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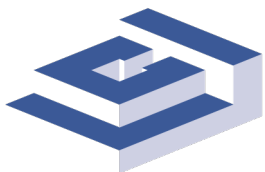
ATTRIBUTION GUIDELINES

Mace, B. (2016). “**Good to Great: What makes Projects Excel?**” “*Advances in Lean Design & Construction Practice from New England, across the US, and Abroad*” full-day event, IGLC-24, July 19, Boston, USA.

Good to Great: What makes Projects Excel?

Bevan Mace, Ph.D.
Balfour Beatty

July 19, 2016

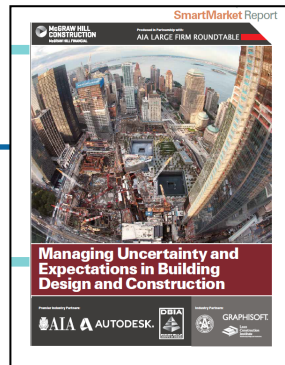


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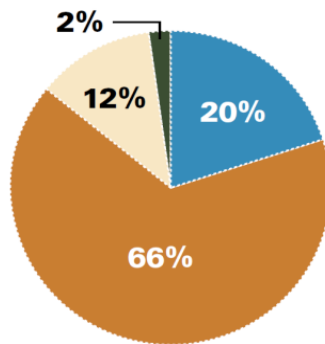
Owner Satisfaction

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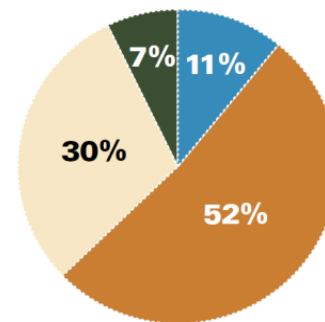
Quality

