Observations

1. Age:

* Maximum Customers belong to the age group of 25 to 60 years except Cluster 4, where lower limit is 30 years.

1. Jobs:

* Admin, Blue-Collar, Management, Technician are the most popular jobs among all the Clusters.
* In Cluster 1, admin consists of 12.7% of total cluster population. Blue-Collar jobs and Technicians constitute similar frequency of 18.5% and 16.2% respectively. Maximum jobs are held by the Management sector. It has a high percentage of population who are Unemployed, 3.4%. It has the maximum no. of customers working in Services, out of all the Clusters(8.9%).
* Maximum Customers in Cluster 2 are working in the Management sector(29.9%). It has the maximum no. of customers working as Technicians, out of all the Clusters(18.68%). This cluster also has a high unemployment rate of 3.3%.
* Cluster 3 has one of the highest number of people working in blue-collar jobs(13.8%), of all the clusters. It has high percentage of retired population (11.26%) and 16.21% are Technicians. It also one of the highest percentages of Customers working in Admin sector(9.3%), among the 4 sectors.
* Cluster 4 has the lowest percentage working in the Admin sector(4.3%). 36.9% Customers are from the Management sector. It has the lowest percentage (2.2%) in the Services. There are no unemployed and unknown-job Customers in this cluster.

1. Marital Status:

* Highest percentage(32.34%) of singles is in cluster 1. Maximum people in Cluster 1 are married(55.96). Highest percentage(32.34%) of divorcees are also in cluster 1.
* Cluster 2 has high percent of singles(31.31%). 59.89% of the people in this cluster are married. This cluster has one of the lowest numbers of divorcees(8.79%).
* Cluster 3 has the second-highest percentage of divorcees(11.67%). It has a high percent of married Customers, 60.37.
* Cluster 3 has the highest percent of Married Customers among all the four clusters. And it has the lowest Divorce(8.69%) rate within all the clusters. It also has the lowest number of Singles(23.91%).

1. Education:

* Maximum Customers from cluster 1 have pursued Secondary(51.4%) education, which is the highest among all the four clusters. Second-highest percentage is of Tertiary education(31.16%) in this cluster.
* 44.5% people of cluster 2 have completed Tertiary education. And 36.81% have secured up to Secondary Education.
* Cluster 3 has high percent(14.39%) of people having secured Primary Education. This also has a high percent of people whose Education details are unknown.
* Cluster 4 has the maximum number of people having secured Primary Education(15.22%) and Tertiary Education(54.33%) out of all the Clusters. This cluster has the lowest percent of people securing up to Secondary Education(26.1%) and Unknown Education(4.35%).

1. Defaulters:

* Cluster 1 has 1.879% and Cluster 3 has 0.104% of defaulters.
* There are no defaulters in Cluster 2 and Cluster 4.

1. Balance:

* Cluster 1 has Customers who deposit very low amounts(-500 to 2000).
* Cluster 2 has heavy deposits ranging from 6000 to 14000.
* Cluster 3 has mediocre level deposit amounts ranging from 2000 to 6000.
* Cluster 4, by far is the most productive Cluster with deposits in ranges 20,000 to 30,000.

1. Housing:

* 49.536% people of Cluster 1 have Housing available.
* 35.44% people of Cluster 2 have Housing available.
* 39.93% people of Cluster 3 have Housing available.
* 21.74% people of Cluster 4 have Housing available.

1. Loans:

* 14.81% people of Cluster 1 have taken loans.
* 4.12% people of Cluster 2 have taken loans.
* 6.93% people of Cluster 3 have taken loans.
* 6.52% people of Cluster 4 have taken loans.

1. Mode of Contact:

* Maximum contacts are done through cellular mode of communication (more than 70%) in each cluster.
* Minimum contacts are carried out through Telephone (less than 20%) in each cluster.

1. Other Parameters:

Remaining Parameters demonstrate similar traits between all the clusters and have been mentioned together below

* Day - Customers were mostly contacted in the range 10-20 in dates.
* Month - Customers were most active in February, May to August and in November.
* Duration of contact - The Maximum duration range was 0 to 400 seconds per call on average. Very less calls were held beyond this point.

Efficiency of Clusters

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr No** | **No. Of Deposits(no)** | **Size of Cluster(len)** | **Efficiency(no / len)** |
| Cluster 1 | 3940 | 8834 | 0.4460041 |
| Cluster 2 | 209 | 364 | 0.5741758 |
| Cluster 3 | 1115 | 1918 | 0.5813347 |
| Cluster 4 | 25 | 46 | 0.5434738 |

Conclusions from the Above Table:

* Cluster 1 has the lowest efficiency (44.6%)
* Cluster 2 and Cluster 3 have similar efficiency 57.42% and 58.13% respectively.
* Cluster 4 has a moderate efficiency with 54.35%.

Conclusions

We observed that Cluster 1 has the lowest efficiency and their deposit amounts are also very low (-500 to 2000). So, the banking institution should invest lesser efforts in the Applicants resembling the traits from this organization.

Cluster 3 has high efficiency(58.13%) but their deposit contributions are also very low as compared to other clusters.

The Banking Institution should concentrate more on customers who have traits from the Cluster 2 and 4.

These two clusters have people depositing large amounts and the number of persons in the cluster are lower as compared to cluster 1 and 3. In the next marketing campaign, the institution should work towards increasing the persons from cluster 2 and 3.

Traits of an Ideal Applicant:

* Age should be between 25 to 60 years.
* Job profile should be management / Technician.
* Marital Status should be Married.
* The applicant should have completed Tertiary level of Education.
* He should not be defaulter and his housing and loans should be minimal.
* Preferred mode of communication should be Cellular and must occur largely in mid-year(May to August).
* Duration of every phone call from customer care executive should be below 400 seconds.

The person possessing all of these traits will be highly profitable for the banking institution.