

# The Heart of Agile

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**Abstract.** Agile has become overly decorated. The remedy is simple: collaborate, deliver, reflect, improve. These four imperatives, already sufficient, expand to cover the complexities of modern development.

## Introduction

The Manifesto for Agile Software Development [1] was written in a particularly simple style. It has become apparent to several authors of the manifesto that Agile practice has become decorated to the point of contradicting its roots (see, for example, “Stop Practicing and Start Growing” [2]). This article describes my approach to getting Agile back on track while at the same time moving it forward into the future.

We recover the simplicity and power of Agile by recognizing that it can be expressed in four words:

- Collaborate.
- Deliver.
- Reflect.
- Improve.

These four words are sufficient, simple, and still support the complexities of modern Agile development. For those reasons, I call them the “kokoro,” or heart of Agile.

## Kokoro Simplifies

In rebuilding Agile from its center, I wanted to honor a minor tradition of looking at Japanese words for skills development. In 1999, my attention was drawn to the concepts of “shu,” “ha,” and “ri,” (守 破 離) which date back to 14th-century Japanese Noh theater. [3, 4]

“Shu” (守) roughly translates to “follow.” It captures the stage of learning in which the novice learns by copying a master or a recipe. In general knowledge acquisition terms, “shu” is the starting stage — “learn one technique.”

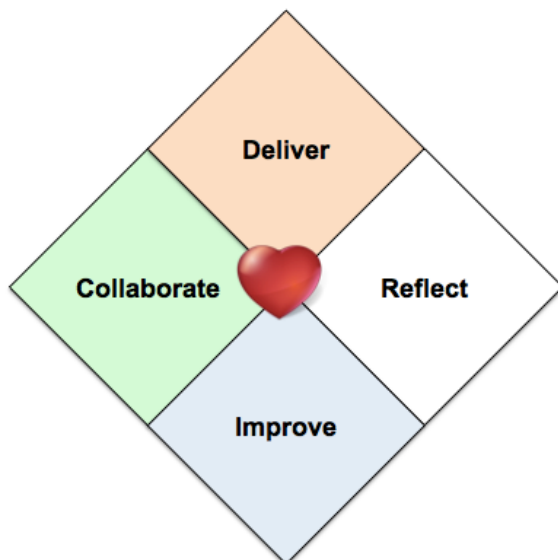


Figure 1. The Heart of Agile

“Ha” (破) roughly translates to “detach.” It captures the next stage of learning in which the person learns different tools and techniques, either out of curiosity or by reaching the boundaries of the techniques he or she already knows. “Ha” can be thought of as the learning stage — “collect techniques.”

“Ri” (離) roughly translates to “leave.” It captures the stage of practice in which the person operates by whole-body response to ever-changing situations, doing something different every time. Ri-level people generally cannot say how they decide on a technique at the moment because it is so ingrained and immediate. In general knowledge acquisition terms, “ri” corresponds to “invent and blend techniques.”

In looking for what could come after “ri,” I noticed that advanced masters advocate a return to essence and radical simplicity. (Think of Mr. Miyagi saying “Wax on, wax off,” in “The Karate Kid.” [5]) The Japanese “kokoro,” (心) “essence” or “heart,” is used in the writings of the 17th-century samurai master Miyamoto Musashi to refer to the essence or heart of the samurai. In other words, “kokoro” (心) is perfect for our needs: the radically simplified essence of a skill area. “Kokoro” represents the teaching stage of the advanced practitioner. It is characterized by the advice, “Just learn the basics.”

Figure 2 captures the “shu-ha-ri-kokoro” progression. It shows how practice starts off simple (“shu,” learn one technique), becomes more complicated as one learns more techniques (“ha,” collect), becomes significantly more complicated at the “ri” level (invent and blend), and finally takes on a simple form again when practiced by the advanced teacher.

You can probably find examples in your own life of a “kokoro”-level teacher telling you, “Just master the basics.” That is what we are seeking for Agile development.

The “kokoro,” or heart of Agile, is to collaborate, deliver, reflect, and improve — nothing more. I express the heart of Agile with the diamond shown in Figure 1.

The nice thing about these four words is that they don’t need much explanation or teaching. With the exception of “reflect,” which is seldom done, most people understand these terms well. You know if you’re doing them or not.

