

Scrum for Hardware at Scale Case Study

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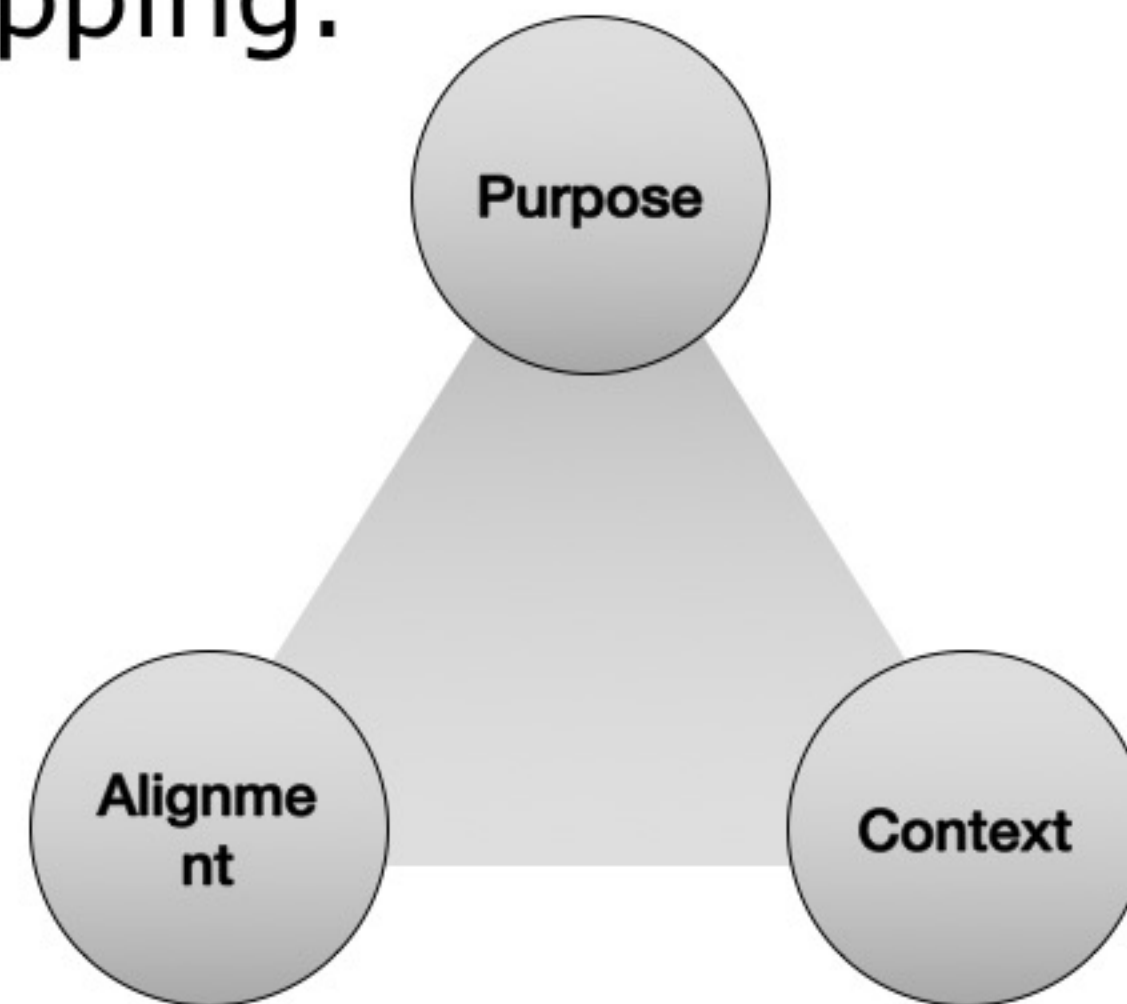
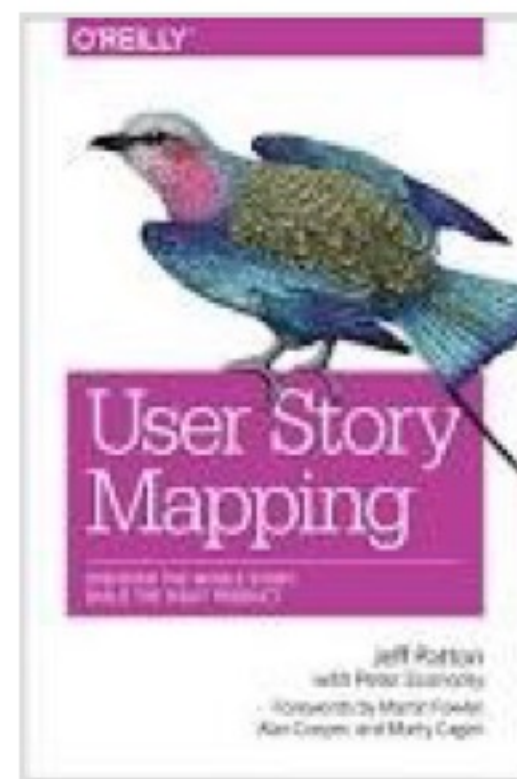
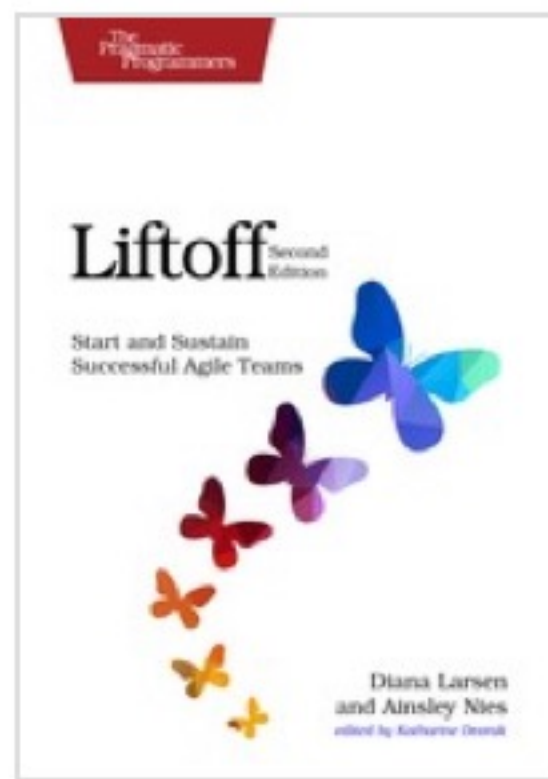
- European IOT Company creating the next generation house automation platform, under NDA.
- Very complex product with Software, Electronics, Mechanical parts, Engines and Plastics components with design needs.
- Time pressure from the market

