Many industries use a methodology called Lean Six Sigma, but it has yet to take a solid hold on A/E design professionals and project managers—something licensed engineer Joshua Plenert wants to change. Plenert says Lean Six Sigma is “extremely valuable and extremely applicable” to firms that want to improve performance through better collaboration and waste reduction.

Waste reduction, explains the author of Strategic Excellence in the Architecture, Engineering, and Construction Industries: How AEC Firms Can Develop and Execute Strategy Using Lean Six Sigma, means fewer costs passed on to clients. And that means “we can drastically reduce fees and actually improve profits at the same time,” he adds. Plenert shares his insights into this methodology, which also provides an organizational framework for cultural change:

**WHAT IS LEAN SIX SIGMA?**

Lean and Six Sigma are two powerful process improvement methods that each include a set of valuable problem solving and process improvement tools. Lean focuses on removing waste, while Six Sigma focuses on removing variation from processes. These two methods are most effective when used together, hence the name.

**HOW DOES SHINGO FIT INTO THE MIX?**

This culture-centered approach to business improvement transforms short bursts of improvement typically associated with methods such as Lean Six Sigma into a continuous improvement strategy (Enterprise Excellence). This requires creating an environment for ideal behavior in every associate, setting up systems to drive behavior that achieves ideal business results, and making sure leaders and associates all understand what makes a sustainable culture of excellence.

**HOW METRICS INFLUENCE BEHAVIOR?**

They don’t if you focus only on profits or how quickly you can get a project out the door. Too often organizations apply metrics that serve no purpose other than to fill out quarterly reports. At times firms use metrics to assign blame and determine who should be let go. Developing metrics aligned with strategic objectives and that promote ideal behaviors will unify the organization and drive performance in the most critical areas of the business.

**WHAT ARE KPIs AND KBIs?**

A KPI (Key Performance Indicator) is a metric designed to drive performance, while a KBI (Key Behavioral Indicator) is a metric designed to influence behaviors. Using KPIs and KBIs together—and aligning them with strategic objectives—can be highly effective because they not only indicate to members of the organization what aspects of performance need improvement, but also what types of behaviors will support that improvement.

**HOW CAN TWO METRICS PROMOTE LONG-TERM SOLUTIONS?**

If you’re consistently experiencing project overruns (KPI), putting the blame on staff will not correct the lingering failures in the system. Instead, try tracking how often bottlenecks are identified, analyzed, and resolved (KBI). Measuring this type of information will help motivate behaviors that will produce sustainable improvements to the root causes of the overruns. In this way, the KBI will promote problem-solving behaviors that will ultimately drive sustainable improvements to the KPI.

Want your own copy of Strategic Excellence in the Architecture, Engineering, and Construction Industries: How AEC Firms Can Develop and Execute Strategy Using Lean Six Sigma? PSMJ has it: