The HBAT a manufacturing hub which excels in selling products like paper magazines and newspapers. We conducted analysis on HBAT datasets for particular field i.e. Firm size based on factors like Satisfaction and likelihood of recommendation. We are using data for 100 customers based with various metric and non-metric variables. From analysis, we are able to understand certain information like the customer's impression of the association's execution in 13 distinct classes in the form of rating. And buy results and business connections etc. It gives data about the client, for example, the client's business, estimate, area, and so forth. Now we conduct a similar analysis on distribution system based on same factors.

The respondents have been split by the distribution system, i.e. one who doesn’t buy directly from a broker (=1 in dataset) and other who buys from a broker (=0 in dataset). The dependent variables are the client’s satisfaction and the likelihood to recommend the paper services. The initial univariate analysis shows that the respondents are more satisfied buying the paper services from a distribution system of the company directly, and are highly likely to recommend the same to other respondents.

Using the Two Sample T-Test for each response, it indicates that both the variables, customer satisfaction and the likelihood to recommend, datasets are normally distributed. The median response to the survey questions that are being analyzed for clients that buys directly from the distribution system of the company are 7.6 and 7.5, respectively for customer satisfaction and likelihood to recommend, which is relatively higher than the responses for those clients that purchase through a broker, 6.4 and 6.6, respectively. The variance of both variables is similarly higher for respondents that purchase their paper through the broker than buying directly from the company. It’s also worth noting that the range of responses of direct purchasers are higher on both questions and the only outliers in the data are two direct purchase clients that gave scores of 9.9 and 9.6 in the likelihood of recommendation response.

The F-value for the customer satisfaction response is 36.31 which is higher and the same follows for the F-value for the likelihood to recommend, which is 18.63. This indicates that the variability of group means is large relative to the within group variability. The larger F-values allow us to reject the null hypothesis that sample group means are equal.

On in-depth analysis of the survey results, it provides us with a suspicion on how the survey was administered and monitored, also consider how clients turned out to be a direct purchaser or a broker based purchaser. There are high chances that the clients who purchase directly from the firm were given this survey by an official of the firm. That could lead to better responses and higher rating since the client doesn’t want to spoil their relationship with the company. The customer who buys the products through an intermediary is given this survey by his or her agent then he or she might be more concerned about the products as a whole in every aspect like quality, worth, fulfillment of the purpose of the nature of the items offered by the firm.