Challenge: Many external suppliers for SW and HW components with a tight schedule. How to manage the complex dependencies?



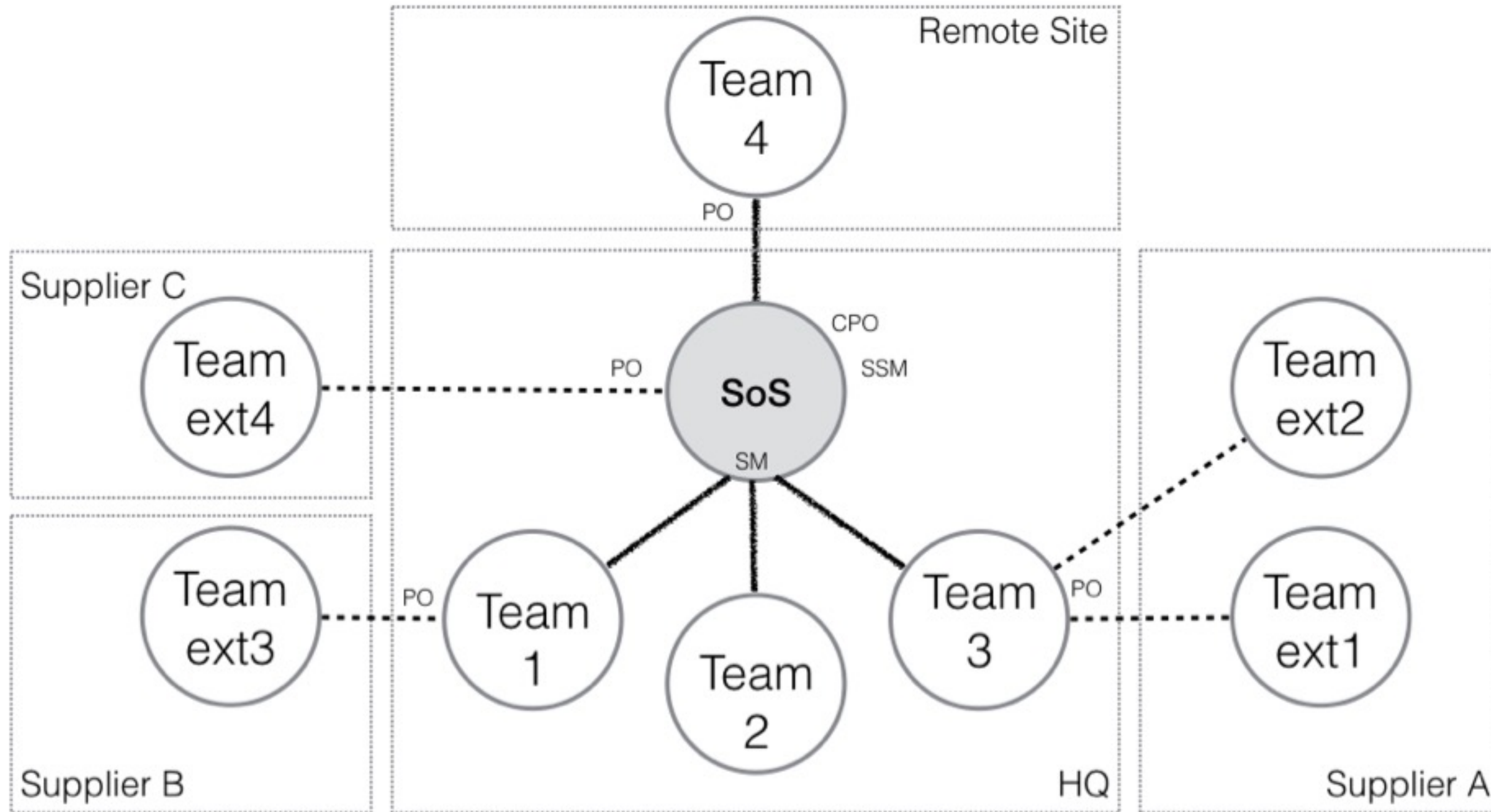
Whole team alignment

The project started with a **two day LiftOff** (as described in Diana Larsen's book) where we shared the Vision, formed the development teams, defined the working agreements and created the backlog with a User Story Mapping.