Owners



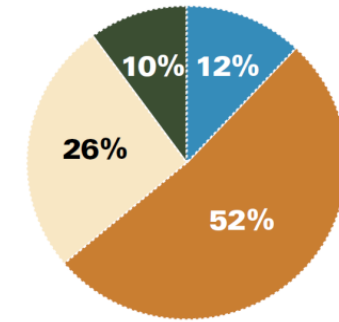
Cost

Owners



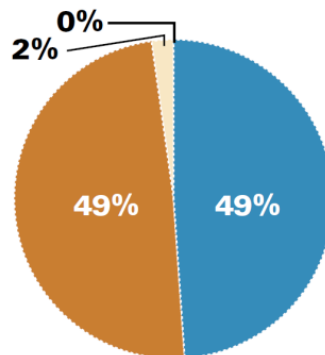
Schedule

Owners

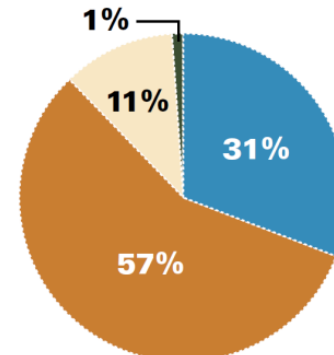


Always
Frequently
Sometimes
Infrequently/Never

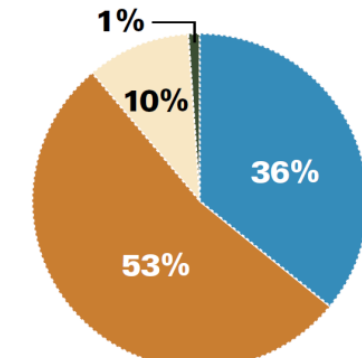
Architects and Contractors



Architects and Contractors

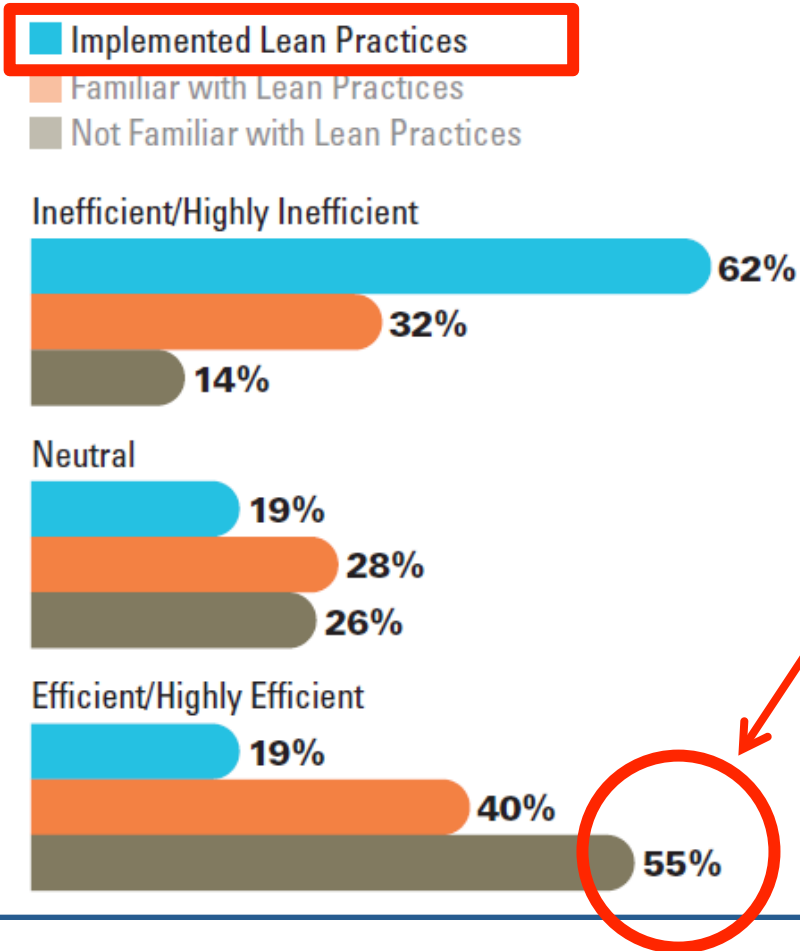
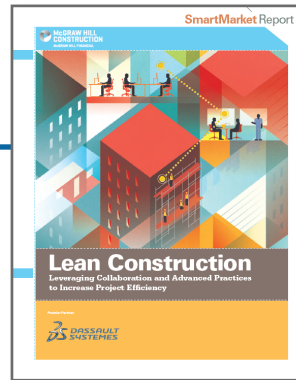


Architects and Contractors



Industry Efficiency

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Most who never heard of Lean think the industry is **Efficient**



Research Objectives

1. Create baseline of owner satisfaction



2. Explore the influence of LCI framework on project performance



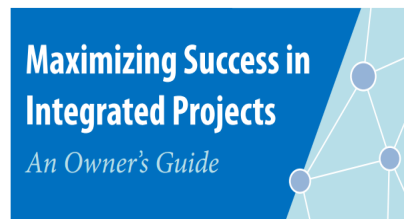
William R. (Bill) Reed, Executive Editor



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BOSTON FOR LEAN CONSTRUCTION

Research Methodology

1. Explore variance of “Typical” vs “Best”
2. Metrics to measure project performance
 - *Capital approval vs. start of construction*
 - *Through design, construction and occupancy*
5. Factors to understand project environment