## The Heart Expands

Although the four verbs simply state most of what you need to do, each also suggests a deeper, subtler execution. There is a beginner version of each, and there are competing techniques to improve each. The “shu-ha-ri” concept of skill progression applies to each of the four, and to each of the sub-categories under them.

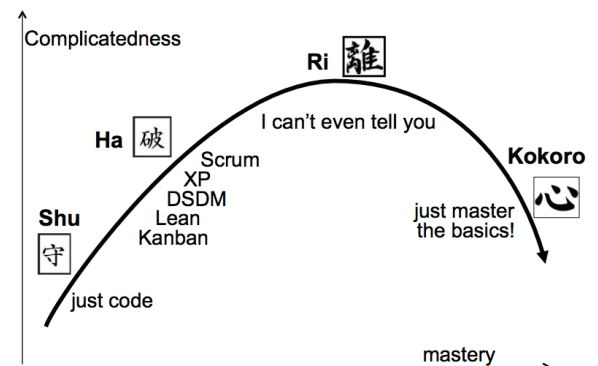


Figure 2. The “Shu-Ha-Ri-Kokoro” progression.

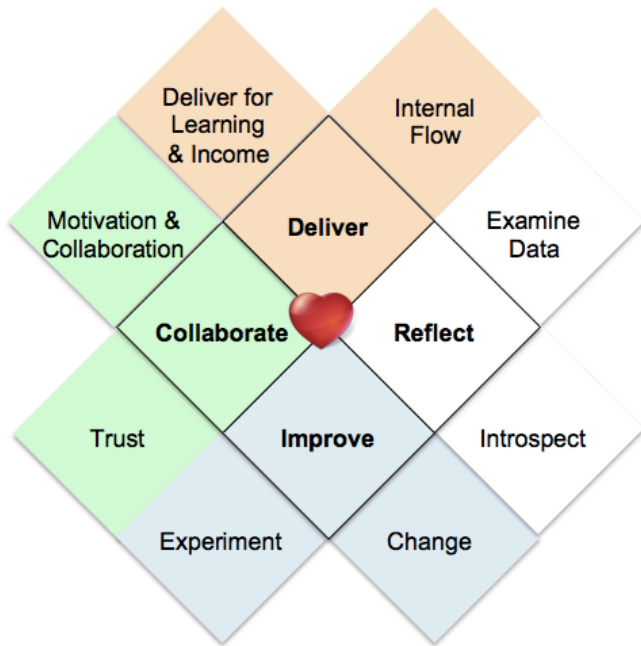


Figure 3. A First-Level Expansion of the Heart of Agile.

Let us look at an expansion to see how we get to modern Agile development. Figures 3 and 4 show two levels of expansion. Other expansions are possible, as we will see.

### Collaborate

To collaborate, we want to improve trust, motivation, and the act of collaboration. These are shown in the first-level expansion of Figure 3.

As you might imagine, trust is an enormous topic. A search on Amazon returns over 91,000 book titles on trust. There are survey instruments, improvement programs, institutes and consultancies. Motivation is similarly rich, breaking into intrinsic and external motivation, including power, rewards and politics (see Figure 4). In other words, “collaborate,” while easily understood, supports a deep expansion.

To illustrate the “shu”-level expansion of the heart of Agile, I highlight just one way to improve collaboration. Figure 5 shows a fragment of a card set [6] being used in organizations and fields from facilitation training to town management. They are taken from the CrossTalk article “Increasing Collaboration by the Minute.” [7] They provide one technique to sensitize people to what helps and hinders collaboration.

### Deliver

Delivery has internal and external aspects. In the internal portion we find incremental development, lean manufacturing, queue management, bottlenecks, work-in-progress limits, Kanban, and technology and social processes in the delivery pipeline. In the external portion we find the issues of delivery for learning versus delivery for revenue.

Delivering incrementally, early and often is well understood. [8] Less understood is the idea of delivering just to learn: to learn what market niche a product should address and with what features, [9] and also to learn how to work together, what design assumptions were incorrect, and how long the effort will take. [10]

### Reflect and Improve

“Reflect” and “improve” are closely related. They are separated because reflection is so rarely done well. I wish to highlight the need to explicitly stop and examine what is happening before jumping to improvement initiatives.

Reflection breaks into two parts: gathering both subjective, emotional information, usually about the team and the process, and objective information from data analytics about the product and its reception by users and buyers.

Inside the “improve” arena, modern practitioners are studying what is called “solutions focused coaching” [11] to incorporate state-of-the-art techniques in psychotherapy and family coaching, compatible with Agile development.