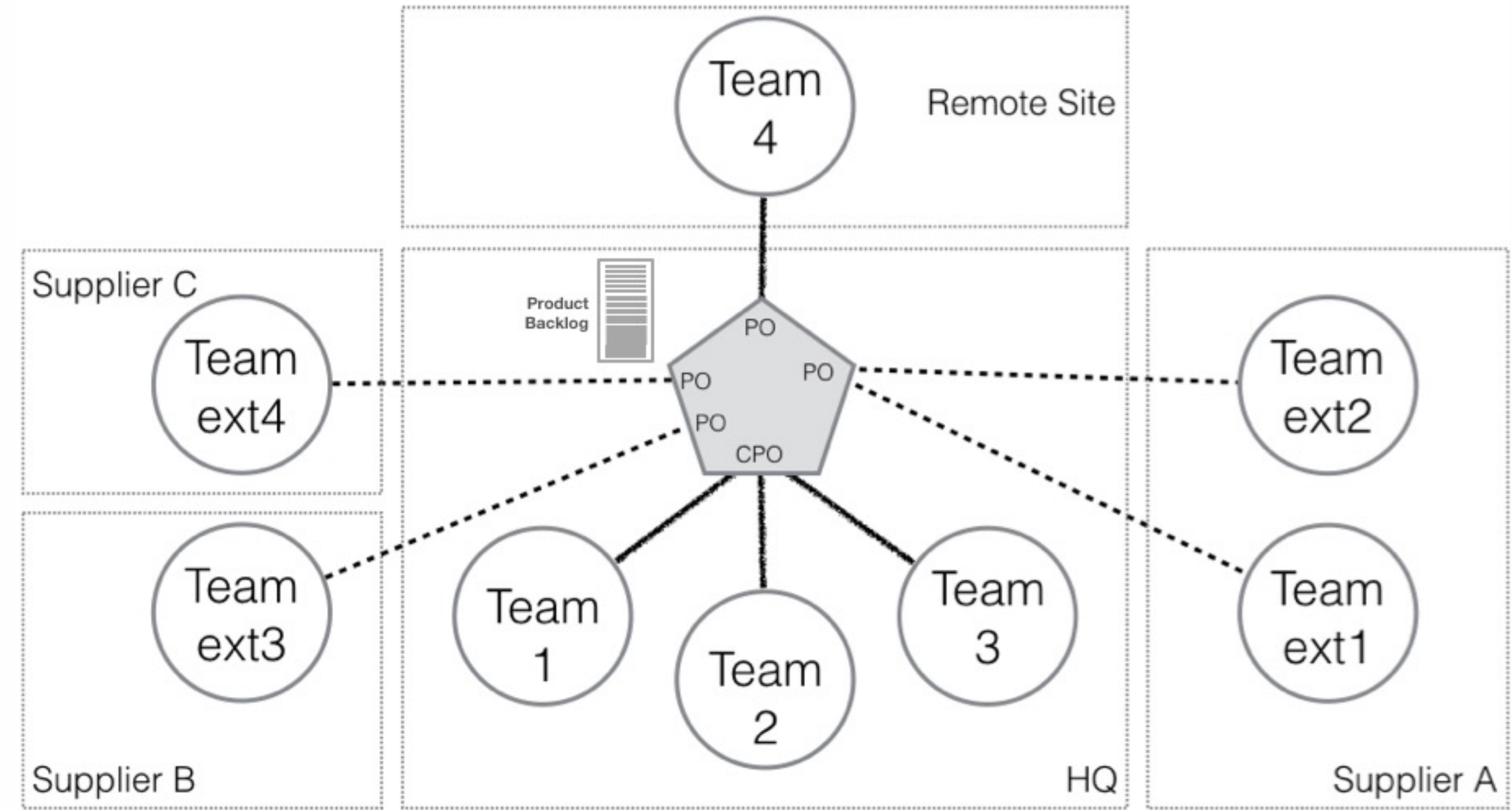


Organizational Structure

Scrum of Scrums



MetaScrum



CPO Chief Product Owner
SSM Senior Scrum Master
PO Product Owner
SM Scrum Master

Buffet Planning

- We tried to do our first Sprint Planning projecting the backlog on the wall. The result was a boring meeting with very low energy.
- We asked the teams to behave like a real buffet: you can't take too little, because it would not be polite, but you can't take too much because you have to eat whatever you take
- It resulted in a very energetic meeting where discussions took place spontaneously; a managed chaos
- It takes around one hour for the three teams. At the end of the hour every team shares with the others what they selected and the CPO checks the table to see if there are high priority items still there. In that (very rare) case, teams are asked to volunteer to replace something they have with the remaining high priority item



Deployment / Review

- Often during the Sprint, the Teams integrate the product and deploy it in a dedicated room, used also for the Joint Sprint Review.
- The different products are installed in several movable panels. They can be taken to the team room during the Sprint for convenience.
- This photo was taken at the beginning of development and shows empty panels with no products.