CHARLES FANKOW
FOUNDATION

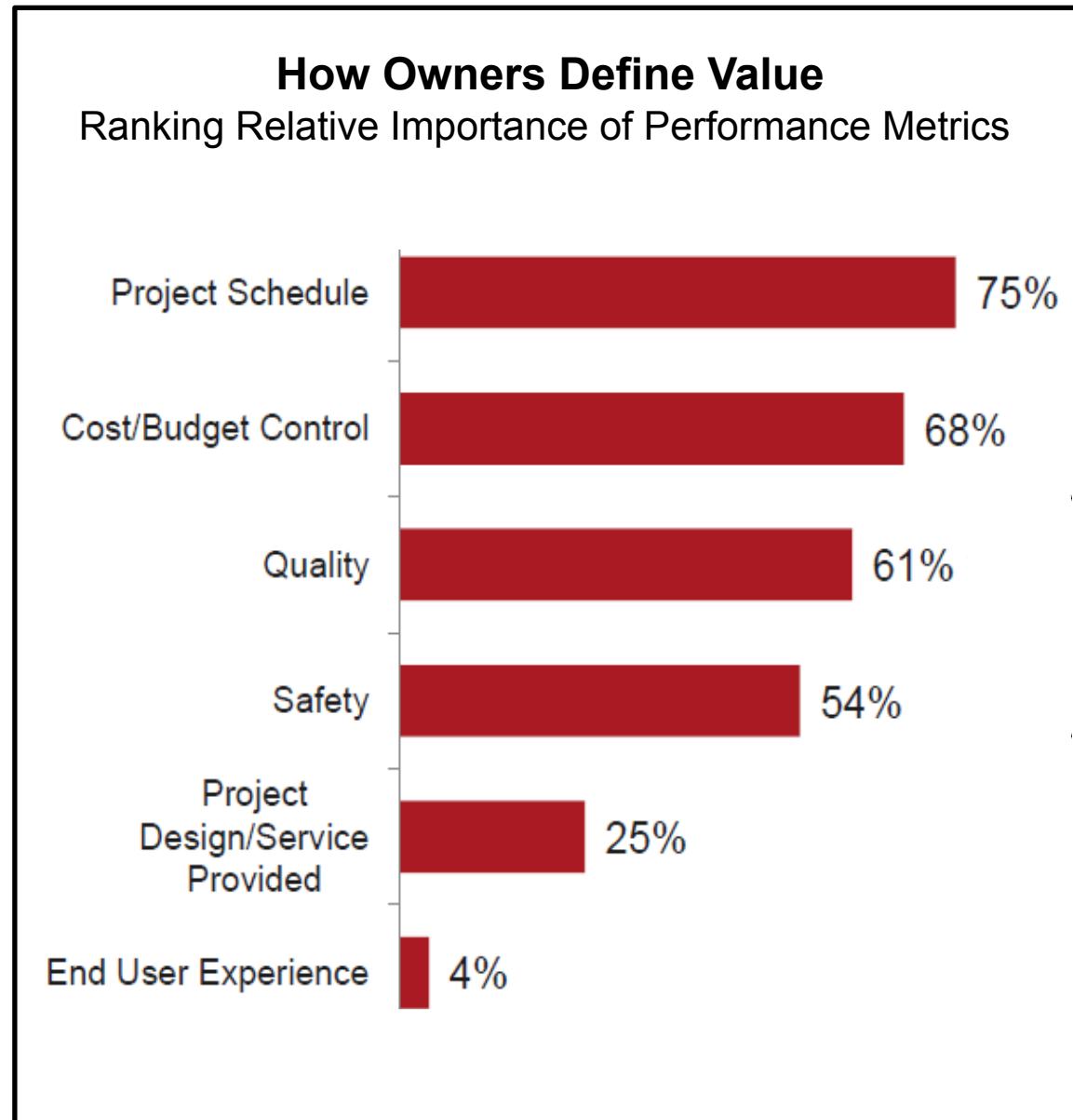


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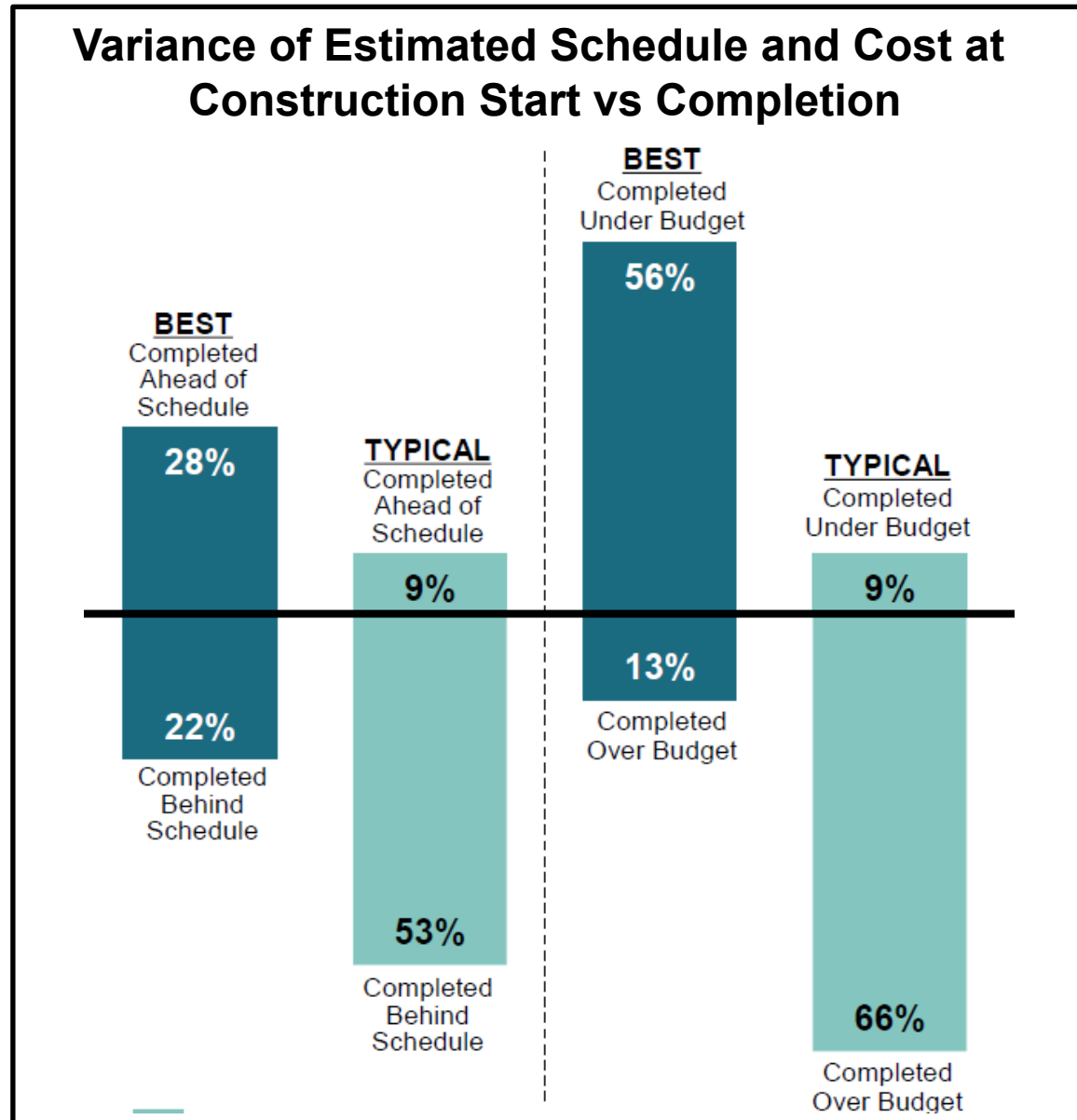
Performance: Owner Value

