The Origins of Scrum

Leadership
Lean
Cross Functional Teams
Continuous Improvement
Agility
Delighting the Customer
Innovation
Scaling
Leadership

EMC
Ericsson
Workday
Cisco
Salesforce
Walmart
Visa
Macy's
Stubhub
Symantec
Adobe
Intuit
Twitter
Paypal
Version One
Lean IT
BBC
Deloite
Google
UK Cabinet
Sky News
GOTO
Rabobank
HBS

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Achieving the Dream

United States Declaration of Independence

*We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable rights, that among these are **life, liberty and the pursuit of happiness**.*

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Most People Think Work Sucks

- 55% of workers are unhappy in their job [(Conference Board)](#)
- 65% are looking for a new job [(Deloitte)](#)
- We find paid work is ranked lower than any of the other 39 activities individuals engage in, with the exception of being sick in bed. [(Center for Economic Performance)](#)
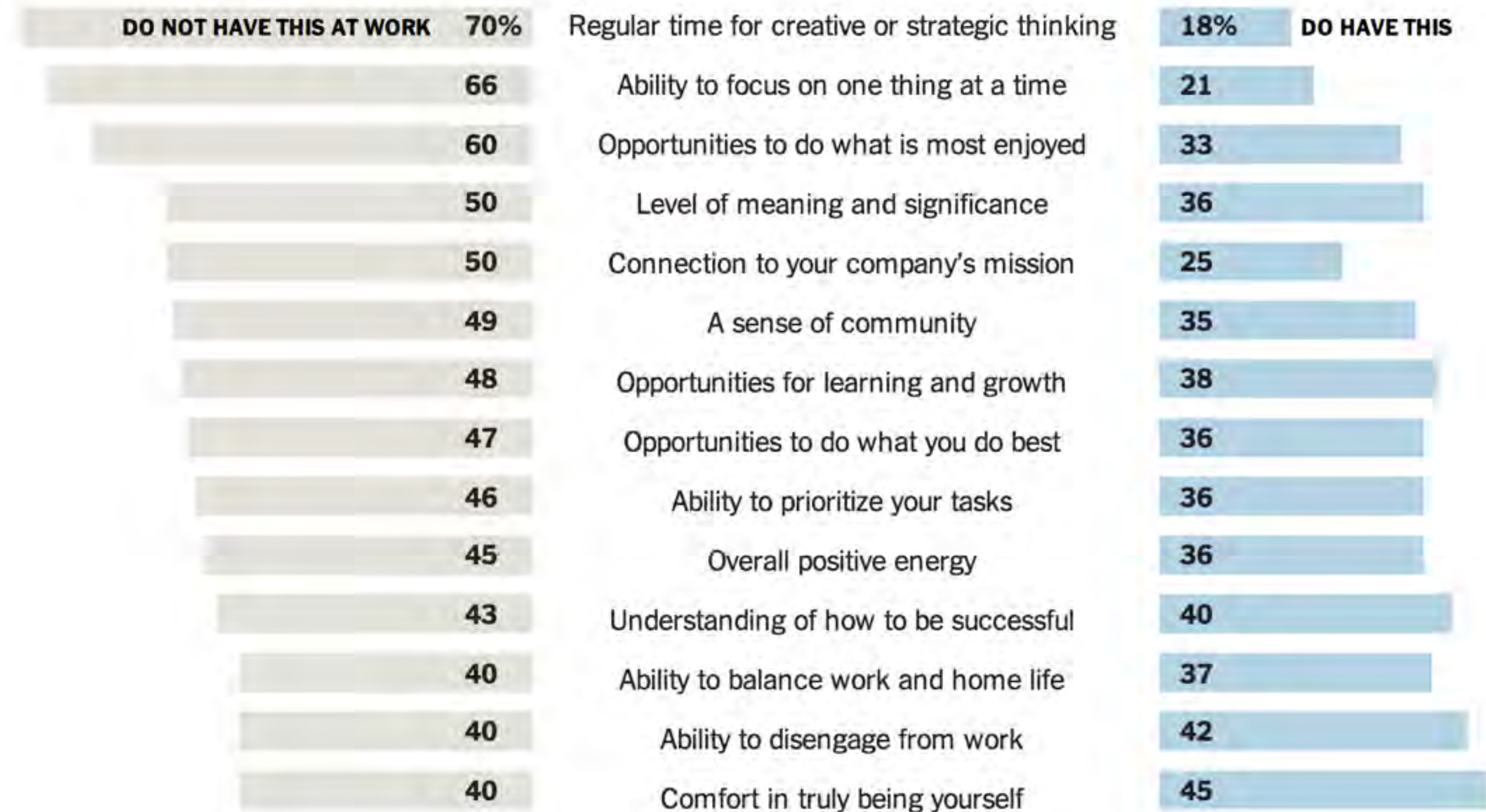

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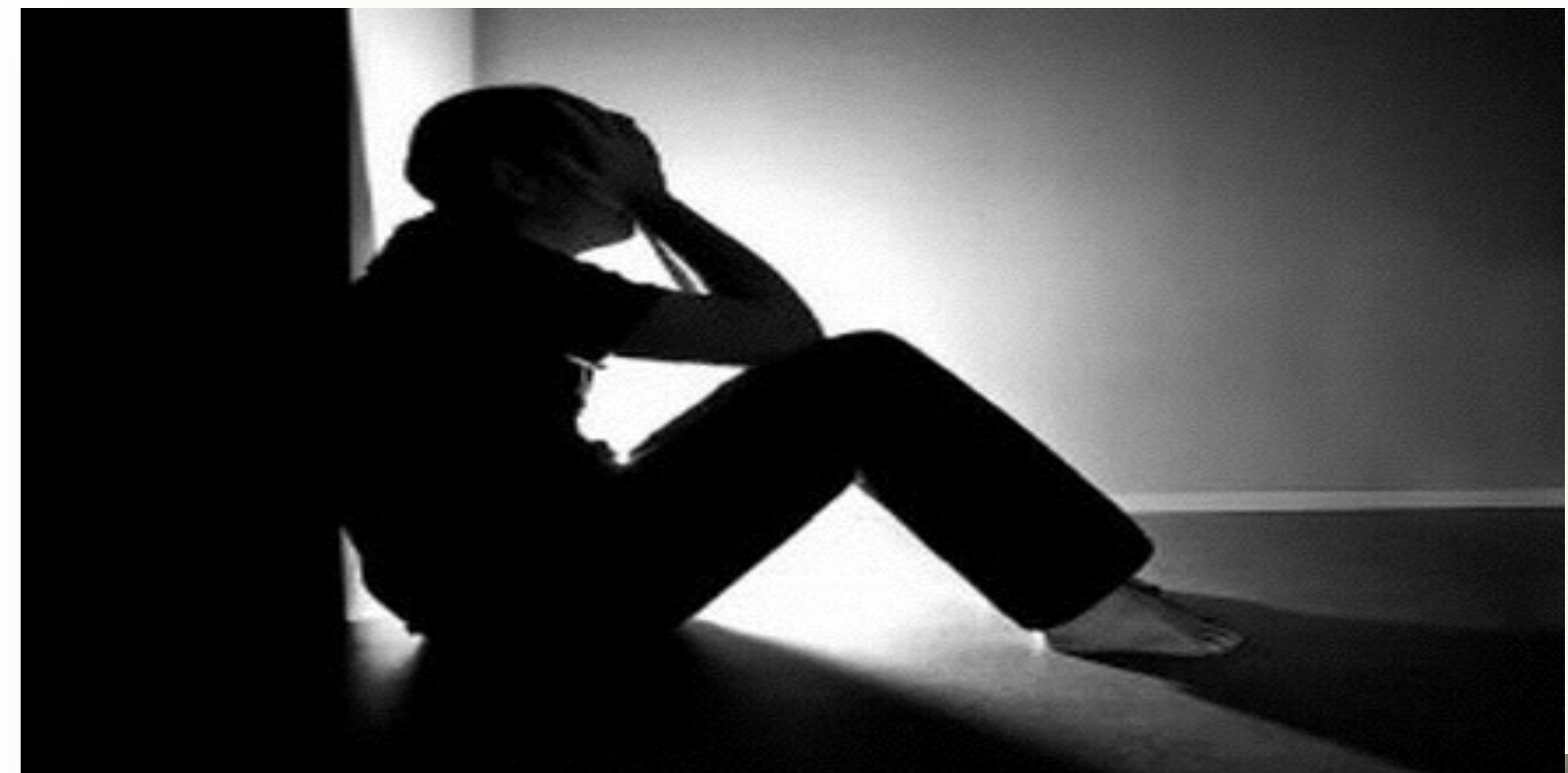
Why You Hate Work

By TONY SCHWARTZ and CHRISTINE PORATH MAY 30, 2014

White-Collar Salt Mine

A 2013 survey of 12,115 workers worldwide found that many lacked a fulfilling workplace.

DO NOT HAVE THIS AT WORK		DO HAVE THIS
70%	Regular time for creative or strategic thinking	18%
66	Ability to focus on one thing at a time	21
60	Opportunities to do what is most enjoyed	33
50	Level of meaning and significance	36
50	Connection to your company's mission	25
49	A sense of community	35
48	Opportunities for learning and growth	38
47	Opportunities to do what you do best	36
46	Ability to prioritize your tasks	36
45	Overall positive energy	36
43	Understanding of how to be successful	40
40	Ability to balance work and home life	37
40	Ability to disengage from work	42
40	Comfort in truly being yourself	45

Source: The Energy Project

94 percent of those surveyed were in white-collar jobs; 6 percent were in blue-collar jobs.

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Few Achieve the Dream

The best-laid schemes o' mice an' men

Gang aft agley,

An' lea'e us nought but grief an' pain,
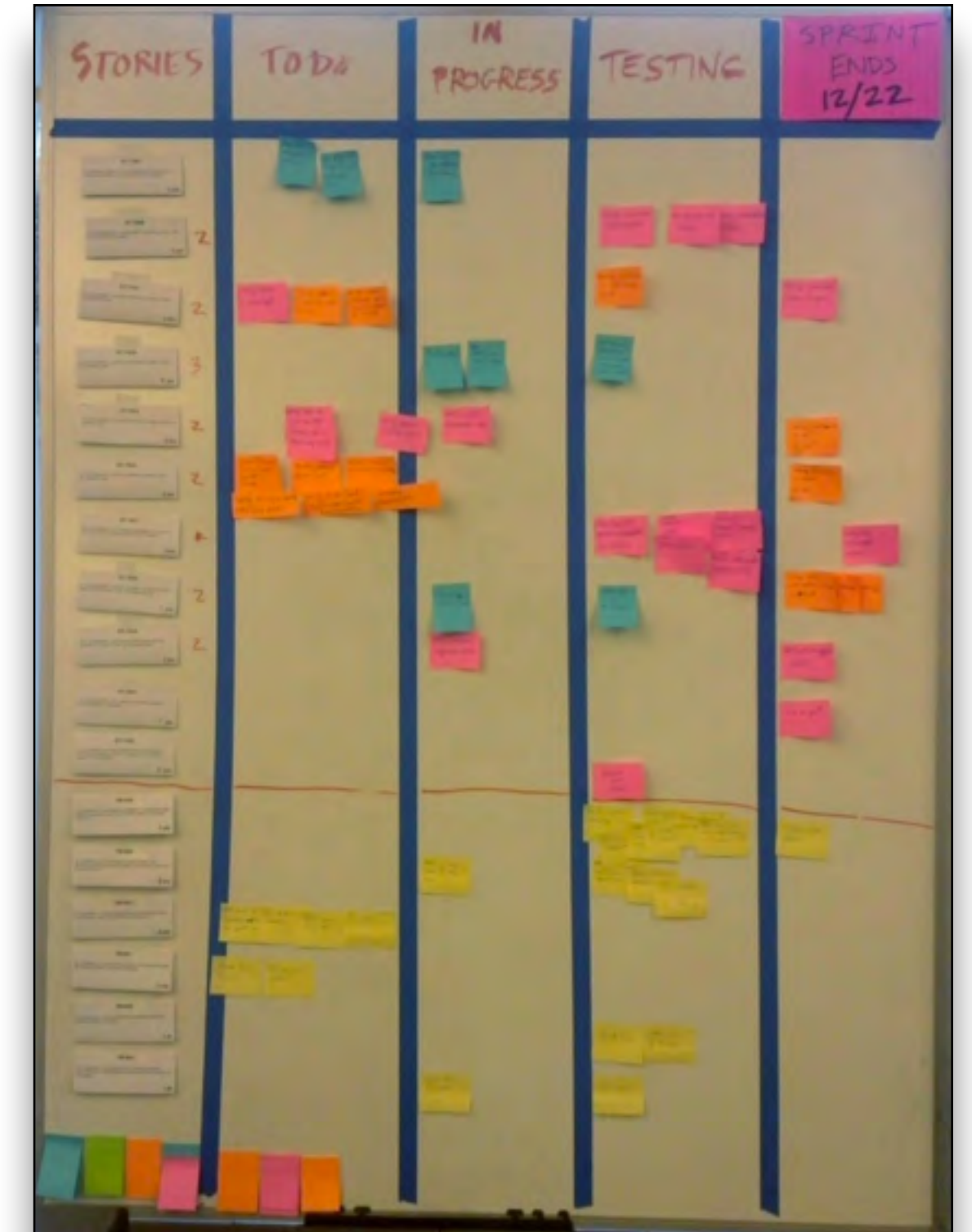
For promis'd joy!

