Introduction to Disciplined Agile Delivery By Mark Lines & Scott W. Ambler (A brief reflection by R. Max Wideman, FPMI)

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Introduction

Perceptive readers will note that I have departed from my usual header claiming a "review" of the book under examination. There are two reasons for this: (a) This book is not about project management per se, though it is frequently encountered in a project environment, and (b) I am neither qualified nor experienced in the art of software development. But when I was offered the opportunity to comment on this book: "Introduction to Disciplined Agile Delivery" 2nd Edition by Mark Lines & Scott Ambler, I jumped at the chance to learn about a new capability.

But what is the big deal? Well, the fact is it seems that wherever you look these days every promotion for any form of effort appears to include the term "Agile" in its title. Take gardening for example. You no longer just "do gardening in your back yard", you do "*Agile* Landscape (and Garden) Development" because "gardening" is an iterative process with continuous improvements – just like in software development. But, what does "agile" mean in the context of this software development?

We are about to find out. But first, let us be clear on what the term "Agile" means in so many different contexts? In fact it should be quite simple – in its general sense it means: "moving nimbly, briskly and actively".¹ So, although the book is not specific in its title, the objective of the authors is to convey how software development should be done effectively and efficiently.

The target audience for this handy book is obviously for those who already have some experience in creating software cooperatively.

About the authors²

Mark Lines is Vice President, Disciplined Agile at the Project Management Institute (PMI). He is cocreator of the Disciplined Agile tool kit with Scott W. Ambler and co-author of several books on Disciplined Agile (DA). Mark has over 25 years of experience helping organizations around the world to be successful with project delivery using Agile, Lean, Traditional, and Hybrid approaches. He has a record of successfully transforming entire organizations to business agility so that they can rapidly and continuously deliver value to their customers and other stakeholders. Mark is a frequent keynote speaker at industry conferences worldwide. You can follow him on Twitter via @mark lines

Scott W. Ambler is Vice President, Chief Scientist of Disciplined Agile at Project Management Institute. Scott leads the evolution of the Disciplined Agile (DA) tool kit and is an international keynote speaker. Scott is the (co)-creator of the Disciplined Agile (DA) tool kit as well as the Agile Modeling (AM) and Agile Data (AD) methodologies. He is the (co-)author of several books, including *Choose Your WoW!*, *An Executive's Guide to the Disciplined Agile Framework, Refactoring Databases, Agile Modeling*, and *The Object Primer 3rd Edition*. Scott blogs regularly at <u>ProjectManagement.com</u> and he can be contacted via pmi.org.

Book Structure

The content of this book is set out in thirteen chapters and one Appendix as follows:

- 1. Introduction
- 2. Reality over Rhetoric
- 3. Disciplined Agile Delivery in a Nutshell
- 4. Introduction to the Case Study
- 5. Inception
- 6. Construction Iteration C1
- 7. Construction Iteration C2
- 8. Construction Iteration C3
- 9. Construction Iteration C7
- 10. Construction Iteration C10
- 11. Transition
- 12. The Road to Disciplined DevOps
- 13. Closing Thoughts
- Appendix A: The Disciplined Agile Tool kit

The book has a total of 87 pages. The Appendix does not include a Glossary of Terms.

The authors introduce their book with a number of comments that include the following:³

"Many organizations are struggling to be successful with mainstream agile methods such as Scrum. Sometimes the impulse is to give up and try the next great thing as Lean or Scaled Agile Framework (SAFe[®]). The reality is that the source of failure of existing agile adoptions can often be traced to either the misapplication of core agile principles or a naïve approach to scaling agile and the need to address enterprise concerns."

