

LESSONS LEARNED

- It's the system not the workers
- It's management thinking that designed the system
- Arbitrary numerical targets were completely ineffective
- Rewarding or punishing the workers had no effect
- Rigid and precise procedures are not sufficient to produce quality
- Keeping the 'best' workers did not work
- Management tampering creates more problems than it solves
- Posters and slogans are at best useless and can be insulting and create resentment
- The biggest source of variation was in the system

Variation and Targets

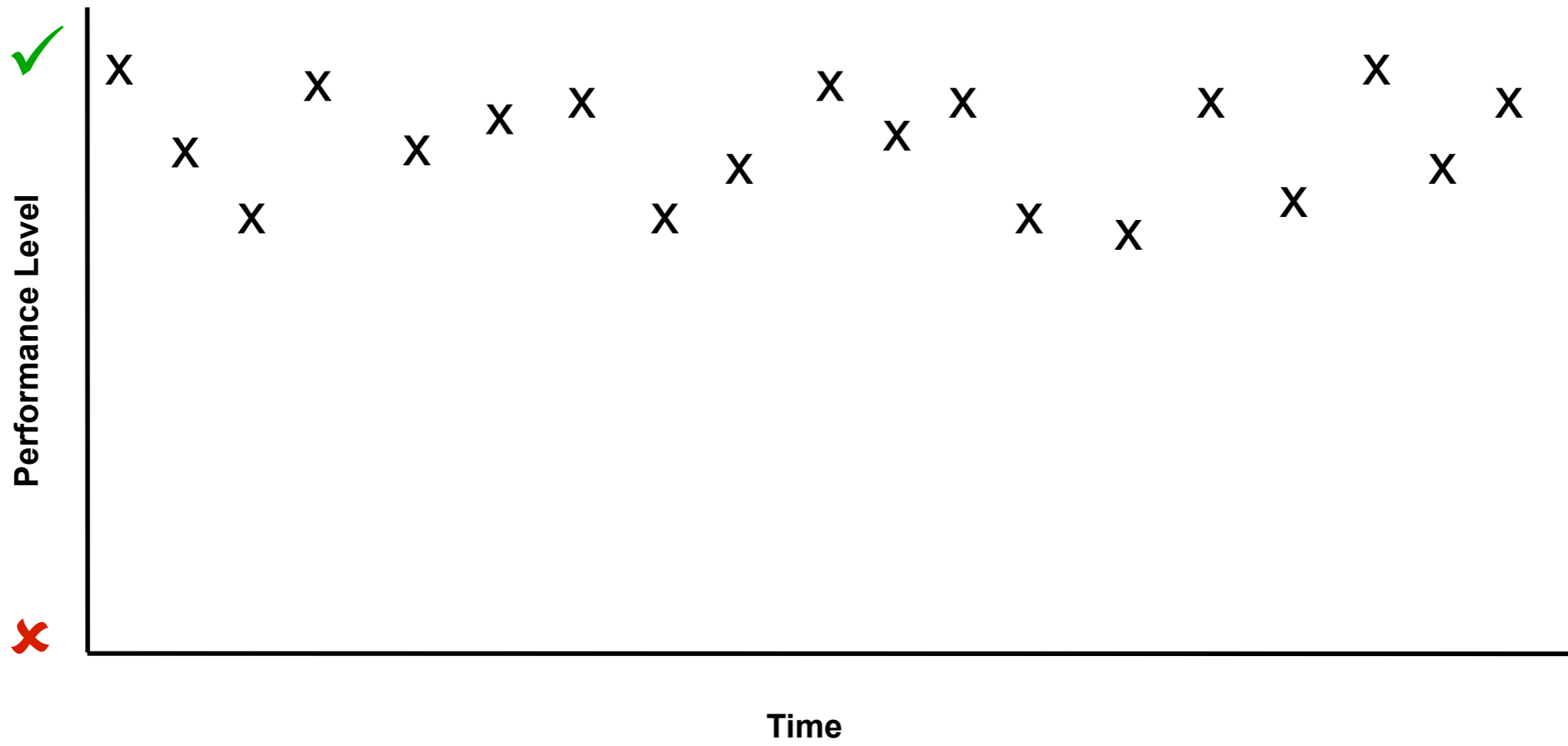
David Joyce

ThoughtWorks

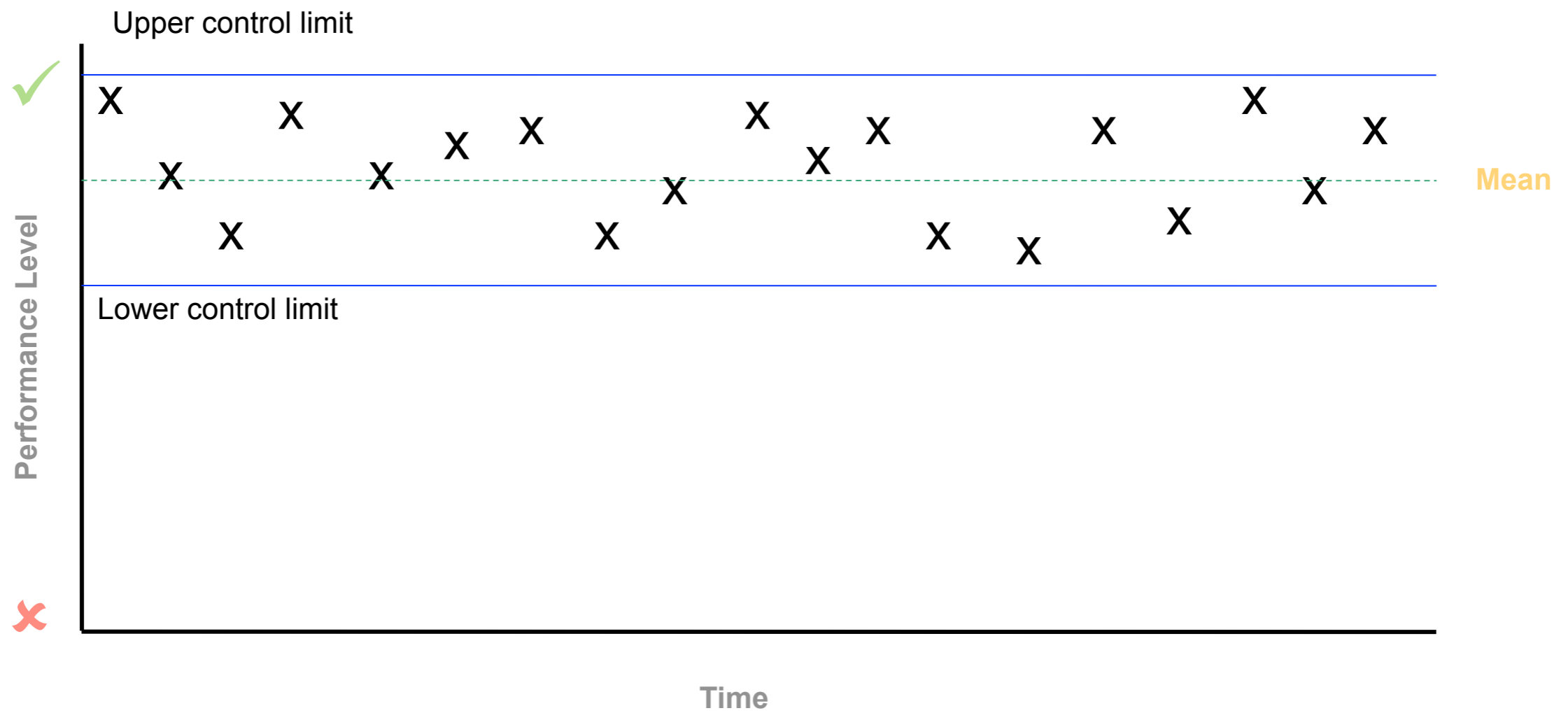
The First Principle of the Theory of Variation