- Adherence to **Project Schedule** most highly valued



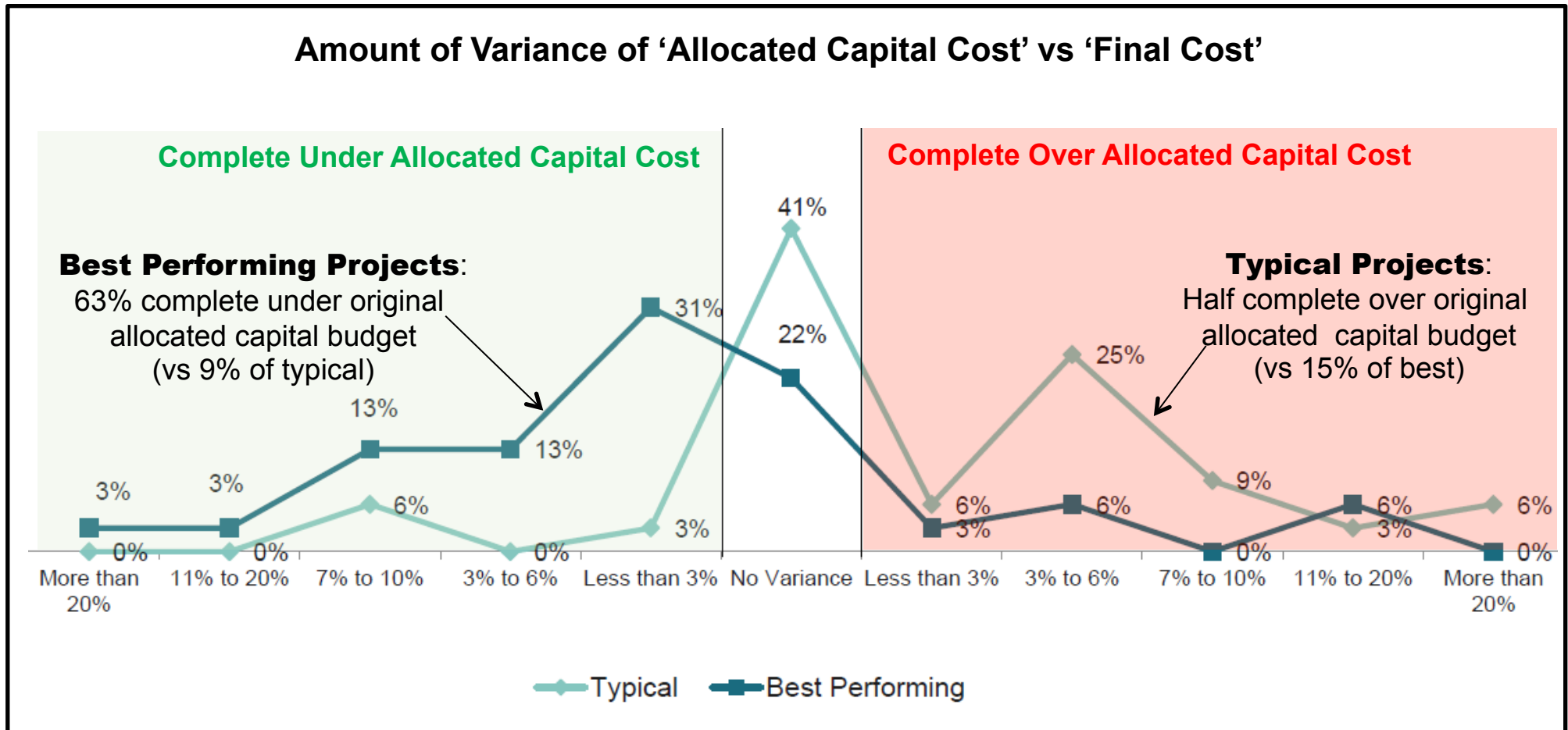
Performance: Cost/Schedule

- Most **Typical Projects** complete behind schedule, over budget
- Cost is improved more than schedule on **Best Performing Projects**



