Preface

You can't expect to meet the challenges of today with yesterday's tools and expect to be in business tomorrow.

—Anonymous[1]

Business is often compared to a chess game. It's complex, with lots of pieces to move, and every move changes the story, offering new opportunities and closing off others. In theory, a chess player can calculate every possible scenario before each move. They may sometimes think for an hour, analyzing the situation, breaking complex problems apart, considering different scenarios, then, finally, moving a pawn one square.

While earning my MBA, and over the course of my long career in project management, I learned to think like a chess player. Business leaders are taught to analyze situations, break complex problems apart, plan for different contingencies, then select the best solution and execute it. I believed I could foresee every step if I consulted the right experts. My Gantt charts felt like works of art—so many departments, each with so many goals, all coming together finally in a smooth flow, a waterfall. I've worked on projects where the planning phase lasted two years before we opened the dam and the actual work began.

Unfortunately, in business, you can't see all the pieces laid out on the board, and the moves are unlimited. Everything you do is based on the assumptions you made at the beginning,

---

[1] Alan J. Stolzer, Carl D. Halford, and John J. Goglia, *Safety Management Systems in Aviation* (Burlington, VT: Ashgate, 2008), 219.

but by the time you deliver the project, a new queen may have stepped onto the board and flicked half the other pieces off the edge.

According to Peter Senge, founder of the Society for Organizational Learning and senior lecturer at MIT's Sloan School of Management, today's problems come from yesterday's decisions, and business decisions are more like bets on the future than chess moves. There *are* rogue queens out there: things you depended on may suddenly disappear, and pathways you never dreamed of may become discernible in the new landscape.

Traditional project planning worked very well during the first Industrial Revolution—the age of the steam engine. It was perfect for the second revolution, the era when Gantt charts were invented and assembly lines created every kind of machine. In the third revolution, the age of robotics, it proved essential. But any manager who started planning a large project in the mid-1990s finished it in an entirely new era, one very few had foreseen.

Business decisions predicated on assumptions are difficult to track over time. Many years may pass before a result is seen, making it nearly impossible to track that result back to the original decision. The longer the gap is between the decision made and the results delivered, the more difficult it will be to determine which decision delivered those results. Therefore, minimizing the time from decision-making to decision impact should be a major goal of any organization. Shortening the gap between making decisions and seeing the consequences makes for more accurate future predictions and assumptions and provides immediate feedback to help team members improve their game.

The Gantt chart was developed in 1910 and is still the preferred way to illustrate project planning within businesses. The idea is that you break a complex problem into smaller ones, hoping that by solving each small problem, you will have solved the big one. This approach

leads to localized optimization: each unit (person or team) remains focused on a small part of the problem. They never have a view of the overall picture or understand their connection with the rest of the project. Still, managers desire an exact plan that is as accurate and predictable as they can get. Creating this chart can take months of effort, demands a high level of detail, and is not flexible to changing environments. Since life isn't predictable, these charts rarely, if ever, hold true. In today's fast-changing environment, playing chess just doesn't work. We're playing poker now. The fourth industrial revolution—the Internet of Things (IoT)—and digitalization have us hurtling through changes at warp speed. We gained access to a universe of information, which would have been a Tower of Babel if Google hadn't slipped it into harness. Google's development of Google Maps allowed Uber to change the landscape of ride-sharing, and Amazon is using breakthroughs in artificial intelligence and machine learning technology to rapidly transform the customer ordering and fulfillment experience. Change isn't linear anymore; it's exponential. And anyone who blinks, opens his eyes to a new world.

Things are changing so fast we need a shorter feedback loop just to keep up. The way we used to do business doesn't work anymore. Our assumptions are based on past experiences and metrics, but what has worked in the past is rarely true for the future, especially when the landscape changes so swiftly. Even when we do it right, and our assumptions are true, the very basis we made them on may have changed by the time we deliver. We work on complex projects in a complex environment; our only certainty is that there will be many obstacles, many changes, and a constant flow of new information to be absorbed and reacted to.

The traditional way of working can no longer be relied on to deliver the expected results. Huge teams, separated by specialty and adhering to long-held bureaucratic standards, can't react

to quick developments and sudden changes. A lightweight, elastic approach was necessary, so Scrum was born.

Was I a visionary, early adopter of Scrum? Did I read Scrum creator Jeff Sutherland's *The Scrum Guide* and realize that Scrum would revolutionize software development? Unfortunately, no. I had done well on three different continents with the skills I had. Why would I change? Then—absolute failure. A year of careful, Gantt chart–organized planning on a major project where, out of hundreds of our deliverables, not one worked. On the precipice of financial disaster, I remembered this thing called Scrum and thought I'd rather try it than go broke.

With Scrum, we turned that project immediately around, gaining the ability to deliver more completely and more quickly. The client was getting exactly what they needed, and my team was working with a new kind of dynamic energy. It felt like a miracle, or at least like a royal flush.

I've made up for my early skepticism by immersing myself in Scrum, becoming certified, teaching it, working with Joe Justice to write *Scrum in Hardware Guide*, which takes Scrum beyond software delivery, and helping Jeff Sutherland develop the *Scrum@Scale Guide*. By now, I've used Scrum in almost every domain from retail to oil and gas mining. I've seen that although Scrum works wonders for the bottom line, it creates those wonders through shared values in the workplace. A team of up to nine people, freed of Gantt charts and bureaucracy, committed to courage, commitment, respect, openness, and focus, are motivated to generate more value with less effort. Scrum makes a project more exciting, more creative, and more satisfying—naturally that leads to more success. People feel better when they have more agency—they do more and take more pride in their work. They don't have to guess at the future; they expect to meet impediments and work to overcome them. Everyone works better in an

atmosphere of trust and psychological safety, where mistakes are expected and quickly remedied. A team works together and supports each other almost like a family, and they can respond with confidence to the unforeseen.

In the last ten years, I've worked with teams across North and South America and Australia who were learning to implement Scrum, and I've seen again and again the results the technique can produce. One gas company I worked with took an average time of nineteen days to drill one well. The fastest well they'd ever drilled took ten days. After adopting Scrum, their average drilling time went down to six days. And they accomplished this with the same staff, no complex infrastructure, and, probably most important, a strongly motivated, comfortable, agile team.

Of course, with all major shifts in thinking, there exists a lag between understanding the basic concepts and being able to process the new thinking almost subconsciously. *Shu-Ha-Ri* is a Japanese martial arts concept that outlines the stages of learning from absolute beginner through that level of subconscious mastery. This book is intended for those in the "*shu*" state—those who've seen that Scrum is a lightweight, responsive approach that changes with the shifting conditions we face, and who want to implement it in their business processes. If you are ready to play business in a more agile, fast-paced, even more enjoyable way, pull up a chair and I'll deal you in.

—Fabian Schwartz, MBA