Making Lean the Dean of IT Portfolio Management

By prioritizing practices that drive organizational agility and value creation, IT can build and deploy software and services that are more tightly aligned with the ever-changing business requirements of today's dynamic digital marketplace.

Executive Summary

Amid the hypercompetitive global economy, Agile software development has emerged as a proven way to rapidly launch business-aligned software and services. Despite considerable momentum, however, we still find that organizational decision-making and governance methods have remained rooted in old practices tied to traditional design, funding and execution models.

Customer-centric organizations recognize that in today's fast-changing business environment, Agile project methods and delivery are not sufficient. To enable market differentiation, it is time to turn the emphasis to scaling agility within strategic- and portfolio-planning processes.

In our engagements assessing enterprise project and portfolio management (PPM) capabilities, we have found numerous instances of organizations applying a legacy mindset to portfolio management, using waterfall-based, phased budgeting and planning cycles. This creates a drag on Agile teams, many of whom are trained to deliver quicker, better and less expensive products to keep their organizations viable in today's dynamic digital marketplace.

Lean-Agile portfolio (LeAP) management introduces techniques for organizing work in Agile organizations from portfolios to teams, providing the visibility needed to ensure alignment and success with future initiatives. The goal of this approach is to demystify what happens in large enterprises in which various interdependencies can derail success with Agile.

This white paper reveals how Lean practices, applied to portfolio management, can help bridge the gap between Agile teams and management and create a winning digital enterprise. It also highlights the drawbacks of traditional portfolio management, and discusses how Lean values and principles can be applied to design a LeAP program management framework for prioritizing organizational thinking. We also identify practices that drive organizational agility and value creation using portfolio, programs and teams in a change-driven world.
But First, Some Definitions

According to the Project Management Institute, a portfolio is a collection of programs, projects or operations that are managed as a group to achieve strategic objectives. Portfolio management is the coordinated management of one or more portfolios to achieve organizational strategies and objectives. Management processes include evaluation, selection, prioritization and allocation of limited resources to best accomplish the strategic intent of the enterprise.

As portfolio management practices take hold, they generate crucial contextual information that feeds back to enterprise strategic planning, altering current and future investment decisions.

A portfolio management capability answers the following key questions:

- Are our prioritizations in line with our company targets and capitalization goals?
- Are we working on the right things?
- What work should we plan to do?
- What expertise would we need to deliver our plans?
- Where are we spending our capacity?
- What work is in process?
- How much value are we planning to deliver?
- When and how much value are we actually delivering?
- What work should we kill, and where do we re-direct our funds?

We have found that Agile teams and executive management have different answers to these questions due to their different focus areas (see Figure 1) and are evaluated on different measurement parameters.

To address these mismatches, IT organizations must shift from a traditional portfolio management approach that is administration-focused to a value-driven portfolio management operating model that is inclusive, lean and geared toward leveraging decentralized decision-making.

A Review of Traditional Portfolio Management

As depicted in Figure 2, traditional portfolio management follows a rigid, phased approach that moves from opportunity search to project realization. This often results in delays and long lead and cycle times. In addition, project selection and fund allocation follow an annual cycle, with resources and funds locked for the remainder of the year.

Table: Mismatch between Teams and Executives

<table>
<thead>
<tr>
<th>Topic</th>
<th>Agile Teams</th>
<th>Executive Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Execution Style</td>
<td>Focus is on “how” to do it.</td>
<td>Focus is on “what” to do.</td>
</tr>
<tr>
<td>Objective</td>
<td>Quick response to market requirements.</td>
<td>Strategic alignment and meeting business needs.</td>
</tr>
<tr>
<td>Planning</td>
<td>Iterative and incremental.</td>
<td>Predictive and prescriptive.</td>
</tr>
<tr>
<td>Roadmap &amp; Release Visibility</td>
<td>Two sprints (approximately four weeks out).</td>
<td>Two to four quarters (about six to 12 months out).</td>
</tr>
<tr>
<td>Key Practices and Artifacts</td>
<td>User stories, epics, velocity, story points, tasks and sprints.</td>
<td>Timelines, roadmaps, priorities, releases, strategy and alignment.</td>
</tr>
<tr>
<td>Desires</td>
<td>Accelerated time to market, reduced cost, higher quality.</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1

Figure 2
This model leads to practices depicted in Figure 3, which can undermine an enterprise’s ability to quickly respond to change. The results: missed revenue opportunities and delayed ROI on software development initiatives.

