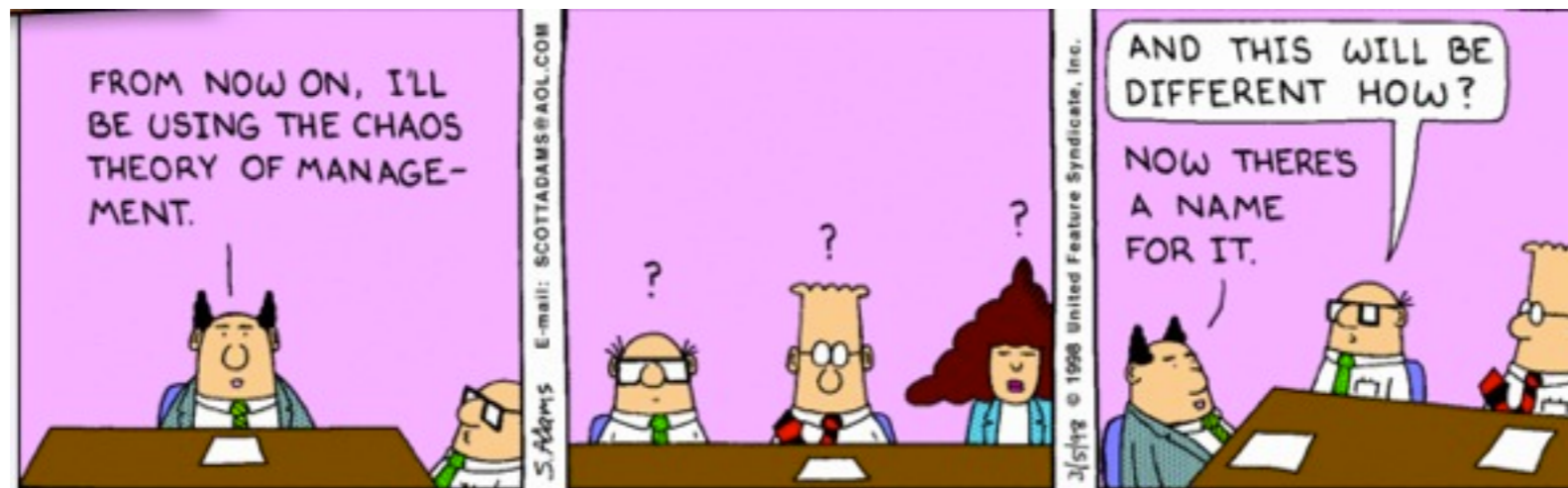# Navigating Chaos

a holistic approach to product development

Olve Maudal, Minister of Knowledge, Cisco Systems in Norway

The key to effective product development is to prepare for the unexpected and be willing to deal with it when it happens. Effective and succssful product development is all about being exceptionally good at navigating the unknown.

A 15 minute presentation, September 6, 2012
Oslo R&D Technical Press Trip, EMEAR Collaboration

"For most of my life I wanted a Porsche, now I think I want an EX90 instead." (leading industry analyst when the EX90 was launched)

What is the secret sauce?

- Facts
- Observations
- Principles

About Developing Spectacular Products

Few high tech projects are like running
down on a paved road where you can see the ...

... goal in the end of the road.

Most projects are more like...

extreme orienteering

in impossible terrain

with a group of people

in the dark

with only a sketchy map as guidance

Observations from R&D, Cisco Systems in Norway

as an engineer joining the organization…

at first you might get this impression...

- No documentation
- No routines
- Fooling around
- Not following plans
- Decision are postponed
- Nobody decides
- Little respect for management
- Little modularization
- Lack of precision
- Sloppiness
- People are not working hard

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but then you start to notice...

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- People communicate
- Focus on important stuff
- Embedded slack
- Continuous planning
- Effective decisions
- Autonomous organisation
- Respect for the doers
- No integration period
- Spectacular products
- Fast deliveries
- Sustainable pace

... and while you still see the "negative" stuff, you will start to appreciate the "positive" stuff more.

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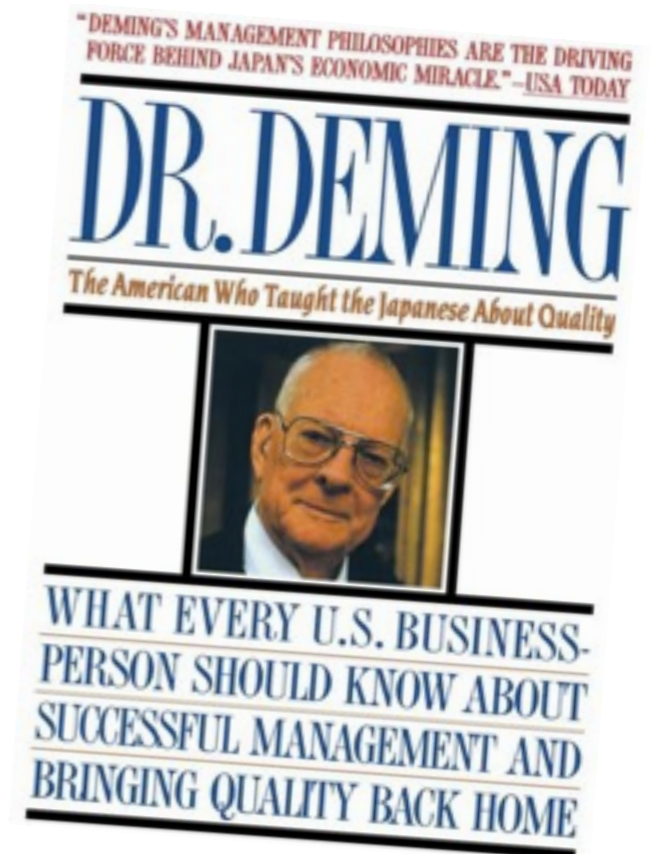- Fast deliveries
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Agile?

