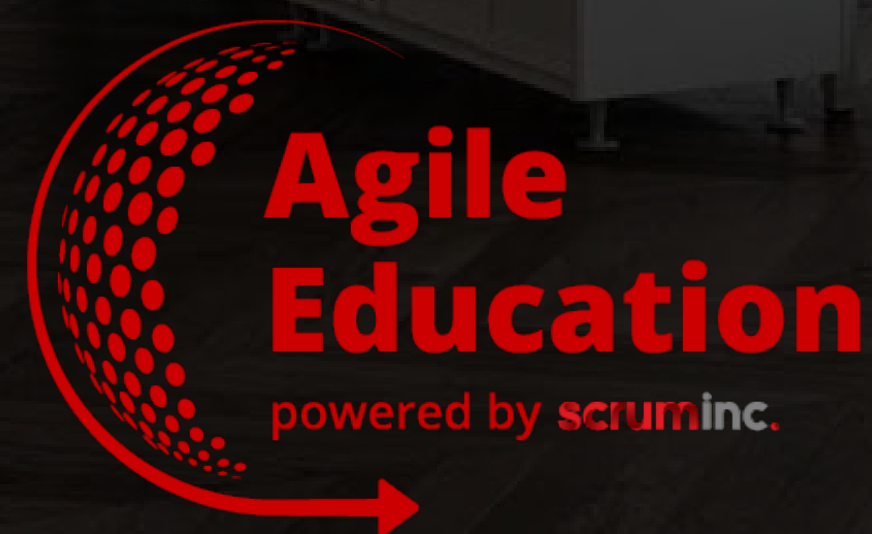


FIRST Robotics and Scrum@Scale
**Transforming Our Future by Empowering
Tomorrow's Workforce Today!**

June 2021
Dr. Mark Buckner



*"We cannot always build the future for our youth, but we **must** build our youth for the future."*

- Franklin D. Roosevelt



Source: [Flickr](#)

FIRST is a microcosm of the real world!

FOR INSPIRATION & RECOGNITION OF SCIENCE & TECHNOLOGY

- Dean Kamen



FIRST
LEGO
LEAGUE JR.

Ages 6-10 (Grades K-4)



FIRST
LEGO
LEAGUE

Ages 9-16* (Grades 4-8)



FIRST
TECH
CHALLENGE

Ages 12-18 (Grades 7-12)



FIRST
ROBOTICS
COMPETITION

Ages 14-18 (Grades 9-12)

660K

students in
110+ countries

300K

mentor, coach, judge,
and volunteer roles

20M+

volunteer hours
served

\$80M+

scholarship opportunities
from 200+ providers

3,600

events in
100+ countries

77K

attendees at annual *FIRST*
Championship

YOUR HELP MAKES AN IMPACT!

Together, we can show students of every age that hands-on problem solving using STEM is fun and rewarding, and is a proven path to successful careers and a bright future for all.

WON'T YOU HELP TODAY?