Robert Burns
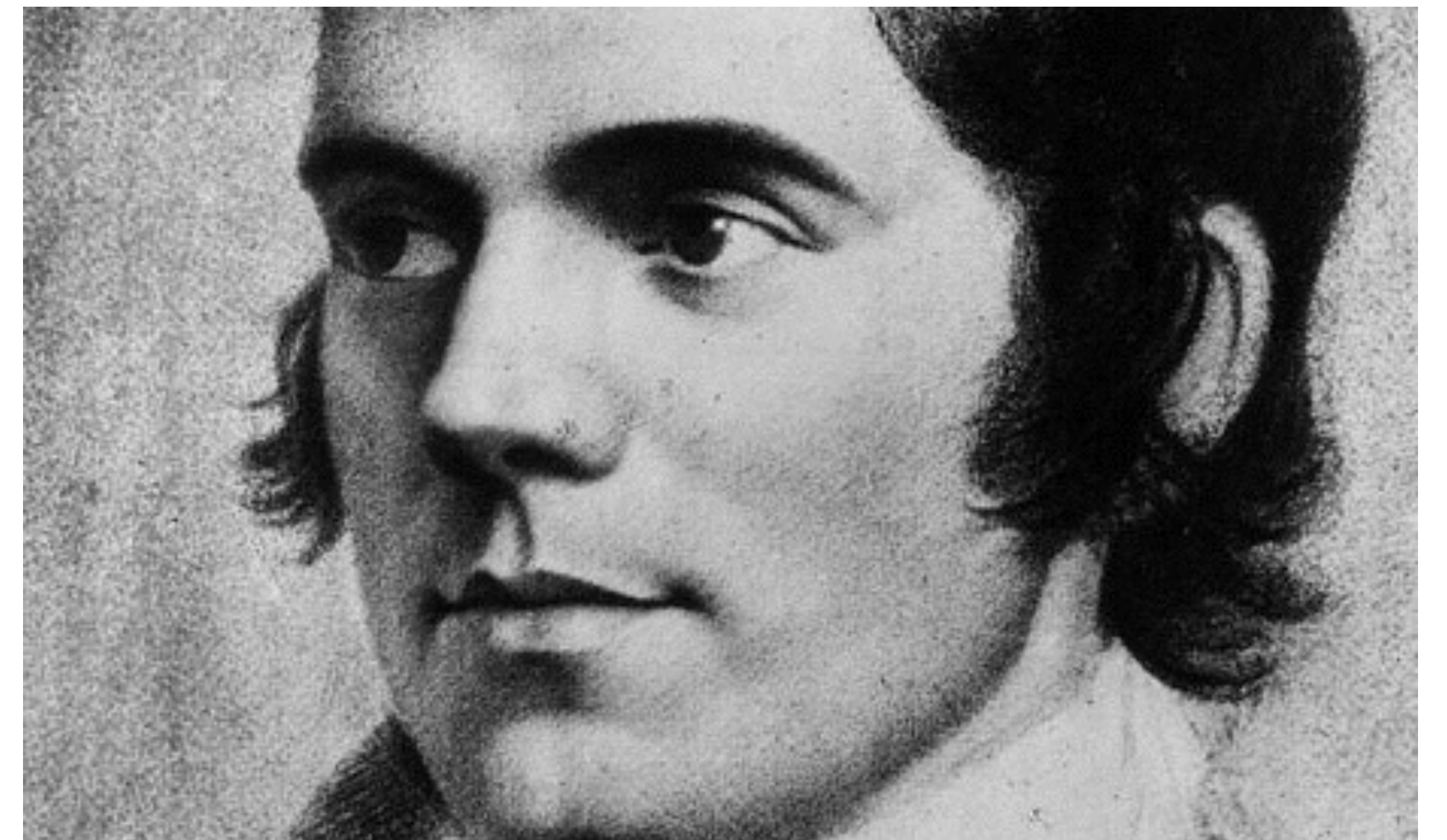
Twice as much sweat in half the time

A Famous Photo

Make Work Visible

General Douglas MacArthur

Duty, Honor, Country

The shadows are lengthening for me. The twilight is here… But I want you to know that when I cross the river, **my last conscious thoughts will be of the Corps, and the Corps, and the Corps.**

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Plans are Worthless, Planning is Everything!

Plans are Worthless, Planning is Everything!

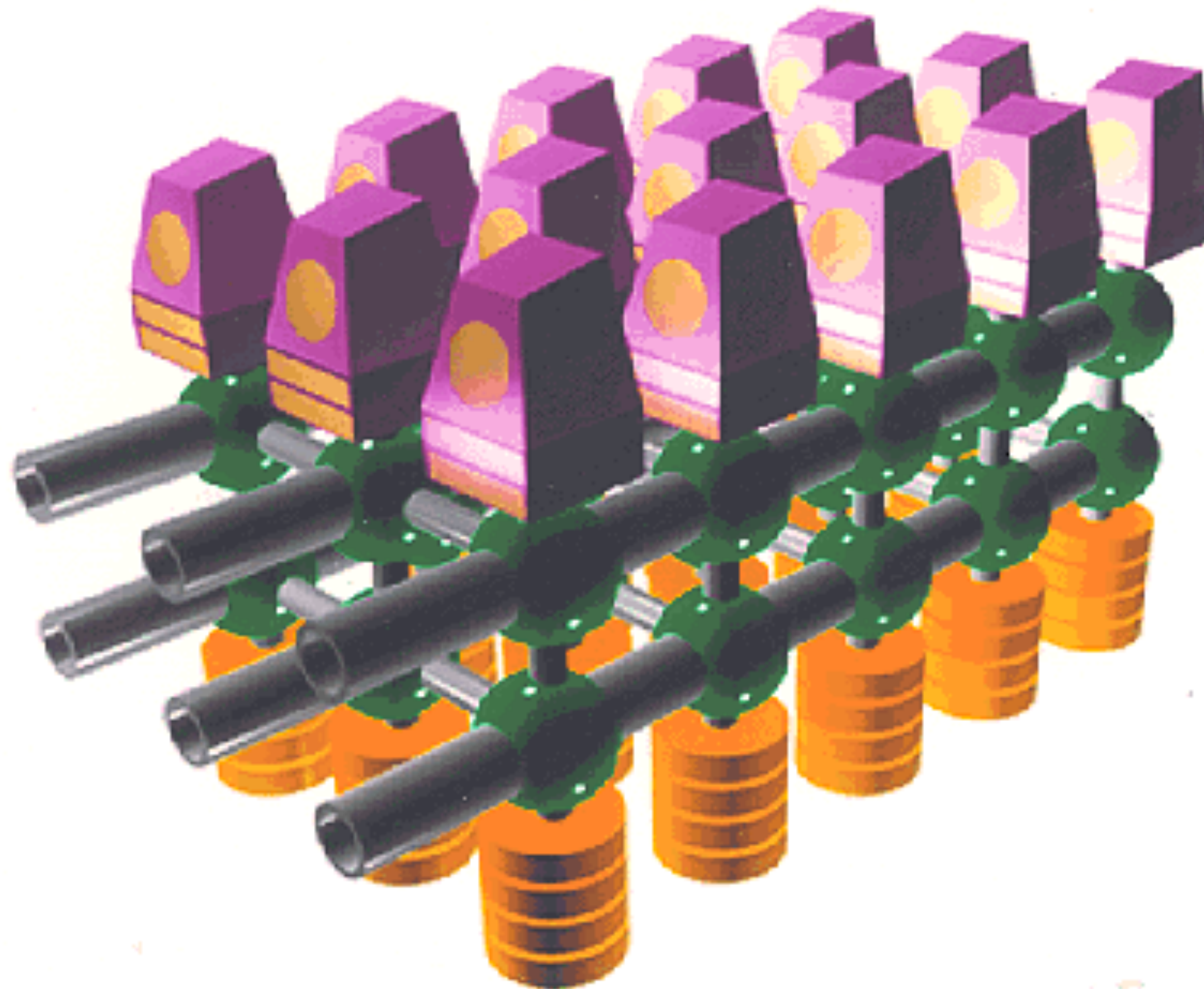Captain Edwin Atterberry Shot Down August 1967- Wikipedia