### The Heart at Scale

The current proposed agile scaling methods work from structure: set up scrums of scrums, backlogs of backlogs, multiple levels of product owners, Kanban boards at a high level, and so on. Having the heart of Agile in hand, we see that this changing structure does not yet address attitude or behavior, which are what we want to change. The heart of Agile addresses attitudes and behavior directly.

No matter the size of the organization improving collaboration should advance the situation, and similarly for improving delivery. Improving reflection and improvement accelerates the first two. In other words, rather than relabeling the job titles of workers or introducing new responsibilities, ask everyone the following questions:

- Independent of anything else going on, how will you increase collaboration?
- Accounting for everything else going on, how will you increase trial and actual deliveries to consumers?
- How will you get people to pause and reflect on what's happening to and around them?
- What experiments will your people perform at different levels in the organization to make small improvements?

People can't hide behind vocabulary or job title shuffles to answer these questions. There is nothing but attitude and behavior to improve, which is what we want.

Scaling agile is a difficult topic at the best of times. The most difficult issue might be the conflicting reward schemes across the organization. The heart of agile identifies but does not address this difficult subject.

### Getting Started

How would you get started on a program to implement the heart of Agile approach in your company?

1. Ask everyone to list all the people they collaborate with to get their work to a customer or client. For each person they name, ask them to rate the quality of collaboration with that person now and identify what they might do to improve it. This gives each person an action item and produces a social graph, revealing where to start.

2. Examine the size of the increments being developed and the time needed to release each. Train both business and development on how to make those slices finer. Solicit ideas to streamline the delivery pipeline. Learn to deliver for learning, not just for revenue.

3. Stop and reflect. Let people say what social and technology changes might improve their work. Examine product usage

analytics to divine what is really happening on the user side. Run an experiment every month.

4. Publish a newsletter showcasing all the things going on, including what people are doing and what projects are starting. Make progress visible so both workers and executives see that the organization is moving.

**Summary**

The heart of Agile doesn't remove the complexities of daily life; it only acts a reminder to clear them away for a moment and focus on the basics:

- Collaborate.
- Deliver.
- Reflect.
- Improve.

These four words — the “kokoro,” essence, or heart of Agile development — are simple, sufficient, and expandable into useable advice at the forefront of the modern Agile development.

REFERENCES

1. <http://agilemanifesto.org>.
2. Hunt, A. (2016.) Stop Practicing and Start Growing. [http://growsmethod.com/articles/stop\\_practicing\\_and\\_start\\_growing.html](http://growsmethod.com/articles/stop_practicing_and_start_growing.html) .
3. ShuHaRi, <https://en.wikipedia.org/wiki/Shuhari>.
4. Shu Ha Ri, <http://alistair.cockburn.us/Shu+Ha+Ri>.
5. “Karate Kid, ‘wax on, wax off’ scene.” <https://www.youtube.com/watch?v=fULNUrOrvEc>.
6. <http://alistair.cockburn.us/Collaboration+Cards>.
7. Cockburn, A. (Jan./Feb. 2016.) Increasing Collaboration by the Minute. CrossTalk, 4-7. Online at <http://static1.1.sqspcdn.com/static/f/702523/26767147/1451886700677/201601-Cockburn.pdf?token=0TGZ9syVsnh4d9%2BTW8ggVolCgEM%3D>
8. Denne, M. & Cleland-Huang, J. (2003.) Software By Numbers. Prentice-Hall.
9. Ries, E. (2011.) The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses. Crown Business.
10. Cockburn, A. (2014, July/Aug.) Disciplined Learning: The Successor to Risk Management. CrossTalk, 15-18. Online at <http://static1.1.sqspcdn.com/static/f/702523/25136916/1404242669373/201407-Cockburn.pdf?token=hkVzBU0lepDbyggvqTqly0cmHA%3D>.
11. Iveson, C., George, E. & Ratner, H. (2012.) Brief Coaching: A Solution Focused Approach. Routledge.

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Dr. Alistair Cockburn, one of the creators of the Manifesto for Agile Software Development, was voted one of “The All-Time Top 150 i-Technology Heroes” in 2007 for his pioneering work in use cases and Agile software development. A renowned IT strategist and author of the Jolt award-winning books “Agile Software Development” and “Writing Effective Use Cases,” he is an expert on Agile development, use cases, process design, project management and object-oriented design. In 2001 he co-authored the Agile Manifesto, in 2003 he created the Agile Development Conference, in 2005 he co-founded the Agile Project Leadership Network, and in 2010 he co-founded the International Consortium for Agile. Many of his articles, talks, poems and blog posts are online at <http://alistair.cockburn.us>.

