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Automated Function Point Sizing in an Agile and DevOps World

David Norton

September 5, 2019

Q1: Is your organization struggling with sizing…? (select all that apply

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Q2: Have you adopted (or are you planning to adopt) a formal automated sizing standard?

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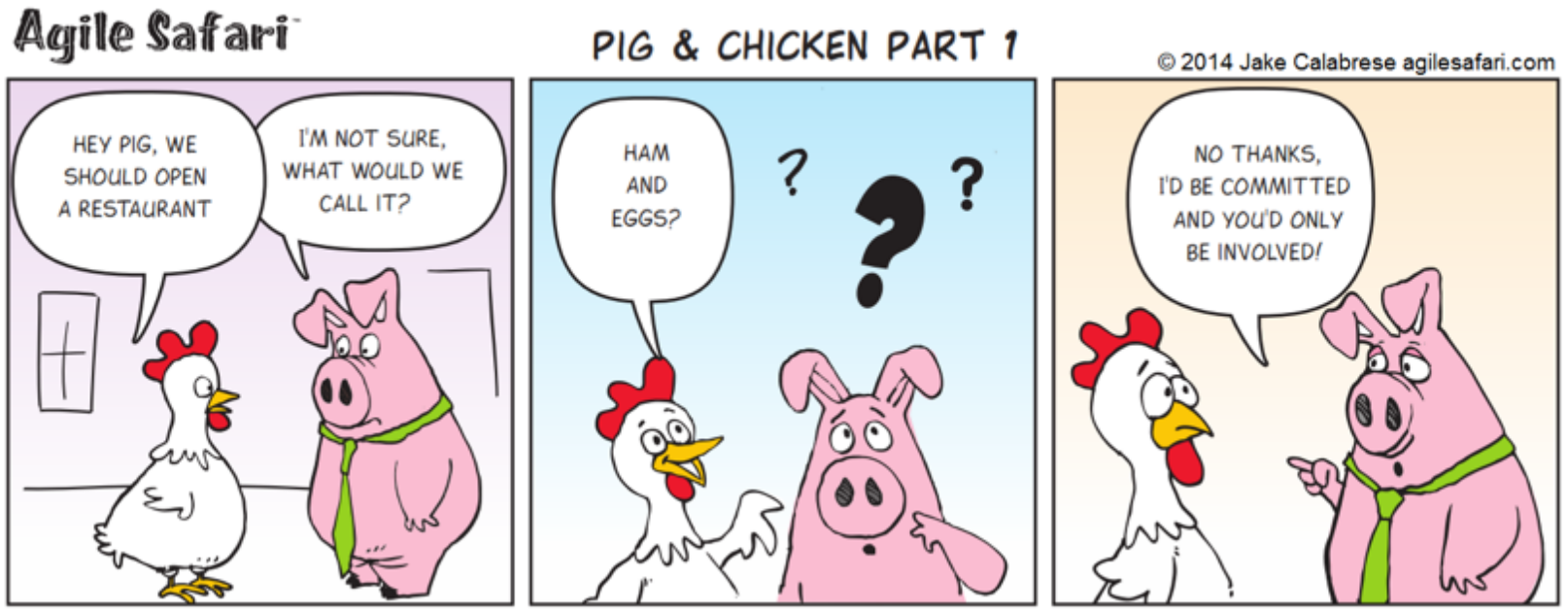
The Pigs Are Revolting



Pigs, who are totally committed to the project and accountable for its outcome, and chickens, who consult on the project and are informed of its progress.

The pig being able to provide bacon

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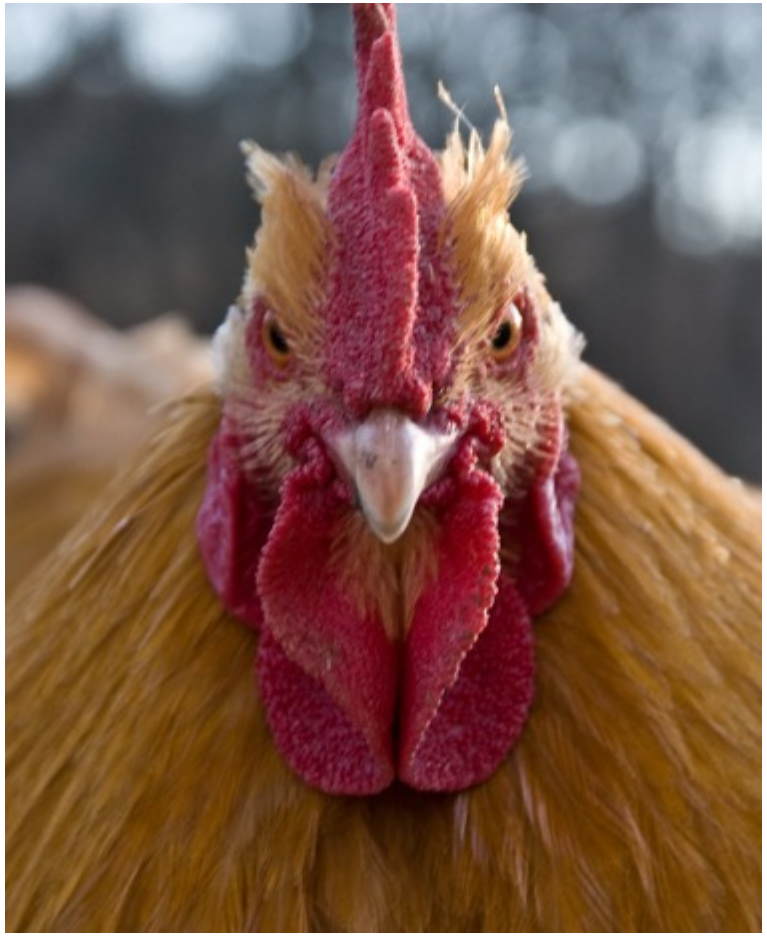
And The Chickens Are Not Happy



- **But we provide the funding**
- **Report to the shareholders**
- **Own strategy**
- **Can fire you, and the whole team if we wish**

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Result …….

I need know how much this is all going to cost.

How productive are you guys anyway?

You will love the features when you see them.

Trust me, and stop asking about productivity and costs.

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A Uncomfortable Truth

We all ask things about size and productivity, why should agile teams be exempt?

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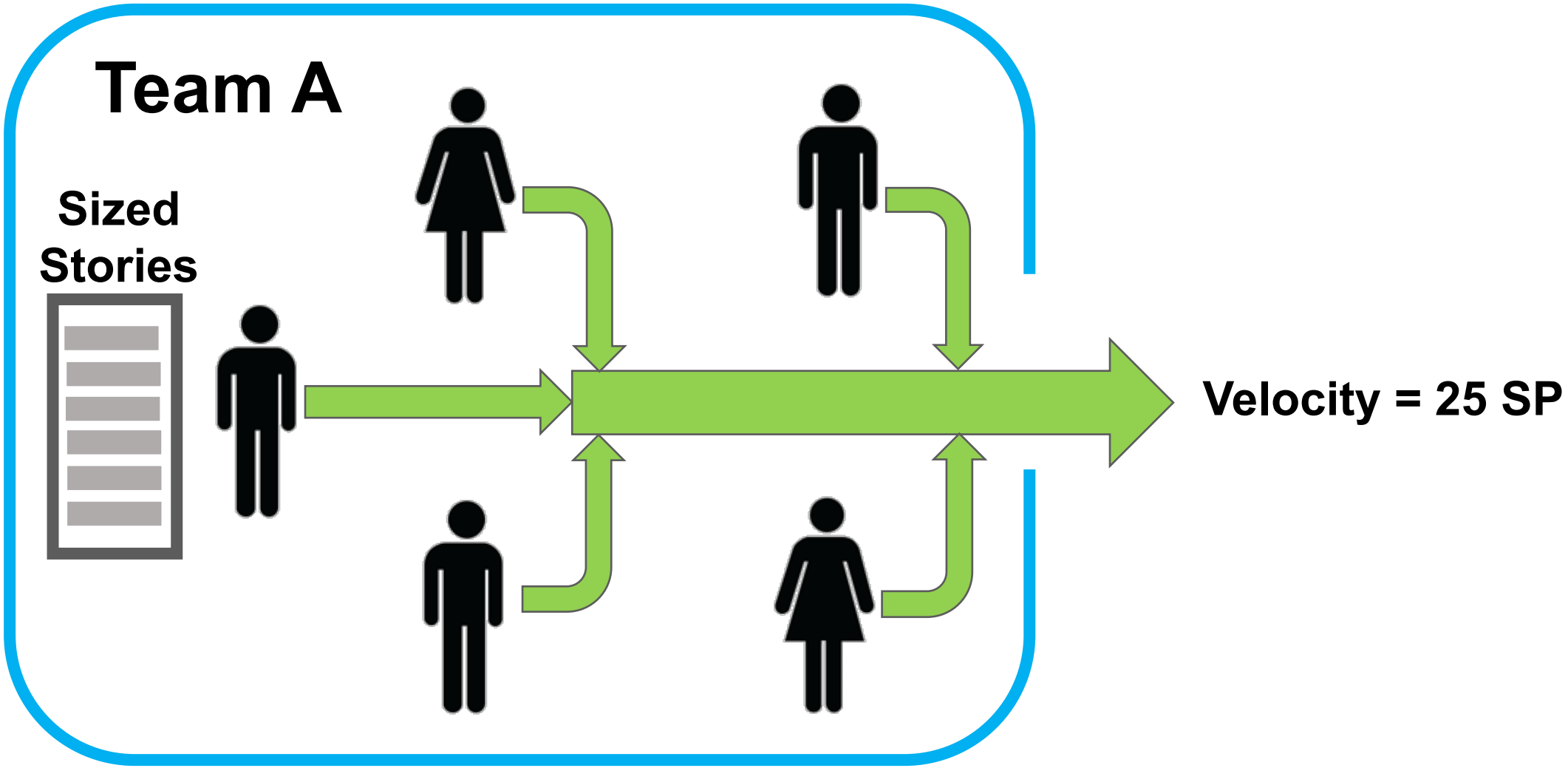
Story Sizing Is Simple and Effective For A Single Team