scruminc. @

U.S. Air Force Academy

Cellular Architecture:
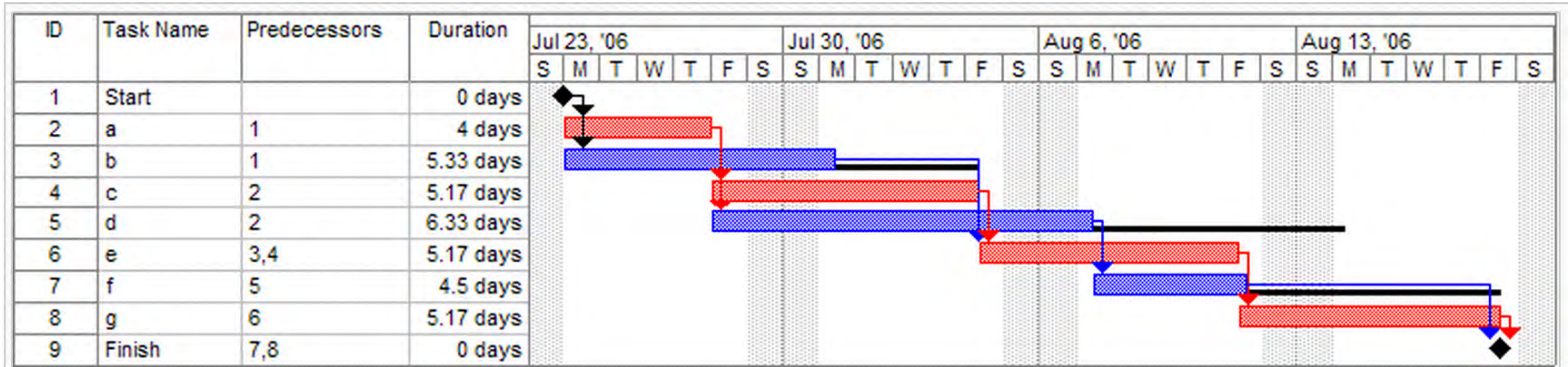# Programming the Human Biocomputer
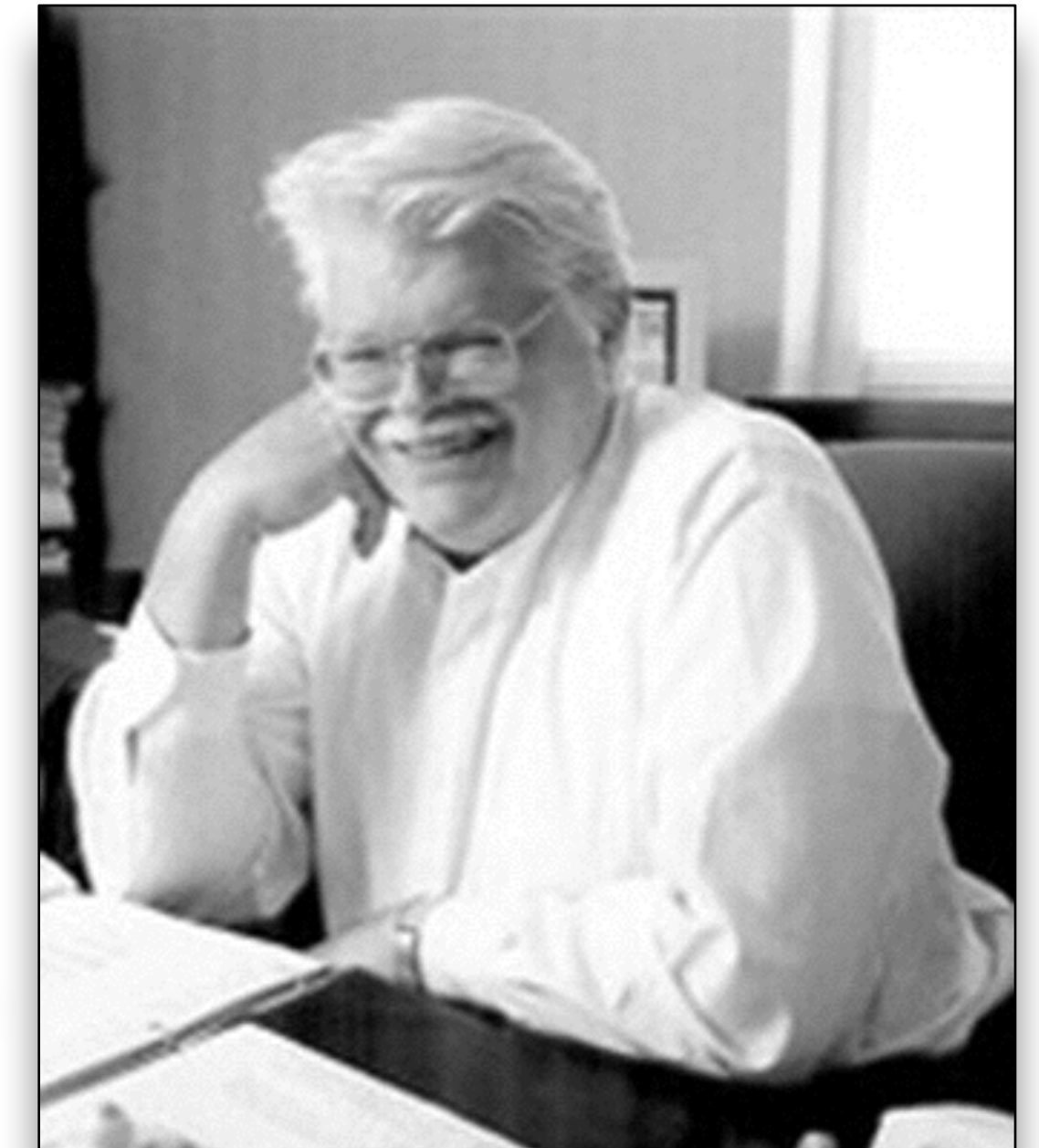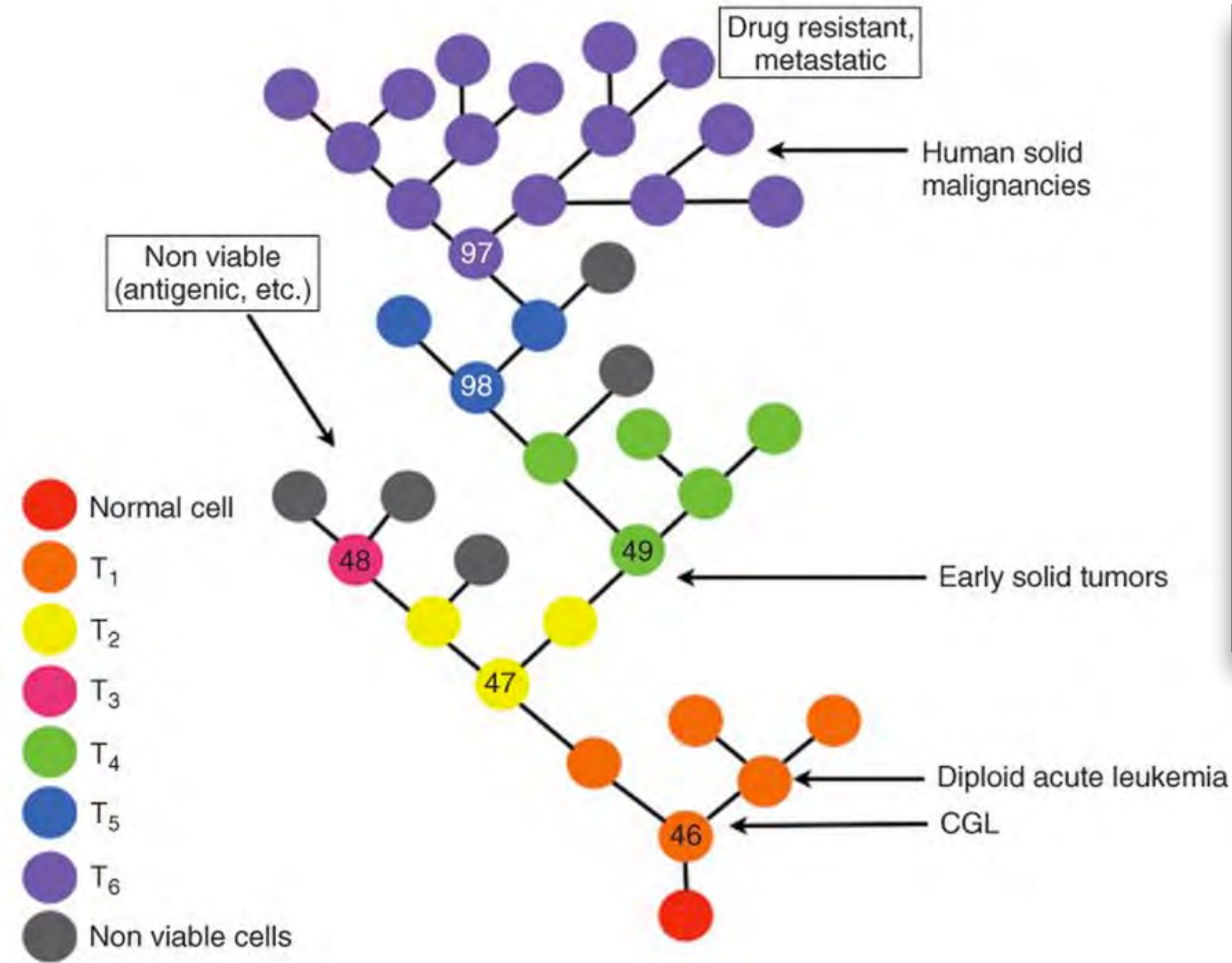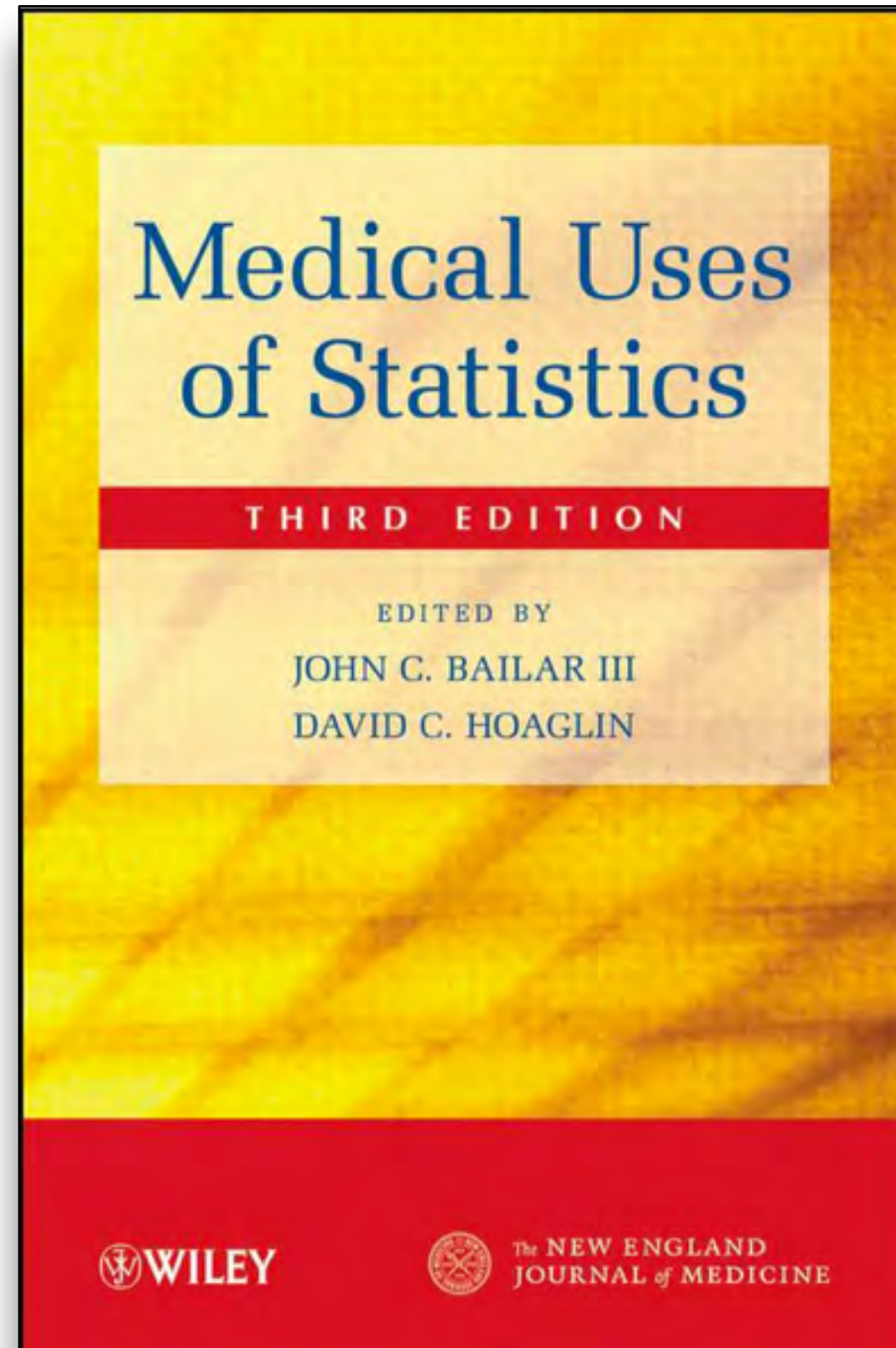
John Bailar, M.D., Ph.D.

