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Keying Process

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Ben Shaver, Jacob Raveling, & Mary Gail Knutson

Keying Process

Cardinal IG Co, Greenfield, IA

Problem Statement

The current process for setting guide keys into aluminum extrusions is performed manually. It is a tedious and unergonomic process. The team needs to evaluate the process for improvement or replacement.

Objective(s)

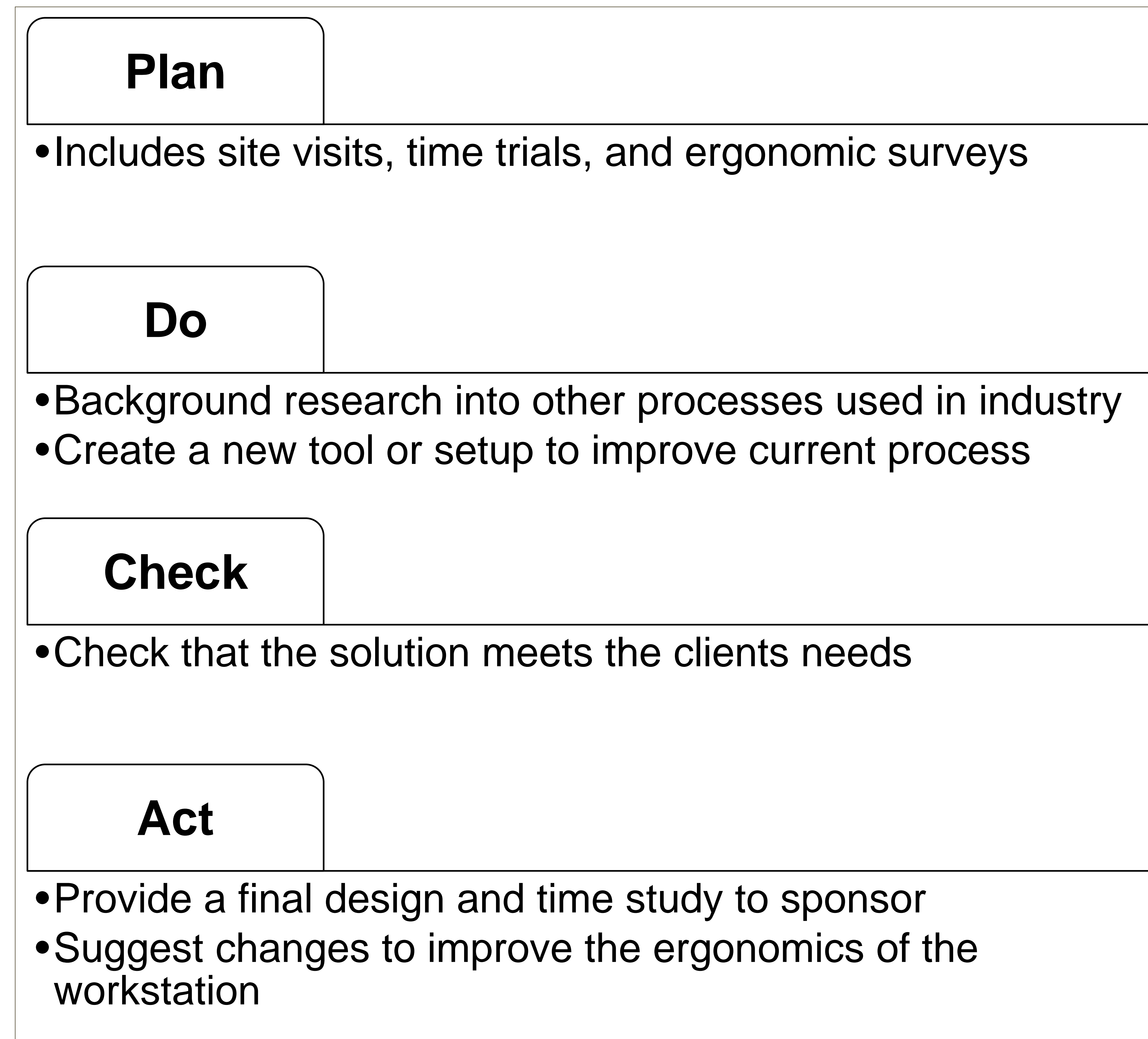
- Improve process to reduce cycle time by 15%
- Improve overall ergonomics of the process

Constraints

- Complete before end of TSM 416
- Budget constraints

Scope

- Analyze current process/ergonomics
- Develop improved process
- Test new design
- Implement final solution
- Final process time study
- Evaluate final ergonomics
- Completing class deliverables
- Background research



Methods

- Ergonomic survey for current process and proposed process
- Time study for analyzing cycle time reduction

Proposed Solutions

- Improve current process
- Deploy a new process
- Encourage ergonomic improvements

Major Outcomes

- Assessment of current process for inefficiencies and ergonomic strain
- Cost benefit analysis and ergonomic assessment of each recommendation
- Implementation of recommendation
- DMAIC/PDCA plan for future improvements

Benefit to Client

- Reduction of manager's wasted time
- Improved process ergonomics
- Ergonomic recommendations for work station
- A plan for continuous improvement