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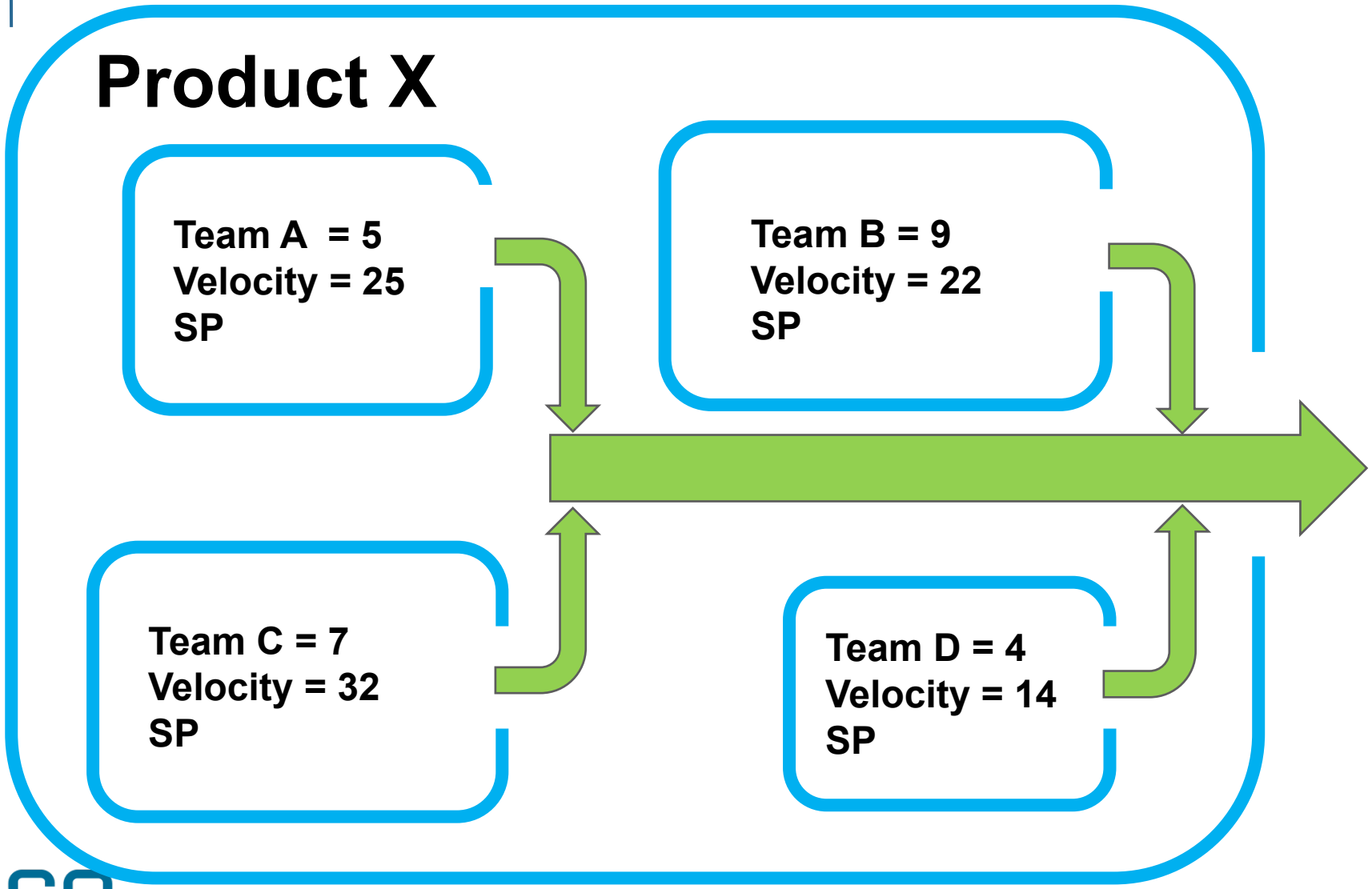
But What About Multiple Teams ?



Product Owner

Total Velocity Of My Teams?

Don’t Know, Don’t Care.

I Trust Them To Deliver Value.

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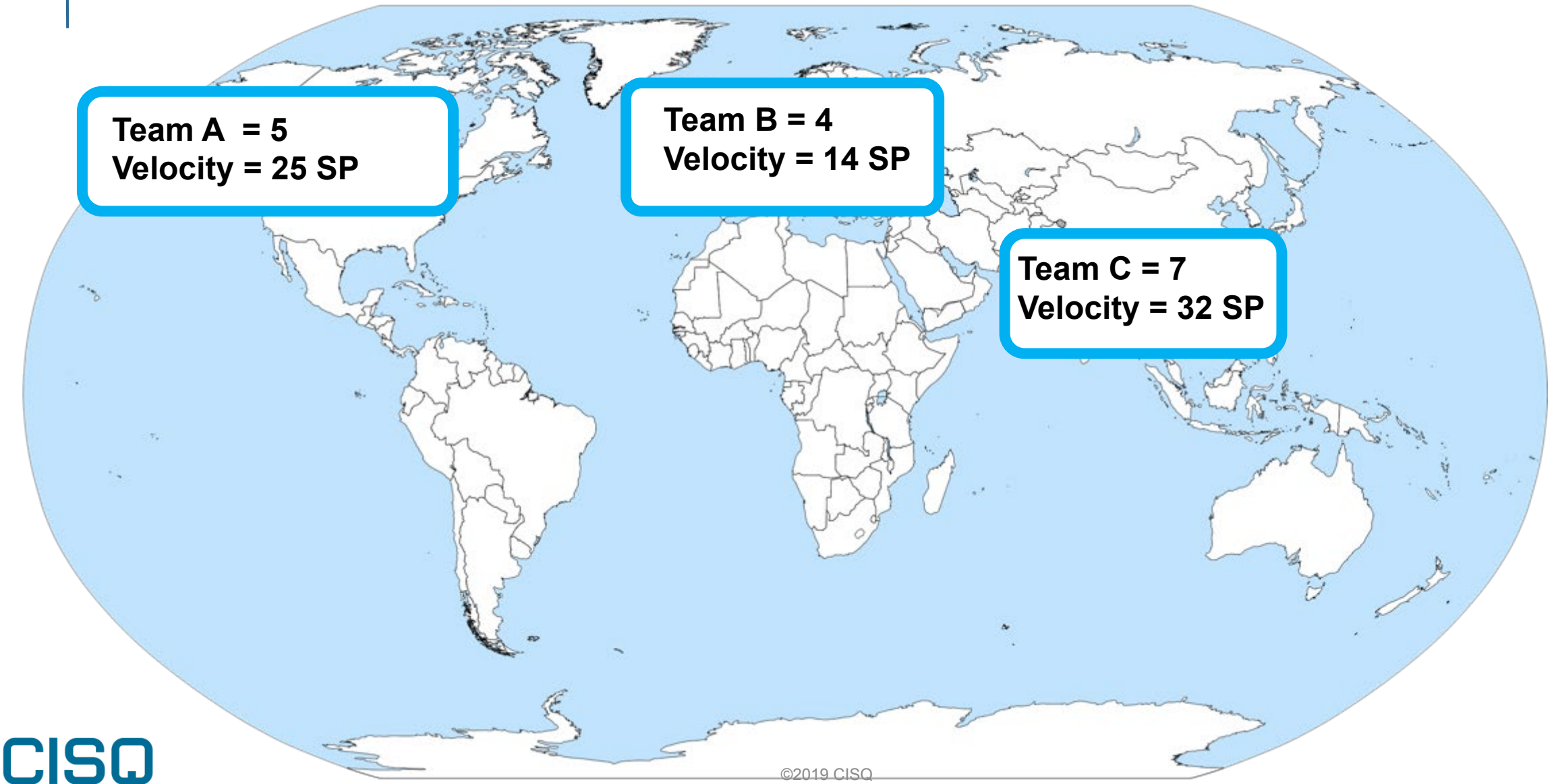
And Distributed Teams?