Systems Architecture: Massively Parallel
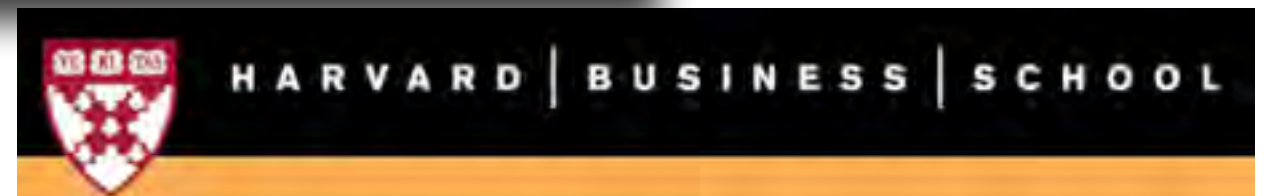
Project Architecture: 84% Failure Rate

ID	Task Name	Predecessors	Duration
1	Start		0 days
2	a	1	4 days
3	b	1	5.33 days
4	c	2	5.17 days
5	d	2	6.33 days
6	e	3,4	5.17 days
7	f	5	4.5 days
8	g	6	5.17 days
9	Finish	7,8	0 days

Death March at the Bank

Landing the Project

YouTube: RF-4E of the Hellenic Air Force

Make Work Visible!

Bootstrapping

Prof. Muhammed Yunus

Grameen Bank

Microfinance company

The Grameen Bank is a Nobel Peace Prize-winning microfinance organization and community development bank founded in Bangladesh. It makes small loans to the impoverished without requiring collateral. Wikipedia

Founder: Muhammad Yunus

Founded: 1983

People also search for

grameenphone GRAMEEN FOUNDATION

Grameen... Grameen Foundation Gram Ameri

ACCION International

Nonprofit organization

Accion International is a global nonprofit organization that supports microfinance institutions in their work to provide financial services to low-income clients. Wikipedia

Founder: Joseph Blatchford

People also search for   View 5+ more

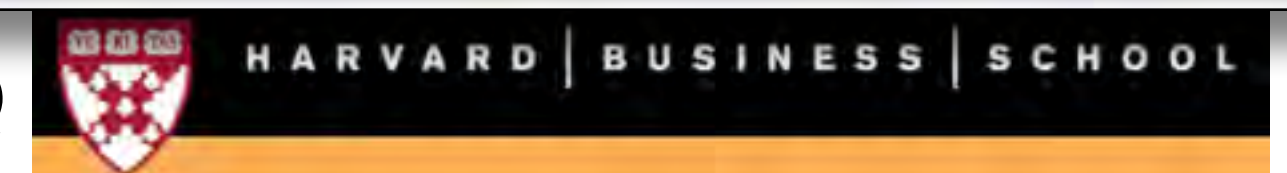WWB Women's World Banking   FINCA   GRA FOUN   freedom from Hunge

Women's World Banking   FINCA International   Grameen Foundation   Freedom from Hunger

- Helen Greiner, First Lady of Robots

- Colin Angle

- Prof. Rodney Brooks

Popular Science — PIONEERING RESEARCH TOOLS FOR ARTIFICIAL INTELLIGENCE — ROBOT INSECTS

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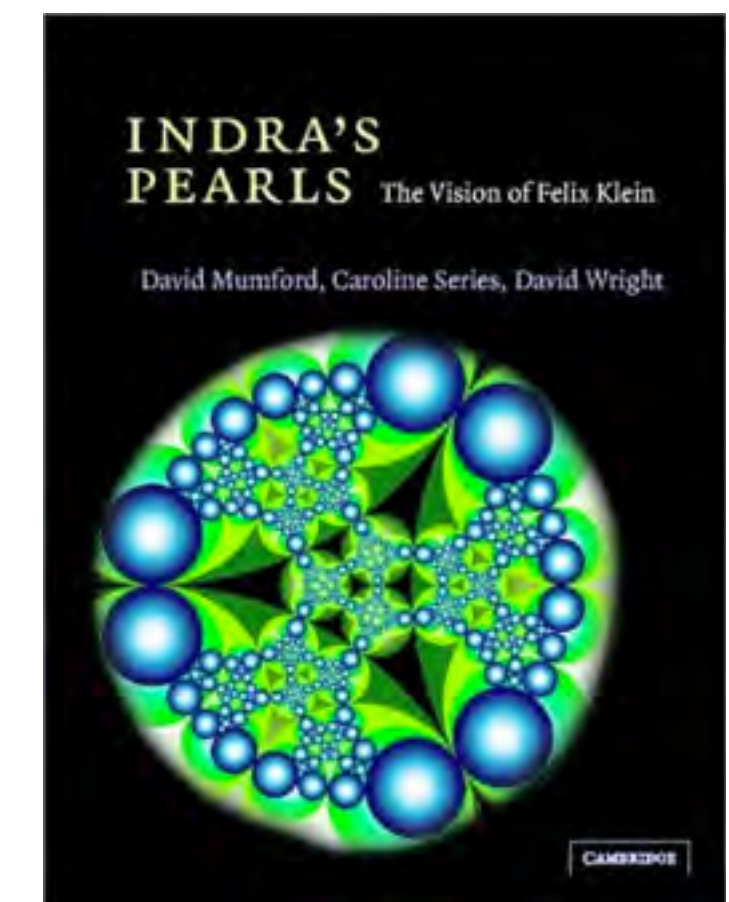
Organizational Architecture: 3 Constraints

- Conway's law

  - **organizations which design systems ... are constrained to produce designs which are copies of the communication structures of these organizations**

- Brook's Law

  - **adding people to a late project makes it later**

- Drucker's "Cuckoo Effect"

  - **any innovation in a corporation will stimulate the corporate immune system to create antibodies that destroy it**
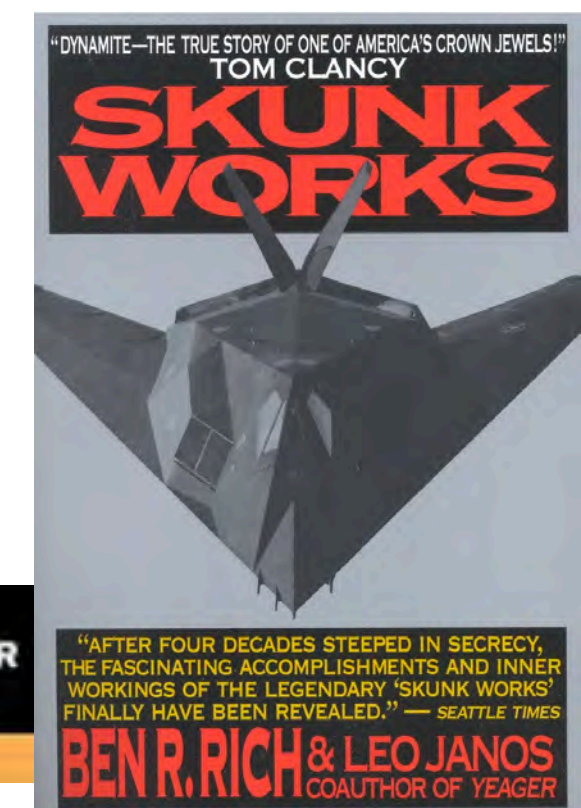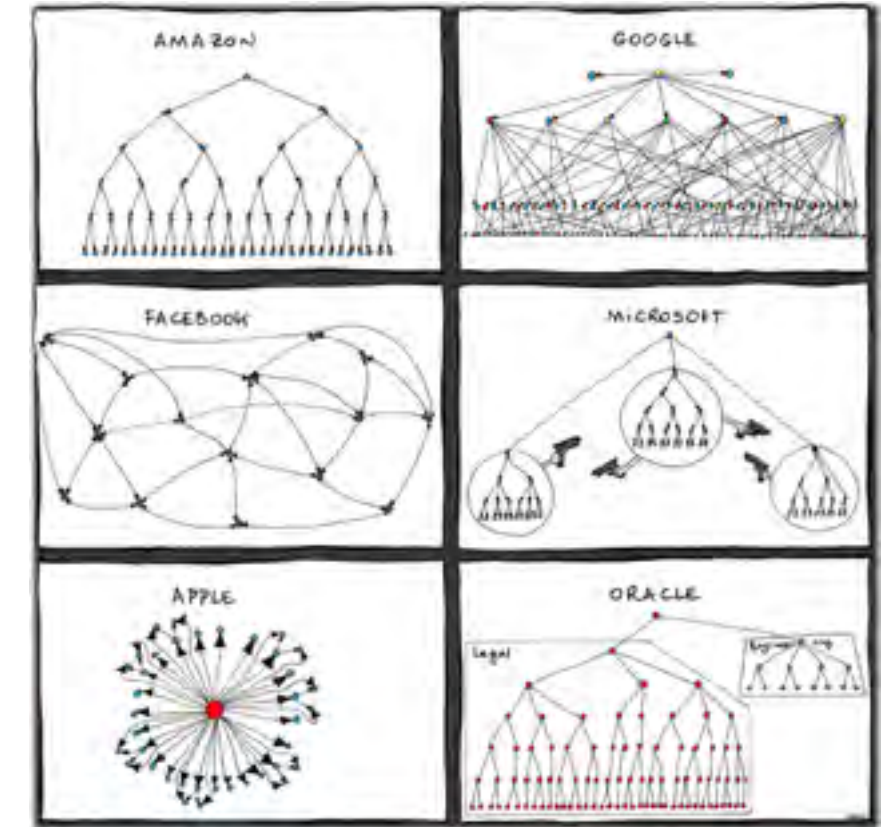
scruminc.@

