

**DALIA HAVENS**

**VP OF ENGINEERING @ REPLICATED**

A night sky with a green aurora borealis over a snow-capped mountain range. The aurora is a vibrant green light that curves across the sky, illuminating the dark, rocky peaks of the mountains below. The sky is filled with numerous stars, and the overall scene is a mix of deep blues, greens, and dark greys.

**Empower your teams to do their  
best work**

# Data-driven Decision Making

2 key categories of metrics

Team Dashboards

Principles for driving focus



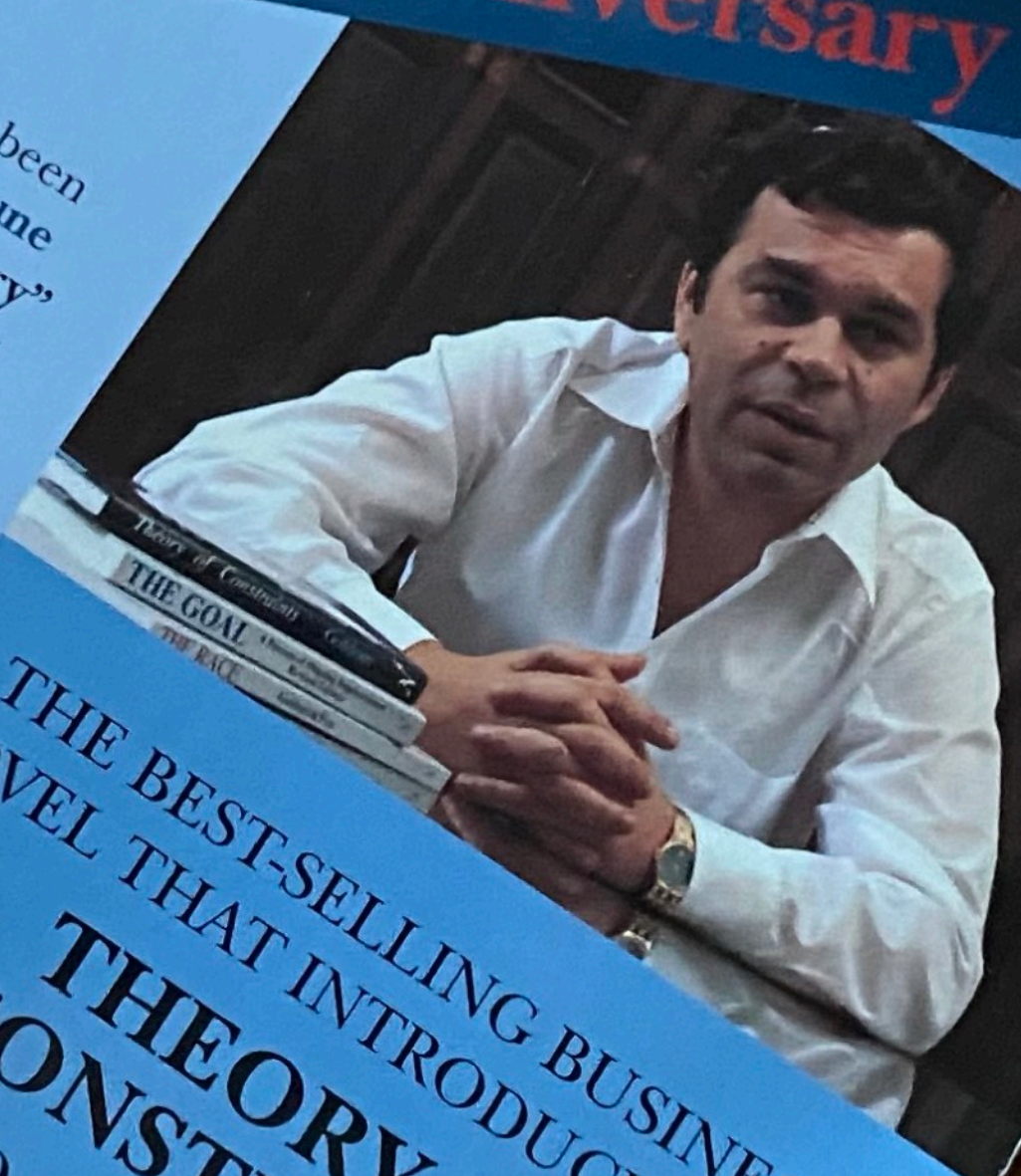
Includes  
Eli Goldratt's,  
"Standing on the  
Shoulders  
of Giants."