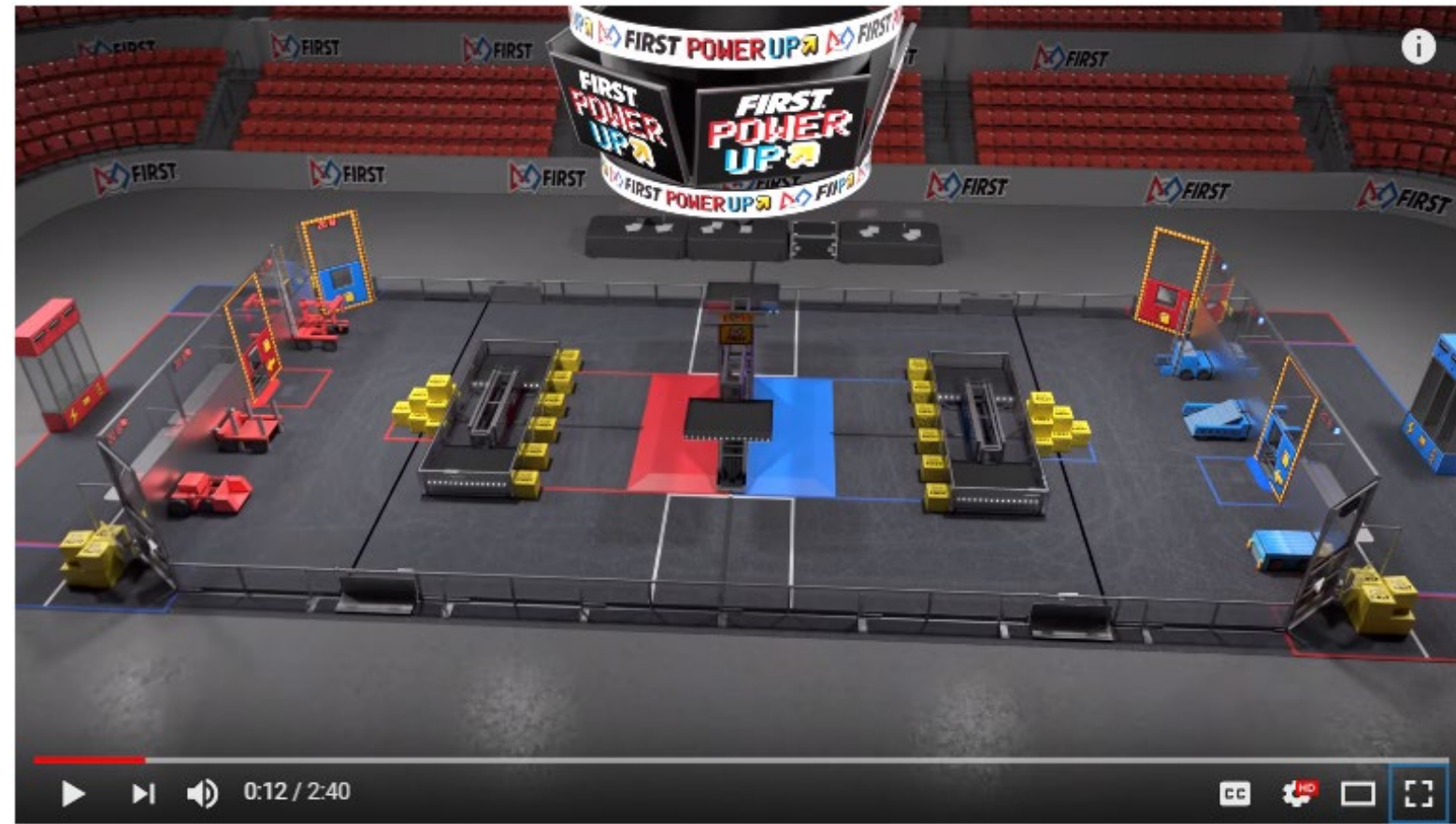
Case Study by Dr. Mark Buckner

©Jeff Sutherland & Scrum Inc 1993 – 2023

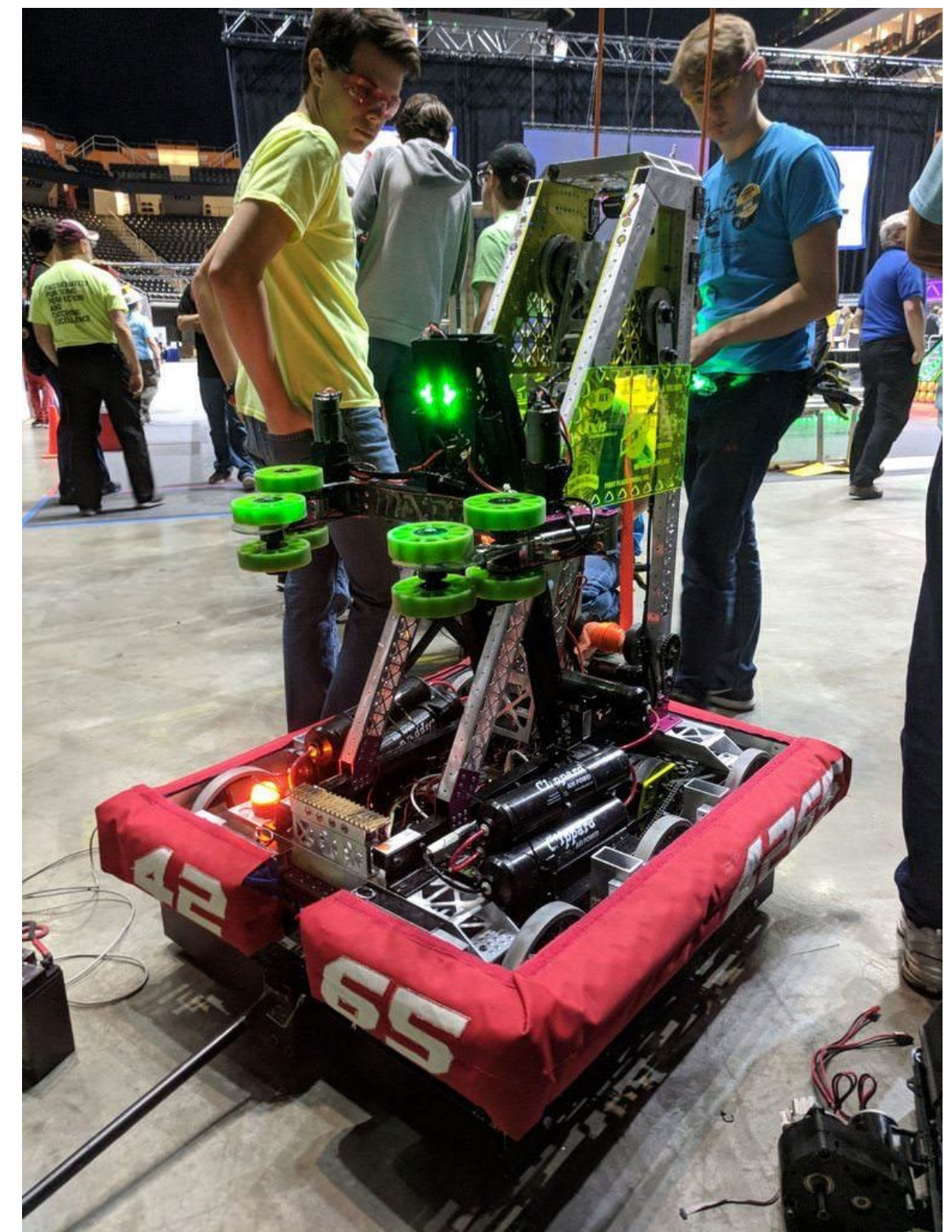
<https://www.firstinspires.org/>



What if your team had to dream up, design, fabricate, build, program & learn to operate a brand-new product in 6 weeks?