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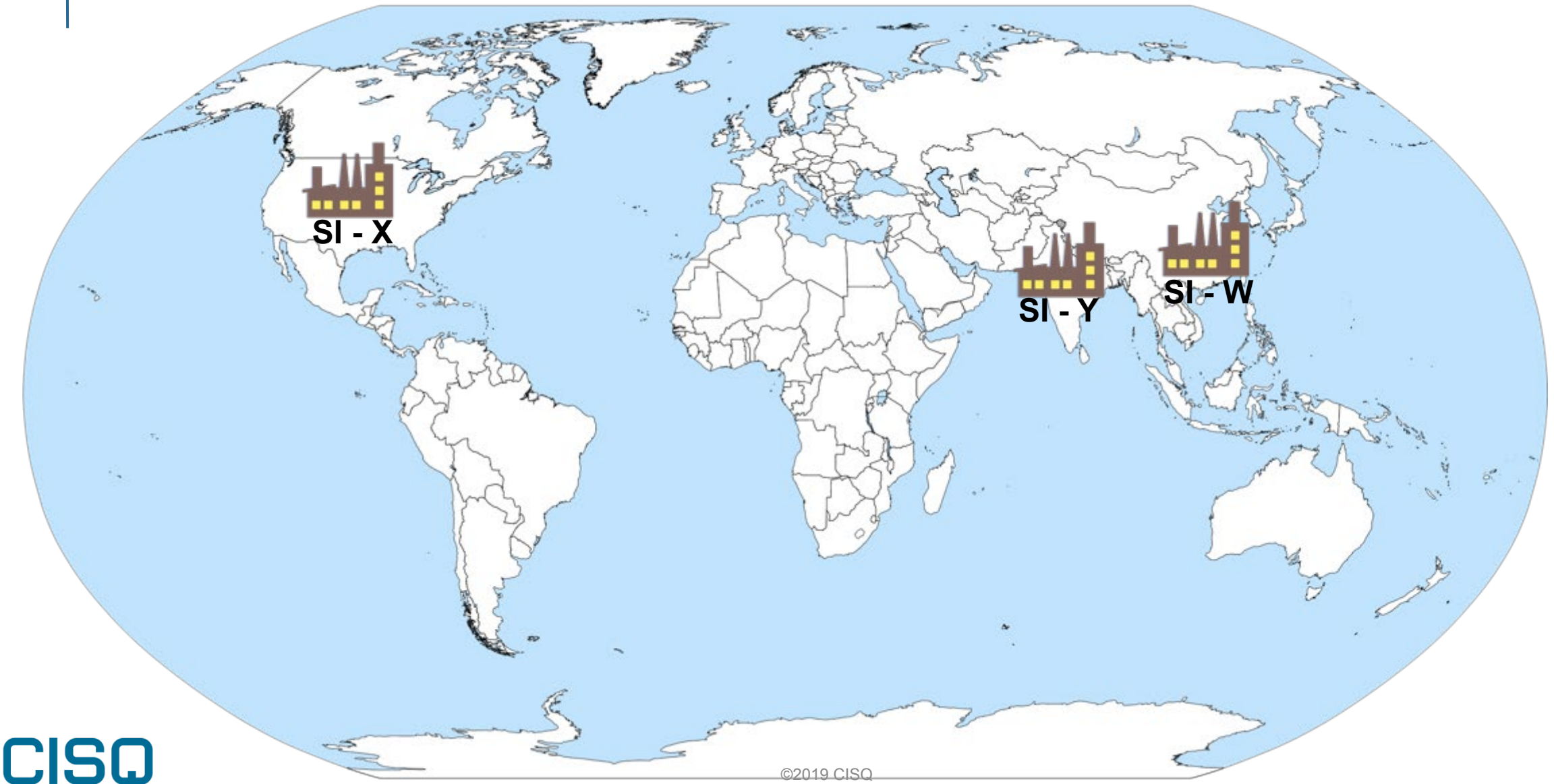
Or Worse 3rd Party SI?



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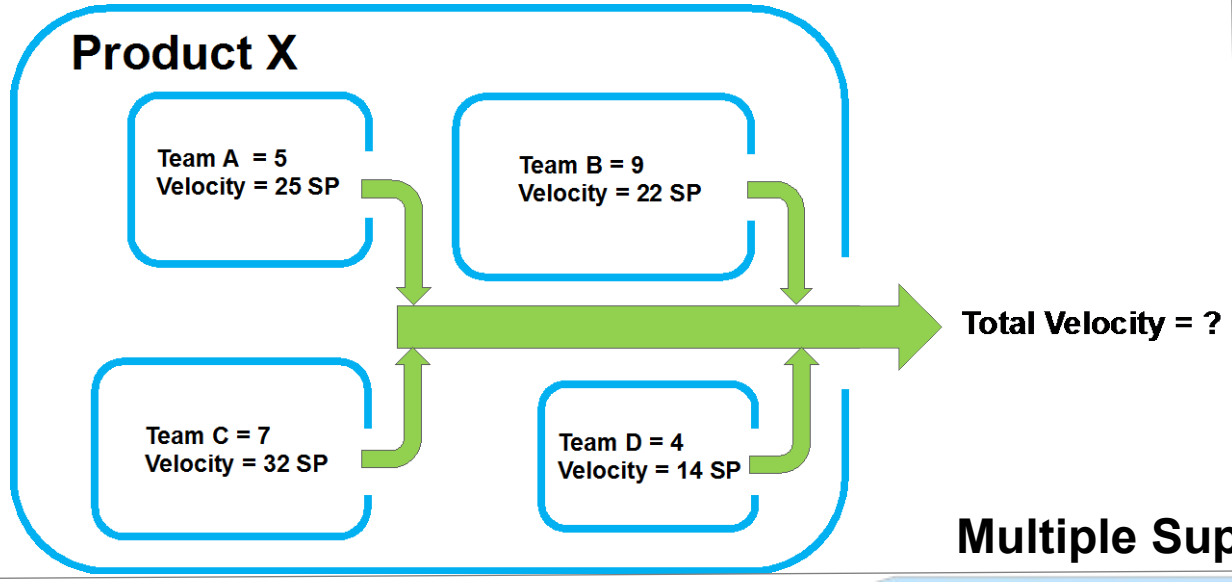
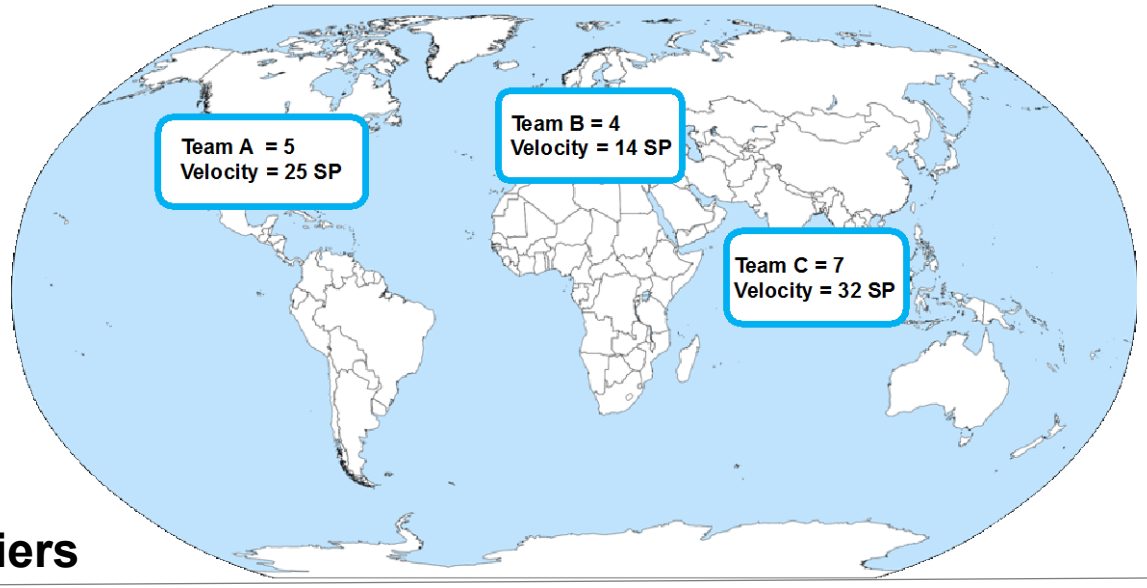
The Problem

