

## ABSTRACT

### The Pad Climbing Route Setting Process Redesign

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This study took place at The Pad Climbing, a rock climbing gym in San Luis Obispo. The problem was that the process of setting new climbing routes was time-consuming and potentially dangerous. This resulted in lower capacity, high labor costs, decreased customer satisfaction, and safety risk for employees and customers. The objective of this study was to analyze the route setting process and identify areas of waste and danger, then to redesign the process to improve these areas. Techniques such as time studies, Pareto charts, and process flow mapping were used to analyze the existing process. A new process was designed, and recommendations were made for improvements in customer service and safety. A survey of customers at The Pad was used to test the recommendations. The survey results showed a large majority agreed that they would be more satisfied with each recommendation that was proposed. The new process was implemented and evaluated using a second set of time studies. The result was a reduction in total process time from 4.5 hours per route to 3.3 hours per route, a 27% improvement. This is equivalent to a cost savings of \$24 a route based on average wages for a route setter. Based on an estimated 240 routes set per year, this would save The Pad \$5760 a year.