



## **ADVANTAGE CONSULTING GROUP LTD.**

### **CASE STUDY #1002**

#### **Problem: Book distribution warehouse has excessive overtime and production delays.**

A major book sales and distribution company in the Eastern United state wanted to improve productivity at one of its warehouses. The company employs in excess of 140 people in the shipping and receiving department, and has a payroll in excess of 3.5 million dollars. Even with this large shipping department, the company was still not meeting its internal shipping deadlines.

#### **Investigation:**

After a short feasibility study was completed, the estimated performance level of the warehouse staff was 70%.

After the initial study, a game plan was developed to do a more extensive study and determine the best solution for the customer.

Industrial engineers spent several weeks on site. The engineers developed a detailed map of the warehouse and racking system. This map included coordinates for all entrances and exits, as well as, each individual storage location. The engineers then observed a large sampling of the work force as they performed their assignments. Time studies and effort evaluation determined the standard times for each element of an assignment. Allowances for rest and personal fatigue plus delays were factored into the standards. A computer program was tied to the clients work order system to determine the work performance for each employee on each task.

#### **Findings:**

Several operational issues were addressed:

- The 70% performance level was confirmed.
- The time clock was moved closer to the work area. This saved the company several minutes of non-productive time per day per employee.
- The personal safety equipment was moved to a more convenient location nearer the work area.

- Transfer assignments were printed on demand instead of all at once. Eliminating the need for employees to search through a stack of orders to find the correct assignments.
- Storage racks were installed in staging areas to reduce double handling of materials.

### **Solution:**

The proposed solution was to use the productivity software to track the performance of all employees. The software is capable of calculating the standard time of each task, comparing the employee's time to the standard and calculating a performance for each task, and for the day. The program also generates reports by employee, shift and company. These reports can be viewed on a daily or weekly time period.

Employees were introduced to the system by Management with the assistance of the Advantage engineers, and were given daily reports on their progress. As the system was implemented, the minimum performance levels were raised each week, until they were above 90%. Management and supervisors were also trained to coach and discipline the employees.

### **Results:**

The warehouse productivity improved to 93% and reduced overtime by 1.6 million dollars per year. Additional saving will be realized as people are not replaced to match the workload to number of people needed.

As the project comes up on one year, the customer has found that with proper supervision and management buy in, the employees have accepted the standards and the company has been able to ship product on-time with less resources.

The company has had lower turn over of the more productive employees who now feel that their work is being appreciated by management.