As a result, IT organizations need a new style of portfolio management that incorporates the following functions:

- An objective, balanced and accepted process to evaluate ideas and produce the next set of prioritized initiatives.
- Capacity management, which in the new model takes into account the demand, supply and resource constraints that impact portfolio delivery.
- Financial management, which now explores the funding, investment opportunities and financial returns from the overall portfolio.
- Performance management, which continuously tracks progress against pre-defined metrics.
- Governance, which ensures required gates and processes are in place for effective decision-making, work allocation and on-demand performance reporting, with traceability from strategic objectives to real value delivered by teams.

These capabilities, reinforced with best practices, must be injected into existing portfolio management, which leads to the creation of a LeAP program management framework. In the next section, we will more deeply explore LeAP and what it entails.

**Lean-Agile Portfolio Program Management**

First, let us consider the LeAP Manifesto (see Figure 4, next page) that will drive the proposed LeAP framework. The primary focus of LeAP is to empower enterprise agility by limiting work in process (WIP), prioritizing economic value and promoting continuous delivery through localized content authority and decision-making. In addition, it is critical to incorporate continuous feedback and improvement, using fact-based lifecycle governance.

The primary focus of LeAP is to empower enterprise agility by limiting work in process, prioritizing economic value and promoting continuous delivery through localized content authority and decision-making.

By following the LeAP manifesto, IT organizations can keep pace with the speed of digital business, and adapt to changing internal and external business requirements. Using LeAP, IT can prioritize activities with the highest impact, and allocate the right “resources” to getting work done. LeAP also helps direct incremental funds to where they would be most effective, with frequent re-balancing across portfolios. A LeAP approach also helps coordinate incremental delivery of pri-
The LeAP Manifesto

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating smaller, good-enough plans frequently.</td>
<td>Helps the organization keep pace with the speed of business, and adapt to internal and external change.</td>
</tr>
<tr>
<td>Delivering value through stable and predictable teams.</td>
<td>Enables prioritization of the highest-impact work, and allocation of the right resources.</td>
</tr>
<tr>
<td>Budgeting dynamically, with fiscal governance.</td>
<td>Helps the business direct incremental funds where they have the most impact, with frequent re-balancing across the portfolios.</td>
</tr>
<tr>
<td>Delivering customer value fast and frequently.</td>
<td>Enables fast delivery of prioritized work, with value reprioritization according to changing portfolio context.</td>
</tr>
<tr>
<td>Delivering frequent, incremental value.</td>
<td>Enables delivery of incremental value in timeboxes, with features allocated to teams for delivery.</td>
</tr>
</tbody>
</table>

Priorities

- Creating smaller, good-enough plans frequently.
- Delivering value through stable and predictable teams.
- Budgeting dynamically, with fiscal governance.
- Delivering customer value fast and frequently.
- Delivering frequent, incremental value.

Rationale

- Helps the organization keep pace with the speed of business, and adapt to internal and external change.
- Enables prioritization of the highest-impact work, and allocation of the right resources.
- Helps the business direct incremental funds where they have the most impact, with frequent re-balancing across the portfolios.
- Enables fast delivery of prioritized work, with value reprioritization according to changing portfolio context.
- Enables delivery of incremental value in timeboxes, with features allocated to teams for delivery.

Figure 4

Prioritized work, with near-constant value reprioritization within an ever-changing portfolio context.

