Design and Implementation of Daily Operator Assignment Schedule

Company Name:
Intertek

Product:
Fuel and lubricant testing

The Problem:
Time dependent critical operator work assignments are not completed within the specified time window.

The Solution:
Create an application that will clearly highlight the time to complete an assignment and any overlapping assignment occurrences.

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Background
Intertek provides fuel and lubricant testing services for the automotive industry. Within the facility, there are over 65 engine stands and over 30 test types, each of which require sampling or blowby measurements that must be conducted within a pre-determined time.

The Problem
Taking the oil sample and conducting a blowby at the appropriate time is critical for quality testing. If the assignment is not completed within the predetermined time interval, the test is considered scrap and Intertek absorbs that cost. Intertek currently uses a Kanban board and tribal knowledge to assign an operator to an engine stand. With the current scheduling method, operators are often assigned to multiple engines with overlapping tasks; which can lead to missed critical test readings consequently invalidating the test.

The Solution
Using a scheduling application written in Visual Basics (VBA), a schedule will be generated displaying upcoming assignments, and flag all overlapping occurrences within a 15-minute interval for a 10-hour duration. Cross-referencing current engine test data with pre-determined sample and blowby intervals, the scheduling application will allow the supervisor to optimize operator assignments and improve test quality.