Product/Tribe/Release Train



Distributed Teams



Multiple Suppliers

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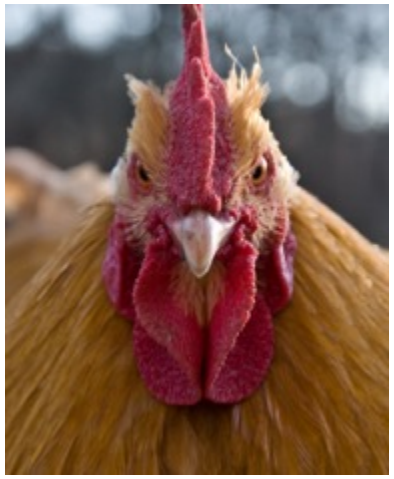
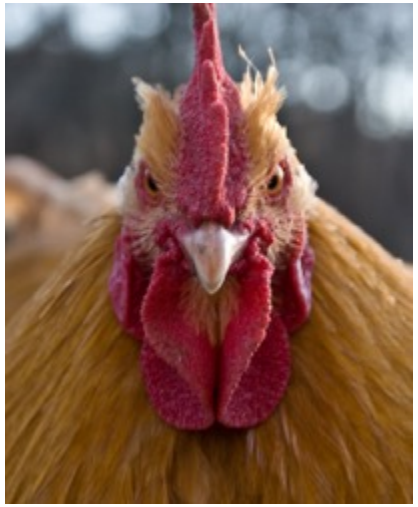
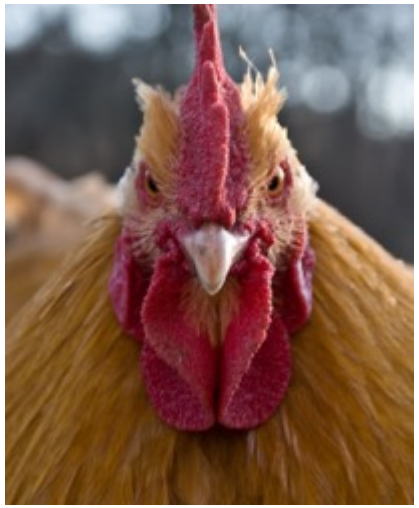
The Chickens Are Lining Up



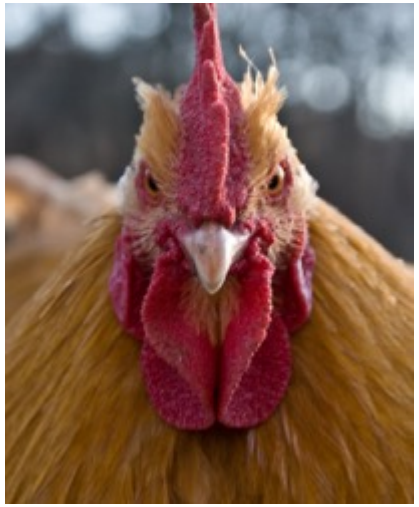
CFO



Business Units Owner



CIO



Vendor Management

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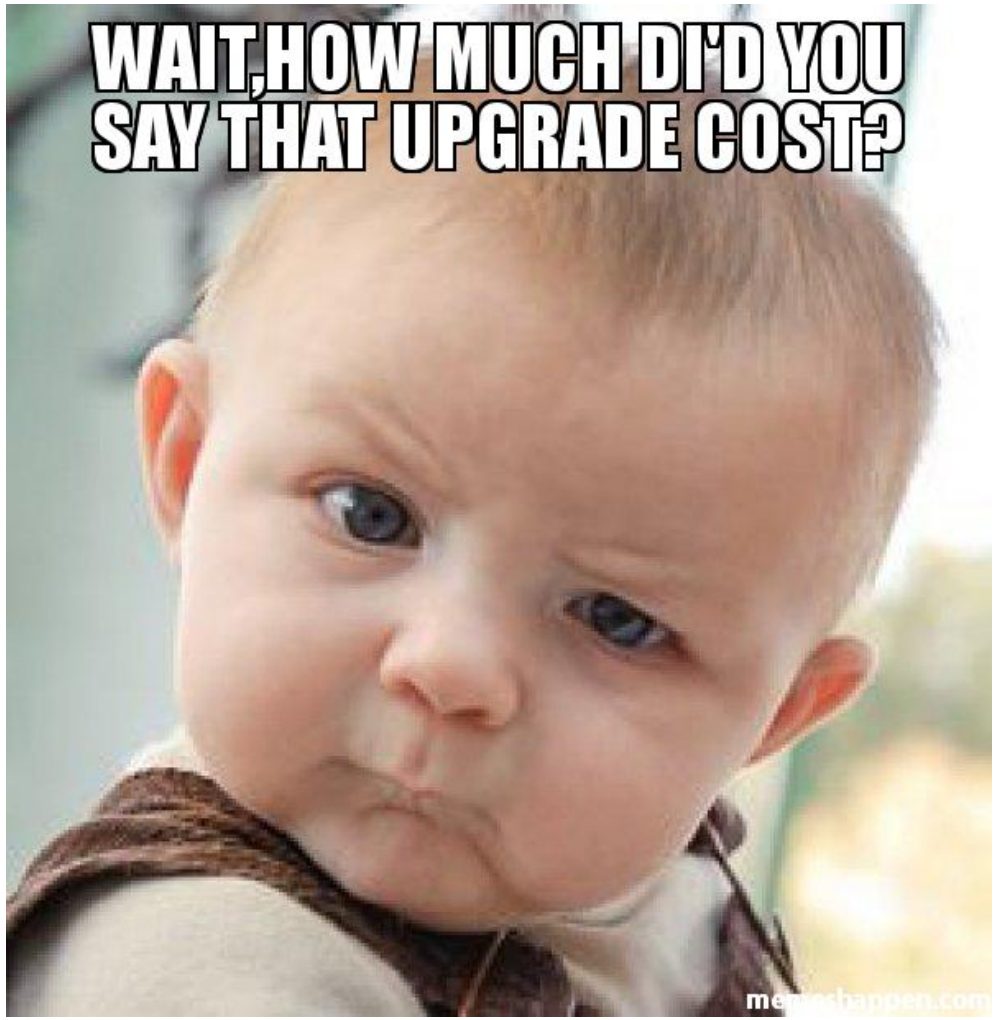
Even The End Customer Is Asking



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So We Try And Fudge It

1 Story Point = 4 hours coding and 4 testing

We are using a simple average of actual effort per story point

We just make it up ….

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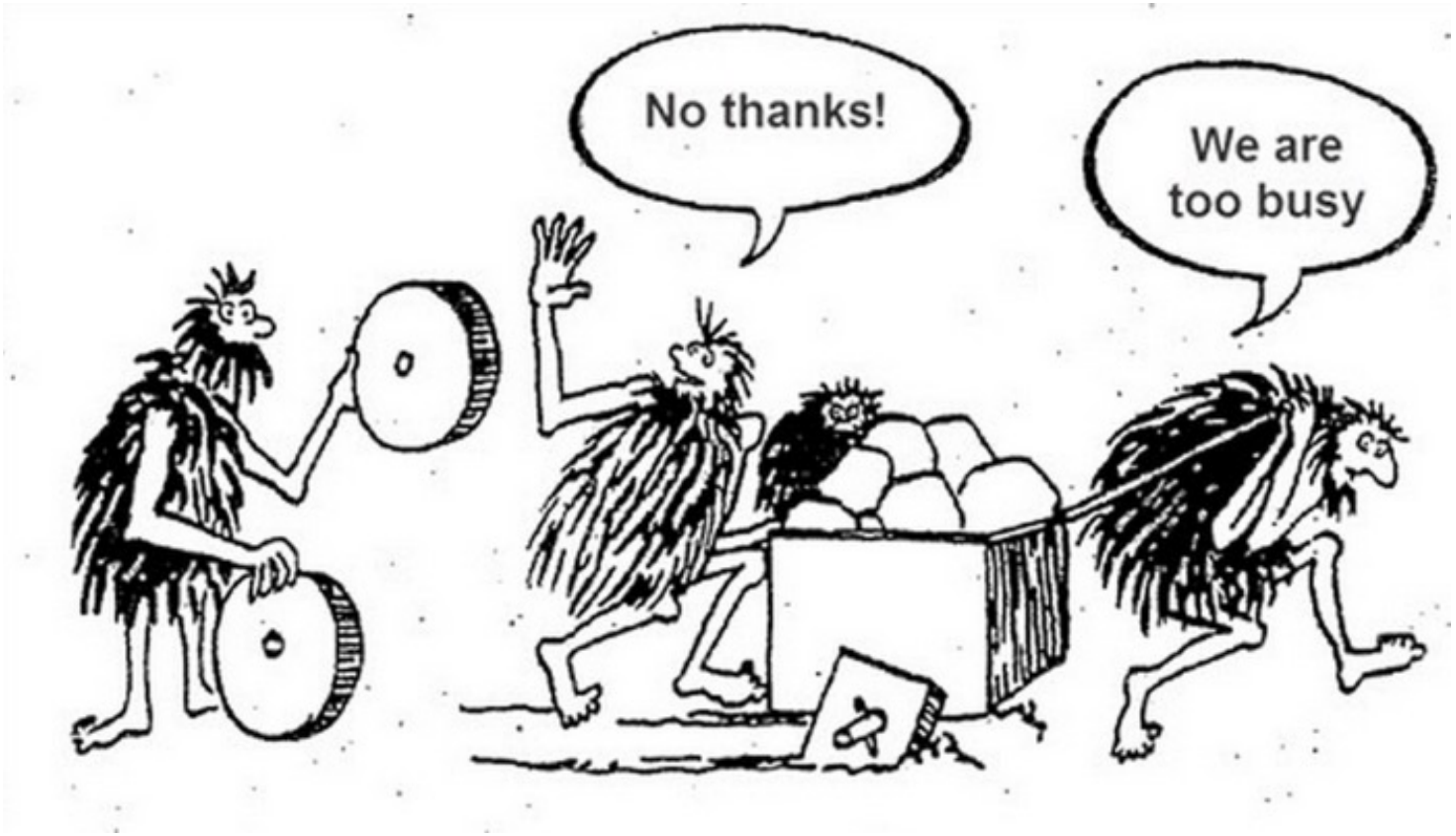
And Some Agile Enterprises are Reinventing the Wheel

We have an agreed sizing standard based on story points all teams must use...



