

Deliver Faster, More Innovative Solutions with Agile Project Management¹

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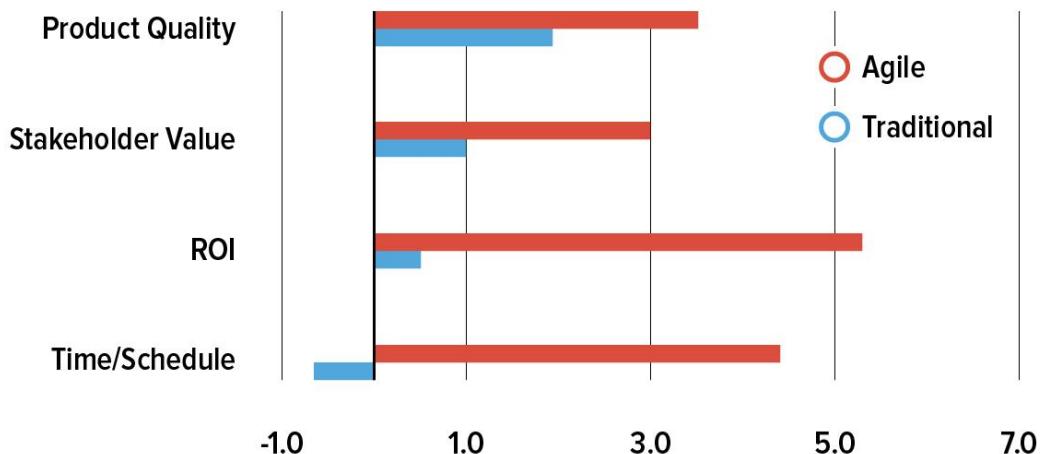
Agile project management is often overly simplified as the project management practice of varying scope. This simplification loses the emphasis on the true benefits of Agile which are speed, innovation, leadership, and control. Proof that Agile can deliver these benefits in even the most complex environments is shown in its history.

Agile project management can trace its roots back to World War II, when Kelly Johnson formed “Skunkworks” within Lockheed Martin. Johnson used his 14 Rules of Management to run Skunkworks and create the world’s first fighter jet, the P-80, in just 143 days. Kelly Johnson’s 14 Rules of Management mirror the Agile Manifesto and its 12 Principles, which promote cross-functional, self-directed teams; response to change with minimal reports; collaboration between owner and vendor; and Incremental (and Iterative) Development. All modern Agile project management frameworks draw on these lessons from Kelly Johnson’s work. Other influences include Total Quality Management (TQM), Lean, the Theory of Constraints (TOC), and Adaptive Systems Theory.

These “Adaptive” approaches can appear to be very different, but at their core is the same driving purpose: ***maximize the speed and sustainability of value delivered to the organization***. This means emphasizing the value of the project’s output over its cost efficiency, understanding that speed and innovation change the value of that output, and that the most important organizational resources are its people and its customer relationships. Companies that embrace Agile principles continue to set record earnings and stock prices (e.g. AMZN, APPL, Netflix); and those that ignore them find themselves unable to compete.

Agile project management has proven that it works. Survey after survey provides the data that Agile Project Management increases success rates for projects, especially those with high levels of uncertainty. Success rates in one 2013 survey across industries showed that Agile was successful 64% of the time, while traditionally-managed projects were successful less than half the time (49%).

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Recreated from Ambyssoft's 2013 survey, 173 respondents across industries, ranking Agile and Traditional methods from -10 to 10 (source: <http://clearcode.cc/2014/12/agile-vs-waterfall-method/>).

The success in Agile Project Management, however, has produced an explosion in variants and frameworks. No Agile project looks the same or applies all principles in the same way. Often these adaptations of Agile are driven by the organizational structure, politics, vendor preference, levels of education, and market realities.