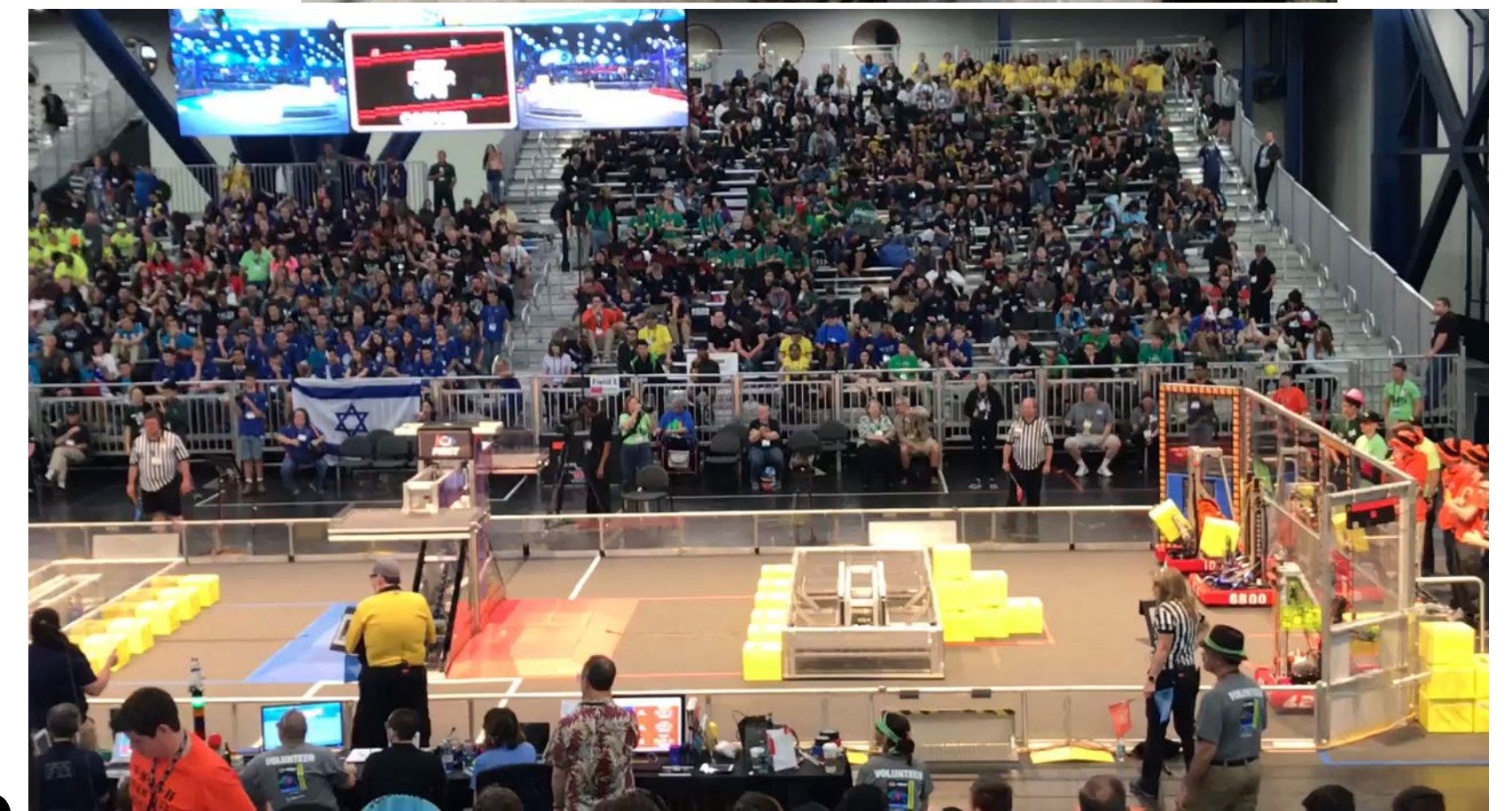
- Much of the team changes each year
- Most start w/ little to no technical experience