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So…. Why Not Use Function Points

When Agile Teams Think About Function Points They Imagine This…..

Its ugly, old, and evil

It may even eat children

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So…. Why Not Use Function Points

They See Over Documentation

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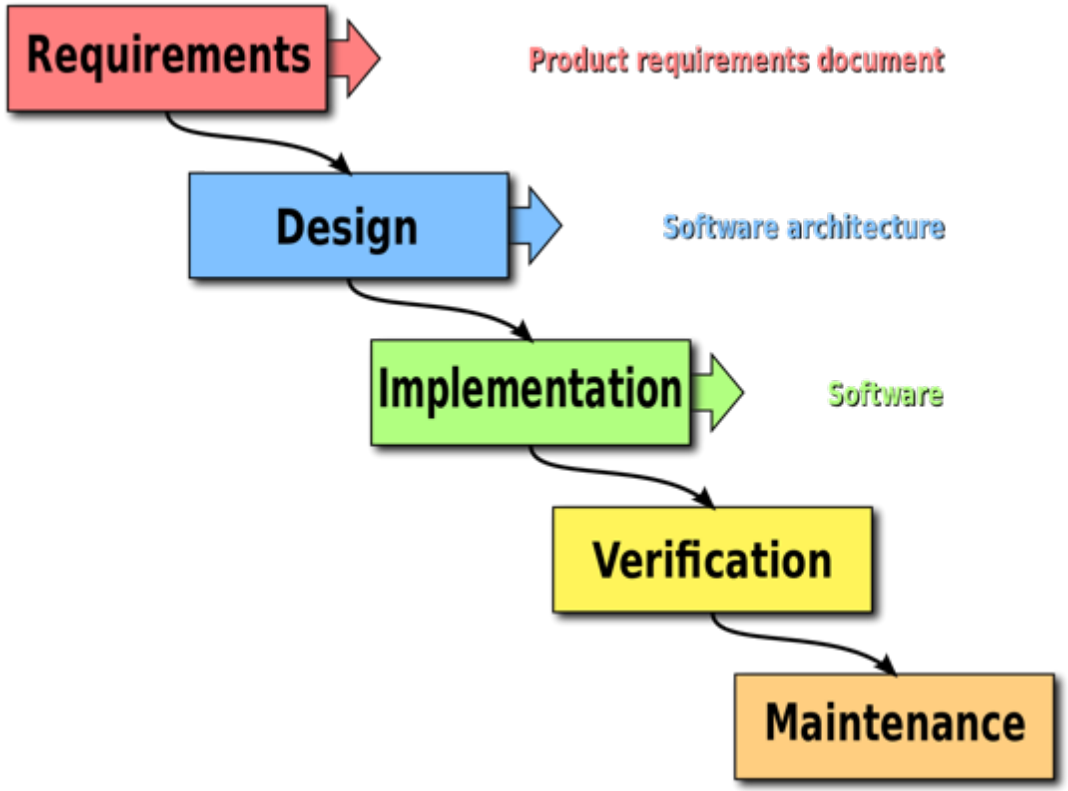
So…. Why Not Use Function Points

They See Over Waterfall



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So…. Why Not Use Function Points

They See It as A Management Tool of Control

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But What If …..

Can we size and measure in a consistent and standards based way that does not get in the way of the teams?

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Enter

ISO/IEC 19515:2019 Information technology -- Object Management Group Automated Function Points (AFP), 1.0

And

CISQ Automated Function Point (AFP)

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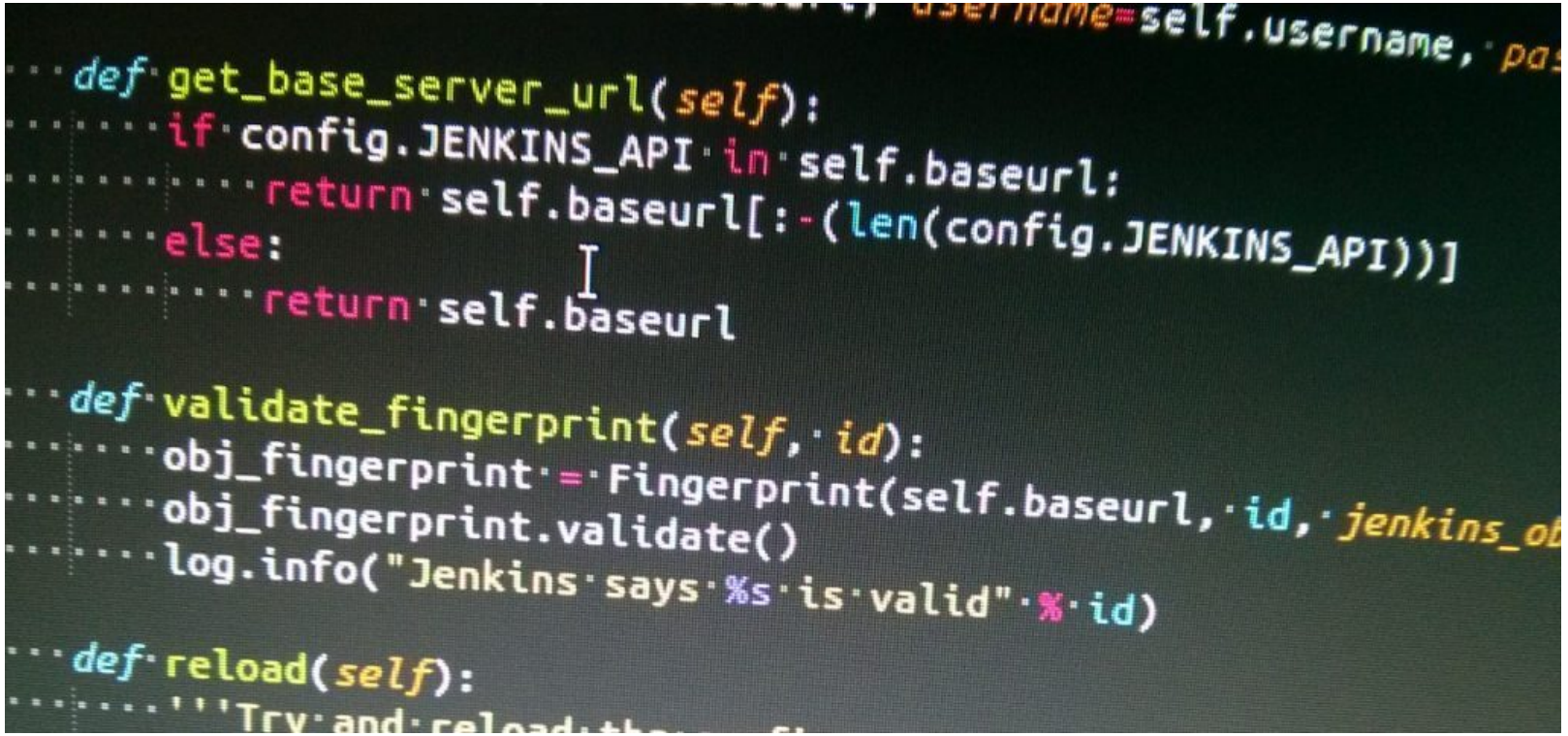
Enter

Automated Function Point Sizing From The Code



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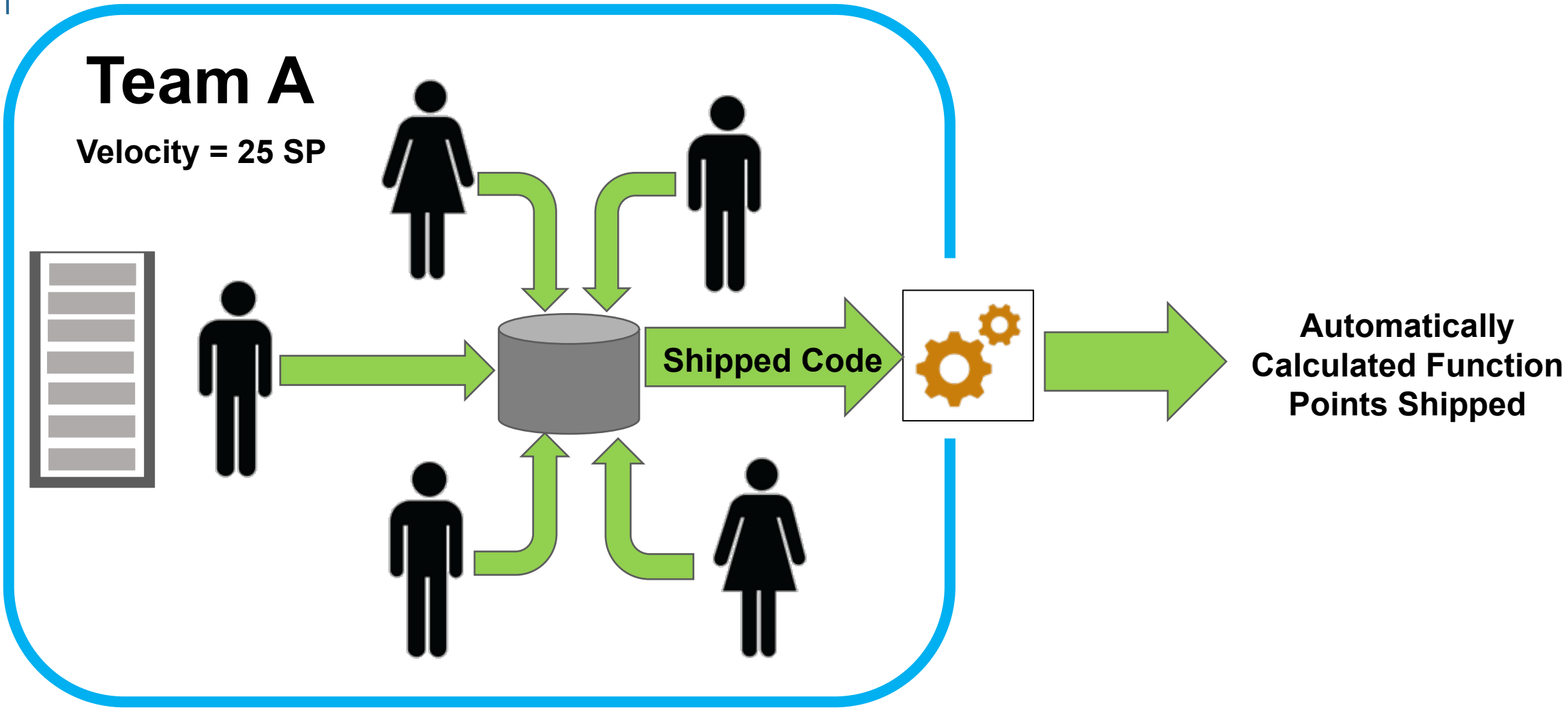
Standard Size Measure From Code



