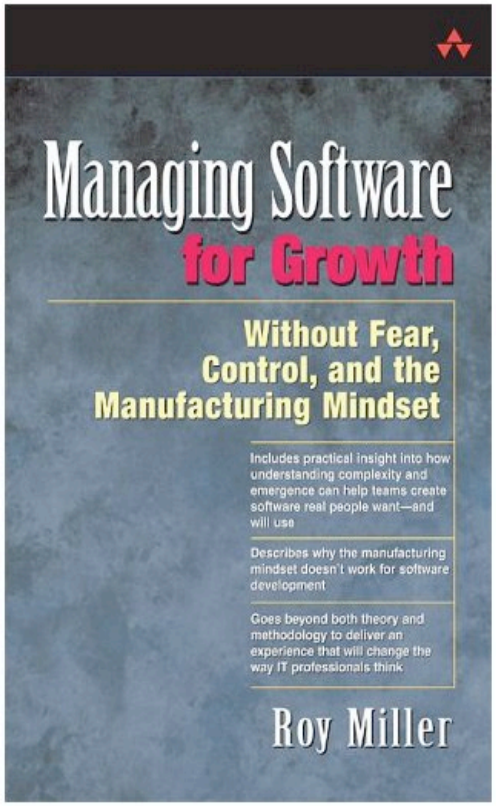
Chaotic Agility

Agile RTP

Good things happen
when you let them

The Book



"Managing Software for Growth"

by Roy Miller

Manufacturing Software

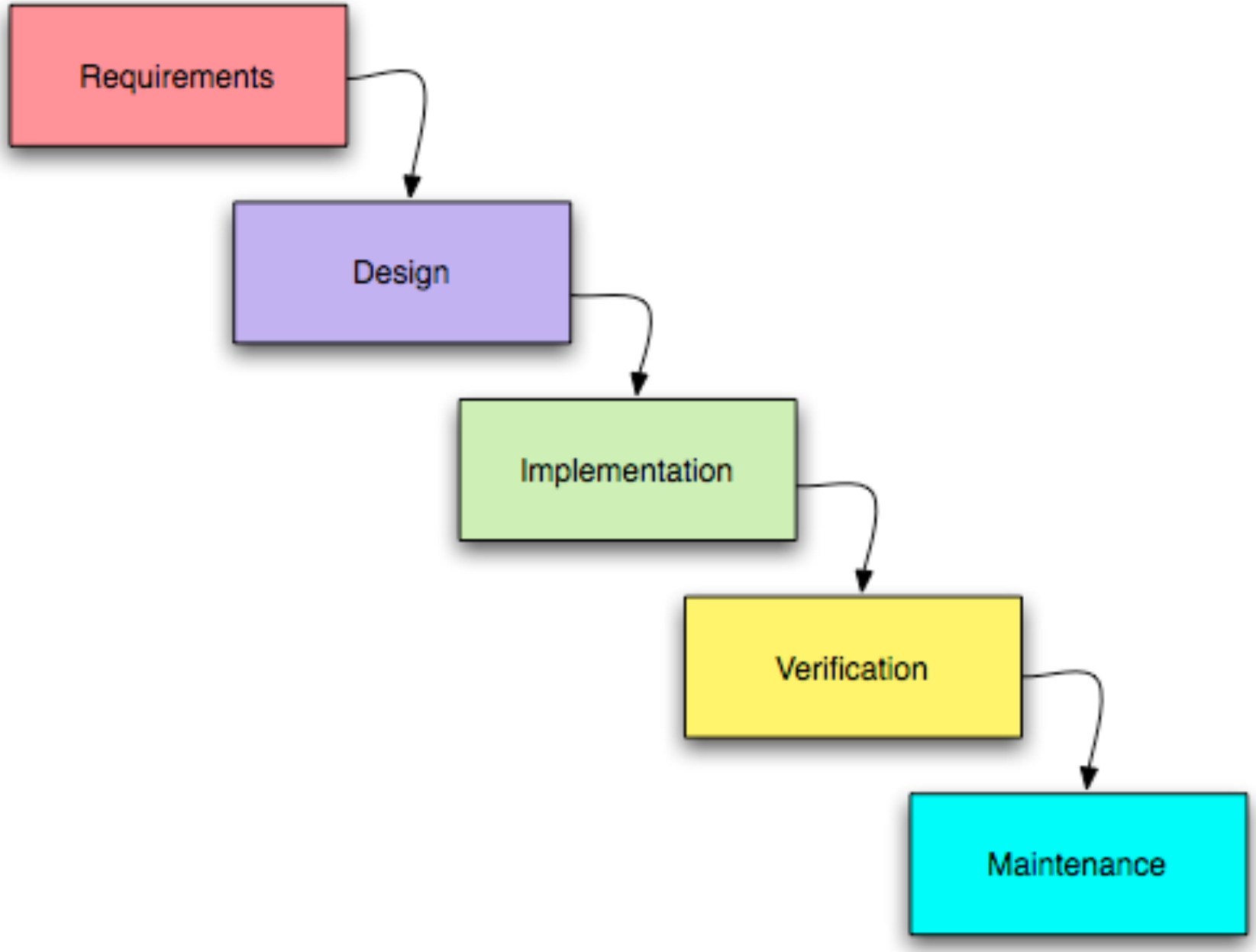
- 1880, Frederick Taylor
  - Every job has “one best way”
  - Workers are dumb
  - Managers need more control

The Manufacturing Mindset

- Determine what we want
- Design it
- Build it
- Make sure it works
- Repeat

Assumption: The result will be the same every time the process is repeated.