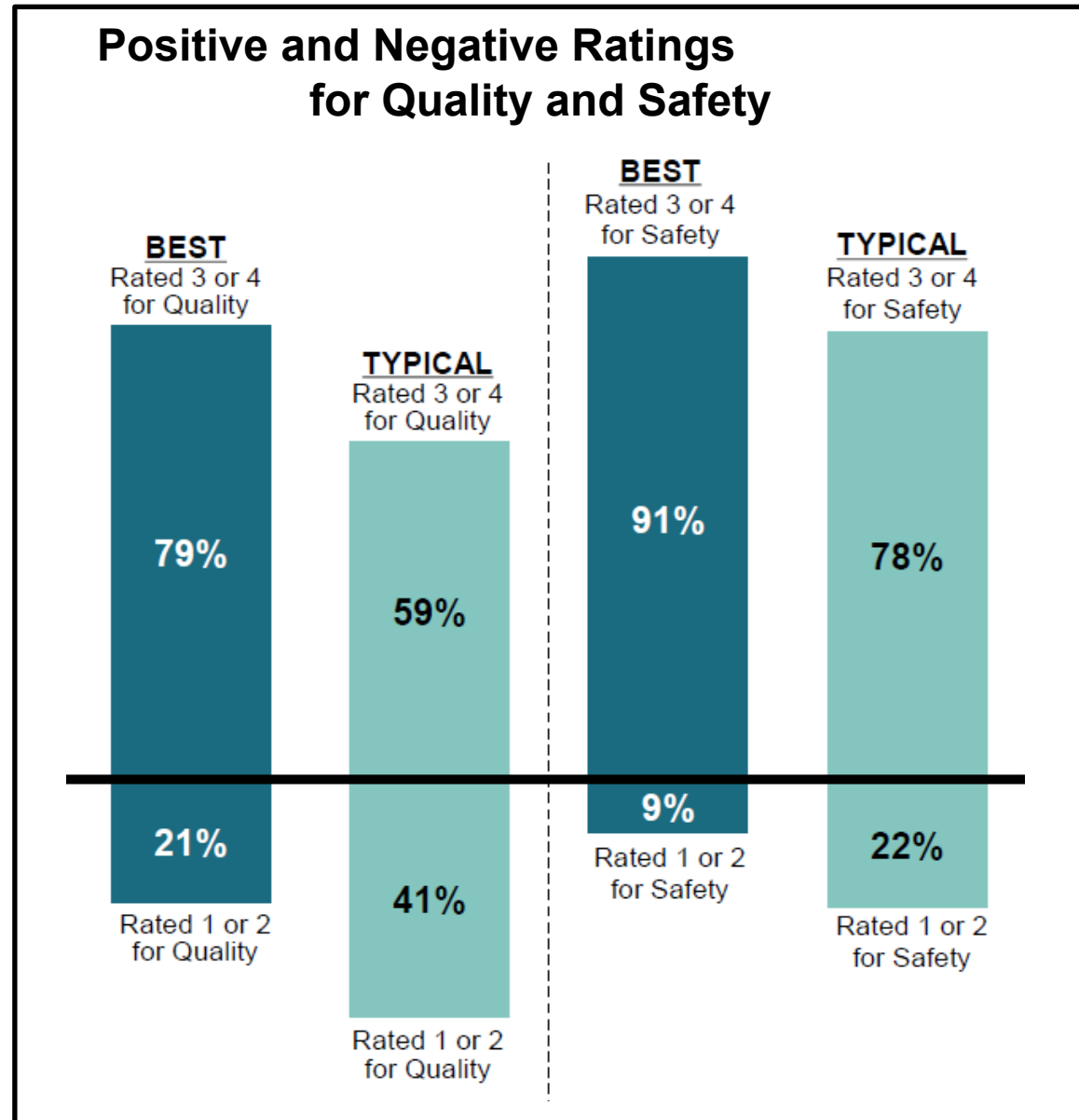
Performance: Cost

- 63% of best projects under budget vs. only 9% of typical



Performance: Quality/Safety

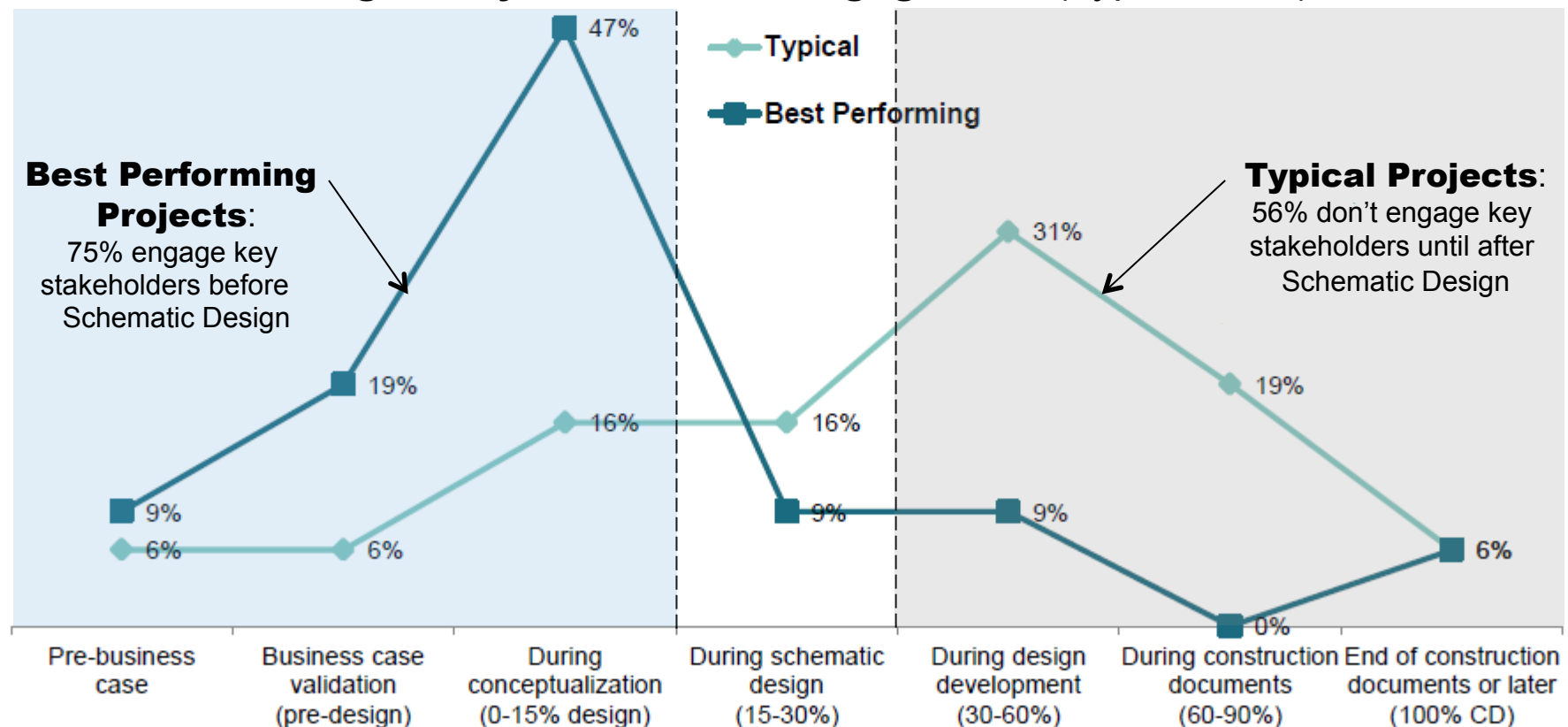
- **Typical Projects'** quality and safety performance is already better than cost and schedule
