The HBAT dataset provided survey information that helped us gain a deep insight of customer satisfaction with the response received from the technical support and complaint resolution departments which nearly consisted of surveyed data from nearly hundred customers. The customers were segmented into three sections :

- Recent customers who’ve joined within a year’s span.

- Customer’s who’ve been with them for more than year and less than five years.

- Loyal customer’s who have been with them for more than 5 years

On analysis we need to decide if customers are happy with HBAT's technical and complaint resolution departments or if they need to improve over certain areas. The analysis reveals that customer’s from segment 1 are the cause for a large portion of the lowest ratings of both the departments this brings down the overall rating of both the departments.

The analysis was first run on the overall total sample size of respondents for both technical support and complaint resolution. The second more detailed analysis investigated the differences and nuances between the different customer type groups. By having a closer look into the data set we identified some key insights, which would have been missed by simply glancing over the data. First, the high level analysis of both technical support and complaint resolution satisfactions show a similar pattern. For both groups, the probability plots and box plots show normal distribution and both Sharpiro-Wilk tests confirm this. If we look at the mean for both variables (~5.4), it is slightly lower than the median (~5.4) but are still very close together indicating slight skewness to the left, which gets confirmed by the negative skewness values. The mode value (5.3) for complaint resolution is very close to the mean and median and therefore doesn’t really tell much but the mode value for technical support is 4.6, which is lower than the mean and median. There certainly is an indication to analyse further. The standard deviations suggest an average spread of ratings, the overall group is not too dispersed or too close together suggesting a wider and flatter curve, which is supported by the negative kurtosis values. This initial overall analysis shows a rather unimpressive and average rating for both departments indicating that improvements should be made to both. Upon doing a deeper dive by customer type there are clearly variations between groups.

When we look at different customer types, these are the observations:

Customer Type 1 – It has the major participation for giving lower end ratings for both the departments. The overall satisfaction is average for all the categories.

Customer Type 2, Type 3 - They follow very closely in terms of kurtosis, modes, tests and plots for normality, skewness, standard deviation, light tails, and average spread from the overall analysis for both technical support and complaint resolution.

These findings Indicate that there is not much insight that can be derived from these groups except for their noticeable lack of outliers and a smaller range that they cater to. While most of the values and description about the data for customer type 1 is similar for both other groups there are some key differences. First, the median, mean, and mode, all are lower for both groups. The mode is significantly lower at a value of 3 (technical support) and 4.1 (customer complaint). The range calculated is higher than the other two groups indicating that it is more wide spread. This is the key aspect here because upon looking at all three groups it can be seen that the higher and lower values all come from customer type 1. For complaint, positive kurtosis and skewness is observed only for Customer type 1. Bartlett’s test indicates homoscedasticity for both dependent variables since the p value is greater than 0.05. The populations are not different based on the Brown-Forsythe test values. Hence, we can infer that the overall model and analysis is appropriate for this data set.

The organization has chances to enhance the general population, process, innovation keeping in mind the end goal to build the mean fulfillment rank towards the higher end for each of the three gatherings. Be that as it may, advance examination should be done, particularly for client sort 1, with a specific end goal to comprehend the circumstances and end results of the diverse rankings. One theory that ought to be considered is that the new clients who are disappointed leave before they achieve the 1 year point to progress into the client 2 class. Advance examination ought to be performed by separating the autonomous variable into sub classes that consolidate industry and time span. Clients who are new may have higher or bring down desires, though veteran clients would as of now be utilized to the general population, process, and advances of HBAT's specialized and protestation determination administrations. Administration ought to likewise investigate client beat, position as essential merchant by client, explanations behind specialized help and dissension determination brings with a specific end goal to diminish the general recurrence and issues clients encounter. These following stages will give more solid activity things to the business to address once finished.