We Should Expect Things to Vary,
They Always Do

David's Performance



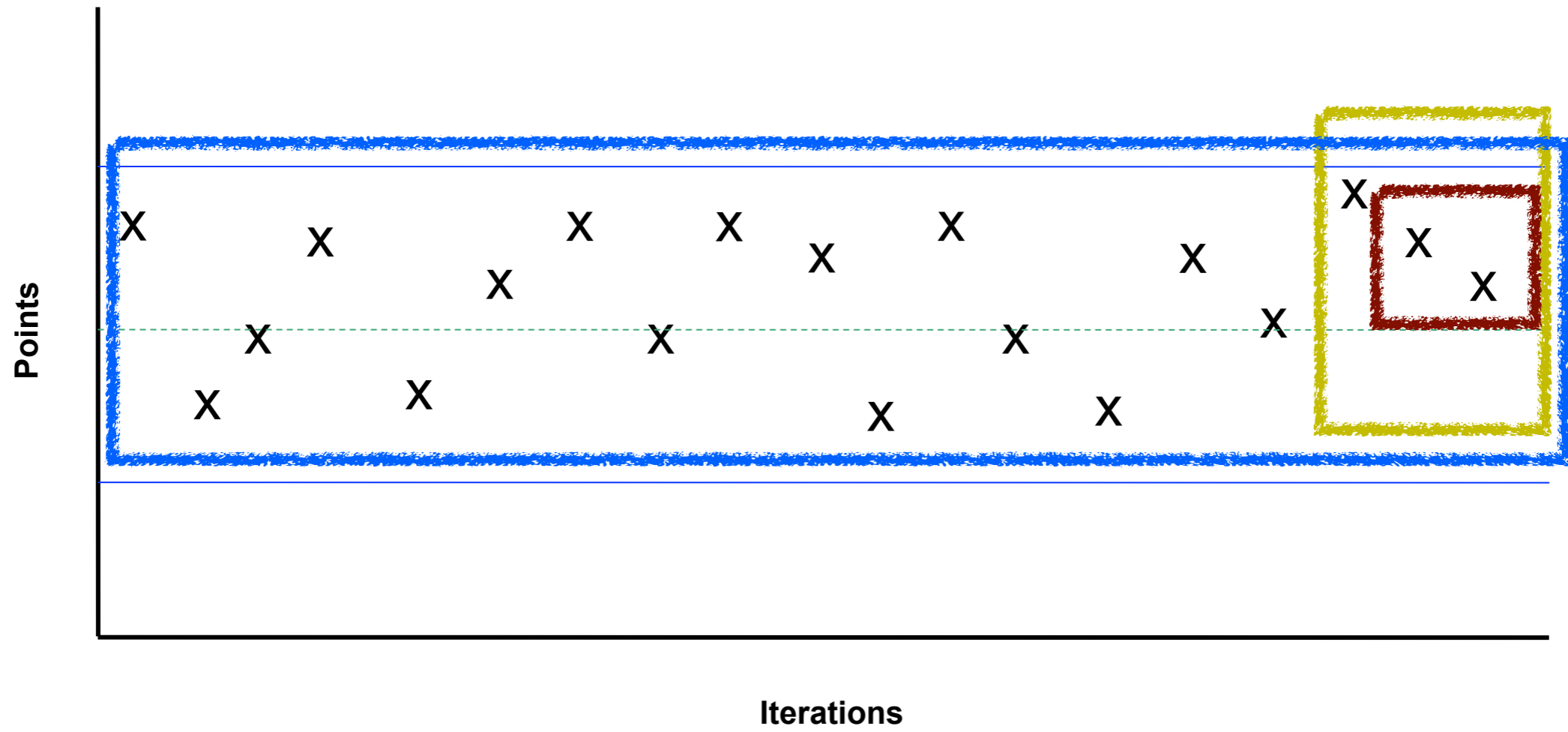