Eliyahu M. Goldratt and Jeff Cox  
**THE GOAL**  
A PROCESS OF ONGOING IMPROVEMENT  
**30th Anniversary Edition**

Eli Goldratt has been described by *Fortune* as a "guru to industry" and by *Business Week* as a "genius". His book, *The Goal*, is a gripping fast-paced business novel.

"Goal readers are now doing the best work of their lives."  
**Success Magazine**

"A factory may be an unlikely setting for a novel, but the book has been wildly effective..."  
**Tom Peters**  
Required reading for Amazon's management.



THE BEST-SELLING BUSINESS NOVEL THAT INTRODUCED THE THEORY OF CONSTRAINTS AND CHANGED HOW AMERICA DOES BUSINESS

**OVER 6 MILLION COPIES SOLD**







**Maximum utilization is  
not the goal**



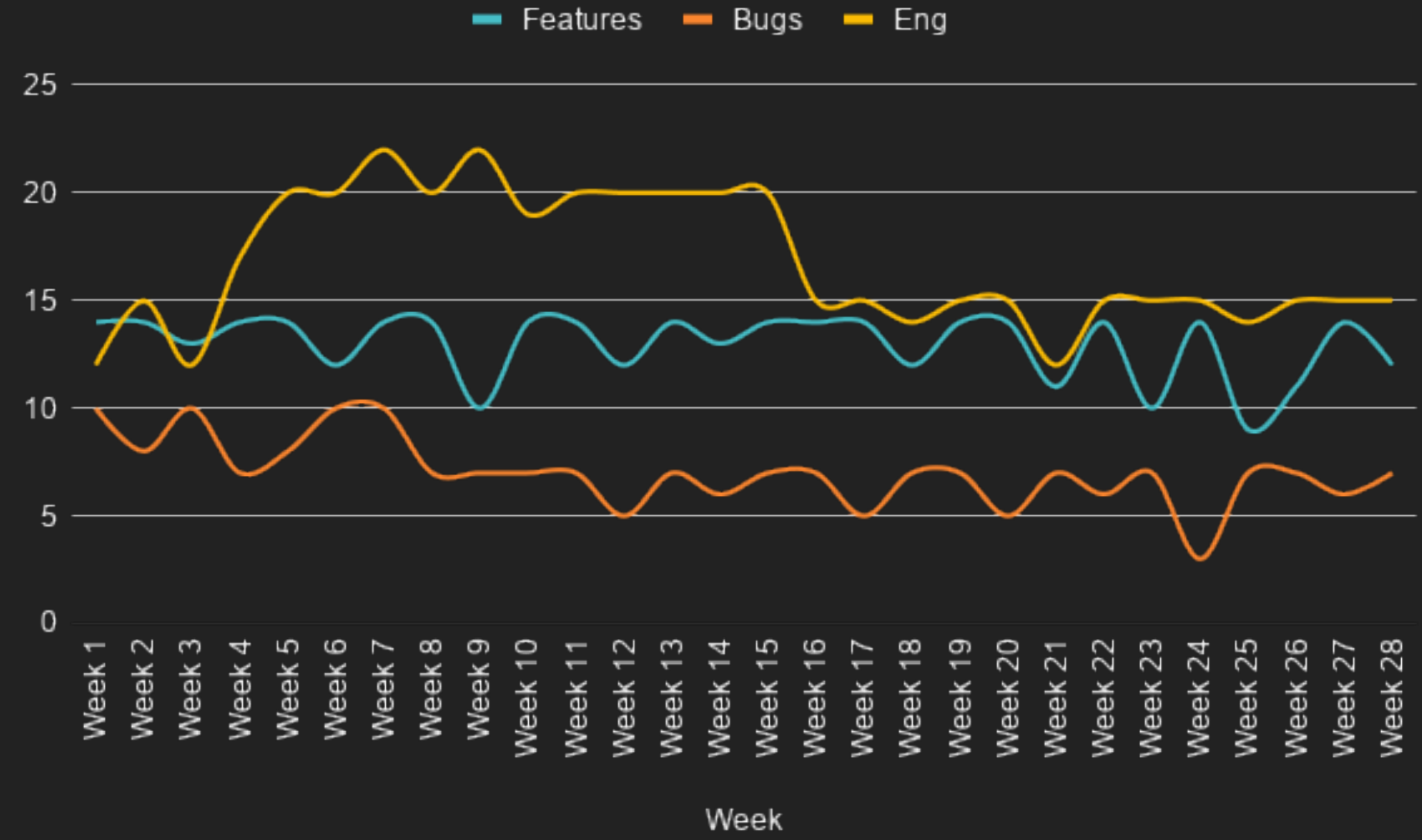
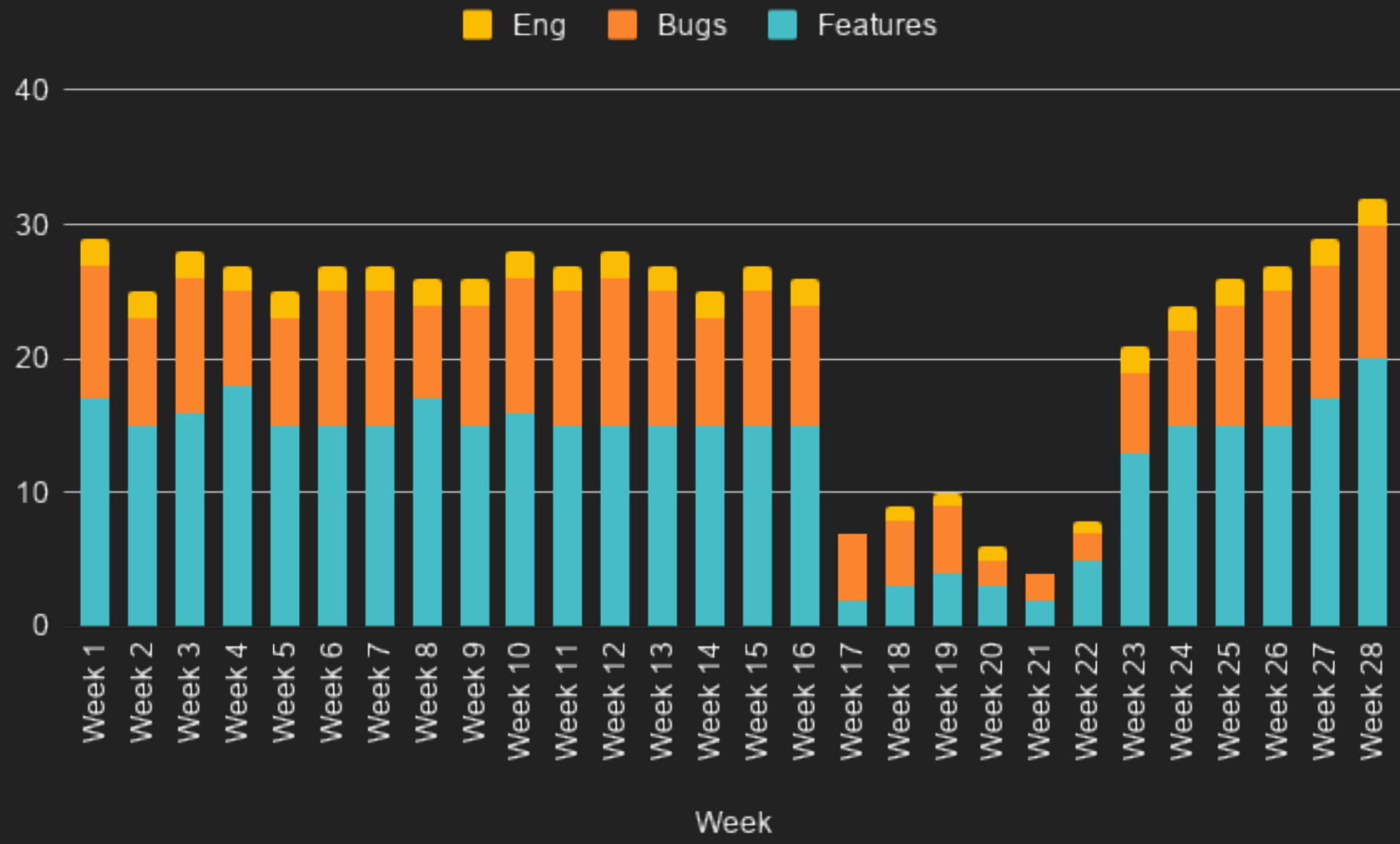
**“productivity is the act of bringing a company closer to its goal.  
Every action that brings a company closer to its goal is productive.  
Every action that does not bring a company closer to its goal is not  
productive.”**