Scrum?

Lean?

Deming?

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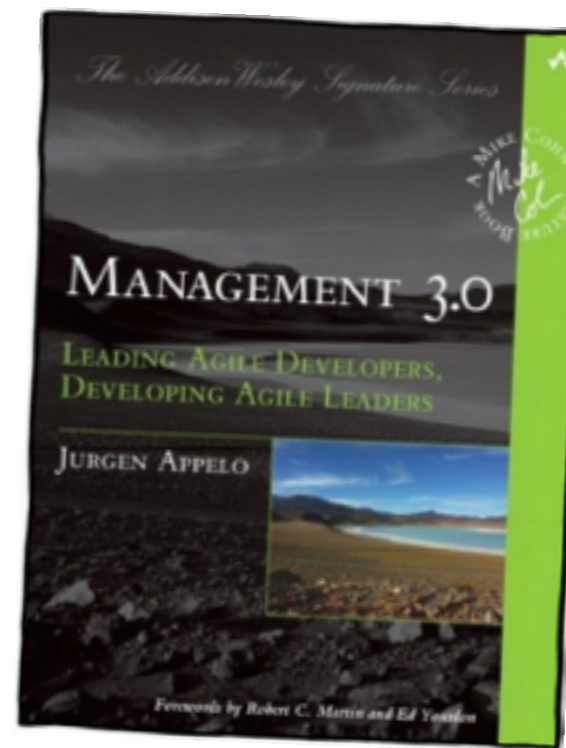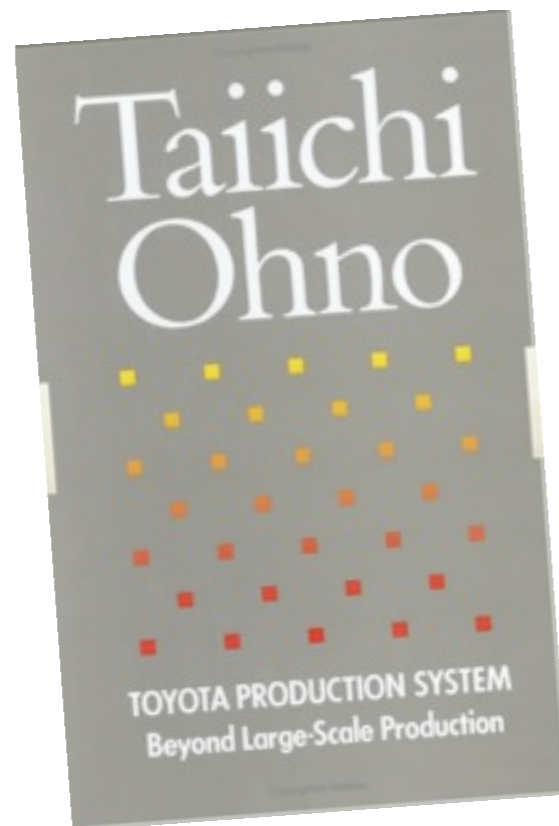