"This is where the Disciplined Agile (DA) tool kit comes in. DA is a hybrid of existing methods that provides the flexibility to use various approaches as well as plugging some gaps not addressed by mainstream agile methods. In a nutshell, DA, and more importantly the *Disciplined Agile Delivery* (DAD) portion of it that is the focus of this book, is 'pragmatic agile'."⁴

What we liked

In their introduction, the authors observe:⁵

While the original book on DAD is quite comprehensive in describing the original vision for [this] tool kit, it is 500 pages. We felt that it would be useful to summarize DAD into a quick read to show how it can be applied in a typical situation. . . . We have found that organizations that simply take a bit of time to understand what DAD is, as well as what it is not, see very quickly the obvious benefits of DAD.

Our authors provide some quick facts about DAD (Disciplined Agile Delivery):⁶

- DAD is the delivery portion of the Discipline Agile (DA) tool kit. DAD is a key component of Disciplined DevOps, which in turn leads to value streams, and then to a Disciplined Agile Enterprise (DAE). The web site <u>PMI.org/disciplined-agile</u> provides an overview of DA as does the appendix at the back of the book.
- DA is resonating within organizations around the world. Organizations that have adopted, or are in the process of adopting DA include large financial institution, software companies, e-commerce companies, restaurant chains, government agencies, and many others. By adoption,

we mean either planning or actively implementing it across their entire organization, not just in one or two teams.

- Although DAD was originally developed at IBM, it is now the intellectual property of Project Management Institute., and is freely available for use.⁷
- DA is not a replacement or competitor for existing agile and lean method, instead it puts them into context so that you can pick the right techniques for you given the situation that you face. DA shows you how to apply agile and lean across your enterprise.

Our authors summarize DAD's delivery cycle as shown in Figure 1, which is applied by DA's two project-based lifecycles. Note: this example is a subset of the whole system life cycle.

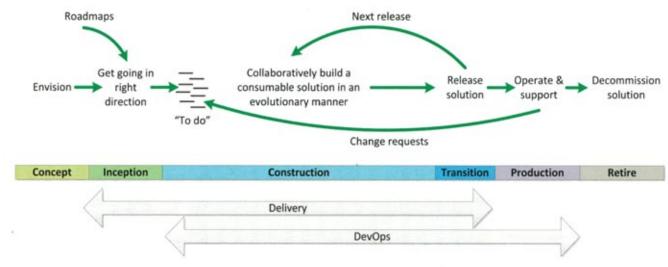


Figure 1: The DAD delivery cycle⁸

However, the authors point out that there is more to DAD than just the high-level diagram shown in Figure 1. In fact, because it is not prescriptive, it strives to reflect reality as best it can by offering several versions of a delivery life cycle.⁹ The authors describe six versions, each in some detail:

- 1. **Agile**. A Scrum-based project life cycle with streamlined phases, see Figure 1, that support for early mitigation of risk and lightweight governance;
- 2. Lean. A Kanban-based project life cycle with streamlined phases;
- 3. **Continuous Delivery: Agile**. A Scrum-based life cycle that leverages DevOps strategies for long-standing product teams;
- 4. Continuous Delivery: Lean. A Kanban-based life cycle for product teams;
- 5. **Exploratory**. A life cycle based on a Lean Start-up approach for applying minimum viable products (MVPs) to explore customer needs; and
- 6. **Program**. A life cycle for a team of teams.

DAD teams should adopt the life cycle that is most appropriate to their situation and then tailor it appropriately. Each of these life cycles is illustrated graphically followed by a detailed description.¹⁰

BigBank

As can be seen from the book's Chapter listing shown above, Chapters 4 onwards to Chapter 12 are all dedicated to a fictitious Case Study Called "BigBank". This study describes what you might expect from

a typical DAD team, and the flow of chapters covers and follows the life span of this particular project illustration.¹¹ The essence of this case study is that BigBank would like to develop a solution to enable prospective customers to apply for a mortgage on line. The solution should be easy to use on both a desktop browser as well as on mobile responsive devices.¹²

After trying Scrum on several teams, BigBank realized that they needed to adopt an agile method that reflects the enterprise challenges they faced. . . . After a bit of investigation they chose to adopt DAD because it offered the flexibility that they required. . . . Given DAD's lack of prescription and focus on pragmatism, BigBank recognized that DAD would scale to meet its diverse needs.¹³

Downside

This book is generally well written in a clear style that is easy to follow, and the text is well supported by diagrams and illustrations. However, there is a tendency to write in long paragraphs. We found numerous paragraphs exceeding 20 lines, or say well over 250 words. This makes for dense text on a page that becomes difficult to follow, or otherwise gets skipped in frustration by the reader.