The LeAP manifesto’s value and principles help generate improvements that align the business, portfolio and delivery arms of an organization. The goal, as depicted in Figure 5, is to optimize business value delivery, working in unison with business priorities and the delivery team’s capacity for execution.

In essence, LeAP is like a train with containers full of products running on an agreed-upon schedule to deliver the materials to designated train stations along the route. When the train’s containers are empty, it expects goods to be delivered on a schedule that aligns with the needs of the recipients. In LeAP terms, the train is the portfolio, the containers are the programs, the products are the minimum viable products (MVP) released incrementally, the train stations are the business units or end users, and the train schedule is the roadmap. Every “station” submits its demand request and expected timeline, based on the available containers and expected cargo; the train schedule is adjusted and finalized as

How LeAP Connects Business to Delivery via Portfolio Management

PORTFOLIO
Optimize Business Value
PPM drives program management and governance.
- Define and prioritize portfolio epics.
- Measure and report progress on investment spend.
- Manage WIP using portfolio Kanban system.
- Enable continuous improvements.

DELIVERY
Deliver Value Faster
PPM function supports and guides successful strategy execution using programs and teams.
- Institute decentralized, rolling wave planning.
- Develop self-managed Agile release trains.
- Use cross-program epic prioritization.
- Create lifecycle governance.

BUSINESS
Sense and Respond to Change
PPM leaders provide portfolio context during portfolio strategy formulation.
- Define strategic themes aligned with enterprise strategy, technology and financial constraints.
- Determine value streams and allocate budgets to them.

Figure 5
the train travels through the stations and delivers its products.

As Figure 6 illustrates, LeAP begins with a portfolio backlog consisting of strategic themes derived from the enterprise business strategy. Each portfolio epic is decomposed into program-specific, implementable epics that are reviewed and approved in an agreed-upon cadence, typically every month or less.

The program epics are grouped into an MVP that achieves the desired value with the shortest possible increment. Epic scheduling across multiple programs should undergo global epic prioritization using the weighted shortest job first (WSJF) technique. The highest ranked epics drive the resources needed for implementation, which must be closely managed using a pull-based Kanban portfolio system.

**Two-Part LeAP Framework**

The LeAP framework has two parts (A and B) to simplify and address specific goals and challenges faced upstream (Part A) and downstream (Part B).

LeAP Part A, which is focused on connecting enterprise strategy to portfolio strategic themes, consists of three key components (see Figure 7):

- Formulate business strategy.
- Plan portfolio strategy.
- Execute business strategy.

**LeAP Part A Model (Enterprise to Portfolio Processes)**

Figure 6

Figure 7
Formulate Business Strategy

Based on available opportunities, executives and fiduciaries with direct accountability of business performance centrally formulate the enterprise business strategy. Each enterprise will have multiple portfolios with their own budget and strategic themes, which in turn reflect that unit’s portion of the business strategy.

A key input into the business strategy is the portfolio context in which it operates, reflected in performance measures such as ROI, customer satisfaction, net promoter score, profit and cost, revenue vs. target, and market share. Every portfolio context is different and has a different impact on the business strategy.

Plan Portfolio Strategy

The input to this cadence-based crucial planning exercise is the available enterprise budget; enterprise business drivers and financial goals; competitive environment, mission and core values; and, most important, the portfolio context. The output of this exercise is a breakdown of the portfolio budget and a set of strategic themes. Figure 8 reflects an example scenario.

Execute Business Strategy

Based on the prioritized strategic themes and budget allocation from the aforementioned process, the strategic theme epics are handed over to the related programs. There, they are decomposed into program-specific epics that
can be implemented by delivery teams within the programs.

As we see in Figure 9, each strategic theme epic has an epic lead who drives it from identification through portfolio prioritization and approval, initiates epic development based on available program capacities, and provides continuous feedback on its progress to the portfolio leadership.