Fractal Organization: Optimal Team Size = 4.6
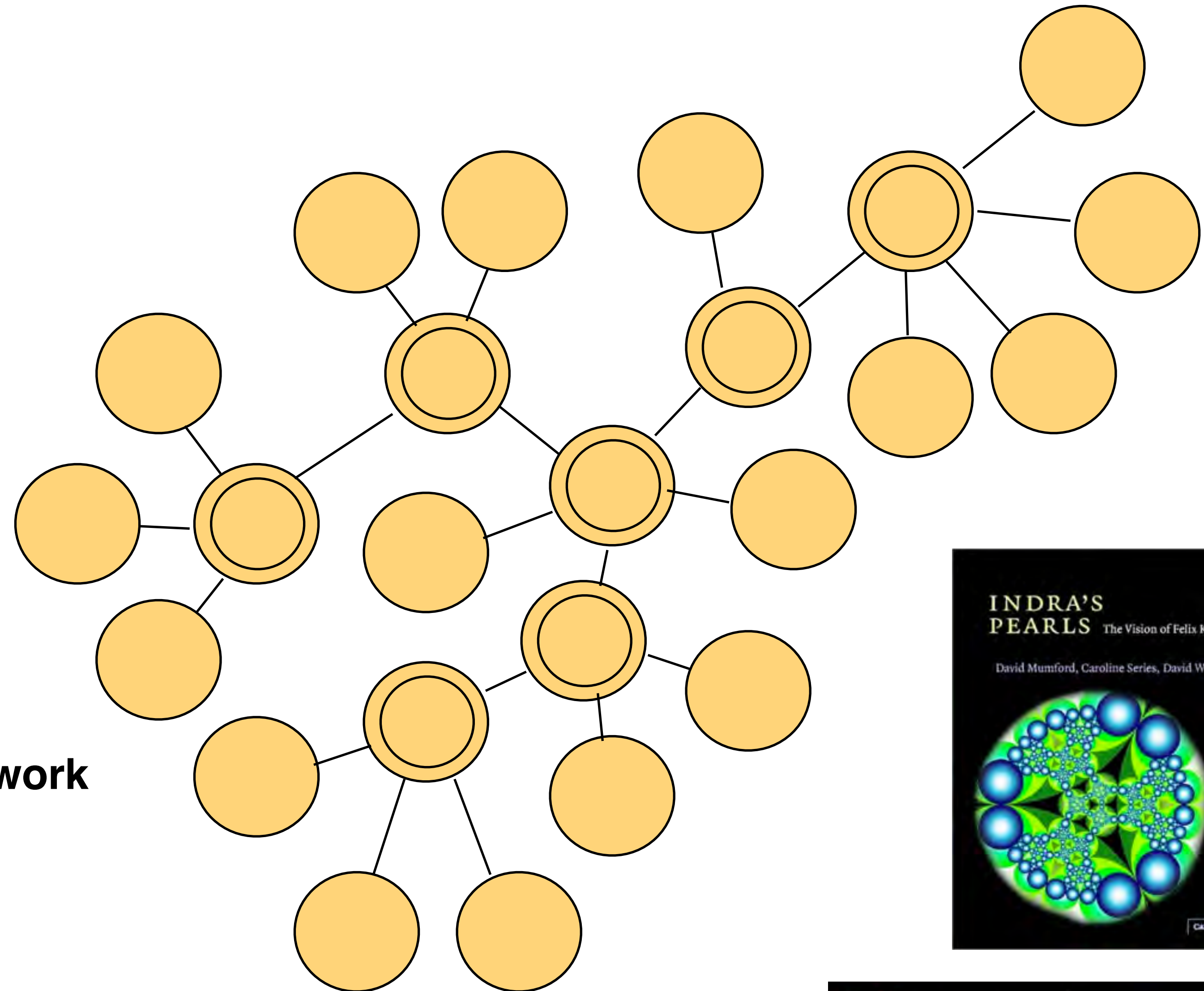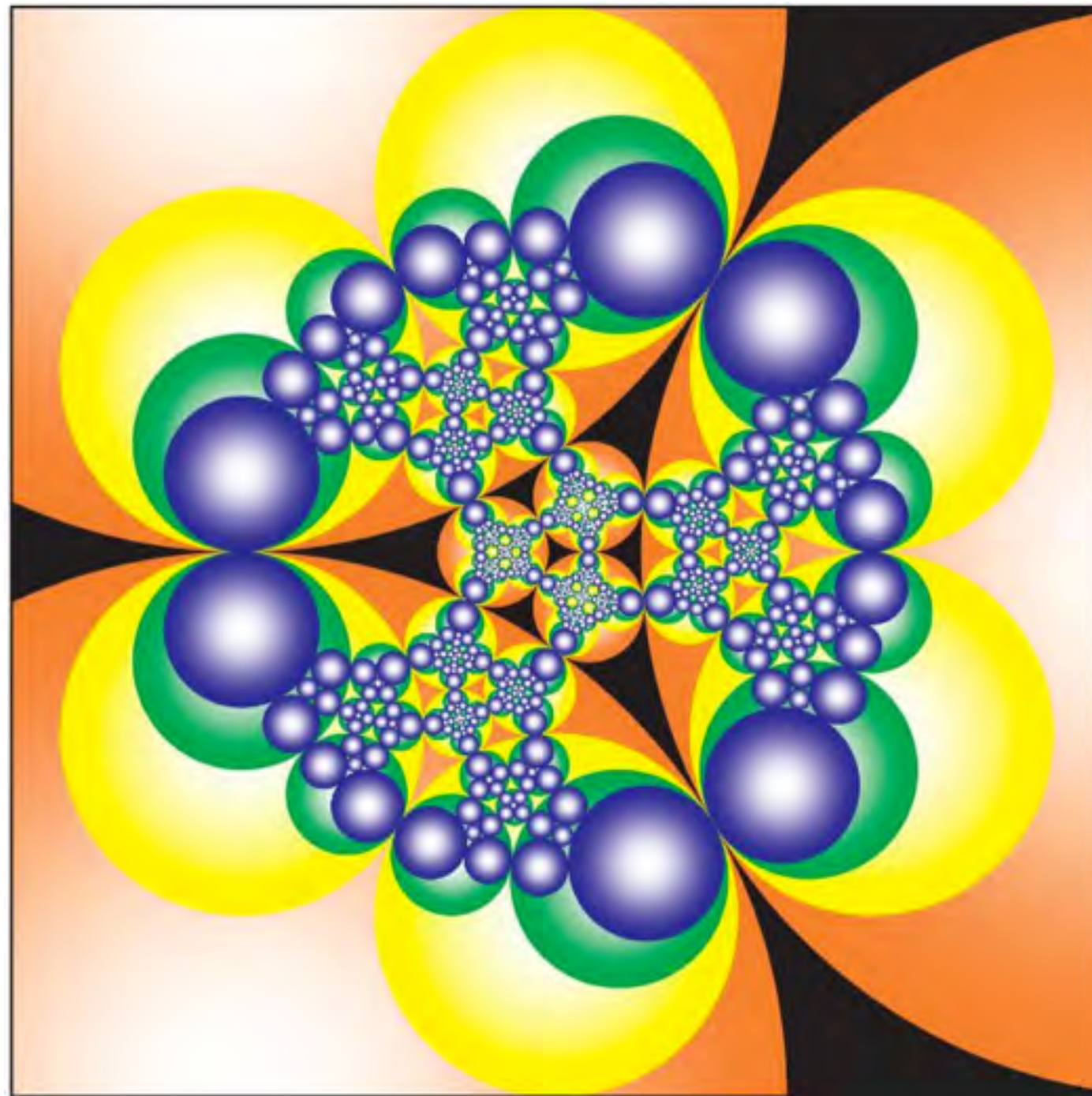
- **Scrum is a object-oriented framework**
- **Refactor the organization to maximize flow**
- **Small steps regularly**
- **Large changes periodically**

INDRA'S PEARLS The Vision of Felix Klein

David Mumford, Caroline Series, David Wright

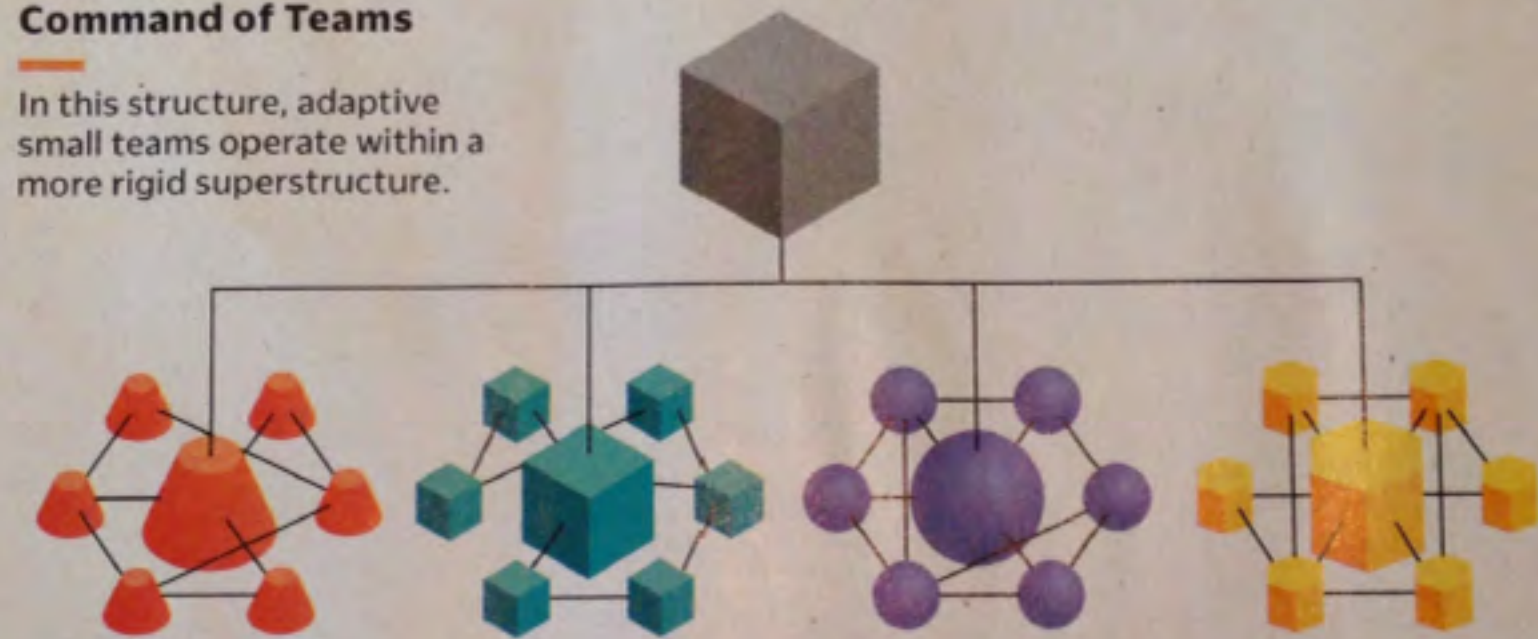CAMBRIDGE

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Command

In this traditional top-down structure, the connections that matter are the ones between workers and their managers.
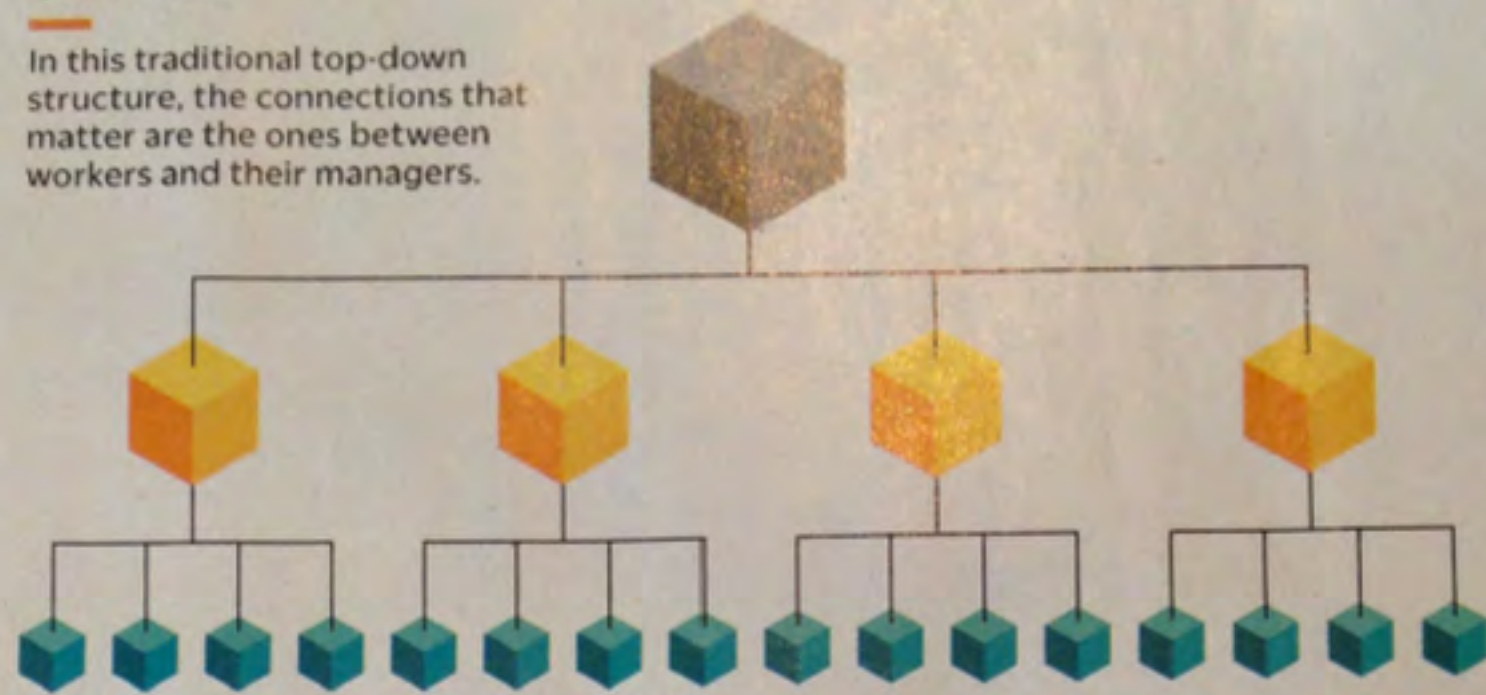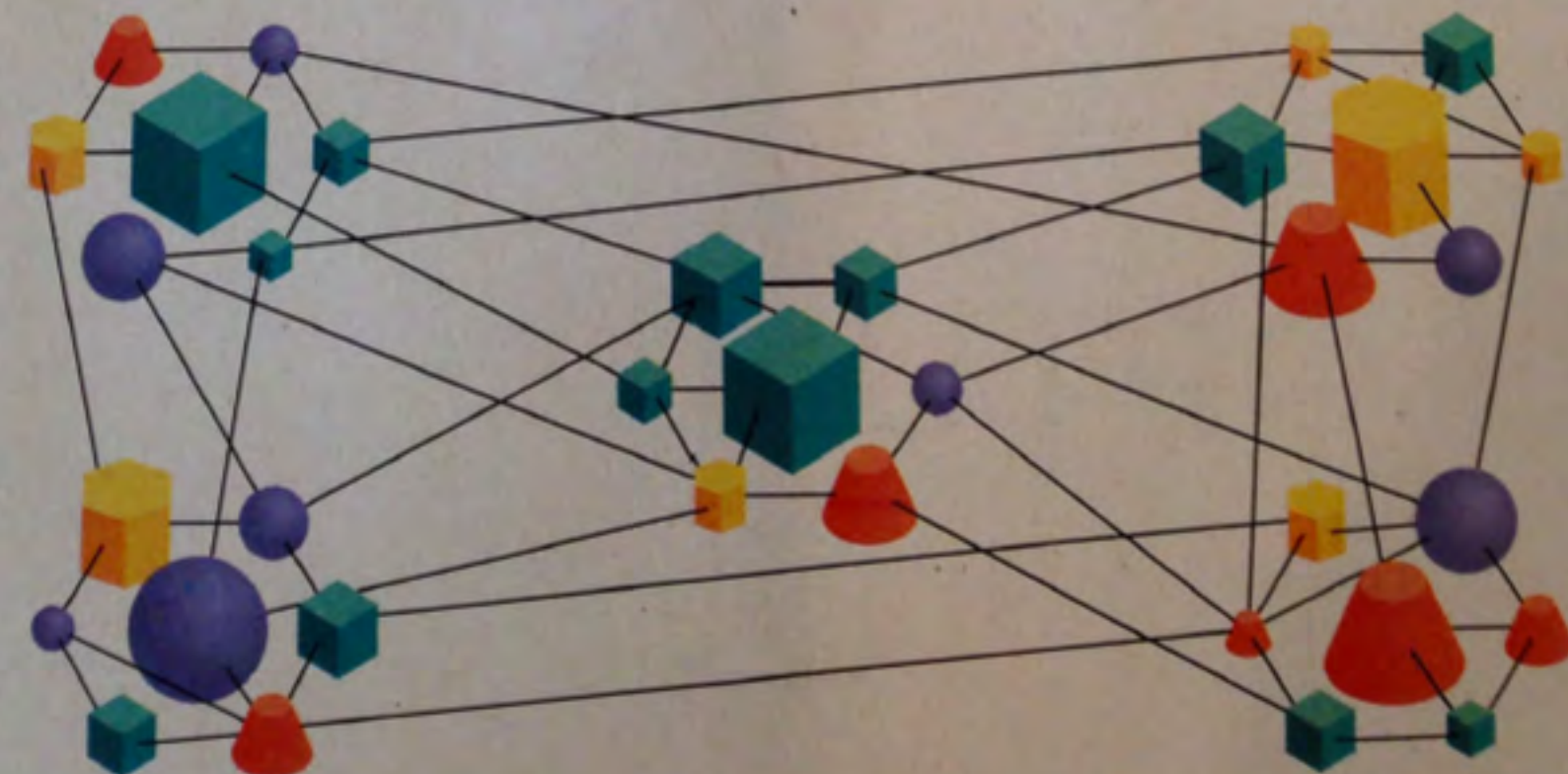
Command of Teams