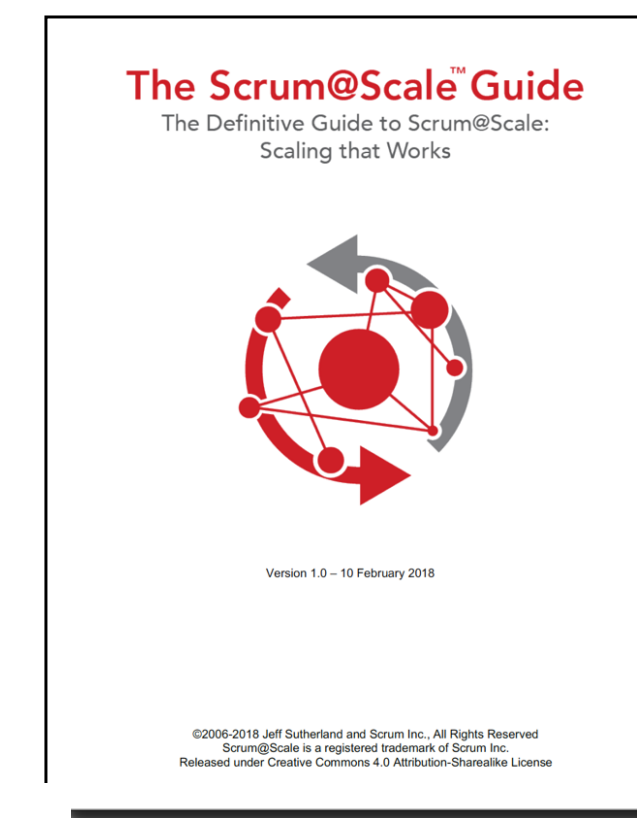
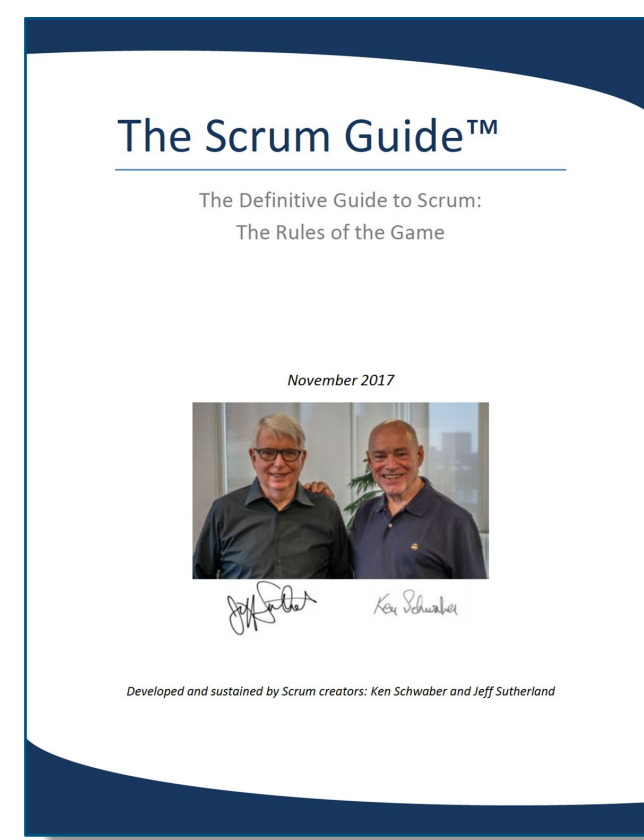
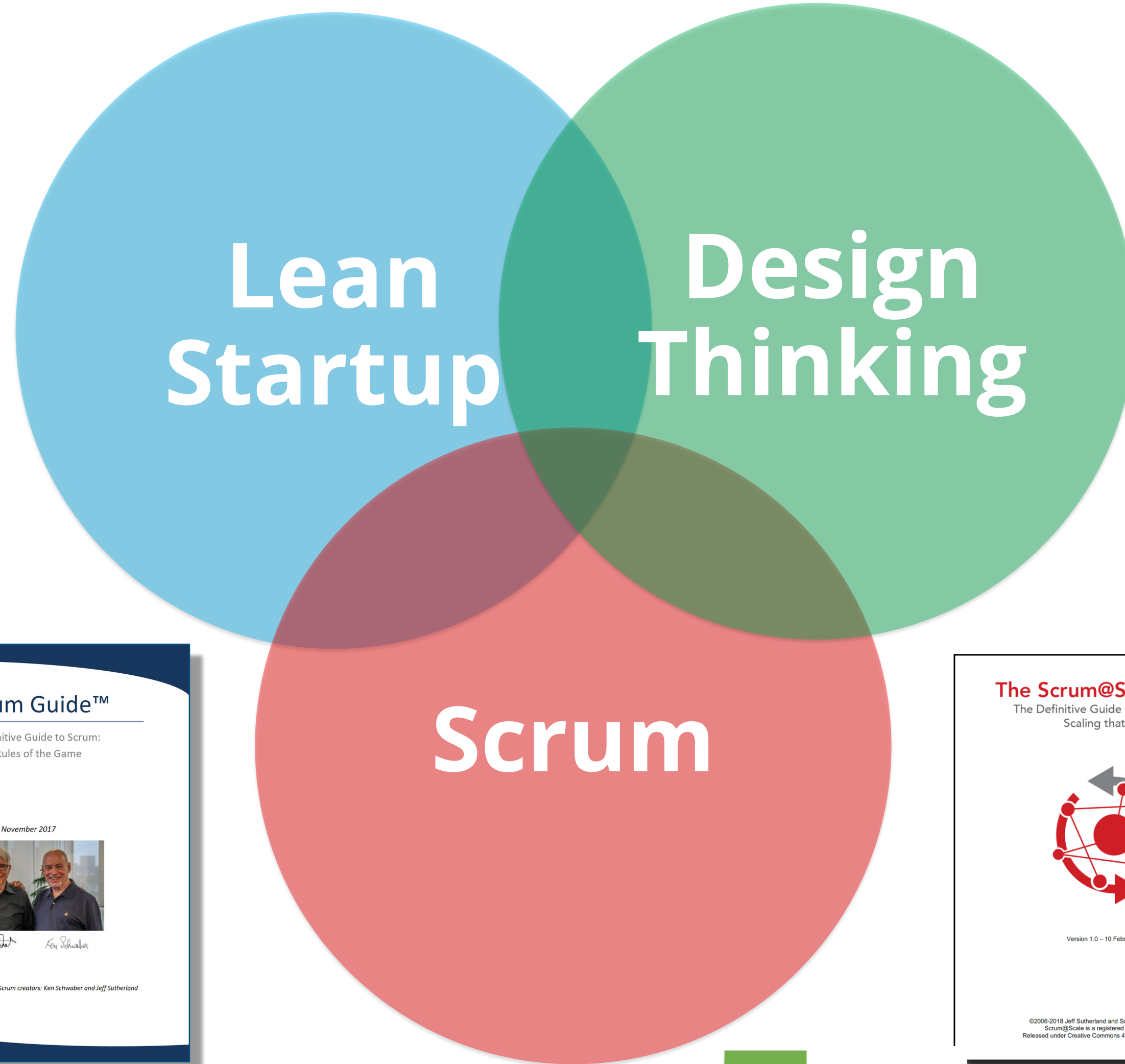
1st Saturday in January