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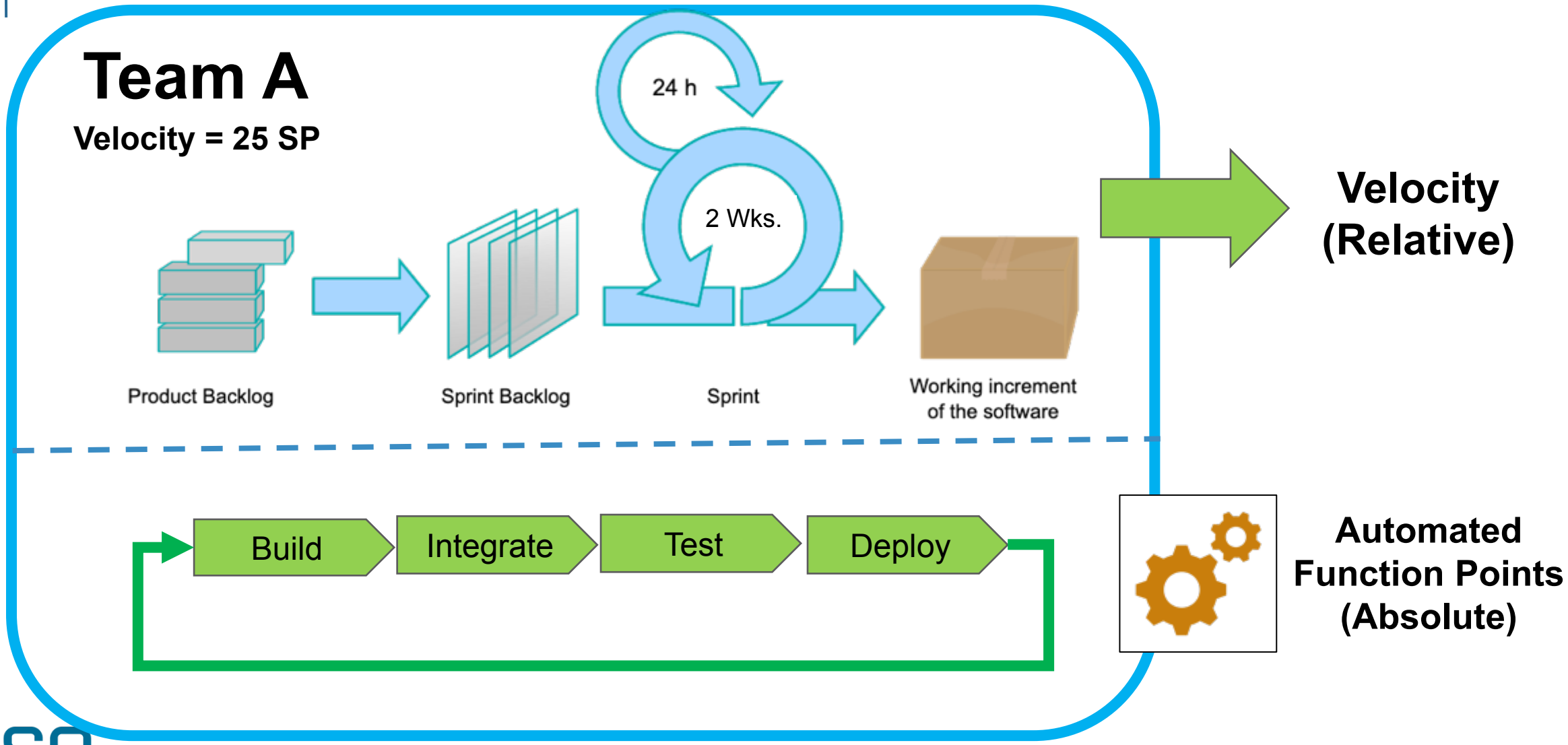
Teams Can Still Use Relative Sizing



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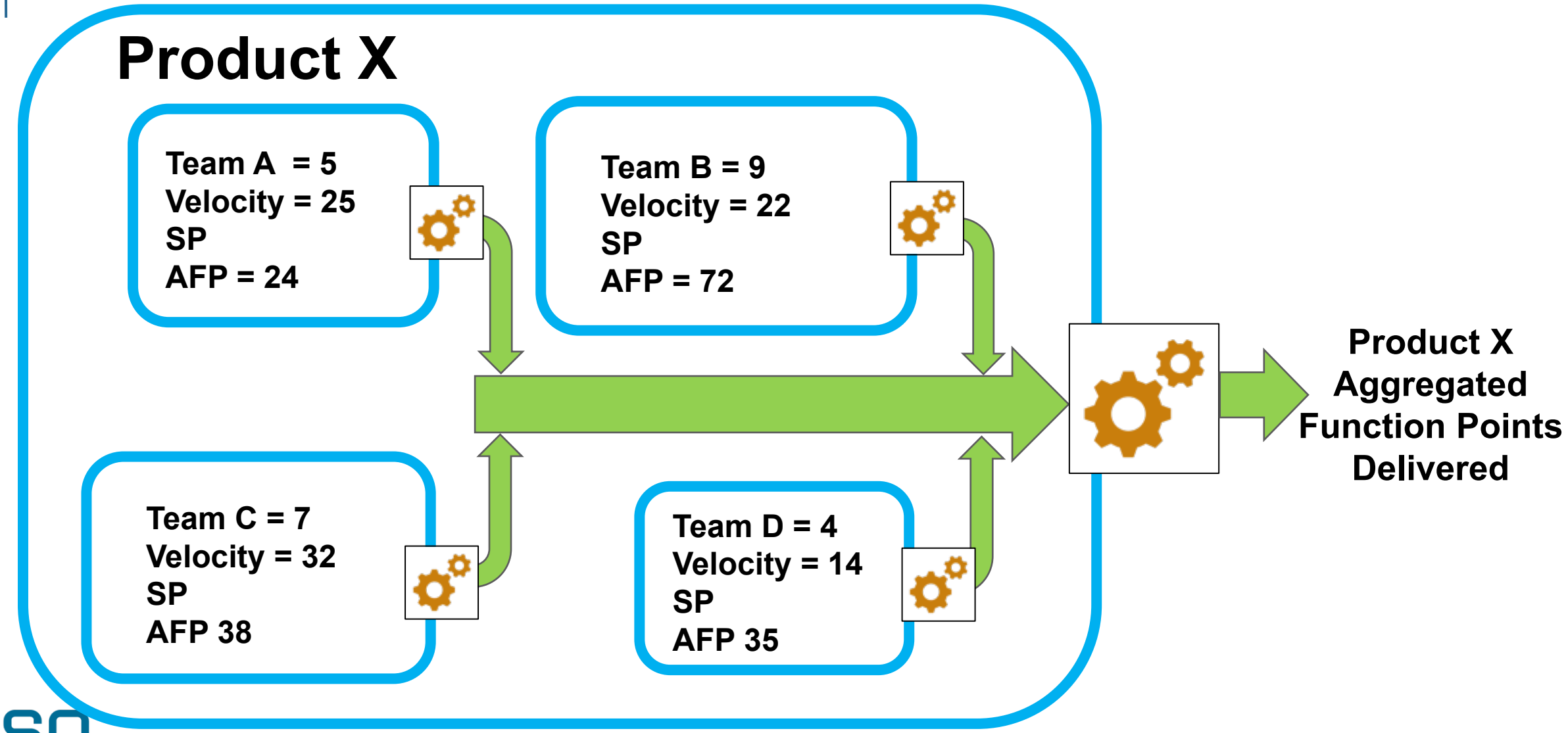
Consistent and Fair Across All Teams and Suppliers