In this structure, adaptive small teams operate within a more rigid superstructure.

Team of Teams

The relationships among teams should resemble the closeness among individuals on those teams.

Your structure is your strategy!

"In addition to being a fascinating and colorful read, this book is an indispensable guide to organizational change." —WALTER ISAACSON, *from the foreword*
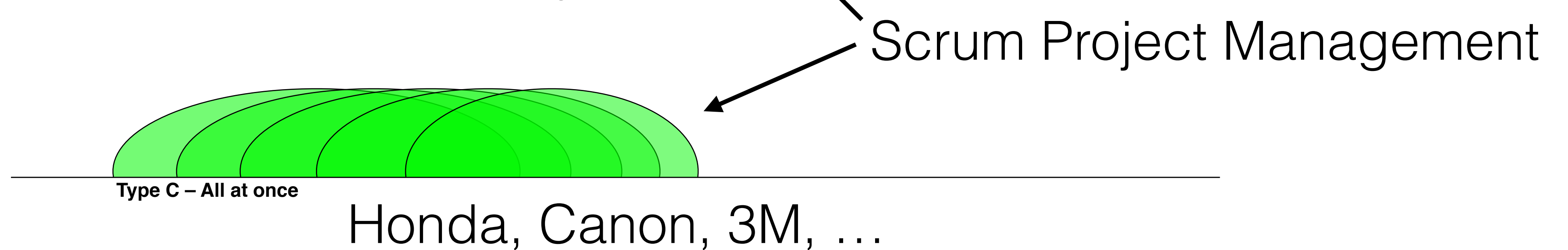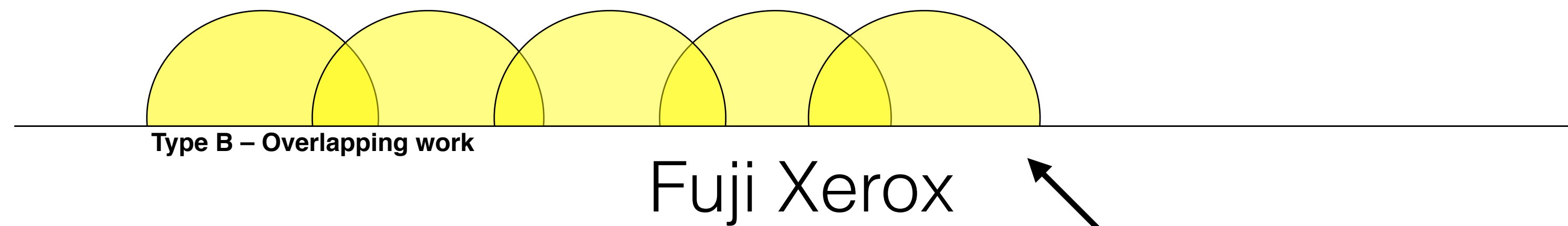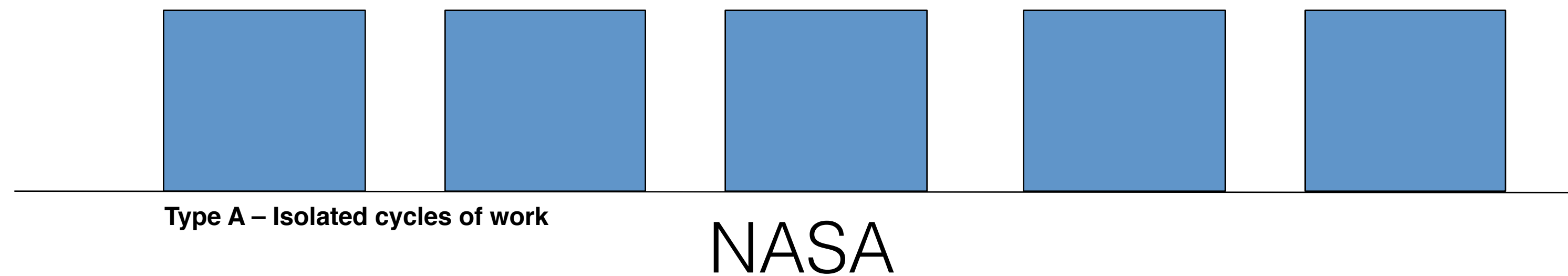
TEAM
OF
TEAMS

NEW RULES OF ENGAGEMENT FOR A COMPLEX WORLD
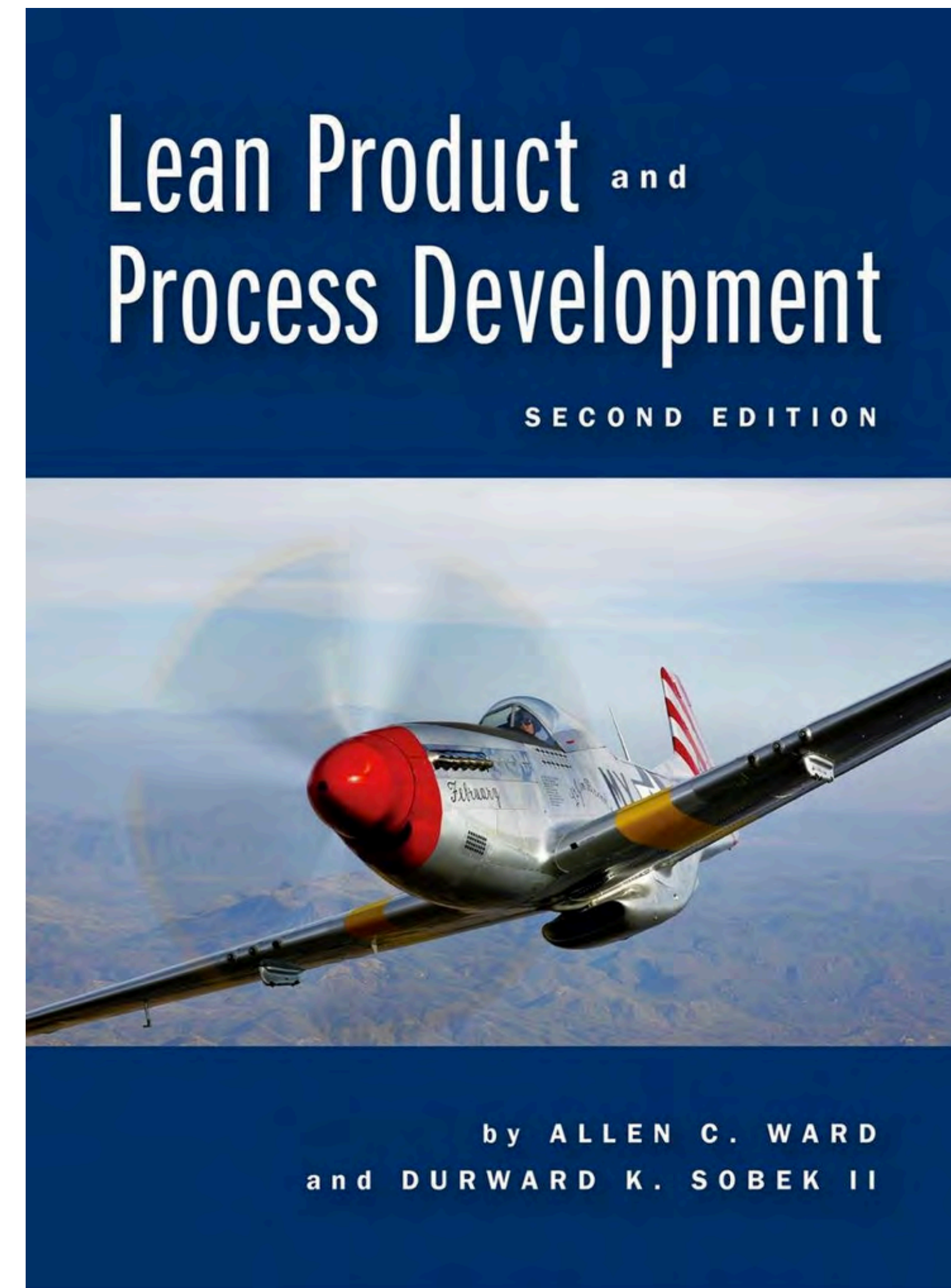
GENERAL STANLEY McCHRYSTAL

U.S. Army, Retired

with Tantum Collins, David Silverman, and Chris Fussell

Goodbye Org Chart. Fast Company Jun 2015

20

Takeuchi and Nonaka
The New New Product Development Game
Harvard Business Review, Jan1986

