

Executive Summary

The Lean-Agile PMO: Using Lean Thinking to Accelerate Agile Project Delivery

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Corporate project portfolios are routinely challenged in many firms. Looking across the portfolio, the executive will often see projects that are late and overbudget, deliver poor value, and have less-than-satisfied business sponsors and end users. In this *Executive Report* (download the complete report at www.cutter.com/offers/leanagile.html), we offer suggestions on how Agile development can help at the project level and how to incorporate Lean thinking to deal with the issues at the portfolio level that will result in increased project throughput, increased financial investment performance, and increased business sponsor satisfaction.

THE EFFECTS OF AGILE ON AN ORGANIZATION

Forrester Research reports that 14% of North American and European early adopter enterprises are using Agile, and a second wave of adoption involving another 19% is underway with corporate IT leading the masses. And a recent survey by the Agile lifecycle product company VersionOne indicates that 60% of organizations adopting Agile methods realize a greater than 25% acceleration in time to market. In addition, Agile has been shown to positively impact investment performance, business partner satisfaction, team satisfaction, and quality.

But not all of the impacts of Agile are positive. Because of the way that Agile teams are organized and how they interact with the rest of the organization, the widespread

adoption of Agile can cause painful change in portfolio management. For example, Agile will cause increased resource contention and misalignment with typical metrics and audit points. And more importantly, typical portfolio optimization techniques will actually undermine the potential positive effects of Agile development. By adopting thinking from Toyota, which is the ultimate Lean manufacturer and utilizes a model that most of the Lean world looks to, the project management office (PMO) can better navigate these issues and deliver more value — faster.

DEFINING PRINCIPLES FOR THE LEAN-AGILE PMO

Our experiences delivering Agile projects over the past seven years indicate that Agile practices at the project level must be complemented by Lean principles at the portfolio level. Most organizations have too many projects in progress at one time. Just as having too many cars on a highway forces speed to plummet, having too many projects in development forces project delivery to plummet. Traffic systems, networking systems, and queuing theory predict this behavior.

A Lean organization does not waste resources starting projects faster than it can complete them. Also, project completion rate is governed by organizational constraints. What is the narrow constraint in your organization? Is it the capacity of your subject matter experts? Is it the availability of your test environ-

ments? A Lean organization will first try to maximize effectiveness at the constraint and then add to the capacity of the constraint in order to increase overall throughput.

MANAGING THE LEAN-AGILE PORTFOLIO

In a traditional environment, portfolio managers maximize utilization of individual resources and try to start as many projects at once as possible. Managing throughput, however, can help organizations avoid the negative effects associated with optimizing resource utilization. To achieve this, we recommend the following Lean-Agile principles and practices.

Align Continuously

Competitive actions, new regulatory findings, new business opportunities, internal reorganizations, and a variety of other impacts can cause changes either to the PMO strategy itself or changes in how the strategy is going to be implemented. It is important for the Lean-Agile PMO to ensure that project ideas and business cases are reviewed regularly throughout the year, and that the project ideas are compared with each other as opposed to being reviewed serially.

Manage Project Throughput

The focus of Lean management is to maximize flow and the role of the Lean-Agile PMO is to maximize project delivery speed. The Lean-Agile PMO puts less emphasis on traditional metrics, such as individual utilization, which actually impede flow and hamper investment performance and business partner satisfaction. In a Lean and Agile environment, the PMO will only start as many projects as there are available teams. Each Agile team is as fully cross-functional as practical containing business analysts, development leads/designers, developers, testers, and others. Projects are then pulled from a prioritized project backlog of selected projects and allocated to the appropriate team. The team then focuses on the

chosen project alone. Working closely with the business sponsor, it should be able to finish it much more quickly than in traditional environments.

Another way to improve portfolio throughput is to reduce project inventory by purging “sick” projects, thereby redirecting team members’ efforts to more productive projects, which in turn will be completed faster. Our experience and the reported experience of others often show improvements in time to market of up to 40% with these practices.

Manage System Constraints

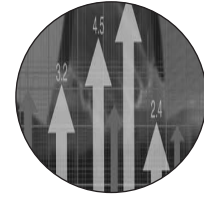
The Theory of Constraints is based on the premise that the rate of revenue generation is limited by at least one constraining process (i.e., a bottleneck). Only by increasing throughput (production rate) at the bottleneck process can overall throughput be increased. Every organization has constraints, and only through finding and expanding the constraints will organizations be able to deliver more projects per given unit of time. For example, adding more application developers in an environment that is constrained by flow through the testing organization will add a lot of cost without doing much to make the organization deliver faster.

CONCLUSION

By applying the principles and practices outlined in the report, the Lean-Agile PMO can help ensure that it is:

- Always focused on the highest priorities
- Responsive to the business in managing changing priorities
- Always delivering the highest possible value to the organization
- Always in alignment with strategy
- Delivering projects at the greatest possible speed
- Maximizing investment returns

Managing throughput by reducing project inventory and improving the project completion rate are the best ways to globally optimize financial performance.



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