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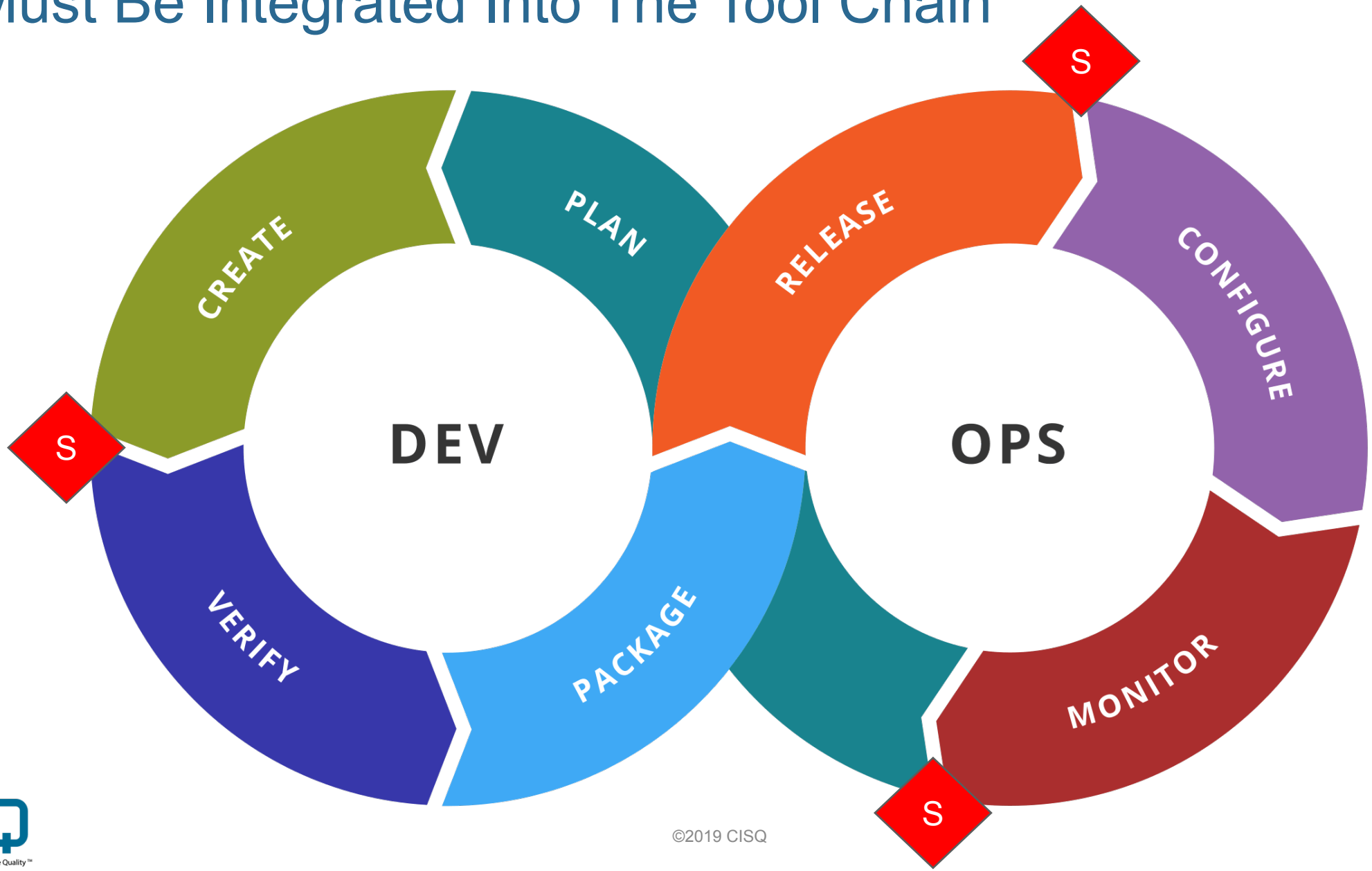
Must Be Integrated Into The Tool Chain



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Q3: Are you using Function Points with your suppliers?

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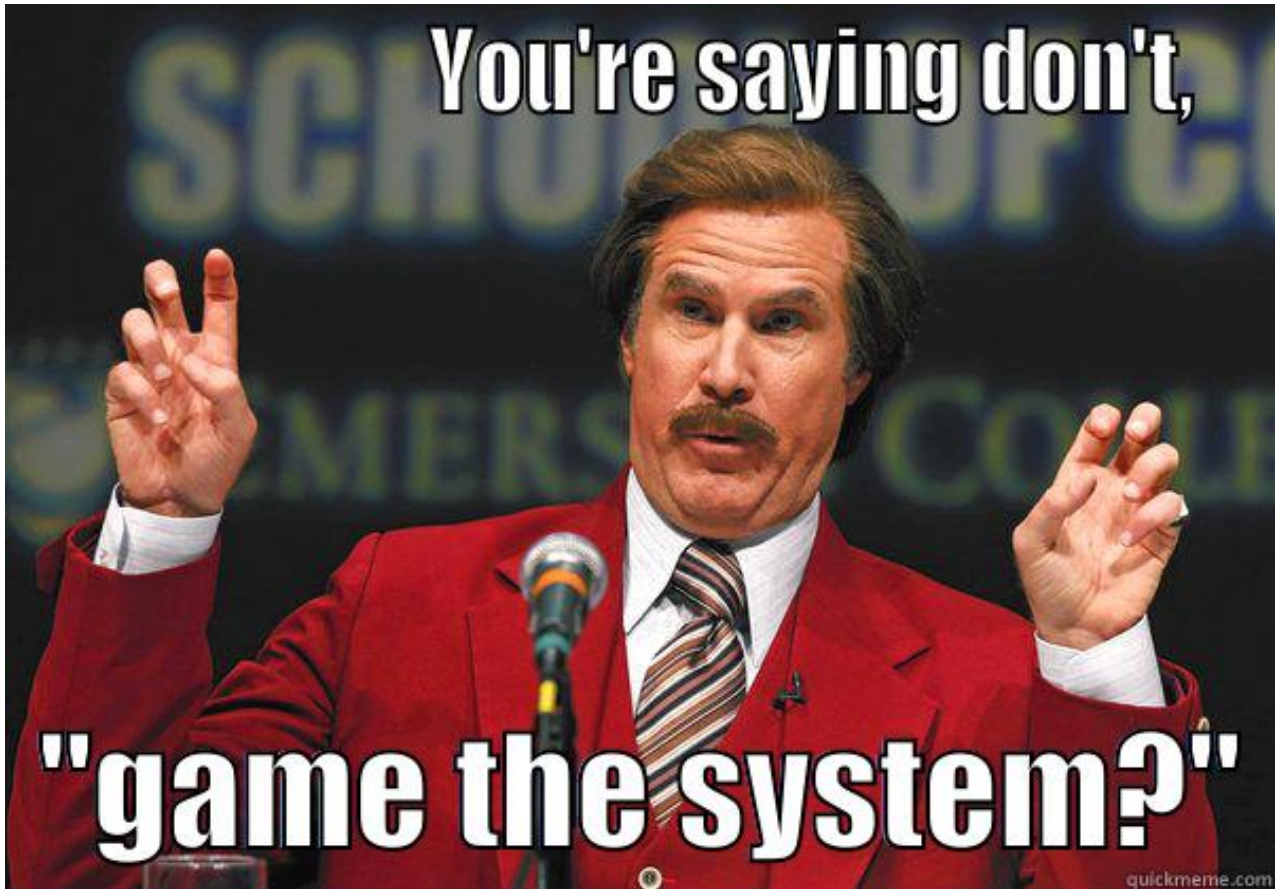
Be Careful with 3rd Parties



