Savannah James

This query shows the products and their estimated service time in minutes. It also shows the actual minutes and the difference between actual and estimated time. The positive differences mean that the service took longer than what was estimated. The negative differences mean that the service was below what was estimated.

As you can see below, ProductID 4 had the largest difference in minutes. Employees of the call center could begin recording the issues that were dealt with for each product. Employees could then possibly see a trend in problems with each specific product, and notify the manufacturer of these issues.

| **Diff in Min by Product** | | | |
| --- | --- | --- | --- |
| **ProductID** | **SumOfMinutes** | **SumOfEstWarMin** | **Difference** |
| 1 | 1767 | 1200 | 567 |
| 2 | 1162 | 1200 | -38 |
| 3 | 1155 | 1200 | -45 |
| 4 | 1783 | 1200 | 583 |

This query shows the actual and estimated service times in minutes by tech level. It also shows the difference between the actual service time and estimated service time. These differences are positive, which means that at each technician level, they spent more time servicing products than what was originally estimated. To reduce the amount of work the tech has to do on each product, the manufacturer should spend more time testing their products in order to find the deficiencies. You could also add more tech levels or divide the techs up by specialties in order to reduce the time spent per product.

| **Diff in Min by Tech Level** | | | |
| --- | --- | --- | --- |
| **TechLevel** | **SumOfMinutes** | **SumOfEstWarMin** | **Difference** |
| 1 | 3140 | 2400 | 740 |
| 2 | 1766 | 1600 | 166 |
| 3 | 961 | 800 | 161 |

This query shows the actual and estimated dollars by tech level. It also shows the difference between actual dollars and estimated dollars. These differences are positive, which means that it cost more to service a product at all tech levels than what was originally estimated. Again, teaching each technician a specialty may result in better training which may reduce the time and money spent per product.

| **Diff in Dollars by Tech Level** | | | |
| --- | --- | --- | --- |
| **TechLevel** | **ActualDollars** | **EstimatedDollars** | **Difference** |
| 1 | $3,140.00 | $2,400.00 | $740.00 |
| 2 | $3,532.00 | $3,200.00 | $332.00 |
| 3 | $2,883.00 | $2,400.00 | $483.00 |

This query shows the actual and estimated dollars by product. It also shows the difference between actual dollars and estimated dollars. These differences again, are all positive, which means that it cost more to fix every product than what was estimated. The manufacturer should look at each product and determine why each product is costing more to fix. They may want to look into finding cheaper alternatives for parts.

| **Diff in Dollars by Product** | | | |
| --- | --- | --- | --- |
| **ProductID** | **ActualDollars** | **EstimatedDollars** | **Difference** |
| 1 | $2,538.00 | $2,000.00 | $538.00 |
| 2 | $2,225.00 | $2,000.00 | $225.00 |
| 3 | $2,231.00 | $2,000.00 | $231.00 |
| 4 | $2,561.00 | $2,000.00 | $561.00 |