For example, while the book is trying to be an Introduction, in the closing stages of the Case Study provided by the authors, we encountered a paragraph of 26 lines, involving well over 400 words.¹⁴ These concentrations of text are especially egregious considering that the book is dealing with a very complex subject, typically involving vital communication and coordination amongst so many players – see Figure 2.

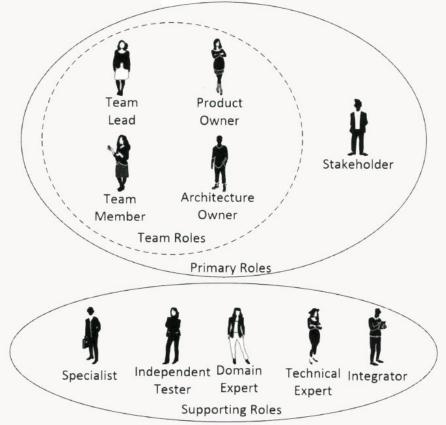


Figure 2: The roles of Disciplined Agile Delivery

In extoling the merits and benefits of Disciplined Agile Delivery (DAD) our authors lay to rest a number

of myths surrounding this general methodology. Here are examples:¹⁵

Myth	Reality
Agile teams don't do requirements or planning	The average agile team spends about one month doing some upfront planning and requirements modeling. While DAD seeks to minimize this work, we acknowledge this reality and suggest that teams new to agile spend a few weeks in an Inception phase to complete the work in a minimal yet sufficient fashion.
"Governance" is an agile dirty word. The agile concept of self- organization means that enterprises should not interfere with how agile teams deliver their software.	Governance is actually a good thing when it is done in an agile/lean manner. Sponsors and the enterprise as a whole deserve to know their investments are being properly spent and that the risk of delivery is monitored and controlled, albeit in a lightweight agile fashion. DAD provides specific guidance to fulfill the responsibilities in a relatively painless fashion. The DA tool kit also includes explicit advice for enterprise-level governance ¹⁶ that augments and supports the team-level governance within DAD
DAD is complicated and would be disruptive to adopt.	DAD is quite simple to adopt especially if your organization is familiar with common agile practices. The good news is that DAD provides guidance that addresses why some existing agile implementations are struggling and DAD can help to bring these implementations back on track.

Summary

Key points in a Nutshell¹⁷

- DAD is the delivery portion of the Disciplined Agile (DA) tool kit, not just another methodology.
- If you are using Scrum, XP, or Kanban, you are already using variations of a subset of DAD.
- DAD provides six life cycles to choose from: it doesn't prescribe a single way of working choice is good.
- DAD focuses on achieving common goals in an agile manner, not the production of specific work products, nor on following a prescriptive agile strategy.
- DAD address key enterprise concerns not described by mainstream methods such as Scrum.
- DAD is complementary to SAFe,¹⁸ yet far less prescriptive and more practical for most enterprises. DA provides explicit strategies for improving upon SAFe, addressing the common challenges faced in those contexts.
- DAD shows how agile and lean works from beginning-to-end.
- DAD provides a flexible foundation from which to scale mainstream methods.
- While DAD's philosophy is consistent with that of the *Agile Manifesto*, it includes additional guidance to be effective in more complex enterprise situations.
- It is *not* difficult to get started with DAD.