Statistical Process Control Charts



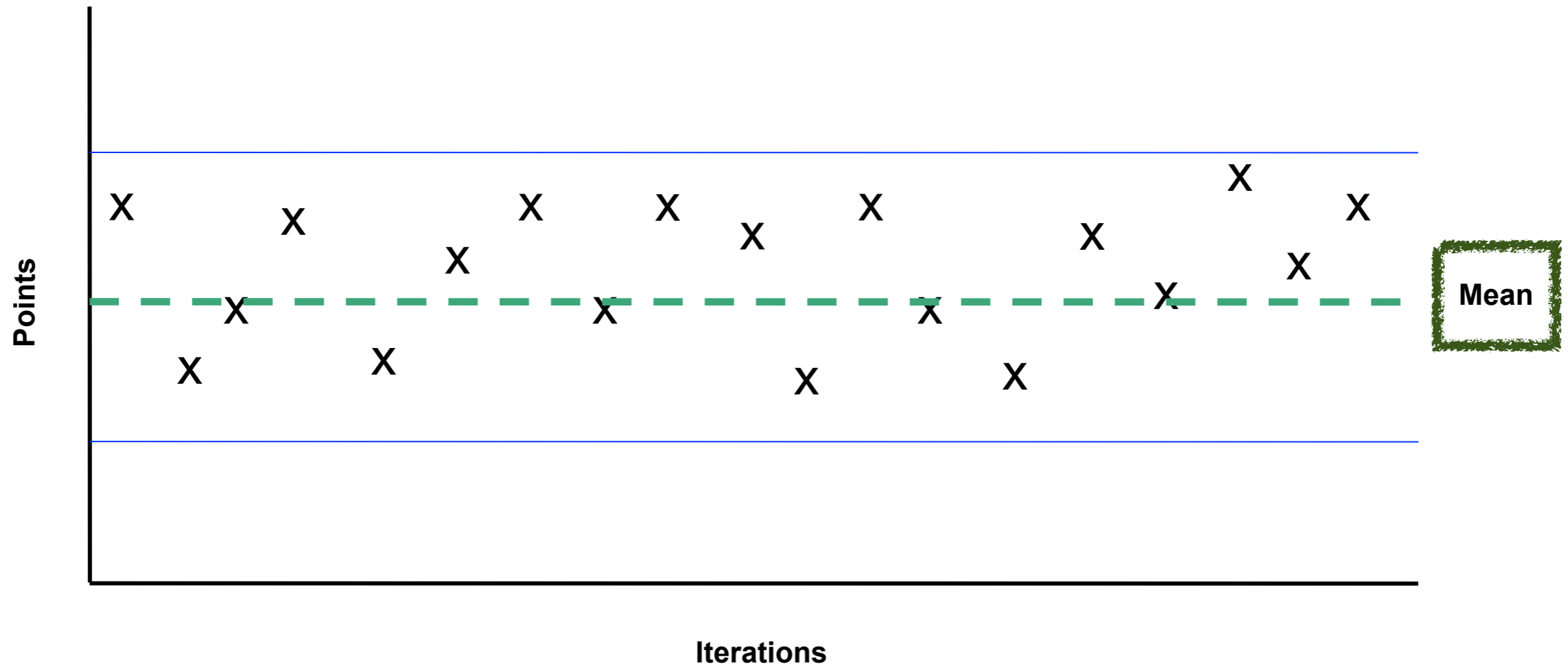
The Second Principle of the Theory of Variation

