

## SALES ANALYSIS OF AVERAGE BIDDING AND MAXIMUM BIDDING

### EU TEST REPORT

**Trial Period** – Data was collected during a specified time period.

**Preliminary Analysis** – Separate descriptive analyzes were made for Control Group and Test Group.

There are no missing or excessive values in both data sets.

	Adet	Ortalama	Stand. Sap.	Minimum	Maximum
<b>Impression</b>	40	101,711.45	20,302.16	45,475.94	147,539.34
<b>Click</b>	40	5,100.66	1,329.99	2,189.75	7,959.13
<b>Purchase</b>	40	550.89	134.11	267.03	801.90
<b>Earning</b>	40	1,908.57	302.92	1,253.99	2,497.30

*Control Group tanımsal istatistikleri*

	Adet	Ortalama	Stand. Sap.	Minimum	Maximum
<b>Impression</b>	40	120,512.41	18,807.45	79,033.83	158,605.92
<b>Click</b>	40	3,967.55	923.10	1,836.63	6,019.70
<b>Purchase</b>	40	582.11	161.15	311.63	889.91
<b>Earning</b>	40	2,514.89	282.73	1,939.61	3,171.49

*Test Group tanımsal istatistikleri*

**AB Test Variations** – We have two datasets for analysis, Control Group and Test Group.

There are variables such as the number of ad views (Impression), the number of clicks (Click), the number of purchases of the product in the ad (Purchase) and income (Earning) collected as a result of using the Control Group (Maximum bidding method). Test Group, on the other hand, covers the number of ad views (Impression), the number of clicks (Click), the number of purchases (Purchase) and income (Earning) of the product in the ad, collected as a result of using the (Average bidding method) developed later.

**Hypothesis** – As a result of using two different bidding methods, it has been investigated whether there is a significant difference on the basis of purchase (purchase). In this way, hypotheses H0 and H1 are formed as follows:

**H0:** There is no statistically significant difference between the amount of sales realized as a result of using the Maximum bidding method and the amount of sales realized as a result of using the Average bidding method

**H1:** There is a statistically significant difference between the amount of sales realized as a result of using the Maximum bidding method and the amount of sales realized as a result of using the Average bidding method.

**Top Results** – Control Group conversion rate (Purchase per Click) is 11.59%. The Test Group conversion rate is 15.65%.

The Control Group unit return amount (revenue per Click) is 0.4083 units, while the Test Group unit return amount is 0.6683.

The test statistic confidence interval (alpha) was determined as 0.05.

**Estimated Increase in Revenue or Margin** – When the total revenue (Earning) between Control Group and Test Group is compared, the total revenue increase rate of the Test Group, which was created with the Average bidding bid method, was calculated as 31.77%.

While Control Group total revenue amount was 76,342.73, Test Group total revenue amount was calculated as 100,595.62.

**Conclusion** – There is no statistically significant difference between the purchase in Control Group and the purchase in Test Group, with 95% reliability.

**Additions** – Our analysis is based on number of purchases. There is no statistical significance between the number of purchases. However, when the total revenues generated as a result of these acquisitions are compared, Test Group stands out with a positive difference of 31.77%.

**Recommendations** – We need more data to more accurately measure the impact of the Average bidding method.

AB Test is required on the basis of Earnings to find out if there is a significant difference between the revenues, rather than to obtain information on whether there is a significant difference between the number of purchases of the company.