– Eliyahu M. Goldratt, The Goal: A Process of Ongoing Improvement

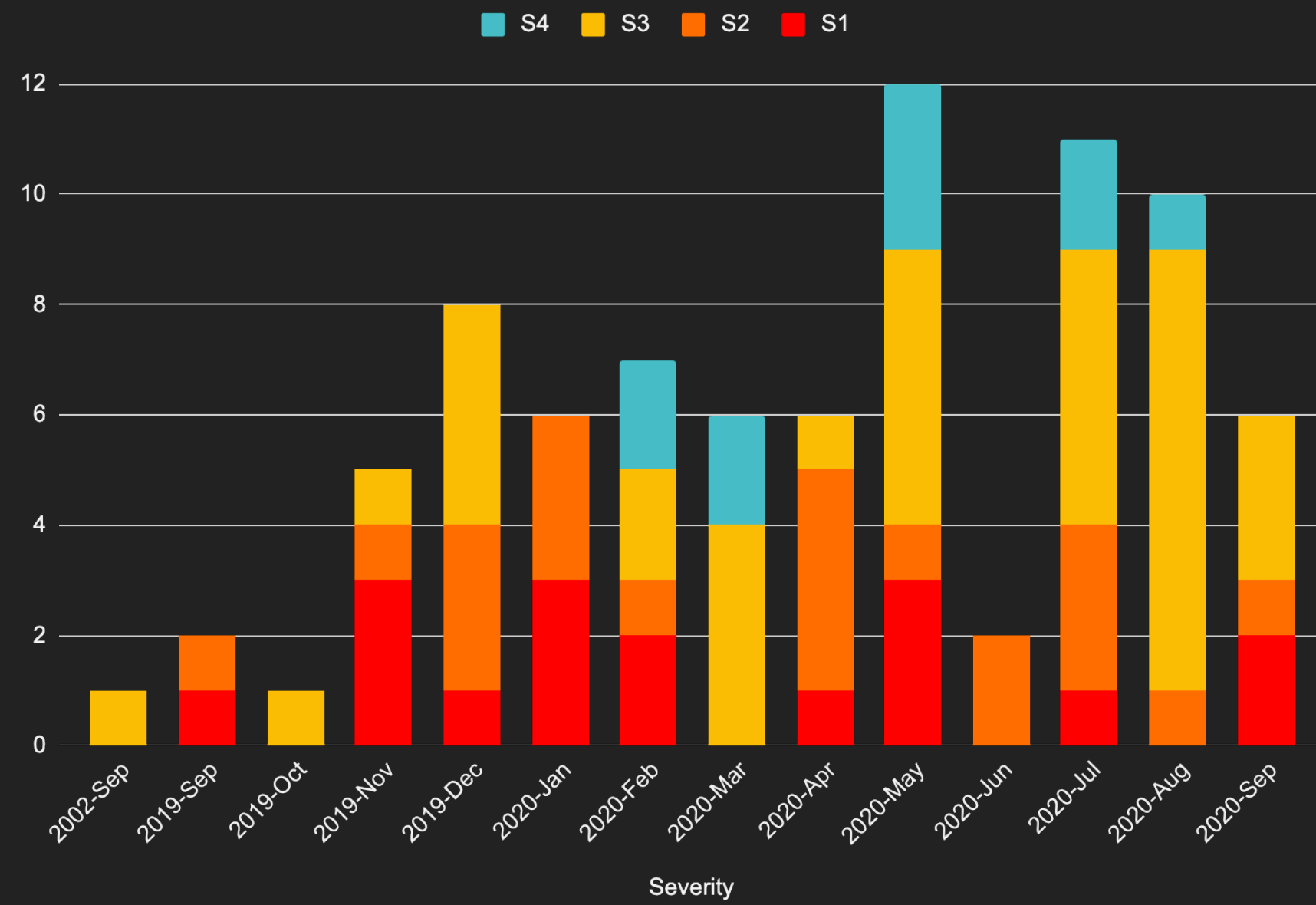
# 2 Key Categories

# Operational Metrics

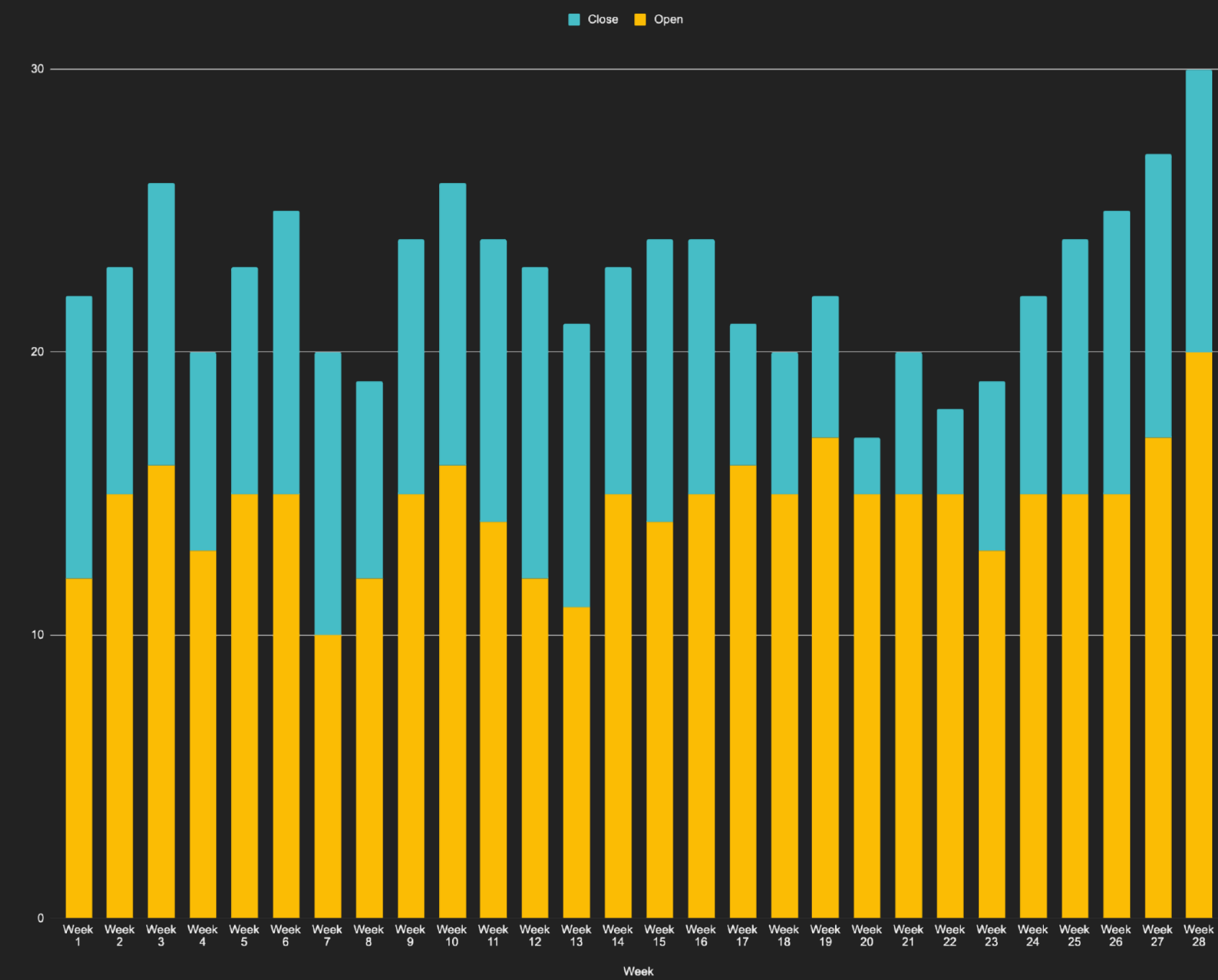




### Incidents in Prod by Severity



### Open and Close







“Since the strength of the chain is determined by the weakest link, then the first step to improve an organization must be to **identify the weakest link.**”

- Eliyahu M. Goldratt, The Goal: A Process of Ongoing Improvement

# Directional Metrics





- # of sign-ups per day
- Time to live
- Feature adoption rate
- Growth metrics
  - Acquisition
  - Expansion
  - Conversion
  - Retention

*\*Make sure you balance product metrics with service level objectives*



# Service Level Objectives (SLOs)

An SLO (service level objective) is an agreement within an SLA (Service Level Agreement) about a specific metric like uptime or response time.

<https://www.atlassian.com/incident-management/kpis/sla-vs-slo-vs-sli>



# Team Dashboard

## Engineering Metrics

- Throughput
- Cycle Time
- Meantime to recover
- Incidents by severity

## Product Metrics

- Northstar metric
- Key Indicators
- Leading Indicators

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Service Level Objectives (SLOs)

# Holistic\* Decision Making

*\*Holistic: characterized by comprehension of the parts of something as intimately interconnected and explicable only by reference to the whole.*