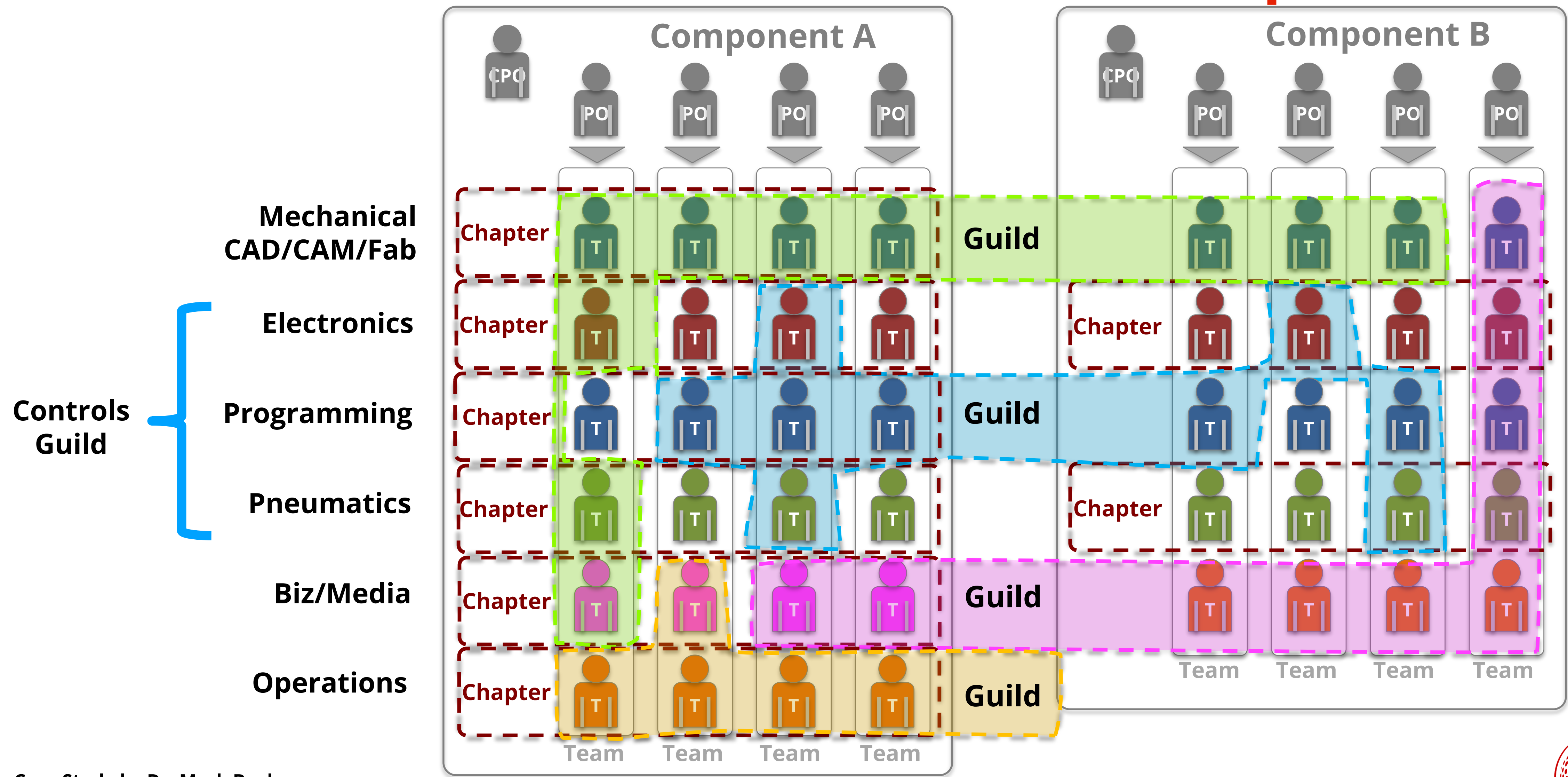
- \$5,000 BOM
- \$500/match
- Volunteer workforce



