The IBM Agile Process Maturity Model.

A contextual framework that can help you effectively adopt an agile strategy

Agile software development techniques have taken the industry by storm,

with 69 percent of organizations reporting that they have one or more agile projects under way.[1] Agile is used by so many companies for a simple reason—it works. When compared to traditional project teams, agile teams enjoy higher success rates, deliver higher-quality software, have greater levels of stakeholder satisfaction, provide better return on investment (ROI) and deliver software to market sooner.[2]

Whether you're considering launching your company's first agile pilot or have an established agile program that you need to scale, IBM can help you get the most from your agile development.

A contextual framework to help you effectively adopt agile practices

The IBM Agile Process Maturity Model (APMM) provides a framework that can be used to put agile processes and practices into context—giving you the guidance you need for adopting the right strategies and techniques for your organization. As shown in figure 1, the framework is designed to enhance your agile capabilities, no matter where you are in your agile adoption.

Level 3

Agility@Scale

Level 2

Disciplined agile delivery

Level 1

Core agile development

APMM level 1 processes—such as Scrum, Extreme Programming (XP) and Agile Modeling (AM)—focus on just a portion of your software development lifecycle, typically the construction phase. These processes are self-governing and follow a value-driven lifecycle. APMM level 1 processes and practices work well for small, co-located development teams but need to be tailored for more complex situations.

APMM level 2 processes address the delivery cycle from end to end, including project inception, construction and transition into production. APMM level 2 processes include Open Unified Process (OpenUP), Dynamic System Development Method (DSDM), and agile instantiations of IBM Rational® Unified Process (RUP). These processes are self-governing within an appropriate governance framework and follow a risk- and value-driven lifecycle.

APMM level 3 is disciplined agile delivery where one or more scaling factors apply. Level 3 includes tailored versions of level 2 processes along with the Enterprise Unified Process (EUP), an extension of the Rational Unified Process that covers the entire IT lifecycle.
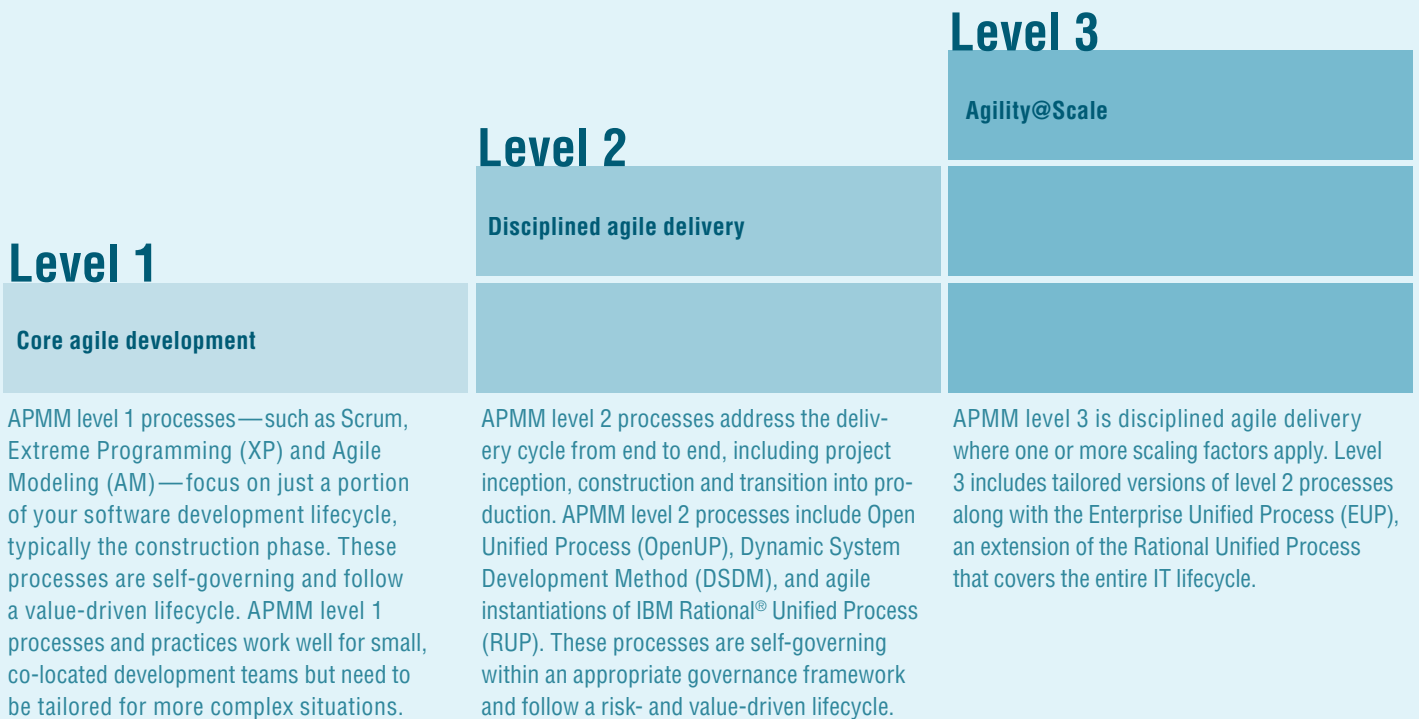
Figure 1: Whether you've only just begun to adopt core agile development methods, or you're ready to start scaling up, out or across, IBM can help you become as agile as you need to be.

Become as agile as you need to be

While straightforward in concept, process improvement can be challenging in practice. The following strategies can help increase your chances of success.

→ **Determine your goals.** For your process improvement efforts to be successful, you should first determine what your goals are, what your current situation is and what challenges you'll face in your efforts.

→ **Start slowly to gain experience.** It can be helpful to first adopt agile approaches on one or more medium-risk pilot projects to gain experience and build expertise among your staff. It's natural to run into a few problems because pilot projects never go 100 percent smoothly. These problems provide learning opportunities that can help you as you expand your agile deployment.

→ **Actively manage your process improvement efforts.** Agile processes dictate that teams should reflect regularly on their approach to identify potential improvements, and then act on those improvements. Teams that formally track their progress at adopting improvements are more successful than those that don't.

→ **Invest in your staff.** It's important to train, educate and mentor your staff in agile philosophies, processes, practices and tooling. Begin by focusing on the people involved with the pilots and train them on a just-in-time basis. Senior management, project management and anyone else interfacing with the pilot team will also require training, because these individuals need to change the way they work too.

→ **Recognize that the ultimate goal is process improvement.** The reality is that no one is going to give you a gold star for being agile. While agile processes can help you improve your software delivery, it's important to remember that there are still some pretty good ideas out there in the traditional development community.

*IBM offers a structured approach to helping software and systems delivery teams drive business innovation through measured and continuous process improvement. The **Measured Capability Improvement Framework (MCIF) from IBM** helps you gain competency in the core development practices that most impact business outcomes.*

For more information

To learn more about how IBM can leverage its 25 years of industry expertise, best practices and technology to help your software delivery teams manage and improve your agile adoption and drive real business results, contact your IBM representative or IBM Business Partner, or visit:

ibm.com/rational/agile

1, 2 Dr. Dobb's Journal, "Agile Adoption Rate Survey: February 2008," *Ambysoft*, www.ambysoft.com/surveys/agileFebruary2008.html