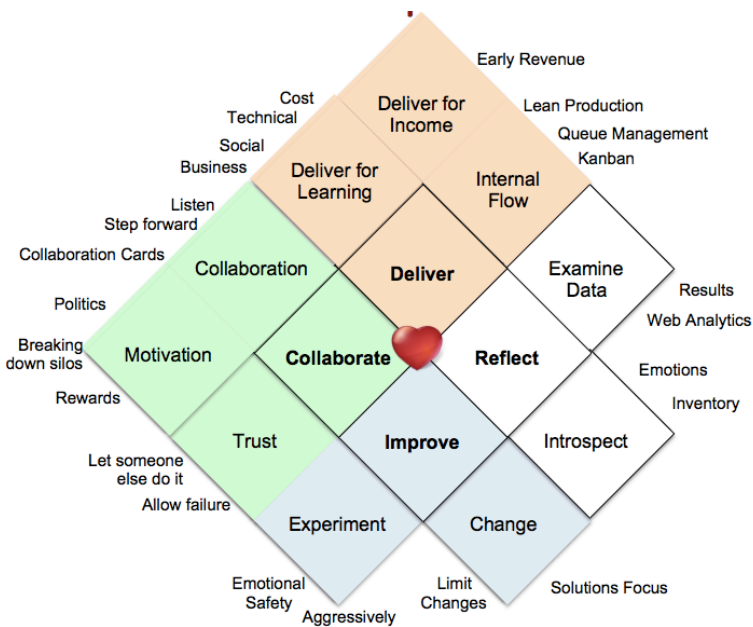


Figure 4. A Second-Level Expansion of the Heart of Agile.

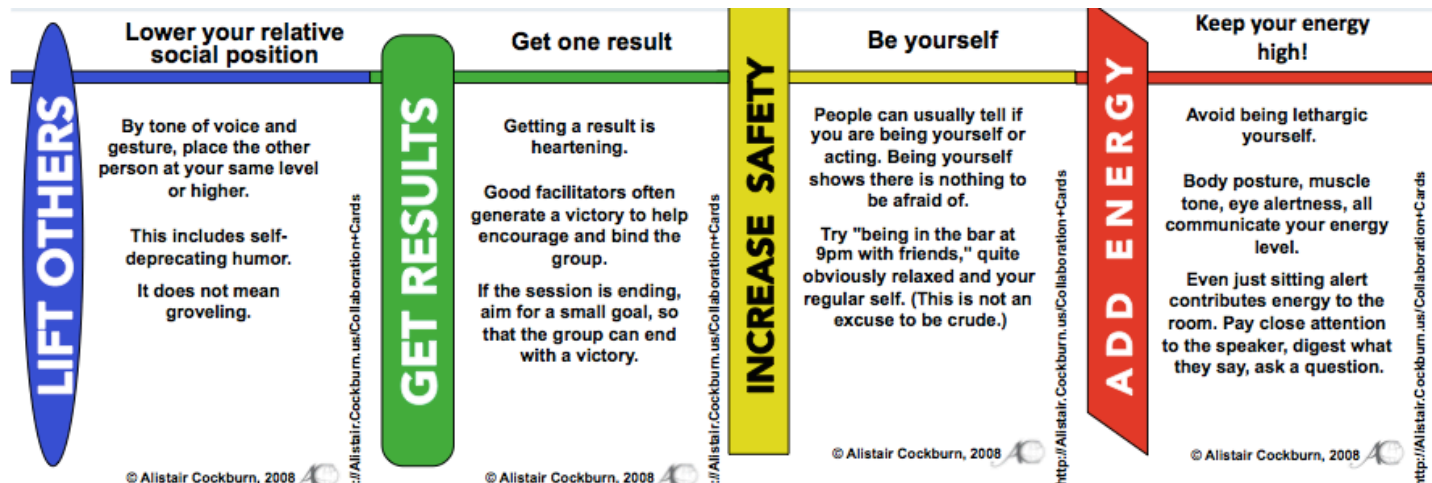


Figure 5. A “Shu”-Level Tool for Improving Collaboration