insurance, Children's Plan, Classic Card, Current Account, Executive- credit card, Gold-credit card, LIC, MetLife-General Insurance, Mutual Funds-Fidelity, Mutual Funds-Franklin Templeton, Mutual Funds-TATA ad Saving Accounts). Each of them have the highest sales in 5024-105023 income group.
- Thus, we can conclude that income group has an effect on the sale of a particular product.

Best Agency and Reason:

Relation between no of sales people and business generated:

Table 6.

DSA	%Pricing
ARTFIN	15.70%
ATTAGG	13.80%
BENYYZ	15.40%
BRUTEK	13.40%
CRACKF	12.60%
DUMRAC	14.60%
ZARETH	14.50%
Grand Total	100.00%



Graph 6.

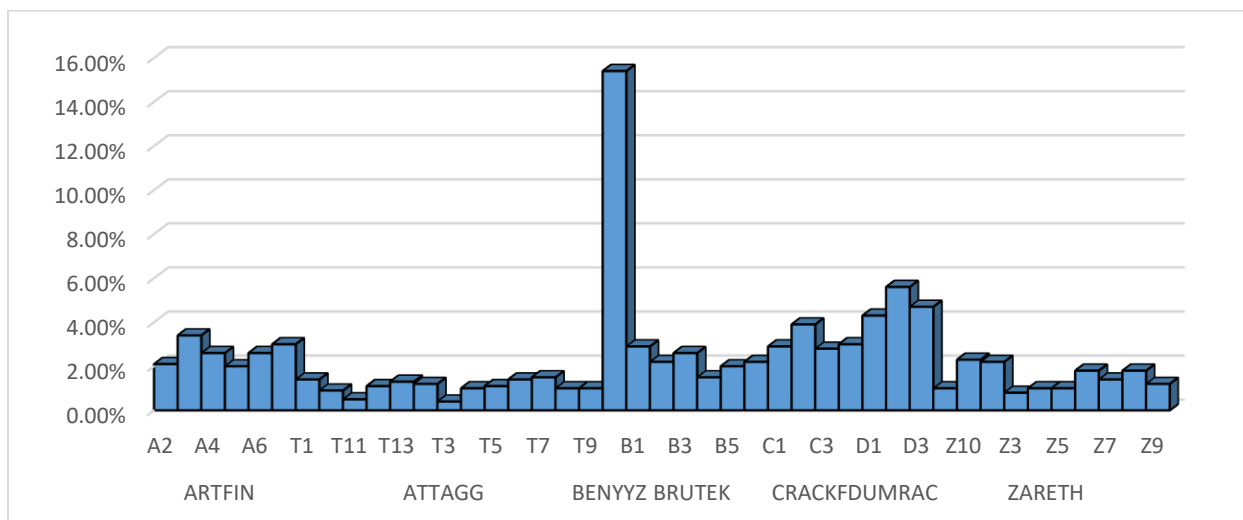
- The above graph shows that out of the 7 DSA's, ARTFIN generates the maximum business (15.70 %) followed by BENYYZ (15.40%) AND DUMRAC (14.60%).

- The DSA's can be further divided and the business generated by individual sales person can be compared.
- Table 7 shows the business generated by each sales person belonging to a particular DSA.

Table 7

DSA	% Pricing
ARTFIN	15.70%
A2	2.10%
A3	3.40%
A4	2.60%
A5	2.00%
A6	2.60%
A7	3.00%
ATTAGG	13.80%
T1	1.40%
T10	0.90%
T11	0.50%
T12	1.10%
T13	1.30%
T2	1.20%
T3	0.40%
T4	1.00%
T5	1.10%
T6	1.40%
T7	1.50%
T8	1.00%
T9	1.00%
BENYYZ	15.40%
E1	15.40%
BRUTEK	13.40%
B1	2.90%
B2	2.20%
B3	2.60%
B4	1.50%
B5	2.00%
B6	2.20%
CRACKF	12.60%
C1	2.90%
C2	3.90%
C3	2.80%
C4	3.00%
DUMRAC	14.60%
D1	4.30%
D2	5.60%
D3	4.70%

ZARETH	14.50%
Z1	1.00%
Z10	2.30%
Z2	2.20%
Z3	0.80%
Z4	1.00%
Z5	1.00%
Z6	1.80%
Z7	1.40%
Z8	1.80%
Z9	1.20%
Grand Total	100.00%



Graph 7.

- Graph 7 shows that E1 of DSA BENYYZ generates the maximum business, 15.40%, followed by D3 of DUMRAC generating 4.70%.
- There are 6 sales person in ARTFIN who manage to generate total business of 15.70%, 13 sales person in ATTAGG who generate 13.80% of the total business, 1 sales person in BENYYZ who generates 15.40% of the total business, 6 sales person of BRUTEK who generate 13.40% of the total business, 4 sales person of CRACKF who generate 12.60% of the total business, 3 sales person of DUMRAC who generate 14.60 % of the total business and 10 sales person in ZARETH who generate 14.50% of the total business.
- One person is capable of generating 15.40% while on the other hand 10 people generate 14.50% of the total business.
- Hence, from the table and graph, we can conclude that there is no relationship between the number of sales person and the business generated.

Does discount help---

Product	No of times Discount offered	Total Count
AIG - Health Insurance	52	90
Childrens Plan	27	74
Classic Card	48	94
Current Account	39	86
Executive - Credit Card	50	89
Gold - Credit Card	43	78
LIC	40	82
Metlife - General Insurance	32	86
Mutual Funds - Fidelity	57	92
Mutual Funds - Franklin Temploton	36	68
Mutual Funds - TATA	36	83
Savings Account	40	78
Grand Total	500	1000