Type A – Isolated cycles of work

NASA

Type B – Overlapping work

Fuji Xerox

Scrum Project Management

Type C – All at once

Honda, Canon, 3M, …

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Characteristics of Great Teams

- Transcendent Goals

- Autonomy

- Cross-Fertilization

Lean Product and Process Development

SECOND EDITION

by ALLEN C. WARD
and DURWARD K. SOBEK II

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Agile = Lean + Customer Collaboration
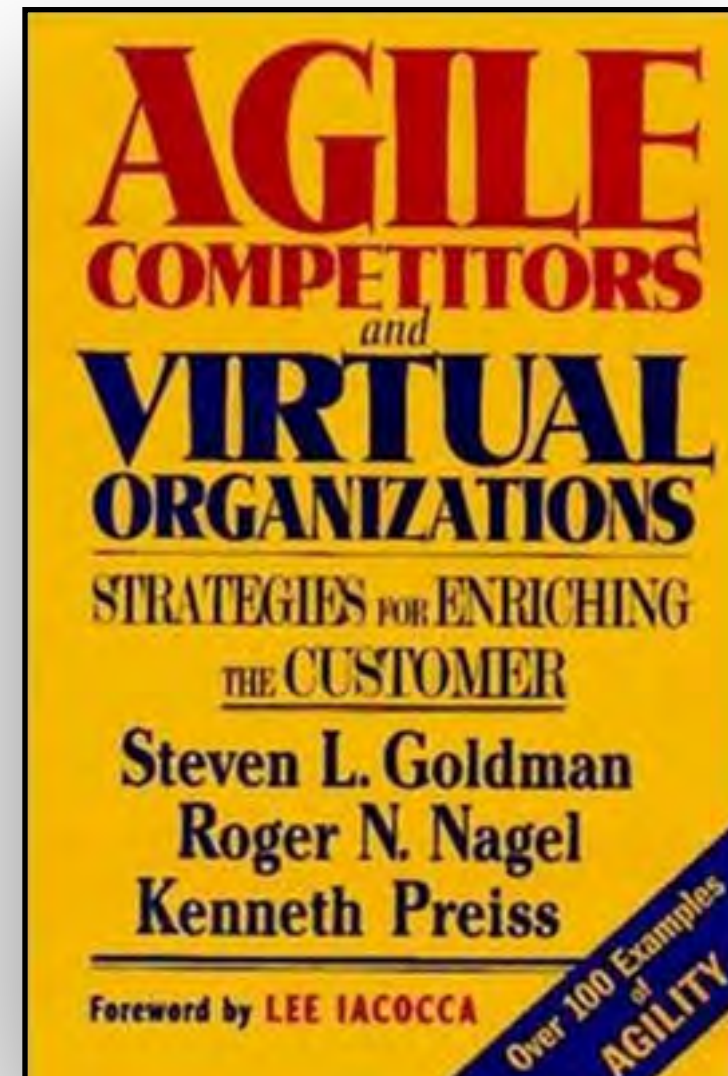
Agile competition goes beyond lean manufacturing by permitting the customer, jointly with the vendor or provider, to determine what the product will be.

For agile competitors, the ability to individualize products comes at little or no increase in manufacturing cost. It does, however exact a cost: **It requires major changes in organization, management philosophy, and operations.**
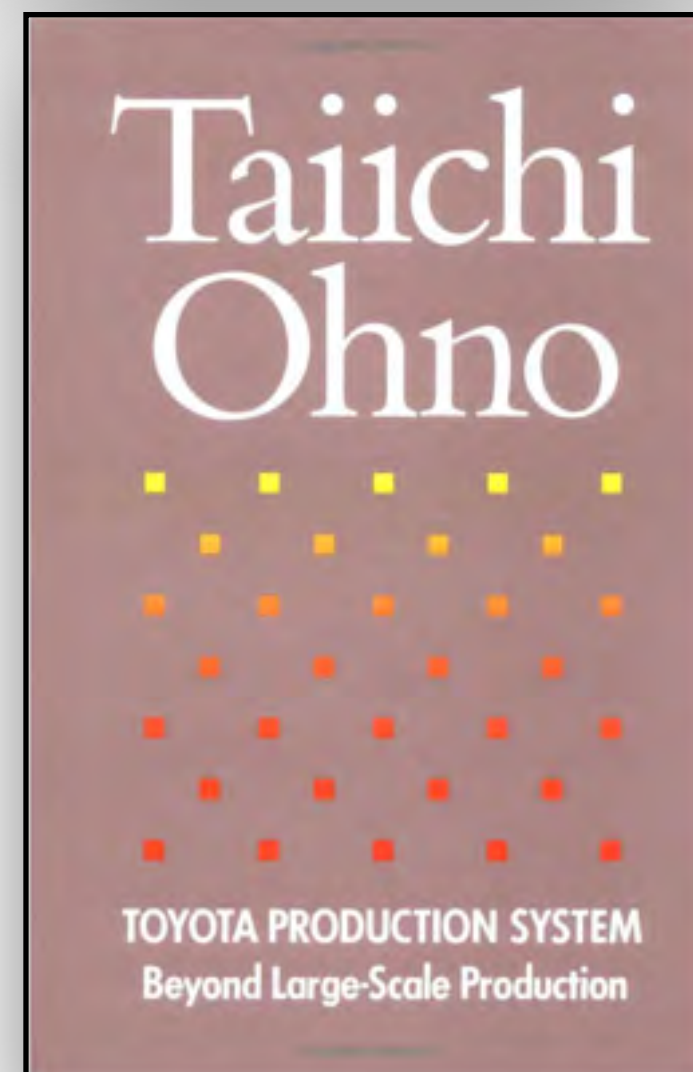
Leadership needs to change focus:

- **Eliminate waste**

- **Understand Value Stream Analysis**

- **Implement Single Piece Continuous Flow**

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Deploy Aggressive Scrum!
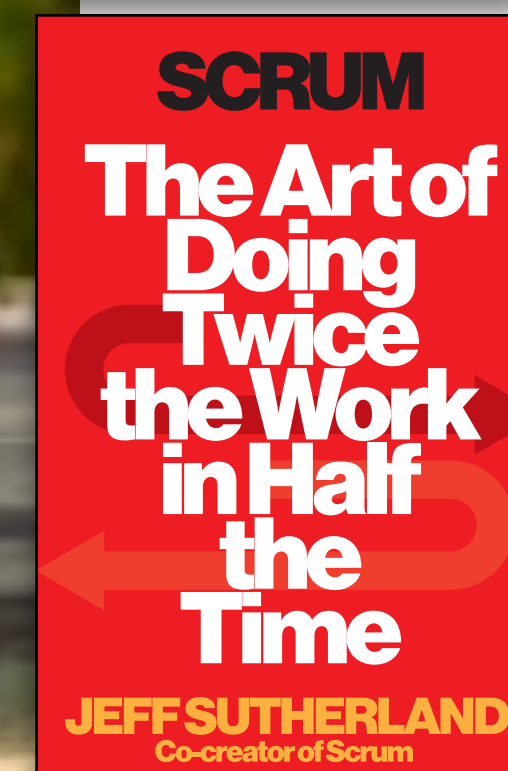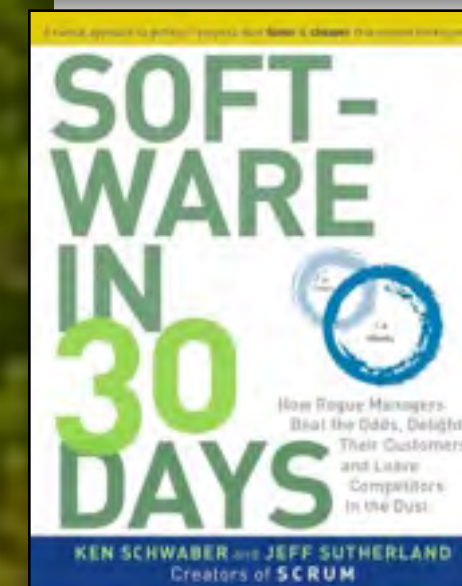
The faster you go, the more resistance you get!

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F35 Delayed by Software Problems

- $143 Billion over budget

- At least another year late

- The cost of the Navy's F35C grew from $273 million in 2014 to a wallet-busting $337 million by 2015.

DEFENSE

How DOD's $1.5 Trillion F-35 Broke the Air Force

David Francis
Thursday, 31 Jul 2014 | 8:35 AM ET

THE Fiscal TIMES

The F-35 Joint Strike Fighter is the most expensive, and possible the most error ridden, project in the history of the United States military. But DOD has sunk so much money into the F-35 — which is expected to cost $1.5 trillion over the 55-year life of the program — that the Pentagon deemed it "too big to fail" in 2010.

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World's Best Stealth Fighter is not Made in America

Bill Sweetman, Aviation Week

- Saab JAS 39E Gripen

- All systems radically improved, cheaper than previous version

- Cost $43M (80% less than F35)

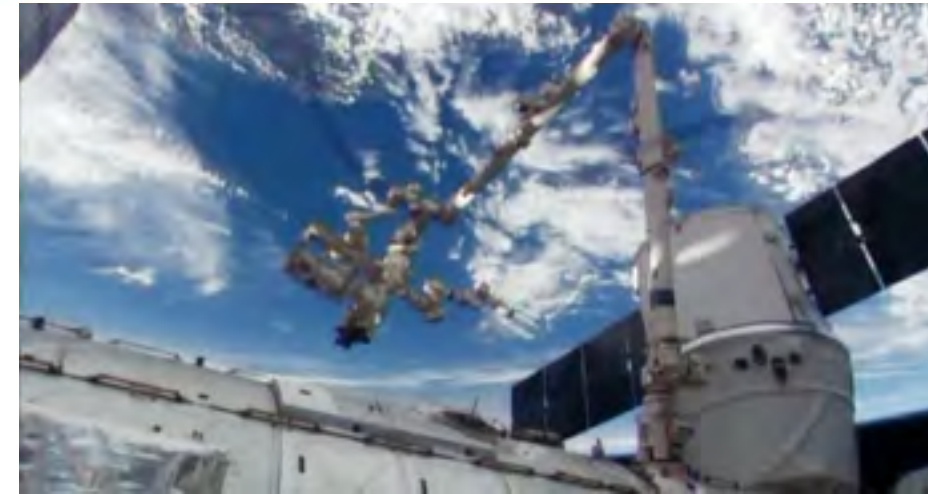- Just won in Brazil, may beat F35 in Denmark