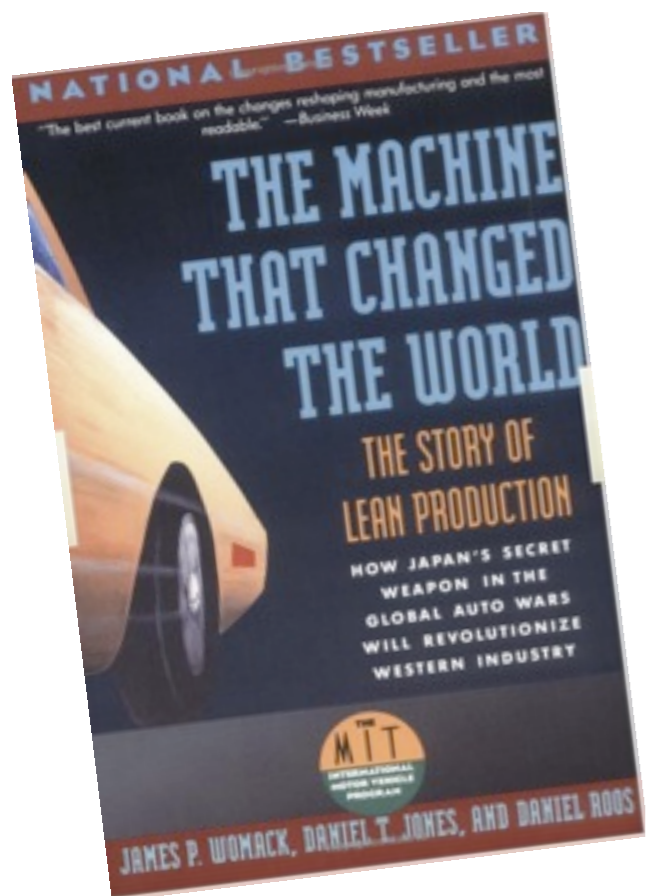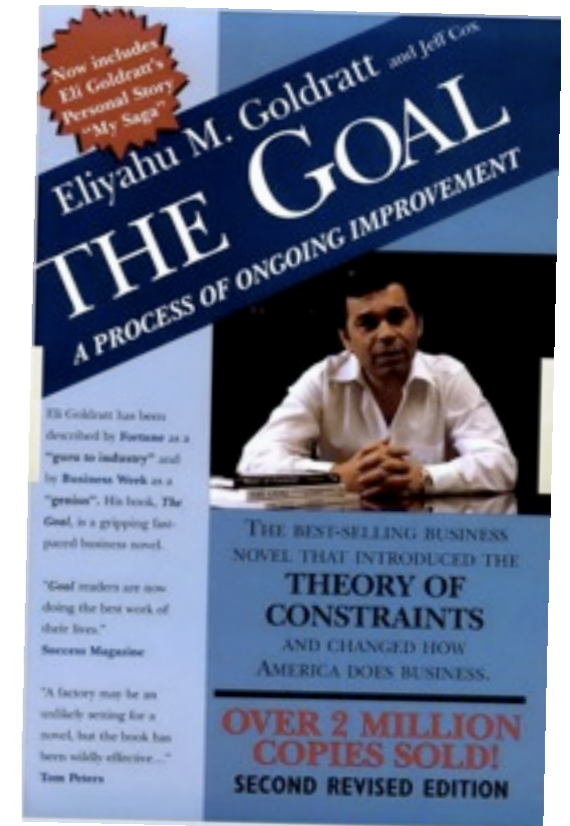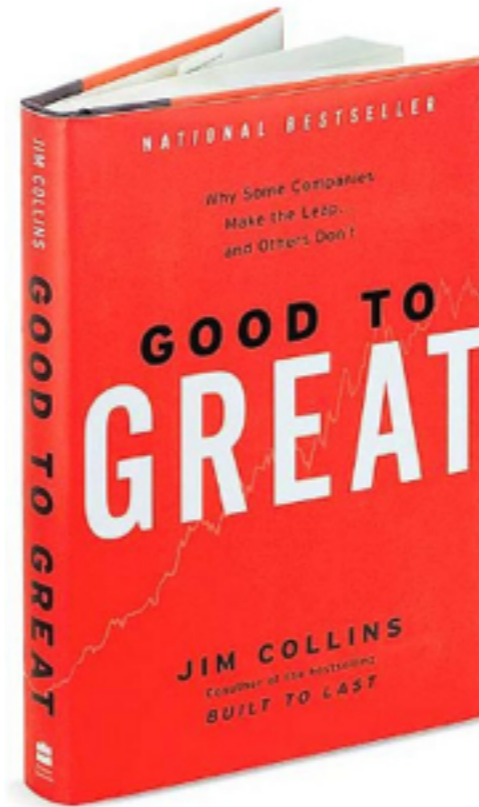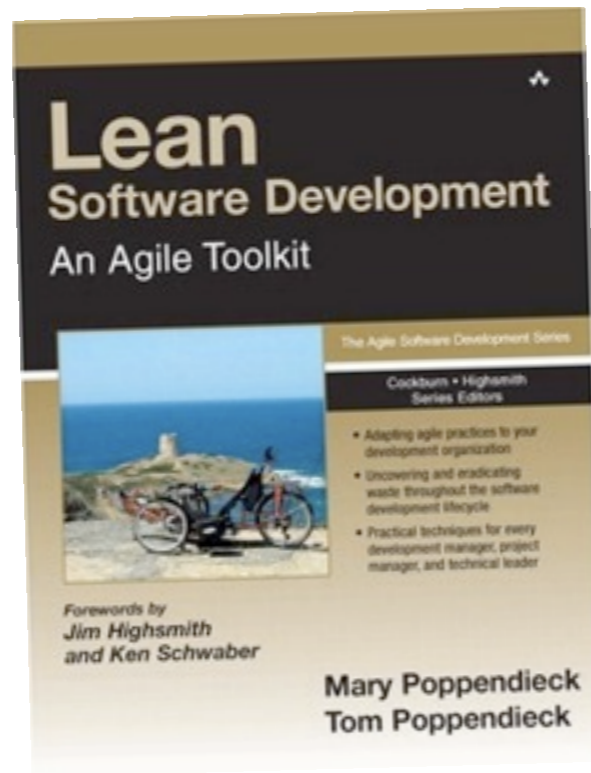