- **Best Projects** are 13-20 percentage points better, but overall impact is not as dramatic as cost



Organizational Aspects

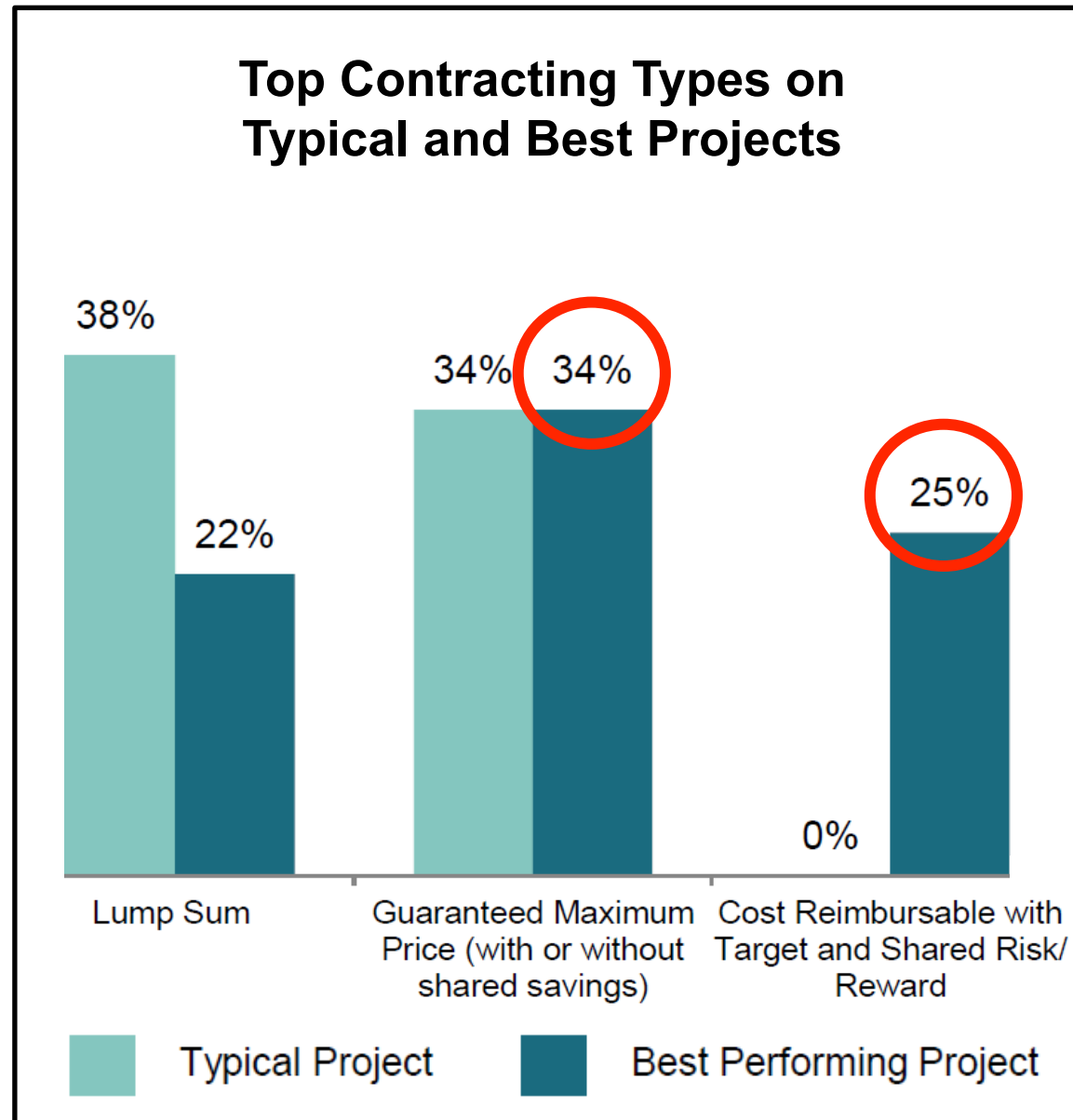
Early engagement is key aspect of best projects