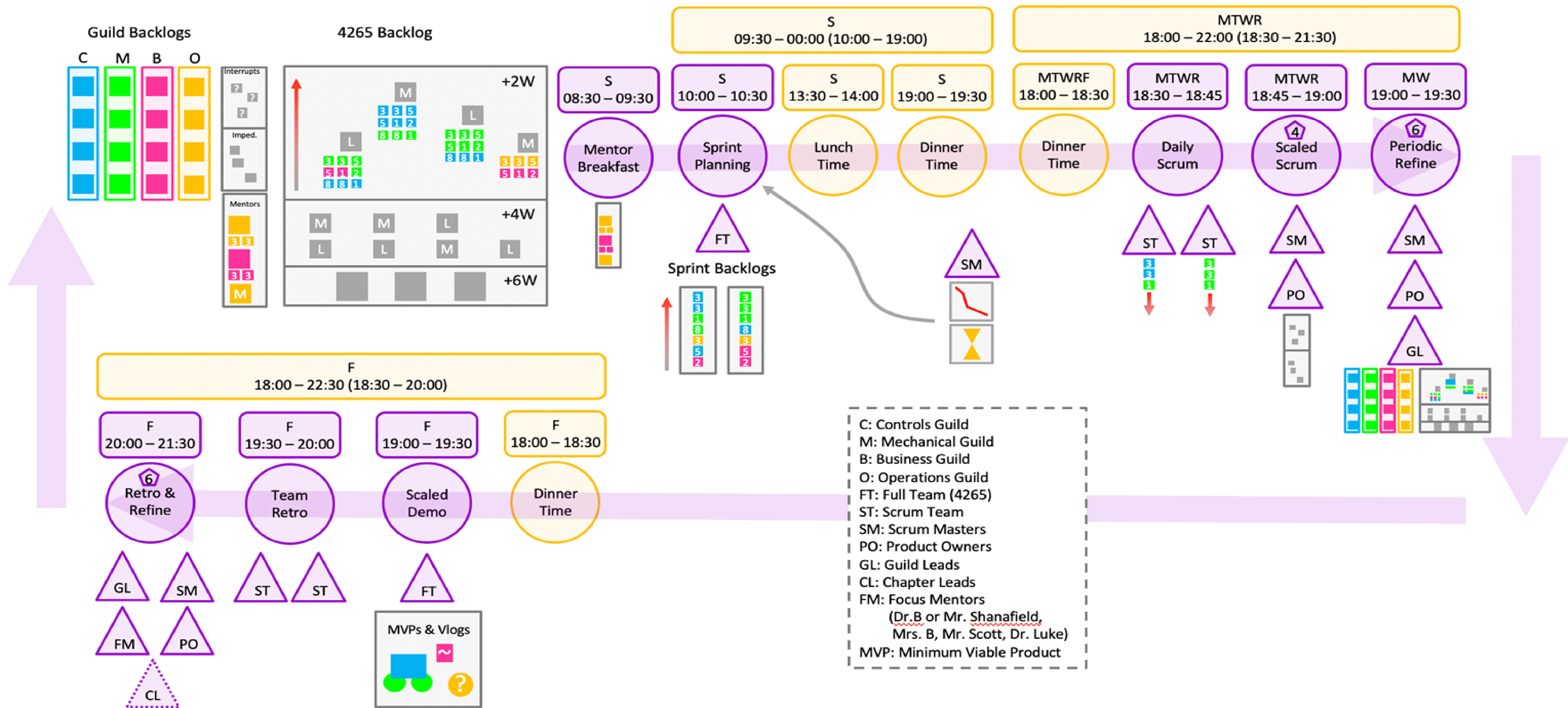
We run our "Team" like an Agile Startup



Different Cross-Team Coordination Mechanisms Serve Different Purposes