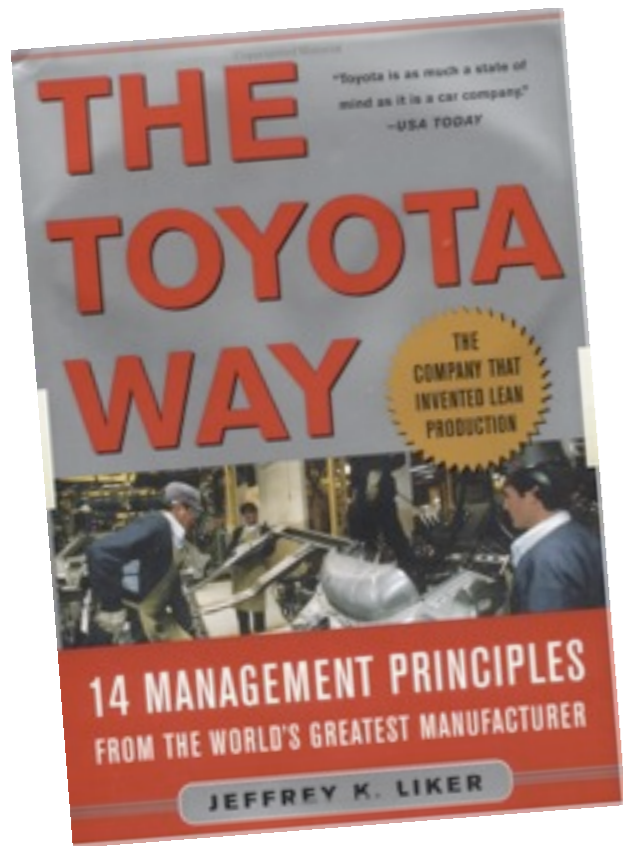- Spectacular products
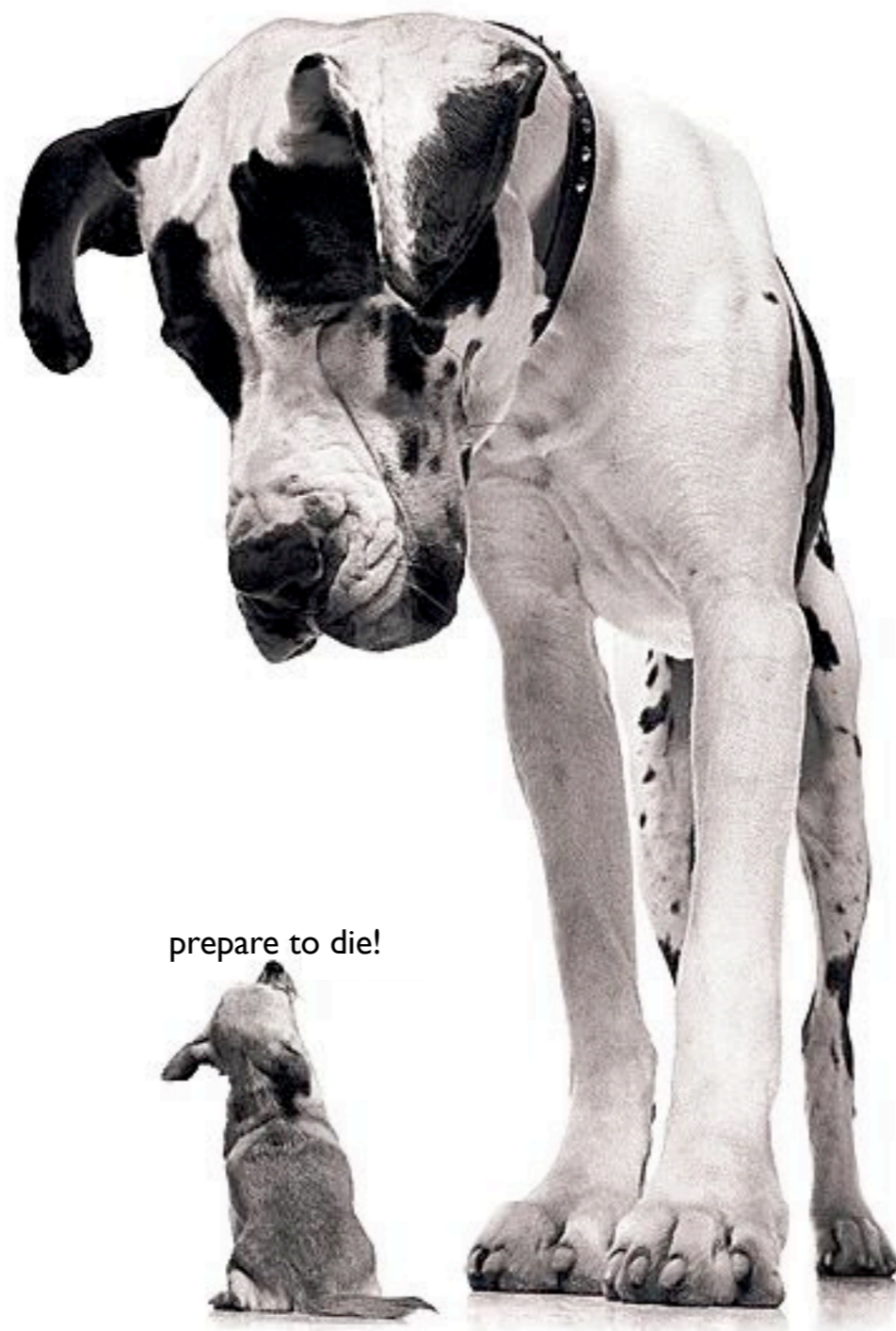- Fast deliveries
- Sustainable pace