Understanding Variation Will Tell us
What to Expect

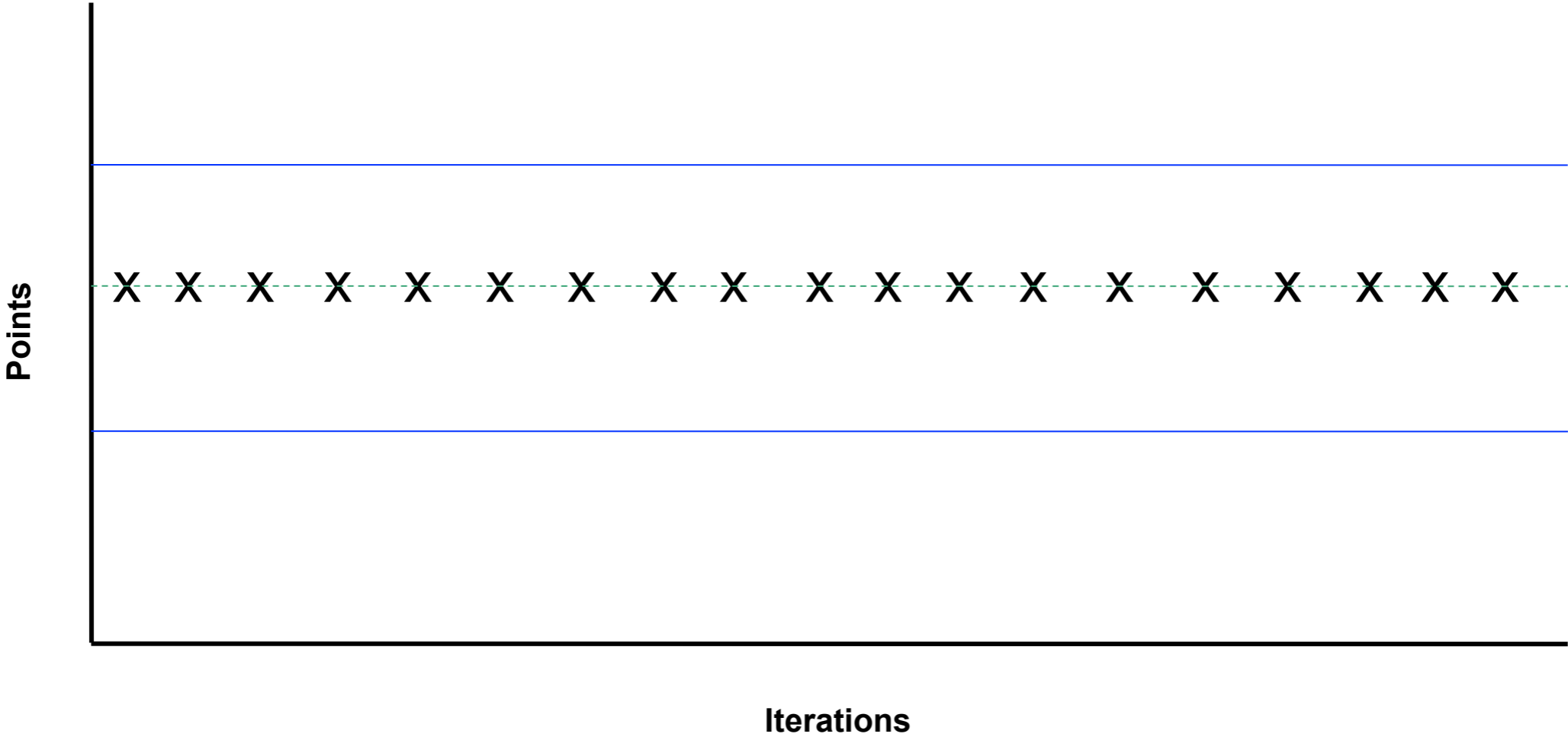
Variance



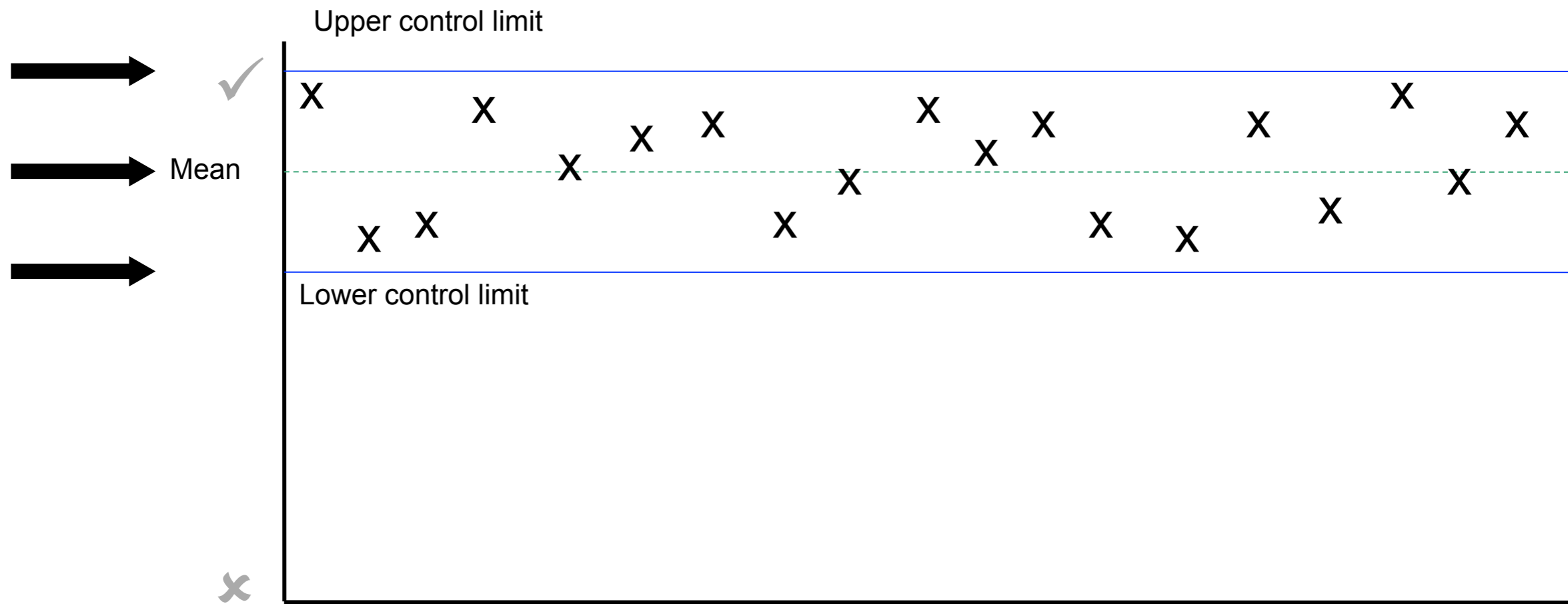
Natural Variation



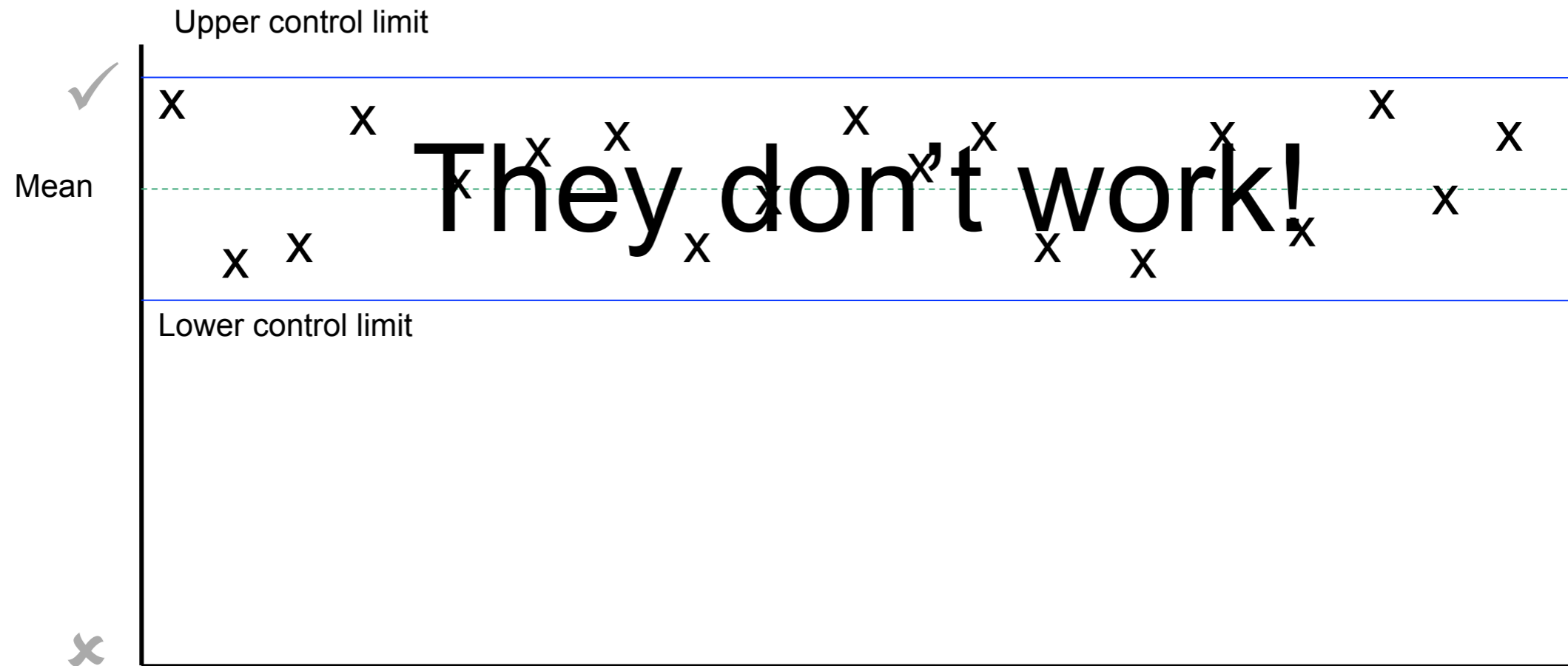
Expectations



Setting a Target



What's the Problem with Targets?



If you give a manager a numerical target, he'll make it, even if he has to destroy the company in the process. W Edwards Deming

What's the Problem with Targets?

“I recently asked a CIO whether he would prefer to **deliver** a project **somewhat late and over-budget**, but **rich** with **business benefits**, or one that is **on-time** and **under-budget** but of **scant value** to the business.

He thought it was a tough call, and then went for the **on-time scenario**.

Delivering on-time and within budget is part of his IT department's **performance metrics**.