Scrum@Scale Interactions

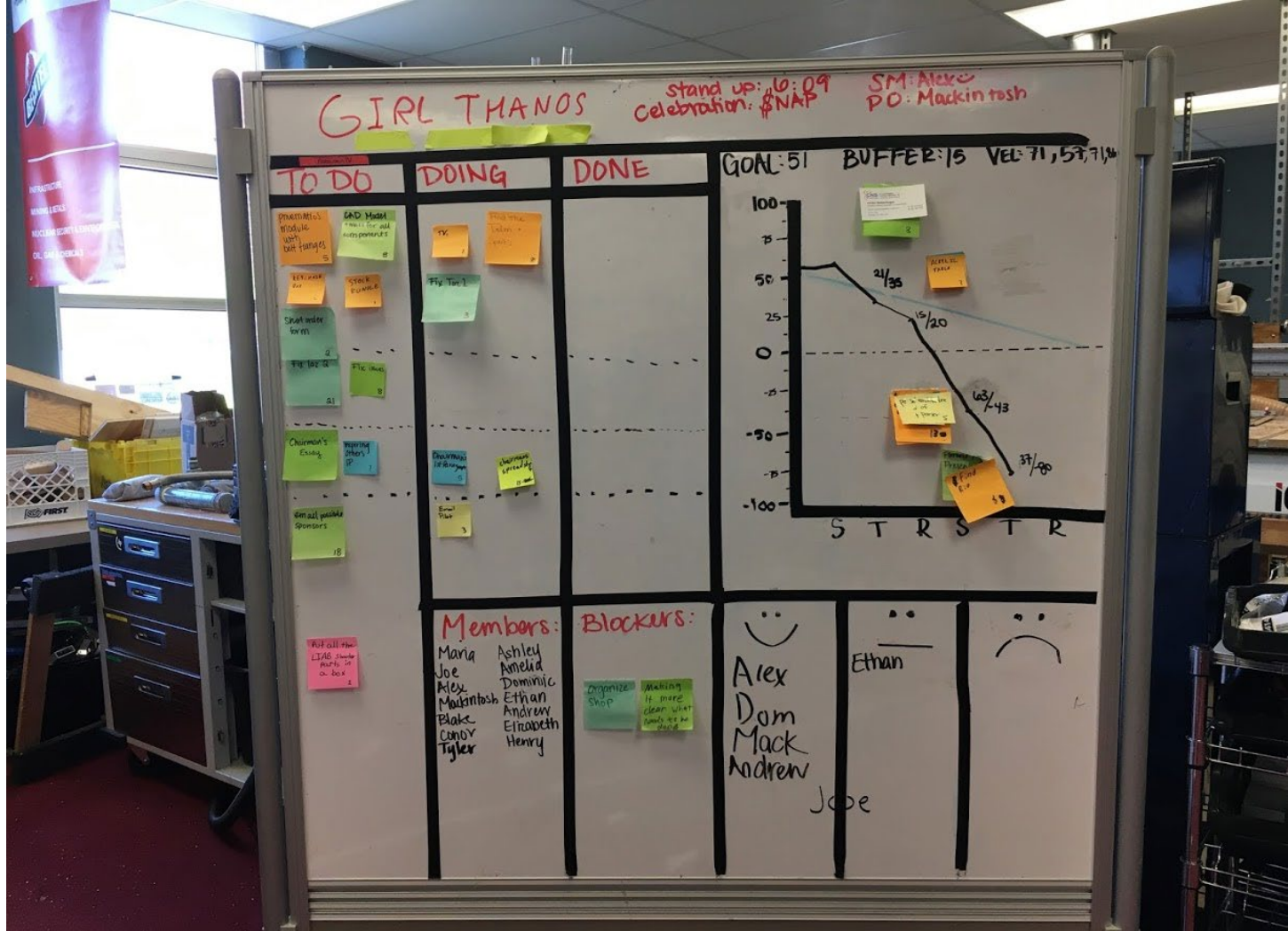
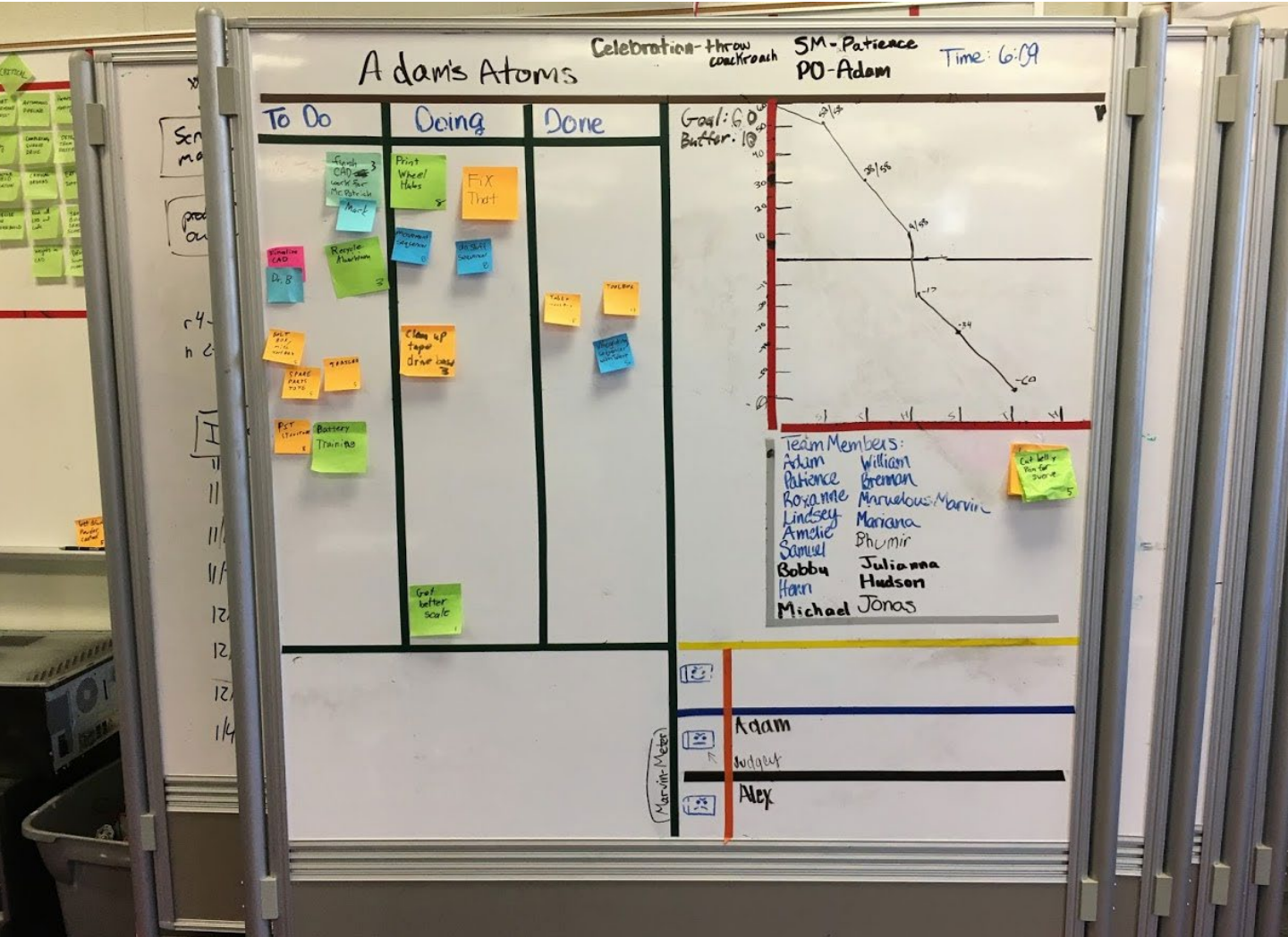
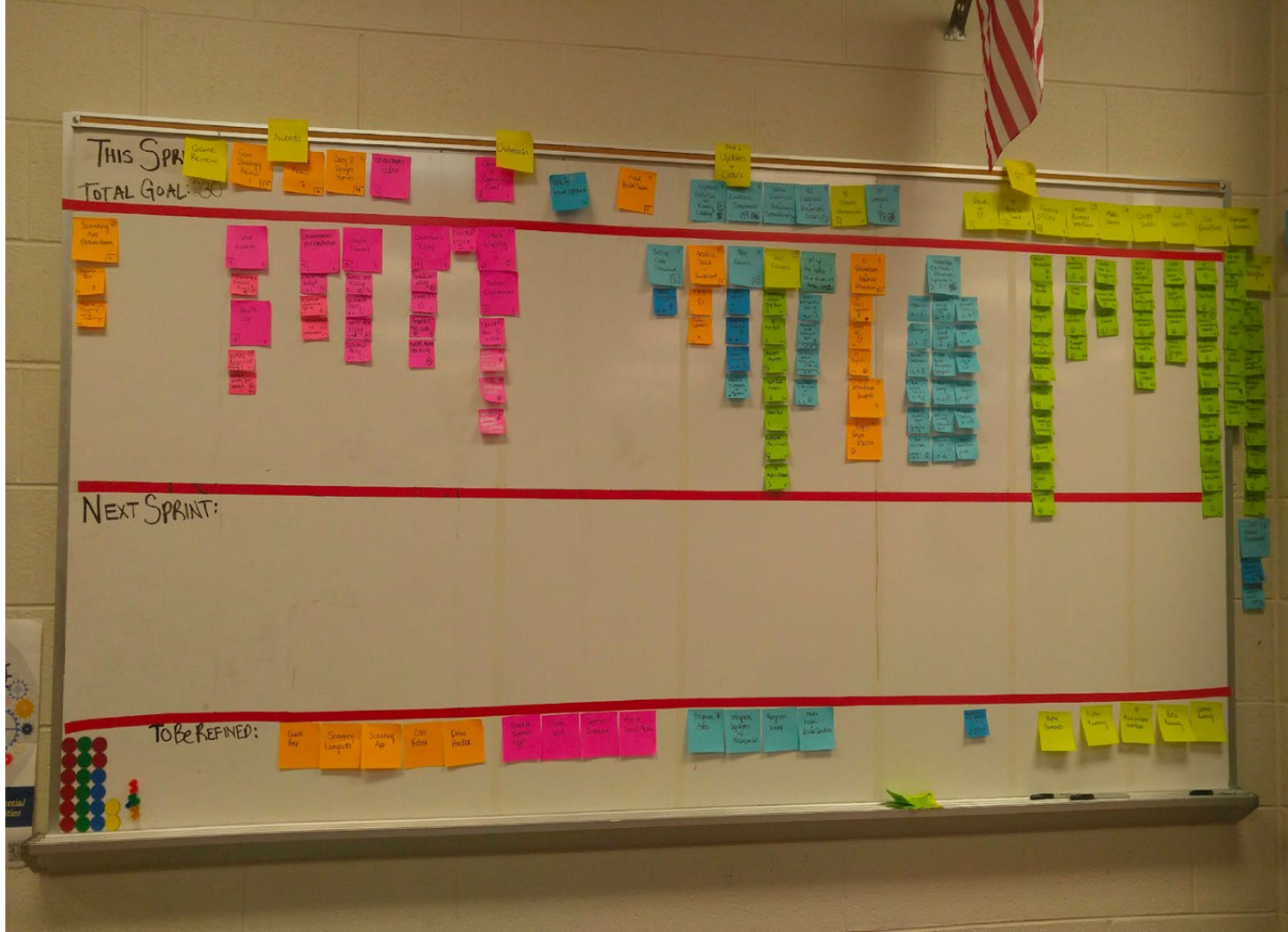




