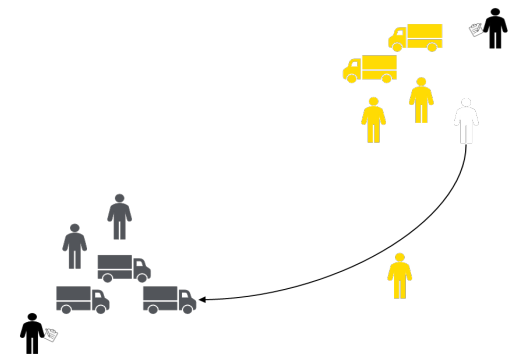


Improving Driver Integration across Dedicated Contract Services Accounts using Resource Identification and Capacity Planning.

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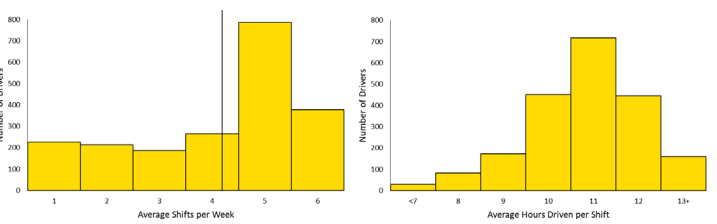
J.B. Hunt Dedicated Contract Services Operations

J.B. Hunt Transport Services, Inc., is a transportation and logistics company that serves clients through five business units. The focus of our project is on J.B. Hunt Dedicated Contract Services (DCS). DCS dedicates their fleet to clients who allow the managing of drivers and trucks to be done by DCS account managers rather than themselves. Currently, DCS has over 500 client accounts, each with a specific account manager who oversees all the operations for the account. Account managers oversee day-to-day operations to ensure that loads are being delivered on time and drivers are being scheduled appropriately.



Low Utilization Among DCS Drivers

A lack of a standardized process for driver integration – sharing excess drivers into non-native accounts – results in low driver utilization. High driver utilization results in happier drivers that are less likely to move to a different company, as their needs are being met.



With over 40% of DCS drivers in 2020 getting less than the target, 4.65 shifts per week, and over 70% getting less than the target, 11 hours driven per shifts. DCS tasked us with producing a solution that would address missed opportunities for drivers to increase their utilization. This tool will result in increasing the average driver utilization to meet the account utilization.

Measuring and Understanding Driver Utilization

There are two specific ways to measure utilization: hours per day and shifts per week. Shifts are typically one load that a driver completes, our target for hours per day driven is 11 hours. Throughout the week, a driver works multiple shifts, our target for shifts driven per week is an average of 4.65.

$$U_{1,d,t} = \frac{H_{d,t}}{11}$$



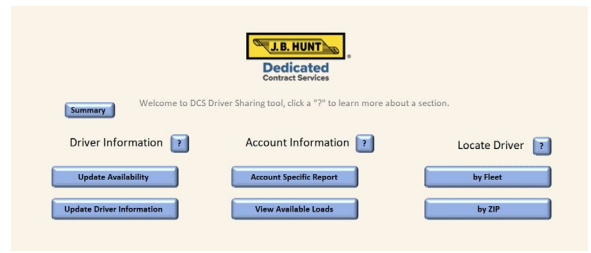
d = driver
 t = given time period
 $H_{d,t}$ = hours per day driven
 $S_{d,t}$ = shifts driven per week

$$U_{2,d,t} = \frac{S_{d,t}}{4.65}$$



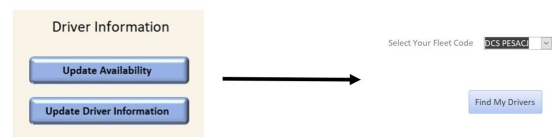
Our Approach

We decided on a database backed reporting tool, which uses historical data to provide account managers with visibility into driver information, account information and the ability to search for available drivers. Account managers spend a lot of unnecessary time searching for information that can be kept in our database, eliminating any manual searching they might do.



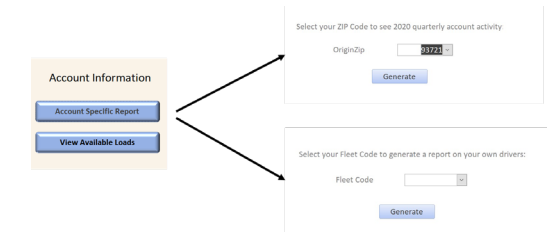
Keeping Updated Records of Available Drivers

Updateable account data allows account managers to update driver availability in order to notify other accounts of available drivers. This allows account managers to quickly look up available drivers near them, in the case they might need an extra driver to cover a load. It also allows account managers to make drivers unavailable, in case they may not have any drivers to share.



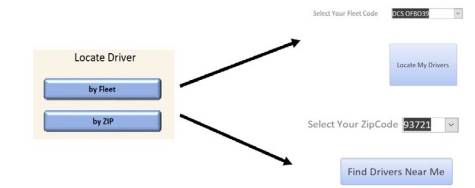
Readily Accessible Visibility for Account Managers

Account specific data allows account managers to run detailed reports that highlight account activity or relevant driver information. These reports give account managers insights into the performance of their accounts and provides information on low performing metrics.



Prioritizing Recommendations on Utilization and Distance

A query developed using the user's latitude and longitude prioritizes available drivers within a reasonable distance to the user. Prioritizing nearby drivers results in more sharing happening between accounts and makes the process easier for both account managers and drivers.



Impact Analysis

DCS estimates that the need for additional driver in the Western region would reduce by 20 drivers, or roughly 1%, which could be potential savings of approximately \$2,000,000. DCS would also utilize this tool to cover 1% more loads per year, which would result in roughly 6,130 load revenue kept in house rather than outsourcing. Our tool was designed to eliminate the manual aspect of driver sharing. This is estimated to save \$312,000 in account manager time soft savings by eliminating around 2 hours a week spent looking for available drivers.

\$2,000,000
of potential savings when reducing the need for additional drivers by 20.

6,130
extra load revenue kept in house rather than outsourcing.