Timing of Key Stakeholder Engagement (Typical/Best)



Commercial Aspects

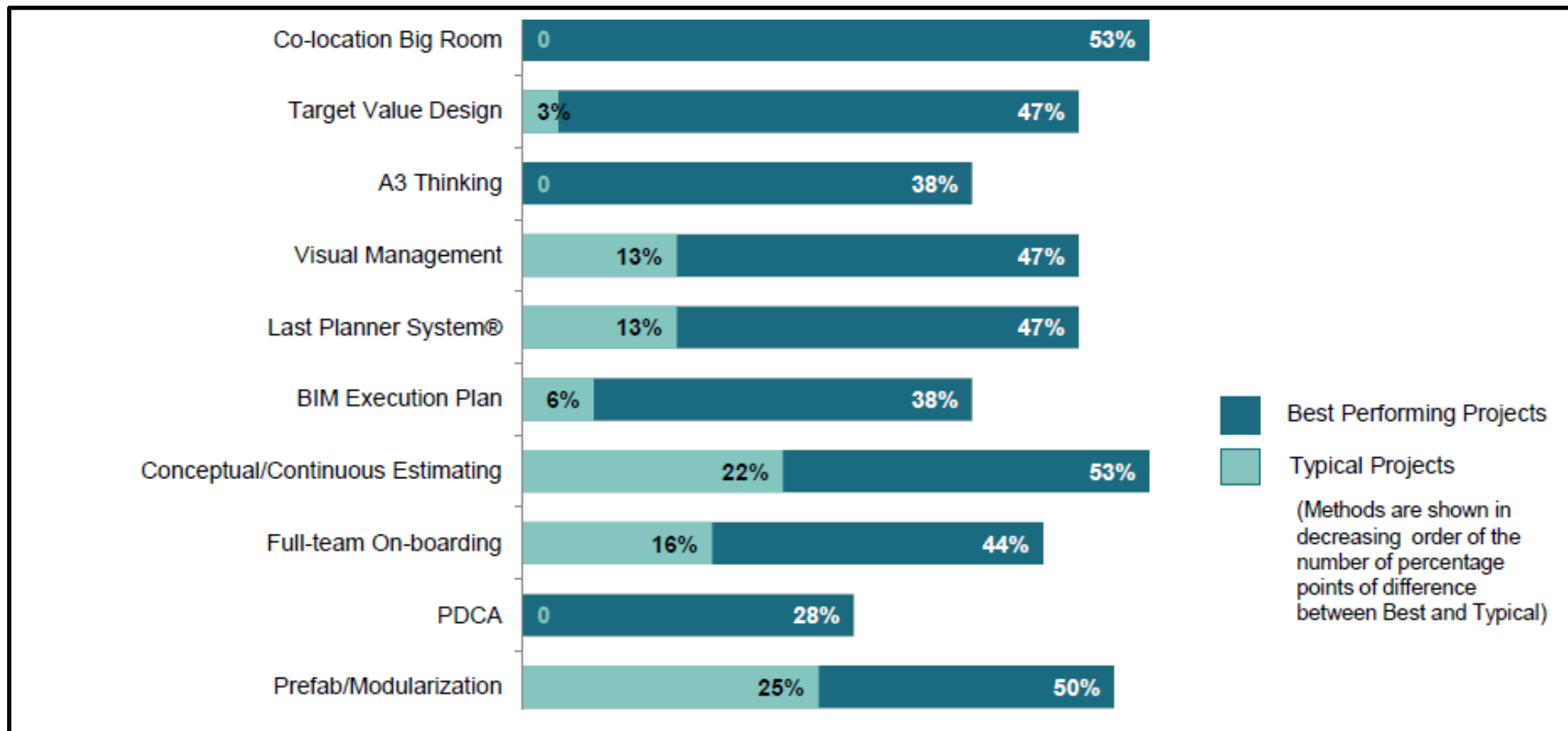
- **GMP*** is most frequent contract type on best performing projects
- **Cost Reimbursable with Target and Shared Risk/Reward** is only used on best performing projects