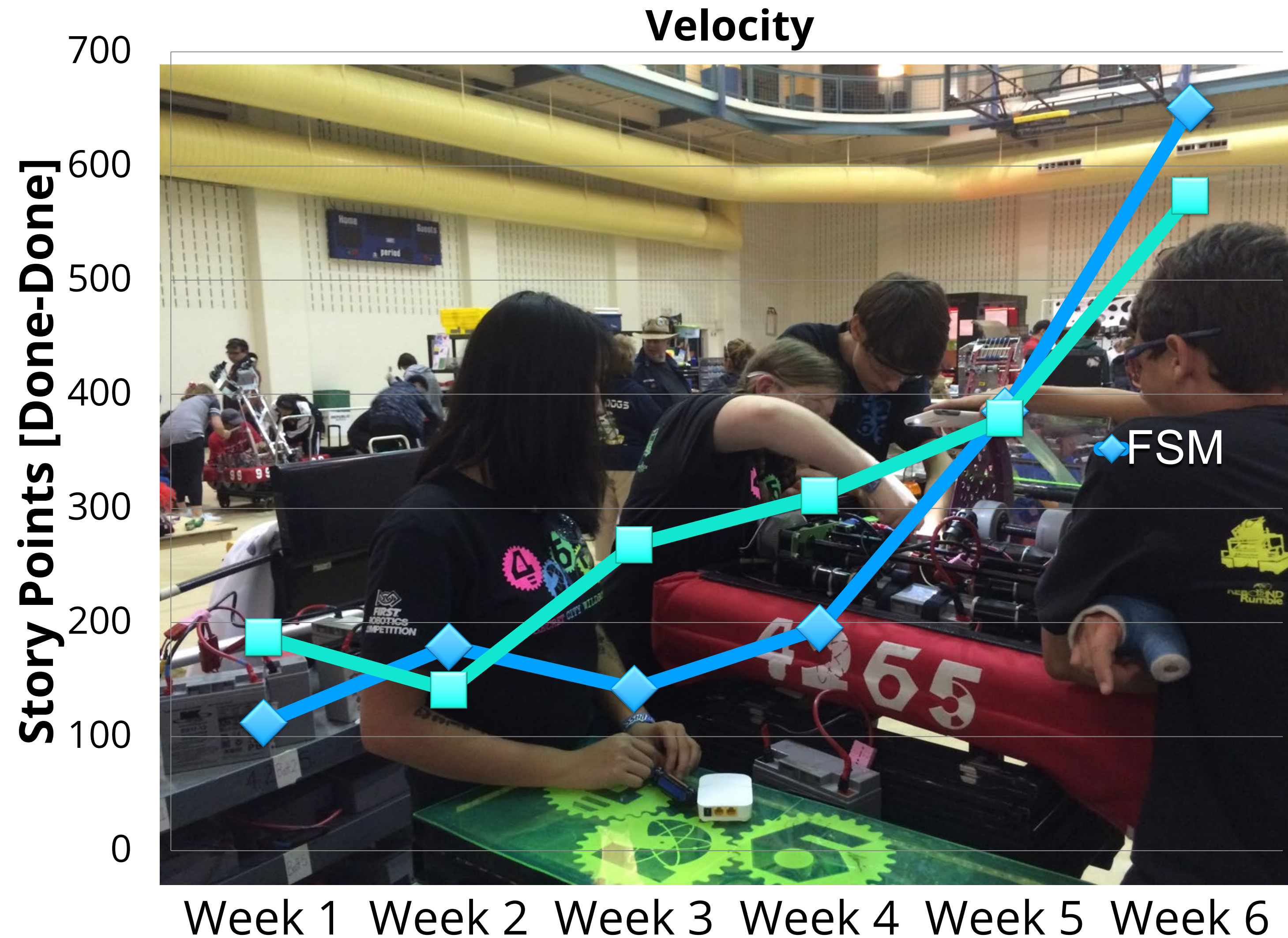
Scrum Room



Cross-Team Coordination & Communication



Scaling Good Scrum Rocks!





**FIRST Robotics and Scrum@Scale
A Force for Good!
Empowering Tomorrow's Workforce
Today!
Come Join the Insurgency!**