Results

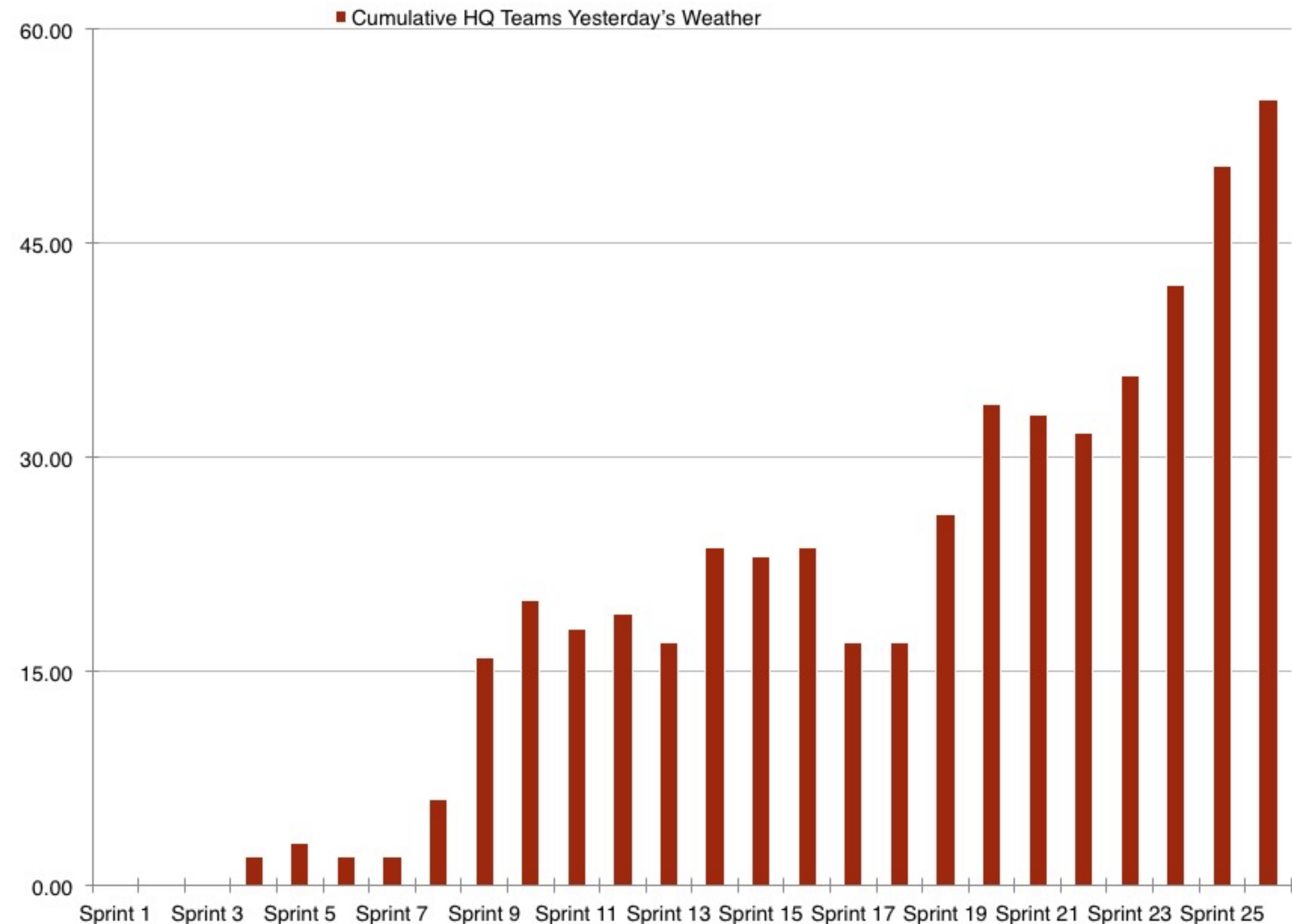
Cumulative Yesterday's Weather

Sprint 8 = 6sp

Sprint 14 = 23sp

Sprint 26 = 55sp

**In one Year
x 9.16 faster!**



Yesterday's Weather is the average velocity of the last 3 Sprints