

# Scrum Theory

A Learning Organization Perspective

Greg Cupal

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# What is this Project

I am not a developer. A good part of my career can be described as a Scrum Master in the manufacturing world. My career started in Manufacturing where I learning about how people and things worked together to accomplish a task/project. I was the Senior Planner and Master Scheduler (That was my title). I swam in chaos, daily, in the deep-end. Chaos is not that chaotic once you learn to dance with it.

Negotiating with plant managers and foremen/forewomen and team leads, where fistfights were not uncommon, left me with a special set of project management skills. Skills I hope to offer in this book.

This prompts the important question:

Are you willing to buy a book from a non-developer who can tell you, in a chaos informed way, the theory behind why Scrum (and Kanban) work and or fail?



Are you willing to prove your interest by putting your money up front?

Encourage me to write this book by buying a copy. There is a 60 day free refund window. If you don't like what I have by then, take the refund. After \$100 in sales I will take up the project with haste.

I'll supply an outline. Your welcome to to suggest additions or comments. I'll add some content on a regular basis because it overlaps with other activities. It also keeps the book in the "recent updates" section of the website.

# Learning Organizations

One of the foundational bits of knowledge to understanding Scrum is Organizational Learning. More accurately, the work of Chris Argyris and Donald Schön. They developed the notion of Double-Loop Learning. It describes how organizations learn and develop organizational knowledge.

More Importantly, it builds on the work of Kurt Lewin called Action Research. Science creates experiments where the subject is isolated and the conditions are controlled. An outside objective observer collects data that supports or refutes their hypothesis. You can't isolate and control conditions in the real world, and you are a participant, not an objective observer. So, Action Research is an approach to do research while in action.

The Action Research process should look familiar to you: plan, act, retrospective, re-plan.

Chris Argyris and Donald Schön built on this with their Single-Loop and Double-Loop Learning theories.

Donald Schön went further and defined the Reflective Practitioner (Retrospective Practitioner??) His goal was to investigate the thinking that defined a "professional." His conclusion was that a professional is:

Someone who develops a theory of success to achieve a goal, and then implements that theory using policies, processes, and procedures.

For a software developer, that goal is a working piece of software. One of the "processes" they use to achieve that goal is Scrum. Scrum can be seen as a form of Action Research.

Another process or procedure used in Scrum is Queuing Theory, but you wouldn't know it without some knowledge of the subject. That brings us to the next Chapter: Queuing Theory

# Queuing Theory

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## Lean

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# Theory of Constraints

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# Scrum and the Learning Organizational

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## The Sprint

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