

# IMPLEMENTATION OF LEAN PRACTICES AMONG FINISHING CONTRACTORS IN THE US

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## BACKGROUND AND IDENTIFICATION OF PROBLEM

The application of lean principles in various areas of the construction process has been well-documented, however research regarding the implementation of lean practices among building finishing contractors is lacking. In the niche of building finishing, contractors are often smaller and may have limited knowledge and training related to lean practices. In the average single family house, the interior finishes cost nearly 30% of the total construction (Taylor 2014). In the average apartment complex, building finishes average around 12% of the total cost (RSMMeans 2015).

## RESEARCH AIM AND METHODOLOGY

The purpose of this research project was to analyze the current level of lean implementation among building finishing contractors in the US. More specifically, the following research questions related to building finishing contractors were addressed:

- How common is lean implementation?
- What are the drivers, challenges, benefits and barriers to implementation of lean practices?

Data was collected using an online survey. Respondents were randomly selected from the publicly available member directory of the Finishing Contractors Association (FCA). Respondents had various specialties (e.g., painting, drywall finishing, etc.) but were all involved in the finishing stage of a construction project as previously defined.

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## RESEARCH FINDINGS

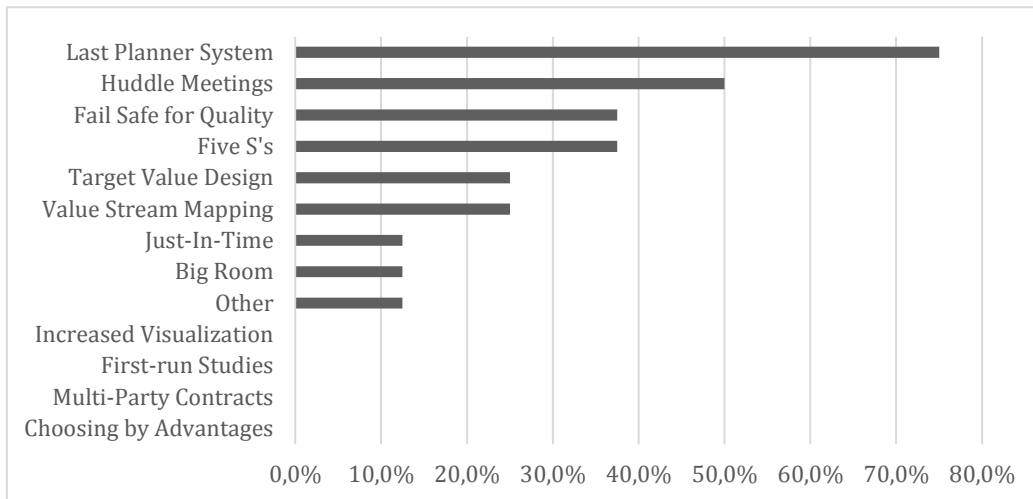


Figure 1: Lean practices currently implemented by practicing finishing contractors.

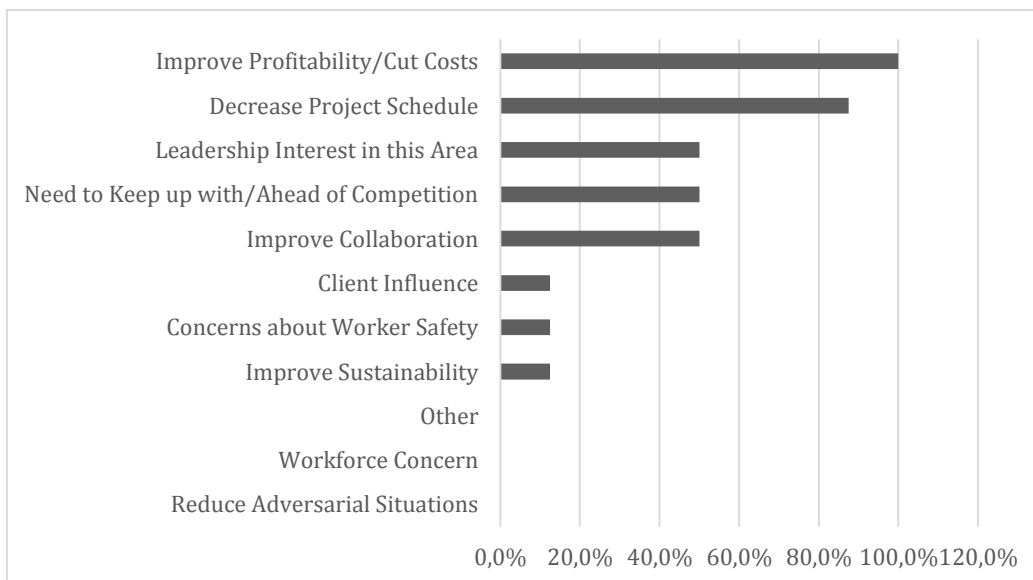


Figure 2: Drivers for lean implementation by practicing finishing contractors.



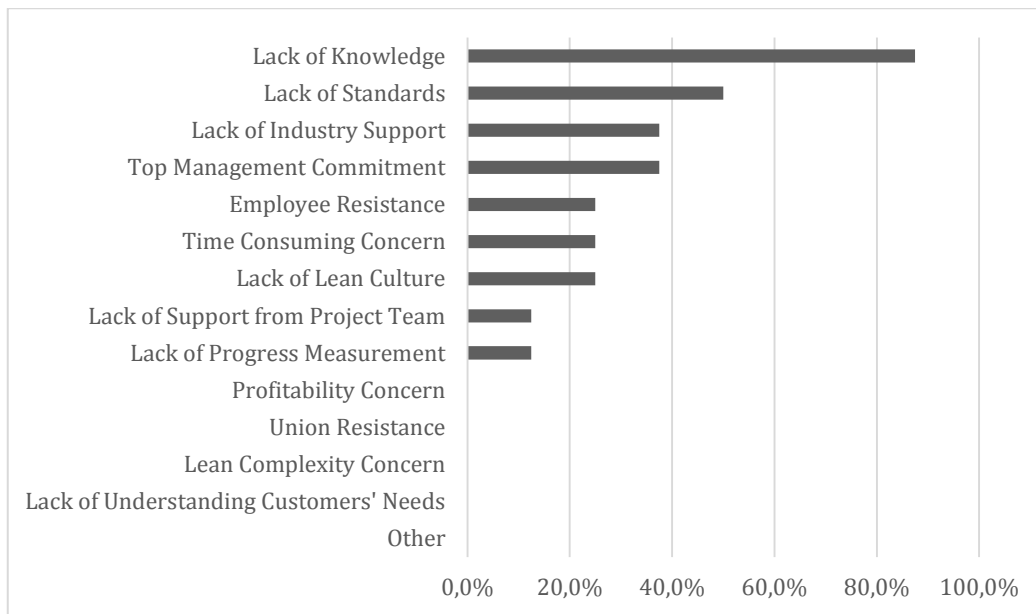


Figure 3: Lean implementation challenges for practicing finishing contractors.

## CONCLUSIONS

- Finishing contractors practicing lean experience similar benefits and barriers as other construction trades that have been examined.
- Primary recognized benefits by practicing finishing contractors of lean implementation relate to improved *planning and project coordination* and *client job satisfaction*.
- Primary barriers to lean implementation by non-practicing finishing contractors include *lack of knowledge* and *lack of industry support*.
- Lean practices are not common among finishing contractors, especially smaller contractors. Most of the finishing contractors that are implementing lean have above average annual volumes.