



DIGITALLY REMASTERED

Get Agile to Digitally Transform Quickly

The path from idea to business outcome—fueled by the need to innovate for competitive advantage—is now the critical path at the heart of your business. The software factory that makes the idea real must produce at a rate that allows you to deliver value to your customers at the speed they want to consume it; any slower means missing customer demand. Waterfall development—with its monolithic projects, long lead times and static requirements—falls down on delivering both speed and value. In stark contrast, agile methodologies decrease cycle times and increase delivered value through the continual iteration of small teams freed from the chains of bureaucratic development processes. Because that iteration continually revisits what you’re building in the context of what your customer wants, you increase speed by reducing rework, and increase value by intensifying engagement around the idea.

In this excerpt from “Digitally Remastered,” you’ll learn the importance of agile and how to scale it to help power your software factory, now and in the future.

Scaling Agile

The case for scaling agile practices is rooted in software's new and expanding place in the value chain. If the ability to deliver innovative experiences is a central determinant of competitive differentiation, then it stands to reason that your entire software factory needs to be optimized to deliver on that strategy.

Agile is inherently about optimizing software development across a particular project or a series of related projects. With the number of development projects, releases, and resources dedicated to delivering customer value constantly growing, having a holistic view of all your development investments becomes a business imperative. A deep understanding of your software portfolio is critical to ensuring that your investments are strategically aligned and provide an appropriate return to the business. This is where scaling agile across your entire portfolio can drive greater transparency around your development investments, give you the opportunity to optimize those investments, and ensure that they align with your strategy. Scaling agile across your organization also allows you to identify gaps and include new requirements at a portfolio level to allow you to predictably evolve the brand experience. Depending on your appetite and need for large-scale change in your organizational culture, agile principles can be extended to functions outside of software development such as finance, marketing, and other areas to achieve similar benefits.

Scaled agile isn't simply a software development methodology. What started as a movement around software teams has matured into an enterprise-scale business approach spanning teams of teams in distributed locations across a spectrum of industries. At scale, agile organizations need to be agile-informed in their organizational structure, processes, ceremonies, and culture. Importantly, agile is an operational model that enables companies to use business agility as a competitive advantage.

In short, agile at scale introduces organizations to a new way of working, thinking, and delivering value.

Roadblocks to Agile Adoption

The highest level of agile adoption requires organizing people around the creation of value. That requires groups to break down internal silos, form value-focused teams, and connect agility across the entire organization. By aligning people and teams around customer value and taking a disciplined approach to managing change, organizations can become responsive and better able to process innovative ideas and deliver them to customers. Deep adoption of agile requires changing established culture and will challenge even the most evolved agile supporter.

Organizational silos

Disparate, silo-oriented teams will require leaders representing multiple domains to advocate and drive agile adoption. A successful agile effort not only requires real buy-in from executive management, but will also demand agile supporters in leadership across business, technology, organizational, and personnel groups. An empowered dream team of leaders from diverse groups must keep agile on track and enable it to scale throughout the entire organization. In addition, champions at all levels within the organization are critical when it comes to driving agile adoption in a grass-roots fashion. Agile is not a top-down methodology, and successful agile adoption can't be either.

Resistance to change

Many might balk at making change an accepted part of the development process. Waterfall development locks down scope requirements so that schedule and cost can be planned and it minimizes feedback during development. This can result not only in subpar code quality but also in delivering features and functionality to customers that they don't value. Agile recognizes that scope is always a variable, and it welcomes feedback as a critical and inextricable part of the planning process that continues through to delivery. In agile, change is welcome as an integral part of optimizing outcomes.

Changing team dynamics

As agile efforts scale, more teams need to be added. The underlying power of agile is in the collective power of small, individual teams. Successfully scaling agile requires more teams, not bigger teams. The teams themselves must be empowered, self-organizing, and self-managing. Even as the number of teams grows, each team must be responsible for delivering a set of well-defined, customer-focused results. And as the number of teams increases, leaders must layer in practices that maintain transparency while coordinating the work between and among teams. Scaling agile requires a level of resolve, focus, and leader maturity to engage and direct what are essentially self-directed, but linked, teams.

The need for ongoing evangelization

Agile must not turn into a one-off project; it's a new way of working — and even thinking — within an organization. To have all aspects of agile successfully adopted across an entire enterprise, agile advocates have to keep touting agile's value and proving its benefit at every stage across every team. As more teams join the effort, leaders will be able to create mindsets and behaviors that drive ongoing improvements. The agile journey requires a belief in the fundamental value of agile principles as well as an understanding that it's a journey that never ends.

Getting Started

Don't get fooled into thinking that loosening up some parts of your development cycle for more iteration is the same as "doing agile." Agile is an end-to-end system, which is why it is able to effectively drive systemic change. By the same token, agile is not a religion. It's a system for producing outcomes that create value for your customers. Your system is not the driver, your customer is. And don't get locked into a fixed formula in your move to agile. Use agile principles in implementing your agile program, and adjust as you go based on your outcomes and the insights you gain on your journey.

Scaling agile¹ — especially in large enterprise companies — isn't just about adding more agile teams. Agile approaches may seem conceptually simple, but scaling agile isn't easy. It requires coordination, a willingness to learn, lots of patient practice, and a commitment to the tenets of collaboration, visibility, and continuous improvement.

1. **Focus on velocity.**

This first step on your agile journey is to focus on improving velocity; it's the heart of your agile transformation. Get your software and technology teams finishing their deliverables — with quality — as quickly as possible by building stable agile teams and delivery groups, and by reorienting people to thinking about delivering on shared outcomes. Improvements only matter if the organization delivers value all the way to the customer more effectively. Consider using metrics such as Net Promoter Score (NPS) to measure value, and be sure to track the number of releases delivered to customers per year to measure velocity. As you start to build velocity, you will be able to free up additional development resources and create a virtuous cycle of improved efficiency and value creation.