Why $DA?^{19}$

Our authors believe that you should consider adopting a Disciplined Agile approach when:

- You want a flexible and pragmatic agile tool kit rather than a purist agile method;
- You are successfully using Scrum or Scrum/XP and want to take it to the next level;
- You are using agile but have not been getting the results that you expected;
- You are out of compliance with your PMO and want to incorporate some lightweight governance;
- You are using Scrum but are unsure how to scale up;
- You are using Scrum and are unsure how to address fundamental activities such as architecture, testing, and analysis;

Moreover:

- You have looked at SAFe but it appears to be too expensive and risky for your organization;
- You have looked at either SAFe or LeSS, but realize that DA's strategy of starting with the organization you have and evolving from there is less risky and more likely to succeed in your organization;
- Your organization has adopted SAFe or LeSS but run aground because you didn't have a solid foundation in place for your agile delivery teams;
- You need to support several approaches to agile/Lean development within your organization; and
- You need to understand how to effectively blend agile/Lean initiatives with your teams that use a traditional approach.

Interestingly, the extensive BigBank case study finally concludes with a section titled: *Preparing for the next release*, i.e. Release #2. Here, the authors point out that:²⁰

"When you keep a team together so that they can work on the next release, you find that the Inception effort becomes much less (i.e., the team is already together, the environment is set up, the architecture is in place, funding is usually in place, and so on). In fact most of the remaining Inception effort focuses on scoping and planning the next release, and that's typically a short effort."

Indeed, the case study contemplates and comments on up to four releases and beyond. It overviews how the team evolves from the Agile, Scrum-based project life cycle, to the Continuous Delivery: Lean, Kanban-based product life cycle.

Once the ball is rolling, there is no doubt that it is well worthwhile keeping it going. Especially from the software team's perspective, that's a lot better than having to seek employment elsewhere and effectively having to re-start your career all over.

But is that really project management? Or is it career crafting?

R. Max Wideman Fellow, PMI

Footnote

I would like to take this opportunity of thanking author Scott W. Ambler for his very thorough review of my early draft of this paper. More particularly because he was kind enough to share with me a 2^{nd} version of the original book, from which I worked, to one currently available but reassembled into a different format. The essential change was from a footprint of $5\frac{1}{2} \times 8\frac{1}{2}$ to $11\frac{1}{2} \times 11$, albeit with a larger print. Nevertheless, it changed all of the page reference numbers!

¹ In *Introduction to Disciplined Agile Delivery [DAD]*, 2nd Edition, by Mark Lines & Scott W Ambler. This may be taken to mean that the intent is to cut out all unnecessary documentation and bureaucracy. However, purists may well argue about what is necessary and what is not!

⁵ Ibid.

 $\frac{6}{7}$ lbid, p2

⁷ See the DA Hub at <u>https://www.pmi.org/disciplined-agile</u>

⁸ Ibid, p8

⁹ Ibid, p8. See <u>https://www.pmi.org/disciplined-agile/process/introduction-to-dad/full-delivery-lifecycles-</u> introduction. This is a critical concept that a lot of people struggle with.

¹⁰ Ibid, pp 10-16

¹¹ Ibid, pp 25-74

¹² Ibid, p25

¹³ Ibid.

¹⁴ Ibid, p69

¹⁵ Ibid, p3

¹⁷ Ibid, 5

¹⁸ "SAFe" is a knowledge base of proven, integrated principles, practices, and competencies for achieving business agility using Lean, Agile, and DevOps.

¹⁹ Ibid, p75

²⁰ Ibid, p66

² See Introduction to Disciplined Agile Delivery, 2nd Edition, 2020, p87.

³ Ibid, p1

⁴ At the time of writing this book, the definitive guide to DAD was: "*Disciplined Agile Delivery: A Practitioner's Guide to Software Development in the Enterprise*". This precious book can be found on the DA Blog at DisciplinedAgileDelivery.com.

¹⁶ See https://www.pmi.org/disciplined-agile/process/governance