(* with or without shared savings)

Operating System Aspects

- 10/27 biggest gaps between typical and best projects

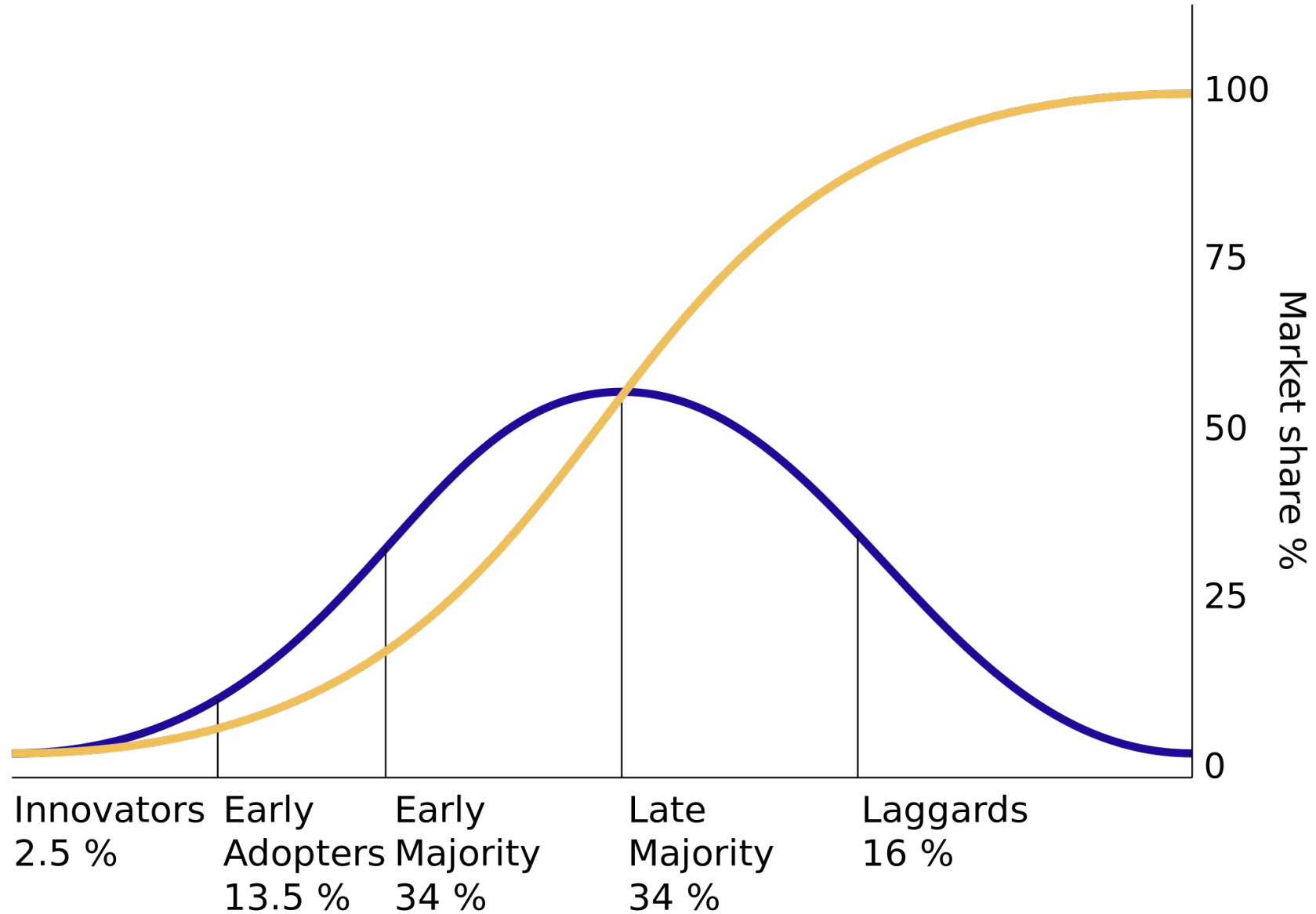


Takeaways

- Business culture influences project culture
- New methods require new training/skillsets
- Contracts need to support not thwart



How do we speed adoption?

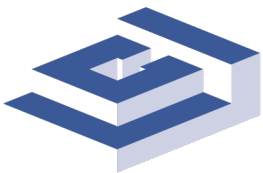




Questions?

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