

## Lean Enablers for Managing Engineering Programs – Lead Your Program to Success!

Are you interested in a best practice resource that will improve program and project performance? Is your company focused on cost, schedule, quality, and customer satisfaction? Would your organization benefit from tighter collaboration and working principles between the engineering and program management communities?

If you answered yes to any of these, "[The Guide to Lean Enablers for Managing Engineering Programs](#)" offers solutions. This study was the product of collaboration across three domains of management wisdom: Lean management, systems engineering and program management. The findings of the Joint Community of Practice were extensively validated through community and practitioner feedback, multiple workshops at INCOSE and PMI conferences, web-based meetings hosted by MIT's Lean Advancement Initiative (LAI), and surveys of the extended professional community. The survey results clearly show that programs that use the Lean Enablers show a significantly stronger performance in all dimensions—from cost, schedule, and quality, as well as stakeholder satisfaction.

The "[Lean Enablers for Systems Engineering](#)" helped serve as a basis for the Lean Enablers. This [work](#) won the INCOSE 2010 Best Product of the Year, the 2011 Shingo Research Prize for Best Research and Publication. Dr. Bo Oppenheim published "Lean for Systems Engineering with Lean Enablers for Systems Engineering", a book that explains Lean Systems Engineering and the supporting Lean Enablers.

The resource uses Lean Enablers to identify possible mitigation approaches (enablers) that can be applied to the risks. The ultimate goal is to use the identified enablers to reduce waste and risk, and in doing so enhance management of engineering programs so they deliver the intended benefits and ROI.

### ENABLERS IN ACTION

The researchers mapped PMI Project of the Year Award finalists to application of Lean Enablers. In both cases, researchers found that up to 65 percent of the Lean Enablers identified in the study had been applied within those programs. One project applied strategic supplier relations to proactively avoid conflict and anticipate and mitigate program risk, which helped drive the value stream. Suppliers provided important input in the very early cost estimation for the project and helped produce an accurate prediction of the final costs.

In the second program, a number of actions were taken to ensure efficient decision-making. A series of chartering workshops at the beginning of the program set foundations for efficient decision-making throughout the program.

Lastly, the program ensured that the right information required to make decisions and keep up to date was available. Those actions demonstrated alignment with Lean Enablers focused on pursuing "collaborative and inclusive decision-making that resolves the root causes of issues."

More information at <http://www.lean-program-management.org> – Sign up to our mailing list!

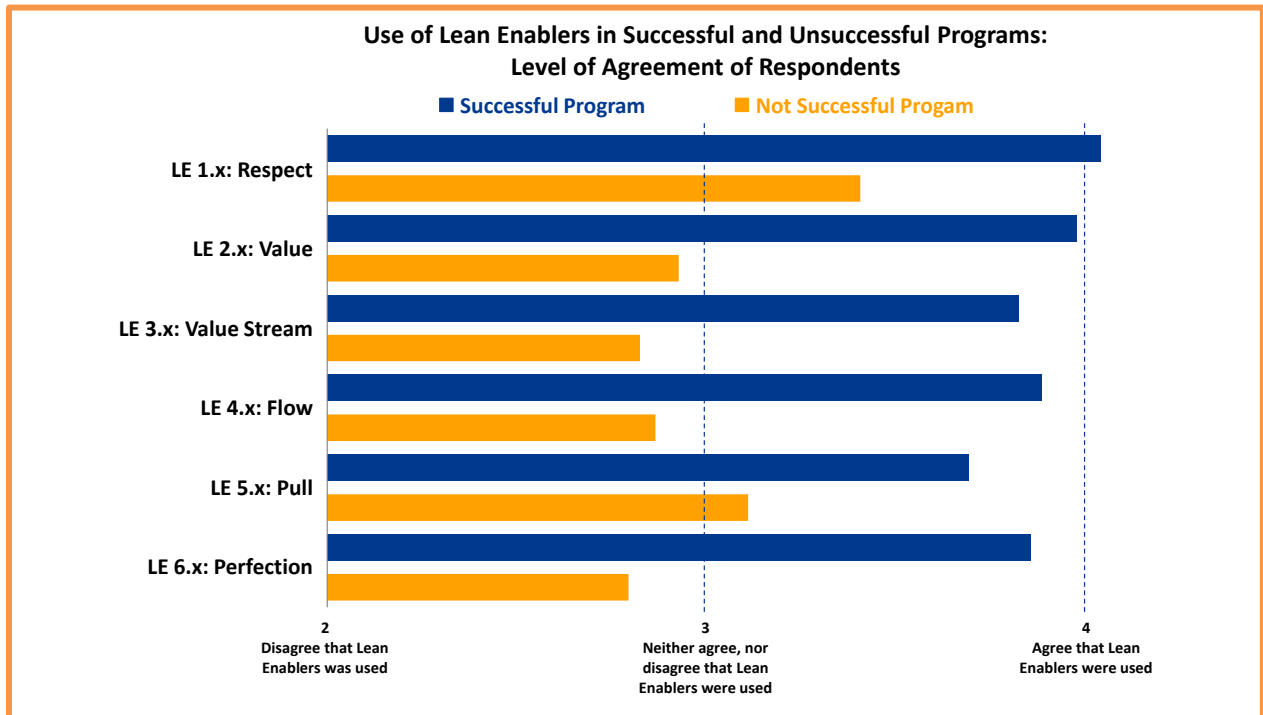
Direct download link for the "Guide": <http://dspace.mit.edu/handle/1721.1/70495>

"The use of Lean Management principles is particularly potent for organizations, as they heavily emphasize the need for overall integration of the value of delivery across all process and organizational boundaries -- including boundaries between program management and systems engineering," said Mark A. Langley, president and CEO of PMI. "While the study focused primarily on engineering programs, the findings can be applied to other programs as well, including IT, business transformation and community- and society-focused initiatives."

"LAI at MIT has focused, for almost two decades, on conducting enterprise-level research and developing unique tools and products to help organizations effectively and efficiently produce stakeholder value," explained LAI Director Prof. Deborah Nightingale. "The Guide to Lean Enablers is a very useful addition to the tools currently available and is the powerful result of a working collaboration between INCOSE, PMI, and LAI."

"This latest research and careful examination of highly successful programs illustrate how collaboration between program managers and systems engineers, paired with the adoption of Lean Enablers, contribute enormously to the success of programs," said John A. Thomas, president of INCOSE. "By strategically solving specific challenges, Lean thinking removes waste and creates a valuable core competency around delivering value to customers."

Review the enablers and adopt those that make sense for your programs. The study report includes suggestions on how organizations can apply the Lean Enablers, as well as some of the barriers that may be encountered by practitioners. The key to success is to focus on one specific challenge and, once the desired level of improvement is achieved, identify the next challenge to tackle.



The study results show: using Lean Enabler leads to higher program performance