Learn at your own pace. To help meet the challenges of this new project environment, the [University of Maryland Project Management Center for Excellence](#) has developed an [Agile Project Management Professional Certificate program](#) on edX.org. This new program provides participants with the understanding, principles, and skills to confidently deliver faster, innovative solutions for their stakeholders. The Professional Certificate program consists of five courses designed to teach the mechanics of how to design and facilitate projects using “pure” Agile Scrum and Lean Continuous Delivery techniques. Through the series, participants will explore other frameworks in order to understand differences in scale, structure, and empowerment. These courses are self-paced so learners can speed through them in a day (each is about 10 hours long) or complete the lessons based on a rhythm that suits their schedule.

Learn the science. Furthermore, students will then delve deeper into the science and essential principles to understand how to achieve the benefits of the Agile method: Speed, Innovation, Leadership, and Control. By the end of the series, participants will be able to explain how Agile techniques address faults in traditional project management techniques, the tradeoffs of these approaches, and when it’s best to apply them to maximize value to the organization.

Applicable to All Industries. There are a large variety of working professionals who would benefit from the completion of the Agile Project Management Certificate program: engineers, managers, designers, writers, creators and executors of all types. The principles taught in the certificate scale and apply to all industries to achieve delivery success. It does not matter if participants are delivering a small part of a project or portfolios of large multi-million-dollar government works. *These courses include examples from Construction, Aerospace, Software, Automotive Industries, Logistics and Manufacturing, and more!*

The Pilot Experience. The UMD Project Management Center for Excellence piloted the content of the Agile Project Management Professional Certificate program through a five part in-person series that was offered in Spring 2018 as a cooperative initiative with the Southern Maryland Chapter of the Project Management Institute (PMI). Feedback on the series was extremely positive and led to discussions with edX to deliver the content to a larger audience.

Feedback from the in-person version of the courses:

"The Agile Project Management program provides clear direction to channel team efforts in a more concise manner. I highly recommend this program to any organization relying on teams to get things done." — Debbie Gray, Director of Human Resources, GTMR Inc.

"I wasn't exactly sure Agile would be the right fit for our organization to meet our goals or our customers' expectations, as software development is not one of our core business units. The understanding gained through the series continues to help us in areas we never before imagined." — Gary Miller, Senior Strategist and IA Director, Technology Specialists, Inc.

"I gained a better understanding of Agile ie what it is, how it differs from traditional project management, and most importantly, how to apply it to my current organization." — Greg Paradis, Program Manager, Precise Systems



Above: Participants in the "Driving Speed through Agile Planning" in-person course working on a group exercise. The University of Maryland and the PMI Southern Maryland Chapter teamed up to provide a five-part series of in-person half day workshops on Agile Project management.

The success of the in-person pilot program led to the development of the Agile Project Management Professional Certificate program online through the edX platform, University of Maryland Project Management Center for Excellence Director, John Cable, stated that “we are excited to be pioneering these Agile courses with edX. The edX platform is the perfect mechanism to deliver our Agile Project Management Professional Certificate program at a global scale. They have a solid reputation for high-quality courses, and with the early success of our Agile curriculum, we wanted to ensure quality was the focus in delivering the Professional Certificate program. Project managers around the world will learn how to empower teams to deliver faster and more innovative solutions using Agile techniques.”

About EdX. EdX is a nonprofit, open-source learning destination that offers online educational programs and courses in alliance with more than 130-member institutions, comprised of both leading global universities and colleges, and a diverse group of prominent organizations from around the world. Founded by Harvard University and Massachusetts Institute of Technology (MIT) and based in Cambridge, MA, edX is focused on transforming online and classroom learning through groundbreaking methodologies, game-like educational experiences and cutting-edge research on an open-source platform.

Certificates and PDUs. All five courses of the Agile Project Management Professional Certificate are asynchronous, which allows individual students to sign up and start the courses when they want and at their own pace. Students from all sides of the project management community will also be able to collaborate with others registered in the program. The courses required to complete the Professional Certificate program are listed below. For those looking for PDUs, you can earn 10 PDUs per course for a total of 50 PDUs for all five courses.

- [Applied Scrum for Project Management](#)
- [Driving Speed through Agile Planning](#)
- [Agile Solutions for Greater Innovation](#)
- [Agile Leadership Principles](#)
- [Agile for Project Control](#)



Above: The online Agile Project Management Professional Certificate can be earned at a pace that is flexible and works with your schedule.