THE TOYOTA WAY

"Toyota is as much a state of mind as it is a car company." —USA TODAY

THE COMPANY THAT INVENTED LEAN PRODUCTION

14 MANAGEMENT PRINCIPLES FROM THE WORLD'S GREATEST MANUFACTURER

JEFFREY K. LIKER

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Jurgen Appelo

Forewords by Robert C. Martin and Ed Yourdon

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DR. DEMING

The American Who Taught the Japanese About Quality

WHAT EVERY U.S. BUSINESSPERSON SHOULD KNOW ABOUT SUCCESSFUL MANAGEMENT AND BRINGING QUALITY BACK HOME

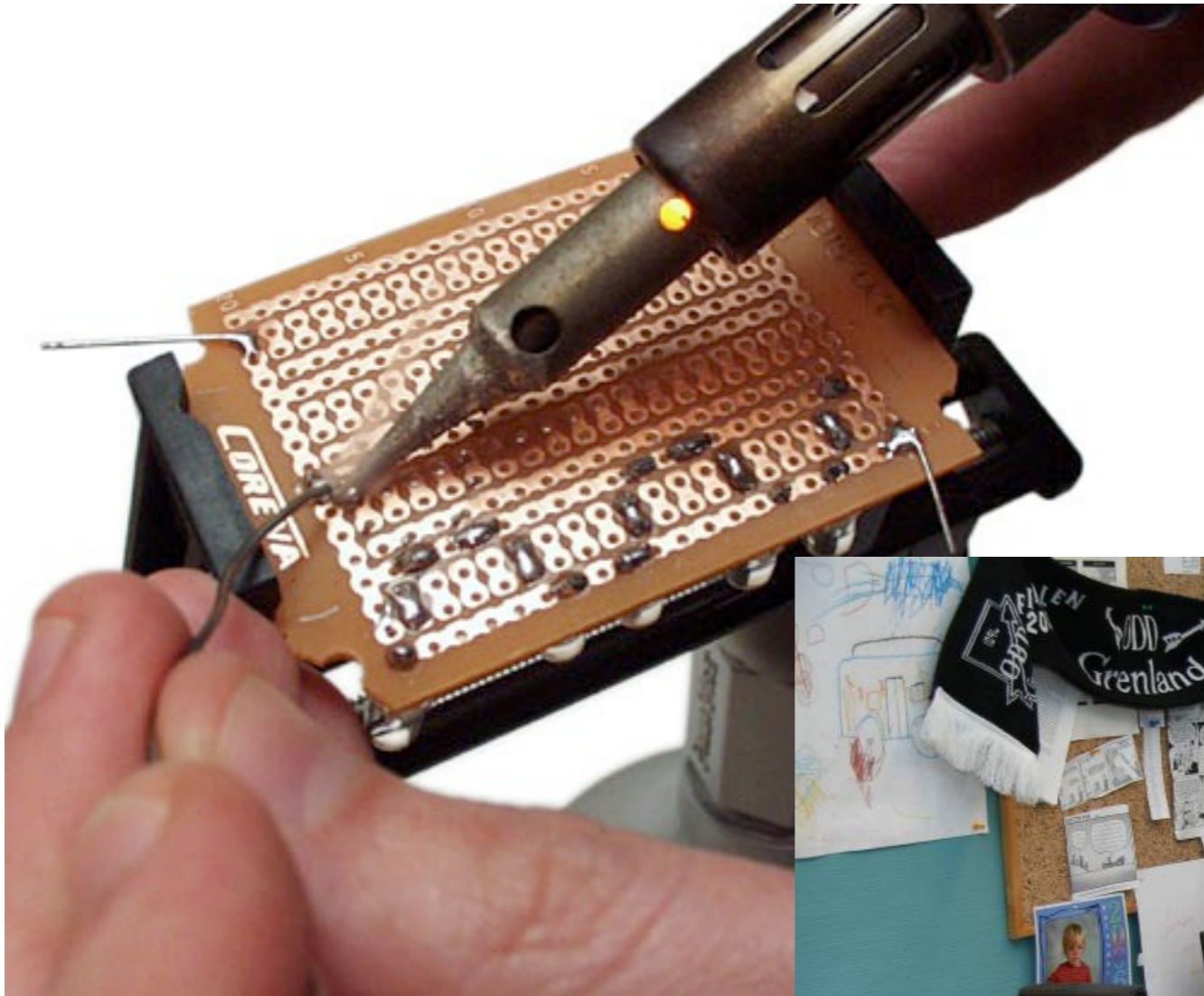# Some principles of effective product development
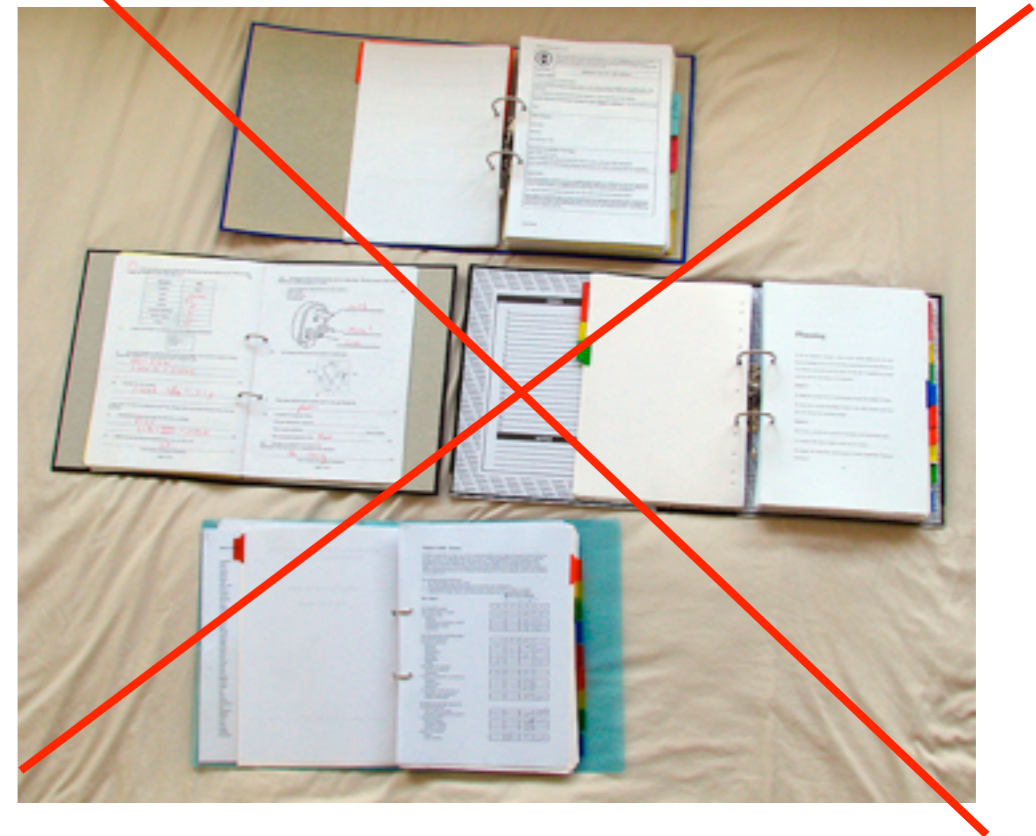
Embrace chaos

