Topic: Laundry Department Waste Analysis and Cost Reduction

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The objective of this project was to identify waste and find areas to reduce the cost incurred by the Joplin Workshops Health Laundry Services (HLS) Department. Over the last five years the HLS Department has lost 49% of its market share due to its inability to keep costs at a competitive rate per pound of processed laundry. Commercial competition to HLS has been offering customers a rate of $0.35 per pound, while HLS is currently incurring costs of $0.46 per pound. It is necessary to lower the incurred cost or the HLS will no longer be able to remain open.

The research and design of this project was structured so that data collected from the HLS process could be compared to industry standards as well as observed machine capacities and historical data. This was done by collecting processing time and taking averages over time and quantifying them in per pound values so they could be related to industry standards. Data was collected by personal observation and recording on data sheets created just for this process. Data was also used from the historical processing data maintained by Ed Zimmer the department manager.

This project found that the largest impact on cost is the maintenance of the washing and drying machines. For the largest portion of time during this project 4 washers and 4 dryers were sitting idle due to maintenance issues, and other machines were experiencing large amounts of variation due to mechanical issues and contamination in the clean water lines. This increased processing time per pound and increased the amount of rework needed due to staining.

Issues found are already in the process of being addressed by the Joplin Workshops. They have replaced the water softener which was responsible for the contamination in the lines and have repaired 3 of the 4 idle washers. They have also sent a staff member for training by the machine manufacturer on proper maintenance techniques, diagnostics, and repair.

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