## **MICROSOFT CORPORATION – VEHICLE**

Improving Overall Effectiveness of Microsoft Fleet Vehicles

## **STUDENT TEAM:**

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**Microsoft Corporation** is the world's largest software maker in terms of revenues. Microsoft Real Estates & Security (RE&S) Organization manages and drives improvements in fleet operations in the Puget Sound Region. The fleet has four functions, namely commute, facility, catering & beverages, and shipping & receiving, all of which are operated by independent vendors. RE&S aims to improve overall effectiveness of the fleet vehicles and optimize the fleet management process. Therefore, the Tauber team was tasked with evaluating the current vehicle utilizations, identifying opportunities for improvement, and providing recommendation on actions that Microsoft needs to take to efficiently manage the fleet vehicles.

The Tauber team focused on four improvement areas, in which the team analyzed the current state, envisioned the desired future state, and provided recommendations to bridge the gap.

- First, the team developed a Power BI dashboard that enabled monitoring and prioritization of vehicle replacement. The team also built a financial model that compared costs for vehicle lease versus buy to provide the most economical acquisition approach.
- Second, the team upgraded the user interface for on-demand shuttle booking which provided visibility on user travel times.
- Third, the team developed improvement plans to create synergies between functions through vehicle pooling and centralized services in fueling and maintenance.
- Fourth, the team designed an asset management framework and built a database through queries which stored vehicle data and streamlined the data collection process.

These recommendations would save RE&S a total of \$6.4M, which includes:

- OpEx savings: \$4.5M over the next three years.
- CapEx savings: \$1.9M capital savings for next vehicle replacement.
- Productivity: 36K hours in employee time savings over the next three years.

In addition, the outcome of this project will be directly integrated into the pipeline for future Microsoft fleet management process. For example, the upgraded user interface for on-demand shuttle booking would be incorporated into the Microsoft employee transportation application. Furthermore, the newly developed asset management framework would be adopted by future Microsoft asset management software.