Break the rules

prepare to die!

Respect doers (and create an autonomous organization)

Focus on communication (over documentation)

Introduce slack

*If your company's goal is to become fast, responsive, and agile, more efficiency is not the answer--you need more **slack**. (Tom DeMarco)*

Beware the observer effect

Constrain your innovation

Reward courage (and failures)

Focus on the whole product

system thinking   vs   reductionism

Delay decisions (but do continuous planning)

Plans are of little importance, but planning is essential – Winston Churchill
Plans are nothing; planning is everything. – Dwight D. Eisenhower
No battle plan survives contact with the enemy. – Helmuth von Moltke the Elder

Everyone has a plan 'till they get punched in the mouth. – Mike Tyson

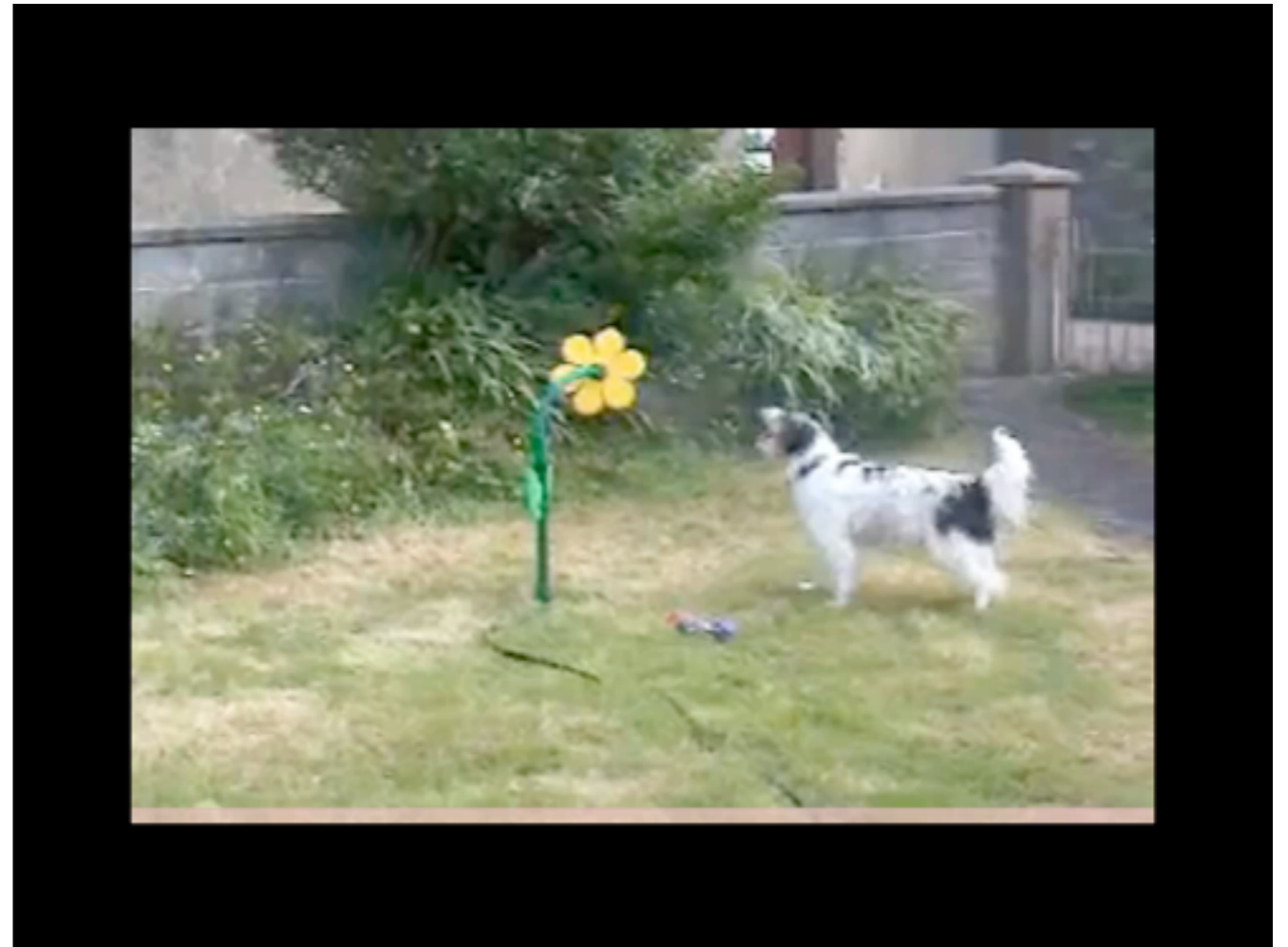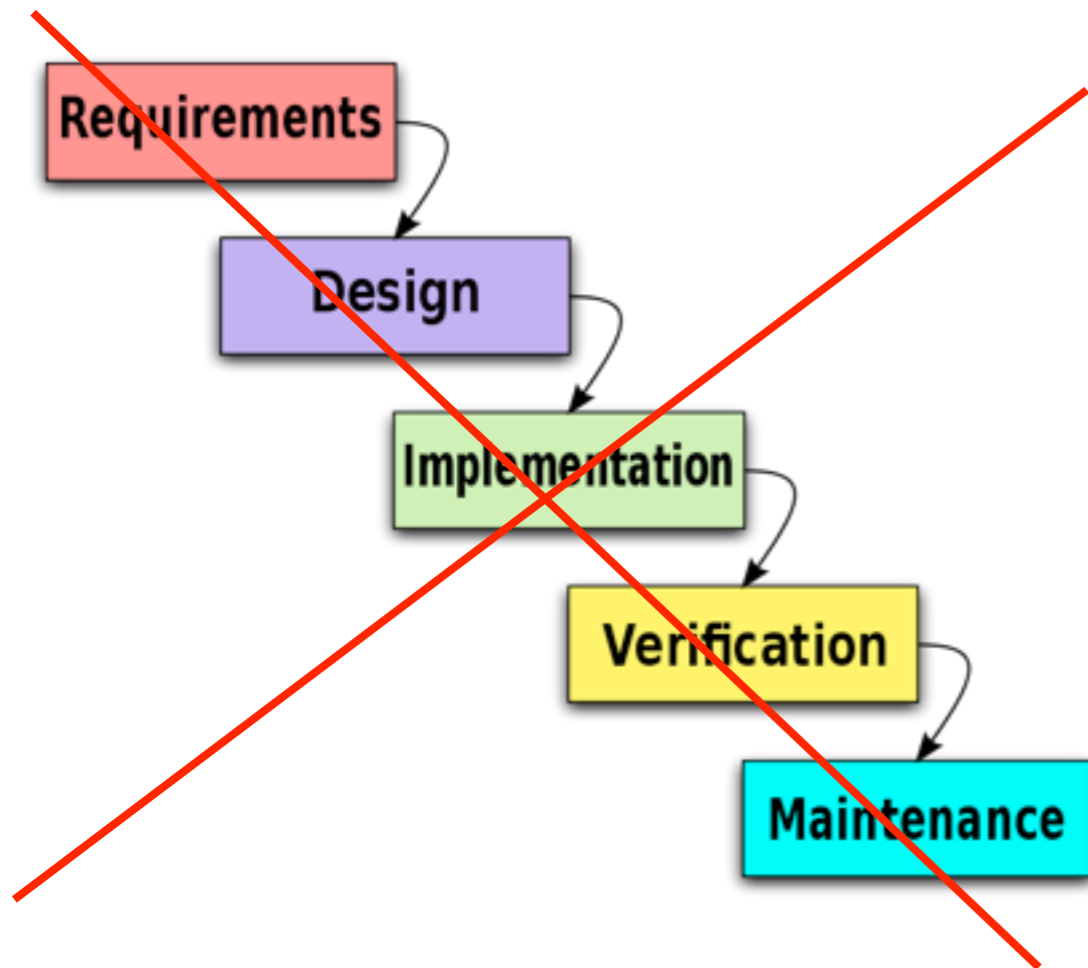# Aim for approximately right rather than accurately wrong
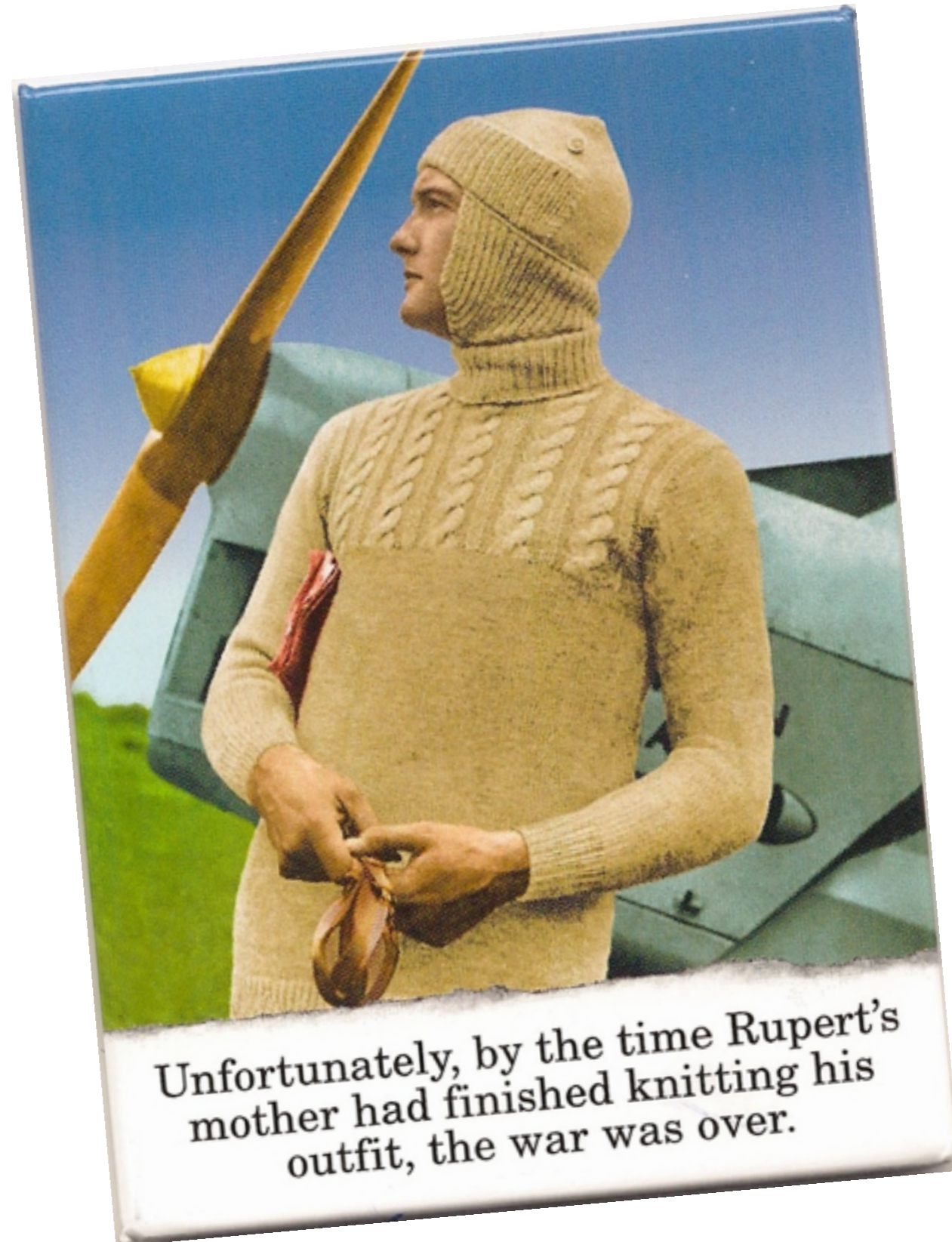
Seek early feedback

Pixar - our films are never finished, they are just released

Follow principles, not processes

Timing is everything

Unfortunately, by the time Rupert's mother had finished knitting his outfit, the war was over.

Navigating Chaos

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- Respect doers
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- Introduce slack
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- Constrain your innovation
- Reward courage
- Focus on the whole product
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Being exceptionally good at navigating chaos is the key to deliver **spectacular products**