LeAP Part B

Figure 10 illustrates LeAP Part B, which focuses on connecting portfolio programs to the delivery teams. The strategic theme epics queued in the portfolio backlog are reviewed by portfolio leadership and prioritized. The output is a sequence of program epics based on priority and grouped into MVPs.

During global epic prioritization, the high-level scheduling of MVPs is conducted based on the capacity of available teams within the chartered programs. During program increment planning, the teams decompose the epics into team-specific user stories that are sized and slotted into upcoming iterations, which take into account the inter-dependencies of the team.

These user stories are implemented and integrated across teams by the system team at the program level, and the integrated system is demonstrated to stakeholders at higher pre-production environments. The feedback is looped back through the programs into the portfolio strategy formulation and planning process.

Looking Forward

To meet today’s demand for faster and more business-aligned delivery of software and services, enterprises must define and institute LeAP program management practices that are built on continuous planning cycles and data-driven feedback. In our experience, this can help enterprises achieve greater visibility into the impact of changing demands on operational performance and keep pace with today’s dynamic digital economy.

Our proposed LeAP framework promotes best practices and helps portfolio management teams build the right product features, reduce in-flight project activities, and more effectively prioritize opportunities and capacity allocation.
In addition, the LeAP framework helps IT organizations achieve rolling-wave planning at appropriate levels, from enterprise-level strategy planning to team-level daily planning. This requires a unified PPM and lifecycle management tool as a single source of truth to achieve full transparency within and outside the portfolio to every stakeholder.

The LeAP framework is a disciplined approach for translating strategic aspirational goals into realistic execution plans that can be implemented as a set of best practices (see Figure 11).

Companies can begin the transition to LeAP program management by focusing on the four quadrants depicted in Figure 11 and following them clockwise, beginning with portfolio prioritization and alignment with value streams; moving to building a portfolio Kanban system for complete transparency and tracking; then on to integrating vision and ownership; and finally to establishing KPIs that report results against enterprise strategic goals.

The proposed LeAP framework has been successfully applied at many of our Fortune 500 financial services and insurance clients. The best approach is to perform a global assessment at the enterprise level of current portfolio management practices to identify immediate challenges and gaps in the LeAP framework building blocks. The next step is to define the LeAP portfolio management strategy roadmap to address the identified gaps in iterations.

By doing so, organizations can customize the framework and enable continuous improvement through constant feedback from portfolio stakeholders, program management and teams. Agile offers many benefits and opportunities for the digital age, and adopting a LeAP framework can help organizations realize those goals through better decision-making and improved Agile project ROI.
Footnotes


8 Ibid.


About the Author

Pranay K. Chanda is a Senior Agile Coach within Cognizant’s Agile Practice. He has been a Lean-Agile strategist, Agile Leader and Change Agent, with over 20 years of experience on accelerated solution delivery of large-scale, complex systems integration programs using scaled Agile methodologies in the healthcare, insurance, retail, and banking and financial services industries.

As a thought leader, Pranay helps clients along their Agile transformation journey, working closely with the portfolio and programs teams to deliver results using programs within portfolios; formulate a portfolio management strategy and organization design; define and integrate a DevOps strategy; and lead change identification and governance to provide greater speed and enhanced outcome and quality in the delivery process to adjust to evolving business needs.

Pranay has deep expertise in helping clients sustain beyond the Agile transformation roadmap; perform assessment across the enterprise Agile landscape; define and govern the change management leadership council; and establish and drive new initiatives through coaching hubs, communities of practice and engineering excellence knowledge hubs. He has deep experience in conducting Agile fitment and maturity assessment, Lean Agile portfolio management target state modeling and roadmap definition. Pranay can be reached at Pranay.Chanda@cognizant.com.

© Copyright 2016, Cognizant. All rights reserved. No part of this document may be reproduced, stored in a retrieval system, transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the express written permission from Cognizant. The information contained herein is subject to change without notice. All other trademarks mentioned herein are the property of their respective owners.