Each course is free for the first four (4) weeks and it takes approximately ten (10) hours to complete. For a small fee, edX provides a [Verified Certificate](#) which provides proof for an employer, school or other institution that the course was successfully completed by the student. To qualify for a [Verified Certificate](#), participants complete all aspects of the courses which can include watching all videos, participating in discussion forums, and completing any required homework and exams with a passing grade. The cost for a verified version of each individual course in the Agile Project Management Professional Certificate program is \$125 each or \$562.50 for the entire series (a 10% discount and only \$11.25 per PDU).



5 Star Rating on Class Central*

*Class Central is the #1 search engine for free online courses

Five-Star Learning Experience. The response has been overwhelming since the September 2018 launch of the Agile Project Management Professional Certificate. The first course of the five-part series, [Applied Scrum for Project Management](#), has 14,525 enrolled learners worldwide (as of Jan

30, 2019) and has a five-star rating on Class Central, which is the #1 search engine for free online courses.

Some of the feedback from Class Central is shown below, but you are encouraged to check out all the [Class Central course reviews](#).

- *“Amazing course, that challenges you every step.”*
- *“I’ve recommended this series of courses to several business and engineering students, I advise you to do the same!”*
- *“The lessons are quick, direct to the point and with very interesting examples.”*
- *“It helps understand the Agile world for someone who has worked with more traditional projects.”*

Class Central listed [Agile Leadership Principles](#), the fourth course in the UMD [Agile Project Management Professional Certificate](#), 3rd among their top 10 MOOCs (out of ~3,400) for January 2019. The honor was bestowed alongside MOOCs offered by the Massachusetts Institute of Technology; Harvard University; University of California, Berkeley; Princeton University; Yale University; University of Michigan; and others.

“We are honored to work with The University of Maryland to offer a Professional Certificate program in Agile Project Management,” said Anant Agarwal, edX CEO and MIT Professor. “We’ve heard from our global community of learners that they are seeking courses to help them advance their careers. Professional Certificate programs on edX deliver career-relevant education in a flexible, affordable way, by focusing on the critical skills industry leaders and successful professionals are seeking today.”

The benefits of utilizing Agile Project Management techniques are numerous and apply to organizations, project teams and products. The online [Agile Project Management Professional Certificate](#) is the optimal way to obtain the training necessary to utilize the innovative solutions offered by agile techniques. The partnership with edX allows the University of Maryland Project Management Center for Excellence the opportunity to provide the content in format that is convenient, accessible and affordable to learners worldwide.

Learn more at: pm.umd.edu/edx

About the Authors



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Ms. Kathleen Frankle has worked at the University of Maryland for over 20 years. She has significant expertise in the development and marketing of education and training programs, both online and in-person. Currently, she is the Marketing Manager for the Project Management Center for Excellence. In this role, she has managed their annual Project Management Symposium since its inception fostering its growth from 178 participants to over 400. She is on the team that is developing the Center's online "Agile Project Management Professional Certificate through edX. Ms. Frankle also works for the Center for Advanced Transportation Technology as Program Manager for two nationally known education programs including the Operations Academy Senior Management two-week in-person total immersion program and the Consortium for Innovative Training and Education (CITE) that offers online advanced transportation courses. Ms. Frankle can be contacted at kfrankle@umd.edu.



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John Johnson teaches graduate courses on Agile and Predictive management at the University of Maryland's Project Management Program. His recent Agile Project Management series on EdX (in-production) was highlighted as the #1 Professional Certificate for massive online open courses (MOOCs) globally by the premier MOOC reviewer Class-Central.com. He also serves as the Chief Technology Officer for Softek Enterprises LLC. Established in 2007, Softek specializes in evolving business systems using Agile, DevOps, and Cloud technologies to deliver working solutions faster for the government's most critical IT challenges. Mr. Johnson works closely with senior Agency influencers to explore and develop solutions, more than doubling Softek revenue annually, while leading multiple deliveries for clients and partners. He has 10 years of project management, systems engineering, and advanced analytics experience.