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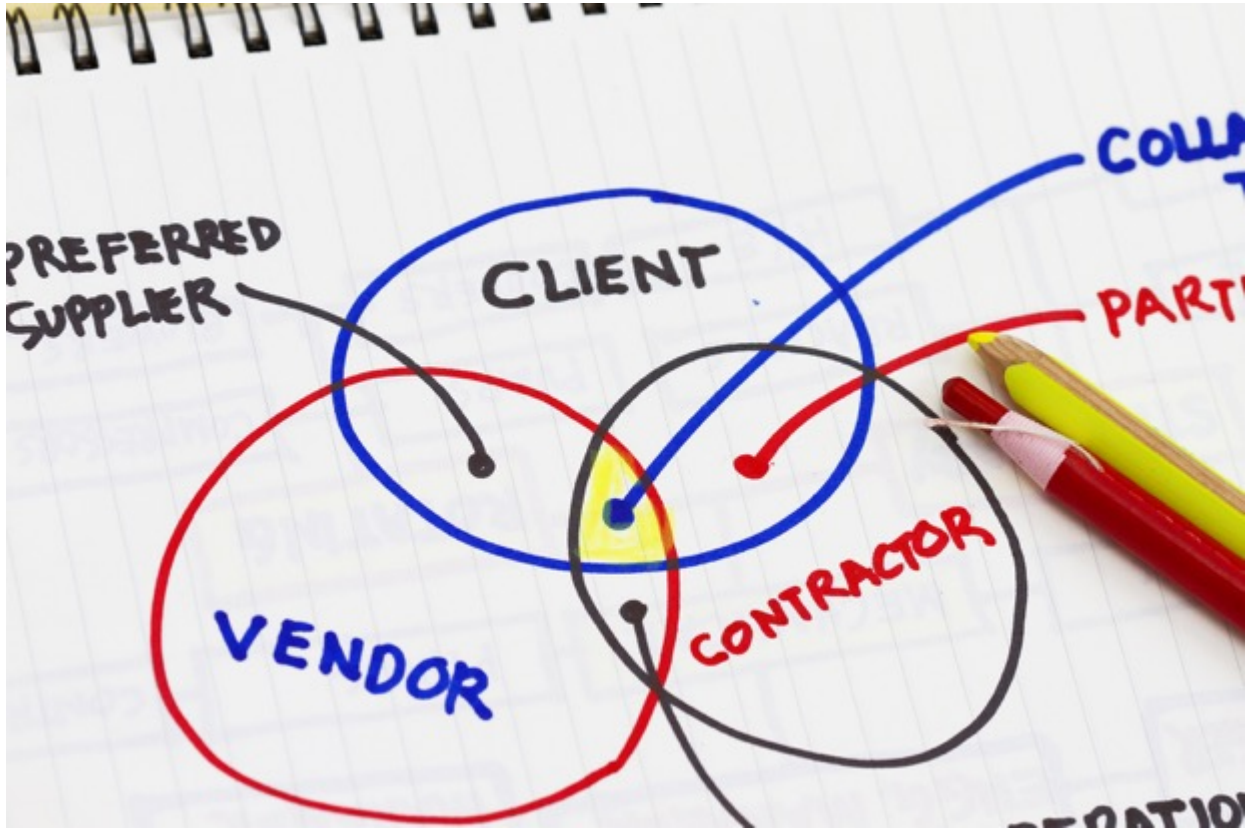
Be Careful with 3rd Parties



Train Vendor Management on the use of AFP for contracting, vendor monitoring and benchmarking

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Q4: Does your organization measure technical debt and quality as a percentage of Function Points?

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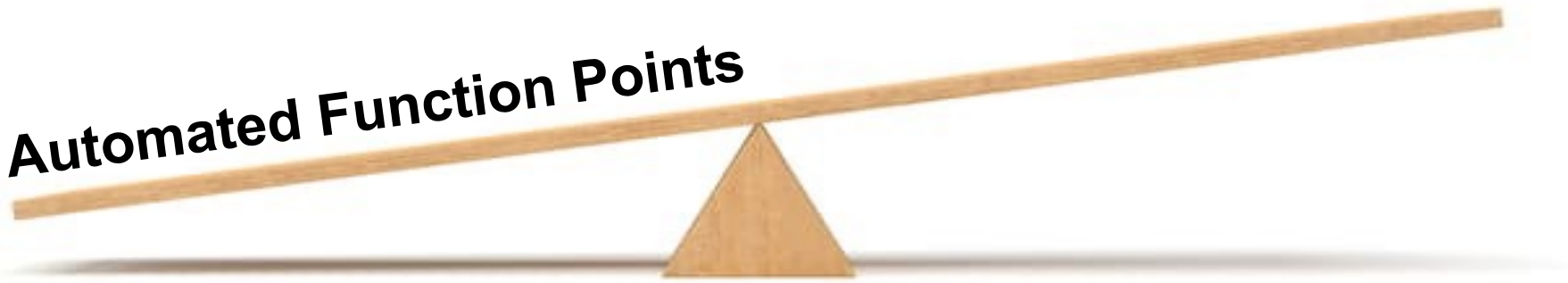
But Sizing Is Not Enough



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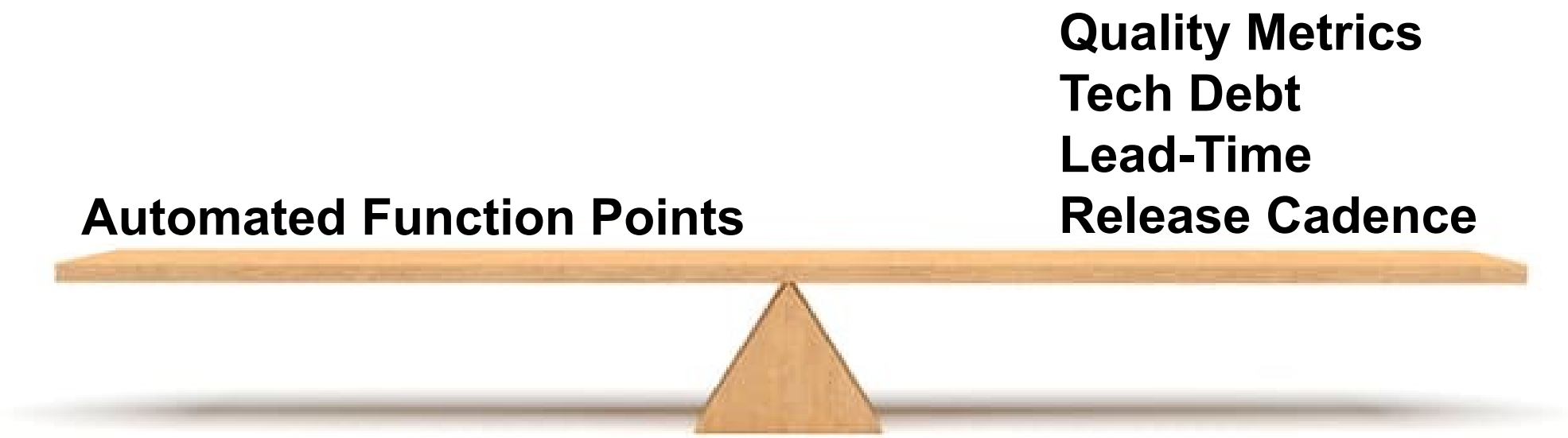
But Sizing Is Not Enough



Survey https://www.it-cisq.org/state-of-the-nation-survey.htm

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But Sizing Is Not Enough

- **Average Lead-Time Per Function Point**
- **% Tech Debt per Function Point**
- **Average Function Points Per Release**
- **Cost per Function Point**
- **% Improvement YoY in Function Points**

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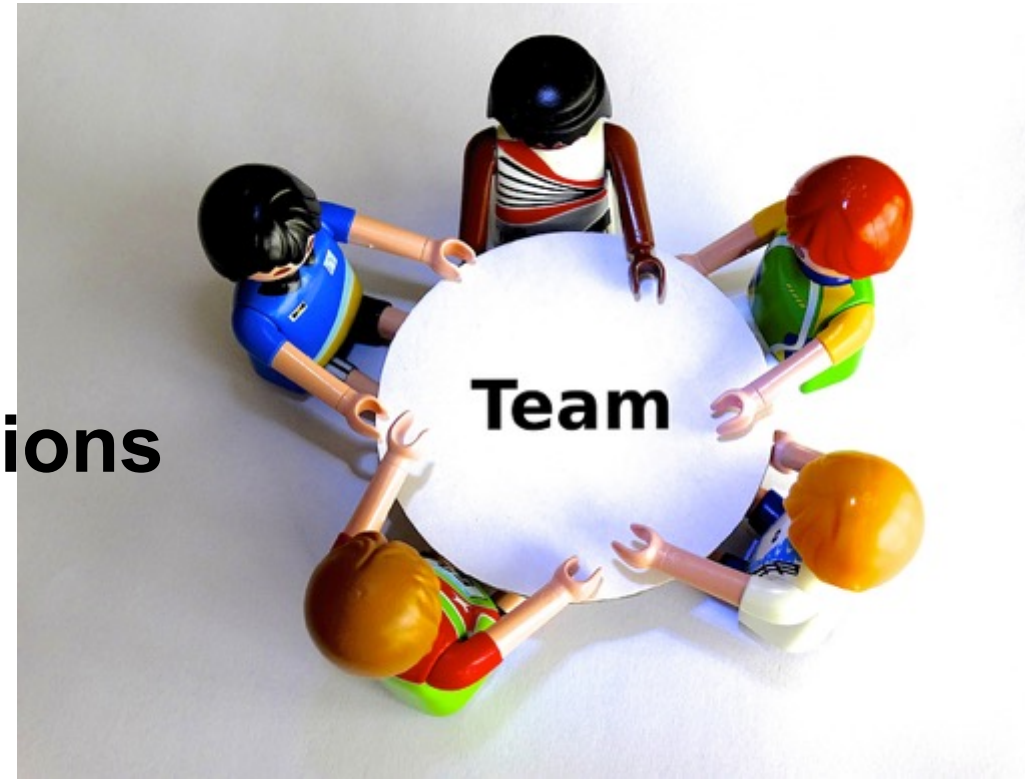
There is a MUST here

- **Its OUR metric, not a management tool**
- **We use it to plan**
- **We use it to improve**
- **We use it to make better decisions**



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Q5: What should CISQ focus on going forward?

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Thank You

Any Questions?

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Thank you

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750+ companies

7 adopted standards

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