- Agile development using Scrum

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Agile Leadership

- Sales, Marketing, Finance

- Manufacturing

- Technology, Software

- Families and weddings

- Education

- Agriculture

- Government

- Space

Changing the World

Higher grades
Faster learning
More fun
Leadership Development
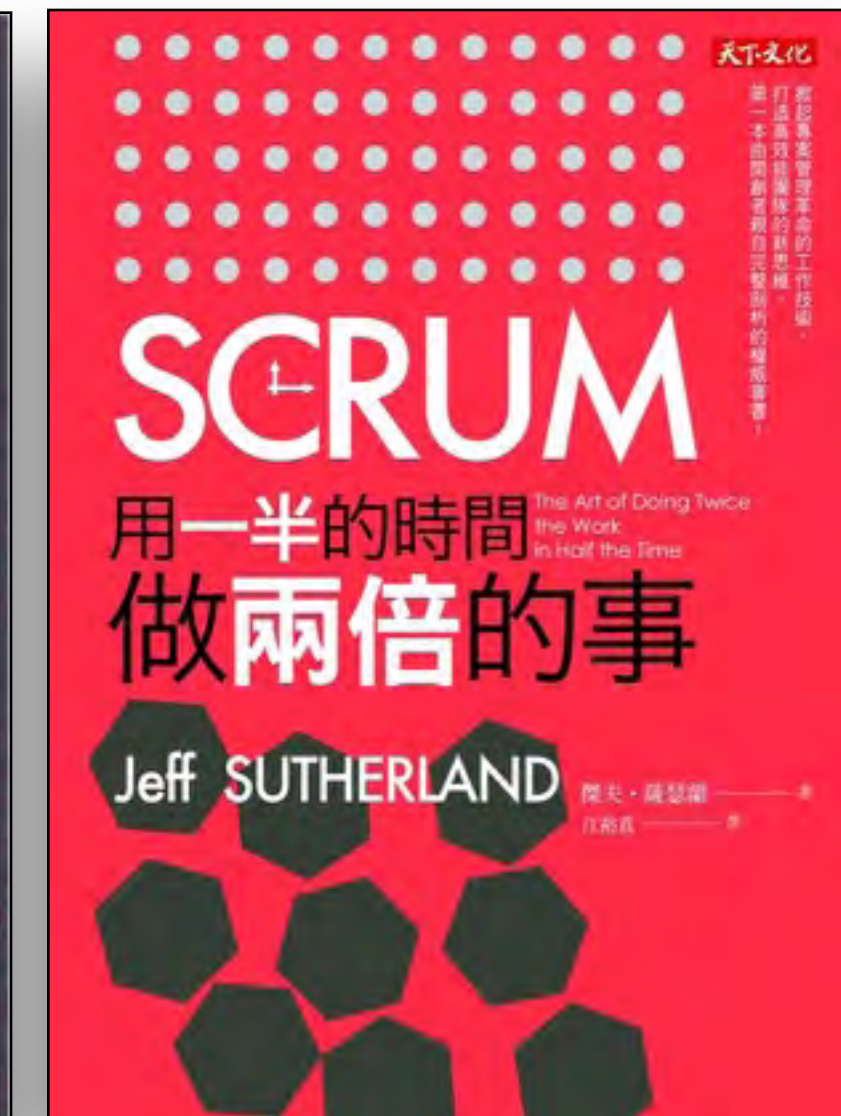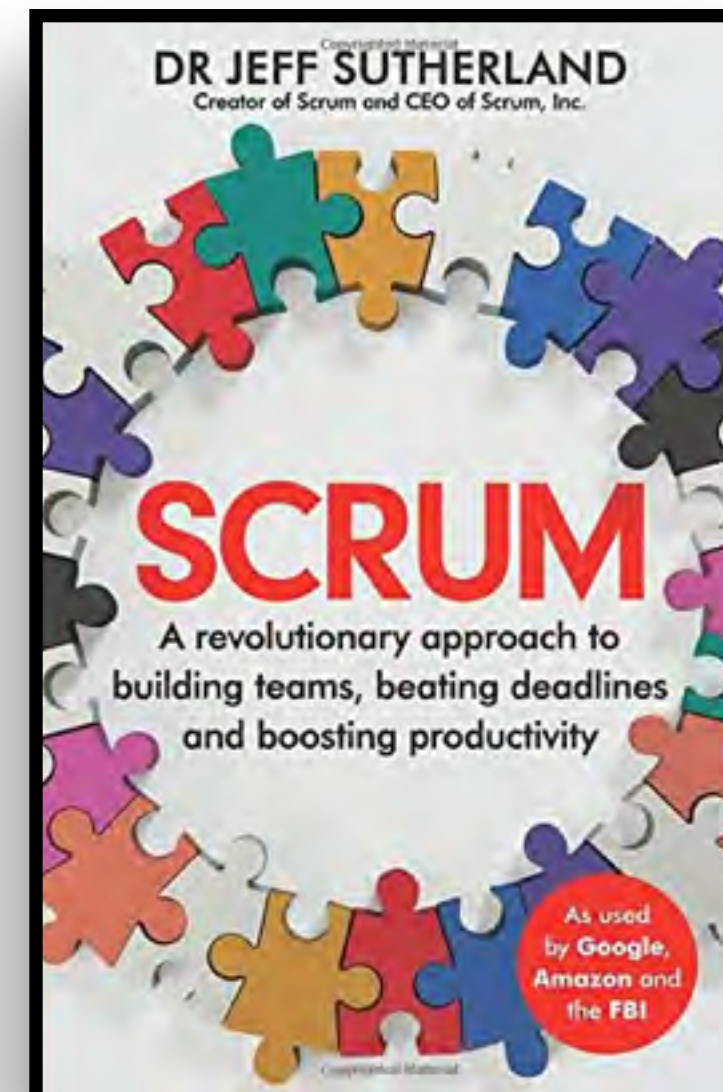Involves handicapped
Motivated students
Self-discipline

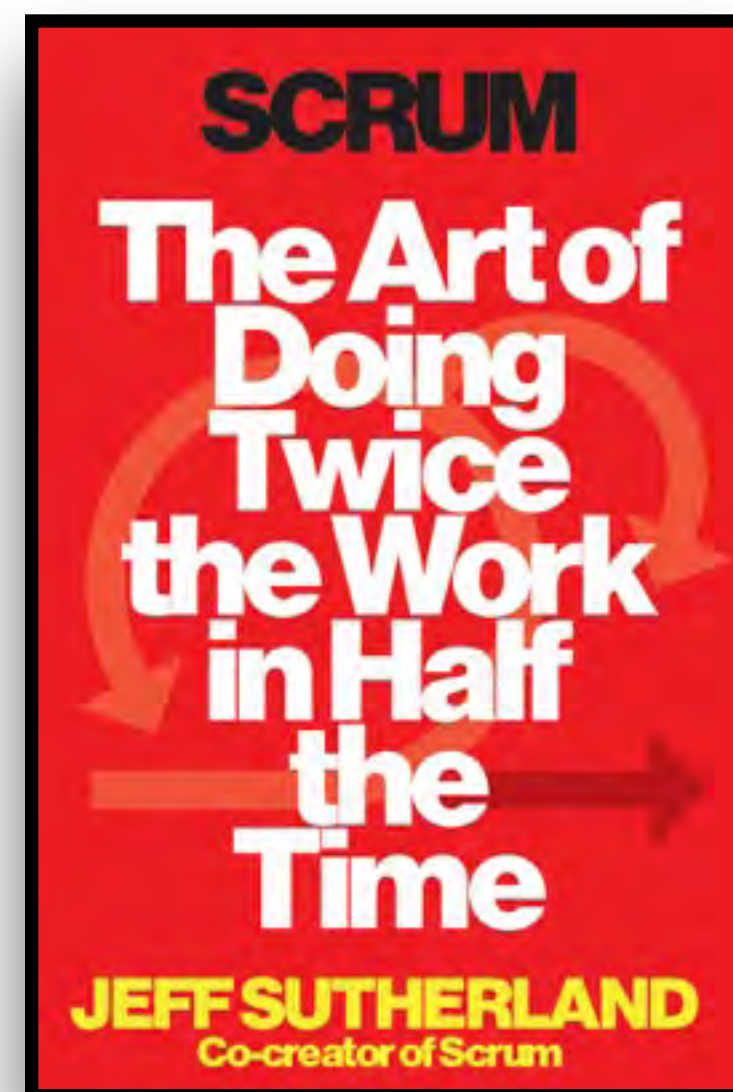eduscrum.com

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Scrum is a Productivity Superweapon - It is Shockingly Efficient

Rick Horgan, Sr. Editor, Crown Business

Risk Management 2011-2015
Standish Group International, Inc.

SIZE	METHOD	SUCCESSFUL	CHALLENGED	FAILED
All Size Projects	Agile	39%	52%	9%
	Waterfall	11%	60%	29%
Large Size Projects	Agile	18%	59%	23%
	Waterfall	3%	55%	42%
Medium Size Projects	Agile	27%	62%	11%
	Waterfall	7%	68%	25%
Small Size Projects	Agile	58%	38%	4%
	Waterfall	44%	45%	11%

CHAOS RESOLUTION BY STYLE

WATERFALL VS. AGILE

The charts show classic CHAOS resolution results of waterfall versus the agile process from the CHAOS project database from 2002 to 2010.

THE CHAOS MANIFE

SOFT-WARE IN 30 DAYS

KEN SCHWABER and JEFF SUTHERLAND
Creators of SCRUM
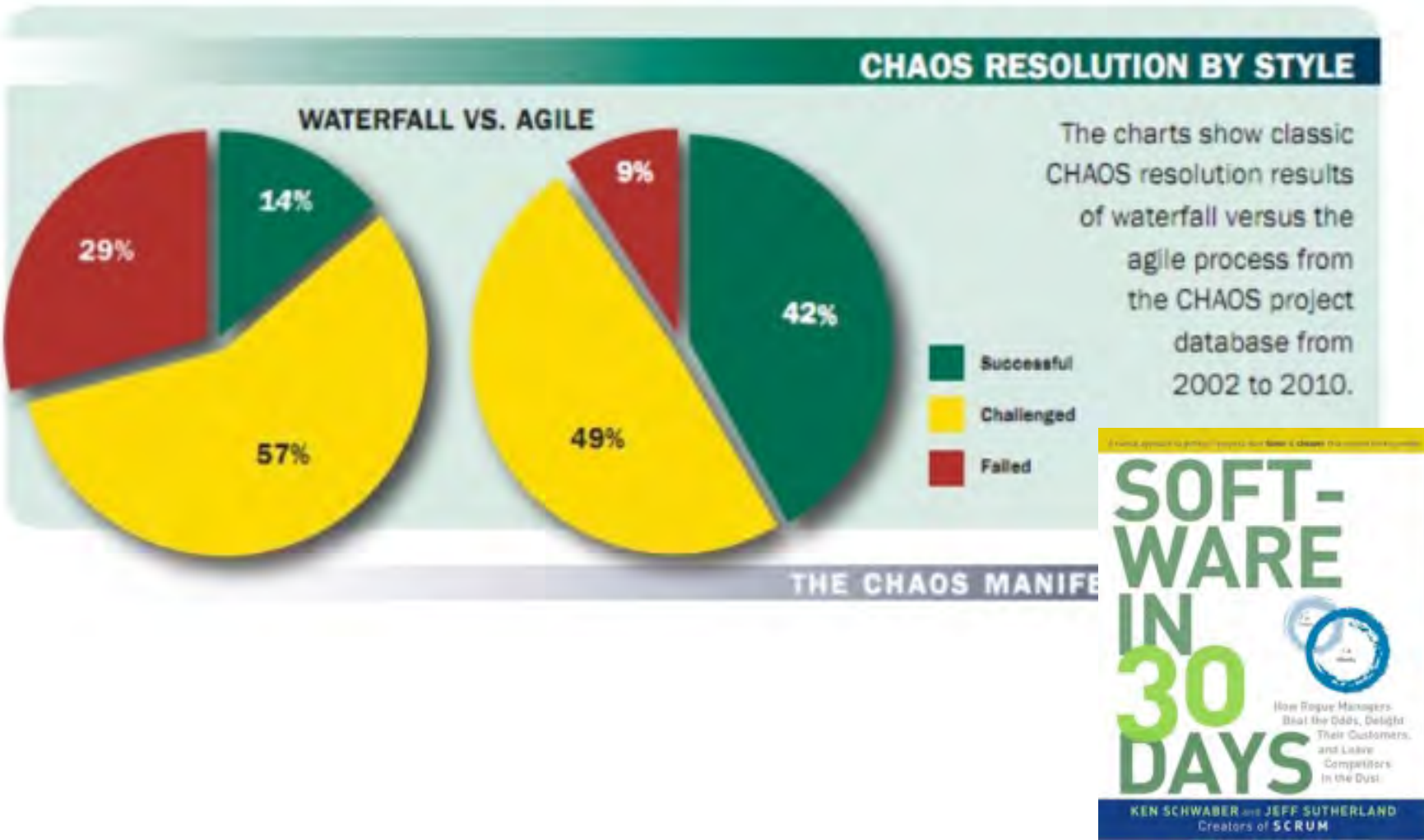
Waterfall vs Agile 2011-2015 Data

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