2. **Implement agile planning and work sequencing.**

Choose the most valuable, smallest pieces of work to deliver rapidly to your customers. Think carefully about planning the sequence of work and being able to deploy work more consistently. Limit the amount of work in progress across development and operations teams, and account and buffer for unplanned work. Include design, development, operations, architecture, security, compliance, analytics, and other relevant stakeholders in your delivery groups and in planning sessions. Provide all delivery teams visibility into each other's WiP using appropriate agile tools, and share feedback openly from stakeholder and customer sessions.

3. **Apply agile portfolio management.**

Evaluate the end-to-end cycle in delivering new value: from the moment you think about doing something; to the decision to proceed; to funding and allocating the right teams; to moving it through the development organization; to deploying it to customers and implementing it throughout the business. Based on value, you must regularly decide which projects to start, keep going, or stop. Determining value requires a tight connection between the implementation organization and the business need. Eliminate the expectation of exact requirements tied to a precise budget delivering a perfect solution to help you strike the right balance between strategy and tactics.

4. **Optimize investments on an ongoing basis.**

Dynamically and intentionally reduce or amplify your investments through quarterly steering and release planning. On the other end, make sure you're getting the full value out of what you've invested — that you're delivering what your business needs and what your customers want, when, where, and how they want it. Optimize what you build for the greatest impact. Support this by emphasizing mindsets and skills of disciplined opportunity exploration (using methods such as Enterprise Lean Startup²) and by limiting organizational WiP. At the center of limiting WiP is a reduction in batch sizes enabled by short iterations, each of which is able to deliver a small portion of a larger segment of value.

5. **Sense and respond with business agility.**

Articulate shared outcomes, demonstrate high-trust leadership, and adopt a pragmatic, problem-solving mindset throughout your business. Cultivate organizational health by clearly expressing these same goals, establishing trust-based teams through regular and open communication, and by collaborating across as well as up and down flatter management structures. Create what may at first feel like threatening levels of transparency, and delegate decision-making all the way down.

Establish structural flexibility with adaptable funding models, and understand how to flow work to shape your business on demand. Become able to sense new opportunities in the digital age by welcoming — in fact, expecting — innovation to come from everyone by giving every single employee a charter for disciplined exploration.

Making the move to adopt agile practices is difficult and requires tenacity as well as sensitivity to the cultural aspect of the transformation. But by embracing a different way of thinking and operating to accomplish the distinct, high-impact activities outlined, you will be able to achieve results that may have previously seemed unattainable.

PayPal takes a big-bang approach to agile to increase speed to market³

When Kirsten Wolberg joined PayPal a few years ago as a new VP of Technology, everyone she spoke with in the development organization told her the same thing: it was really hard to get work done. PayPal was relying on waterfall development methodologies and, because their workforce was so specialized, there were 85 bottlenecks within the development process.

One problem was that the development teams were focused on very large-scale development projects that would take years to get out the door. Huge product specification documents would be thrown over the wall to development teams. By the time the product was released, there was often a complete disconnect between what customers wanted and what the technology teams delivered.

Additionally, PayPal was operating with a “project mindset,” rather than a “product mindset.” If a technology leader had a product idea to develop, she or he would assemble developers from across the organization. After the release was out the door, those developers would be assigned to the next new project. As a result, products were essentially orphaned after they were rolled out; there was no one who understood the code and maintained consistent ownership of the product and whether it was meeting customer expectations over time.

PayPal began experimenting with some pilot agile projects, introducing the concepts of minimum viable product and dedicated scrum teams. They began seeing some benefits right away. “With teams in place that fundamentally own the products in the marketplace, they took responsibility for the customer experience. They care about the quality of that product. They care about what the next release is going to look like, and how it’s going to meet customer needs. That mindset shift has resulted in much better experience for our customers, and a better experience for our teams, because they have much greater pride in the work they’re doing,” said Wolberg.

With these initial successes in hand, Wolberg pushed for a “big bang” approach to scale agile quickly to the rest of the development organization. She realized that because development teams are so dependent on each other, PayPal wouldn’t see the full benefits of agile until they had all teams adopting the methodology. Additionally, Wolberg feared that because everyone would feel the pain involved with change but not see the benefits in the short-term, executive support for agile might wane if they didn’t move quickly enough.

After seven months of planning and training, PayPal moved from having 20 percent of its development organization following agile approaches to its entire technology and product organization of people adopting agile, scrumming in two-week sprints. The results speak for themselves: in the 18 months prior to its full-scale adoption of agile, PayPal had rolled out three new products. In the six months after full-scale adoption, it had rolled out 58 new products and features. “By forcing the entire team — 3,500 people across four major development centers and 40 global business offices — to move on the exact same day to a new way of working, the entire organization began to see the benefits immediately,” Wolberg said.

Learn more:

See how CA can help you get agile and speed your software factory.
ca.com/agile

Get the entire book:

Download the entire Digitally Remastered book to learn how to fully tool your software factory and drive successful digital transformation.

- 1 CA Technologies, “A CIO’s Guide: Five Steps to Business Agility,” 2015, (<http://www.ca.com/content/dam/ca/us/files/white-paper/a-cios-guide-five-steps-to-business-agility.pdf?intcmp=searchresultclick&resultnum=2>)
- 2 Zach Nies, et al., Rally Software, “The Enterprise Lean Startup Approach,” 2014, <https://www.rallydev.com/toolkits/enterprise-leanstartup>
- 3 Interview conducted by CA Technologies, “PayPal takes a big-bang approach to agile to increase speed to market,” November 2015