- Eliyahu M. Goldratt, Beyond the goal



# You need to change the rules



# Friday Releases

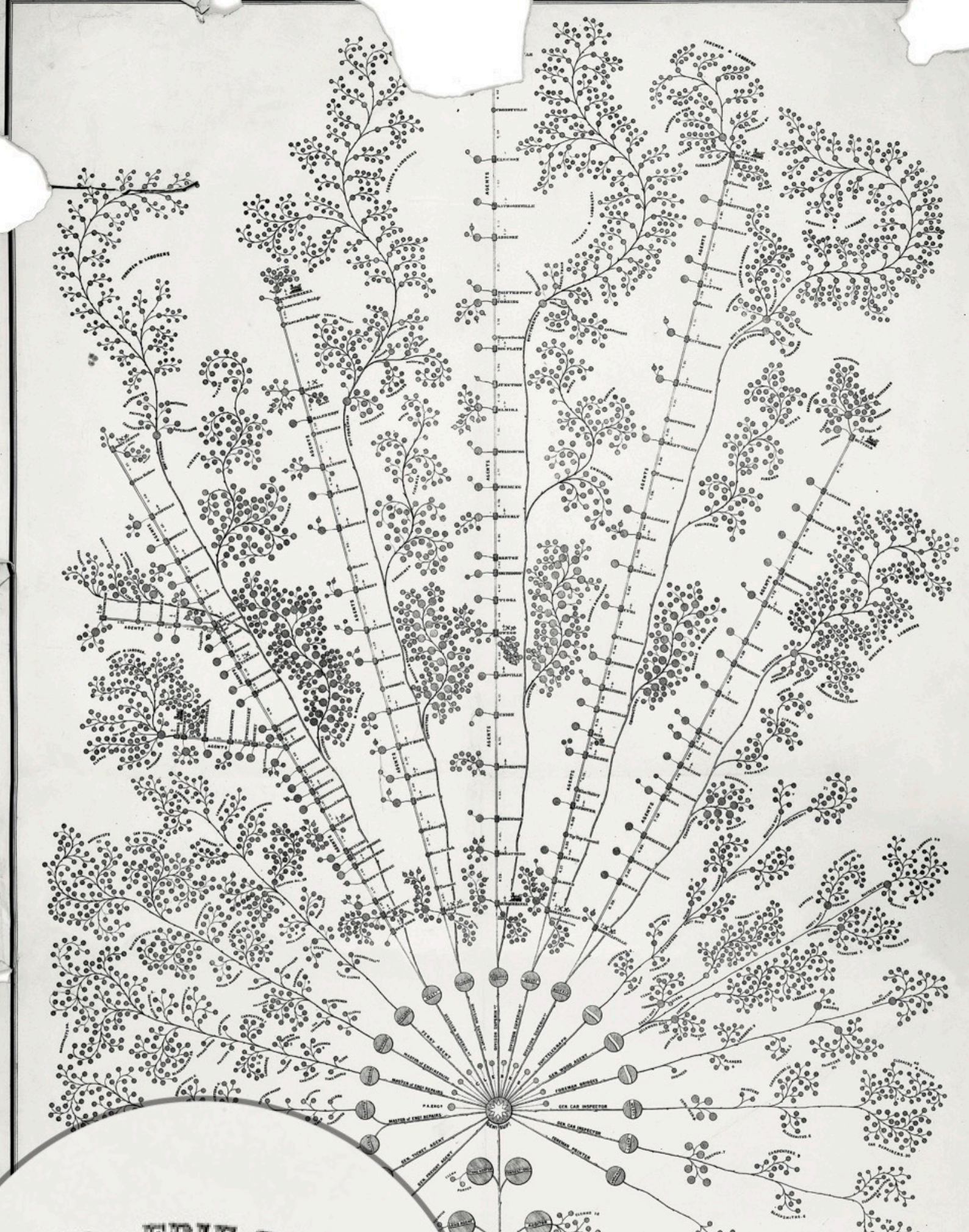


50/50

Product/Engineering

**Less estimation - More iteration**

**NEW YORK AND ERIE RAILROAD**  
**DIAGRAM**  
**REPRESENTING A PLAN**  
**of**  
**ORGANIZATION**  
 Exhibiting the division of administrative duties  
 and  
 SHOWING THE NUMBER AND CLASS OF EMPLOYÉS  
 Engaged in each department  
 FROM THE RETURNS OF  
 September 1855.



**EXPLANATIONS.**

The Diagram compiled from the Department Reports and shows the average number of employes of each class engaged in the service of the Railroad during the year ending September 30, 1855. The numbers are arranged in the order of the Department, and the classes of employes are indicated by the letters A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, and the figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

DEPARTMENT	CLASS	NUMBER
GENERAL OFFICE	A	1
	B	2
	C	3
	D	4
	E	5
	F	6
	G	7
	H	8
	I	9
	J	10
ROAD DEPARTMENT	A	11
	B	12
	C	13
	D	14
	E	15
	F	16
	G	17
	H	18
	I	19
	J	20
MATERIAL DEPARTMENT	A	21
	B	22
	C	23
	D	24
	E	25
	F	26
	G	27
	H	28
	I	29
	J	30

114.  
 Made in the Office of the Chief Clerk, N.Y. May 30, 1856.

Courtesy of the  
 and Map Division.

**In a world where we talk so much about empowerment, a top down approach does not align.**

**Thank You!**