

Improved Operator Productivity

Problem Statement

One manufacturing process ran 4 shift operation but was intermittent in nature and manpower limited. Three operators had come up with an idea for different staffing that would allow 2 shift operation instead allowing elimination of night shifts.

Investigation

The operators knew what they wanted to do. They correctly identified the sources of productivity losses, and were attempting to convert to a machine limited operation. They had permission from their supervision to conduct a trial on one machine.

They also correctly identified their limitations. None of them knew how to extract data, generate reports, or make valid comparisons. While comfortable speaking to their peers, none of them had any public speaking capability. They approached me for technical support in these areas.

Implementation

The project proceeded, and after a few initial hiccups, settled in to a production rate approximately 3x normal. Progress reports were generated early and often indicating that they were routinely setting and breaking production records. It was clear from analysis that this level would not be sustainable within the whole operation, as the rate would then become sales limited, restricting productivity to a maximum of 2x current. However, that was left for a later discussion so that they could continue to focus on implementing and stabilizing their process.

Results

After a suitable period, the test was considered a success, and the rest of the machines were converted to the new method. Productivity increased to the expected 2x level. At first, operators were confused and concerned that this represented a failure, and they would be forced to return to status quo. However with the explanation above and support through management, they came to understand the situation, and recognize that there was still benefit to additional capacity, even if currently unused. Productivity, morale and costs all improved with no capital investment. Further, some operators preferred night shift so a small contingent was kept on, allowing makeup on lost production or emergency orders. Customer response improved as a result.

Critical Success factors

- Clear understanding the problem. In this case, the request was for help in communication only, not help the fundamental productivity issue.
- Managing morale is as important as managing machinery.
- Flexibility as new information becomes available.
- Data is important in support of work in the field.