What does this remind you of?


Requirements
Design
Implementation
Verification
Maintenance

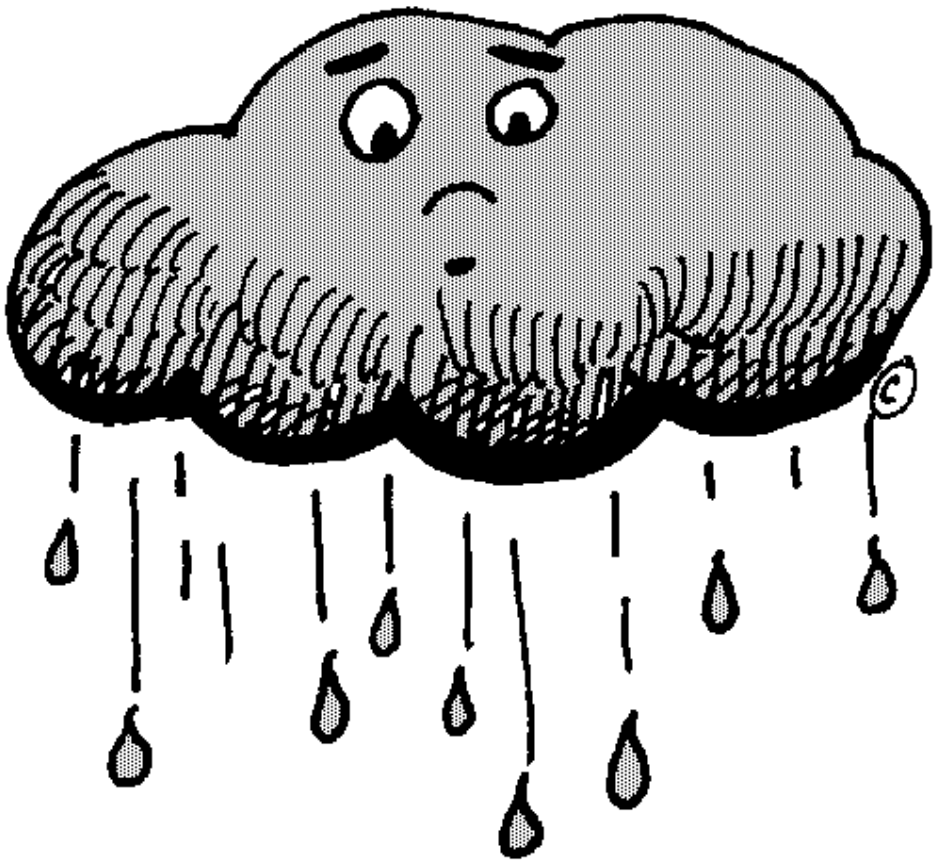
Manufacturing assumes linearity

- Whole equals sum of parts
- Effects proportional to causes
- Result is predictable

Complexity science models reality

- Whole greater than sum of parts
- Small changes have big effects
- Patterns appear, but predictability remains elusive

When will it rain?



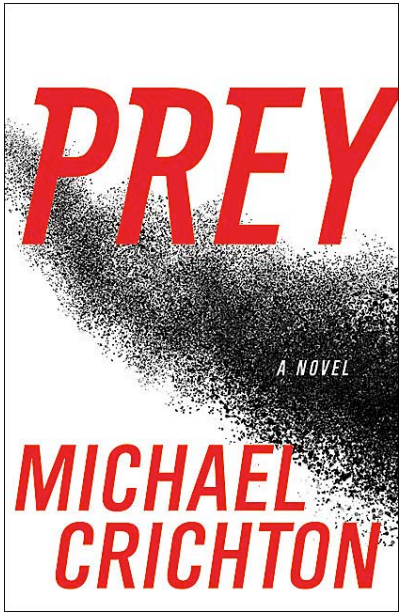
Weather

- weather = function(sun, wind, humidity, CO^2…)
- 1960, Edward Lorenz
- Toy weather
  - Small variations eventually disappeared
  - Until the program was started in the middle

Attractors

- Emergent patterns
- Only show up during change
- Can’t be created in advance
- Can’t be predicted

CAS



- John Holland
- Networks of agents…
- Acting in parallel…
- Without central control

- Constant change == life
- Stability == death

The Edge of Chaos

- A CAS must be stable…
- But not too stable…
- And not too chaotic

- Balance is key
- Where is the edge?

Self Organization

- Minimize the number of choices, then make an educated guess
- It’s the economy…
- Agents influence each other
- BarCamp, anyone?

Growing Software

- Emergence
- Interaction
- Adjustment
- “Just Enough” / YAGNI
- What is “done?”

Waterfall is Manufacturing

- Prediction is possible
- Software is an efficiency optimization problem
- Process over people

Agility is a CAS

- Continuous change
- Good design
- Simplicity
- People working together
- What else?

Take Aways

- For managers:
  - Stop trying to control and predict
  - Setup minimal structure
  - Make minor adjustments
- For developers:
  - Don’t stress over perceived chaos
  - Be willing to experiment
- What else?

Okay, who's the jerk?

Matthew Bass
Software consultant
Speaker
Ruby addict
Agile evangelist
Not Fred Medlin!

:blog => matthewbass.com
:email => pelargir@gmail.com