Chasing after the **elusive business value**, over which he thought he had little control anyway, **is not.**”

Cutter Sr. Consultant Helen Pukszta

The Third Principle of the Theory of Variation

Work on the Causes of Variation,
Which are Always Found in the System

Majority of Possibilities for Improvement are in the **System**

95%

System

5%

Individual

“A bad system will defeat a good person every time” W Edwards Deming.

But I'm Agile!
I'm in Control of my Own Destiny!?

System Conditions

Examples of **System conditions (red beads)** that **affect our performance**:

- **Policies**
- **Procedures**
- **Measures/Targets**
- **Work Design**

Upstream

- **Business Cases**
- **Funding**
- **Poor Requirements (value)**

Downstream

- **Inspection**
- **Compliance**

The New Job of Management

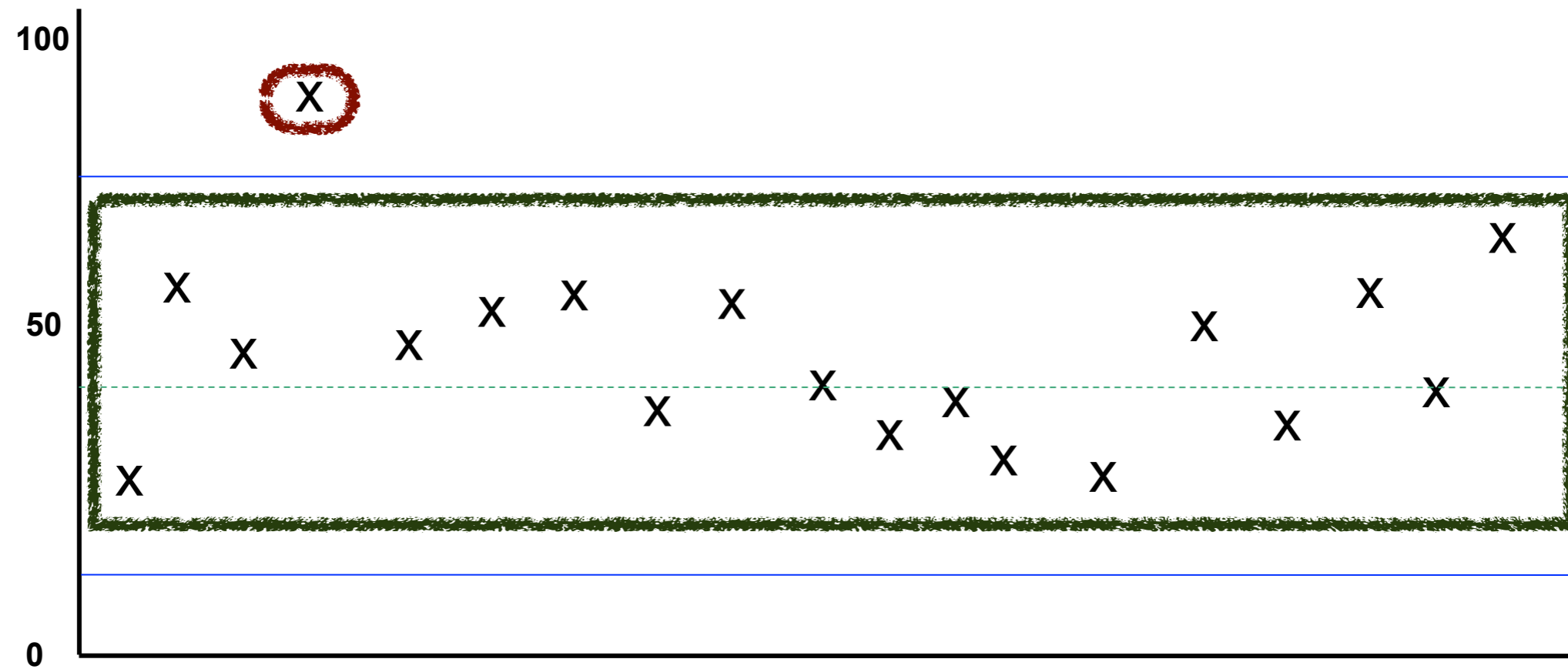
The job of **management** should **change** to a **co-operative** role, **working on the system**, **fixing** things **outside of the workers control**.

Managers then **work alongside staff**, **experimenting** with **work methods** to **ensure** the **system gets better** every day.

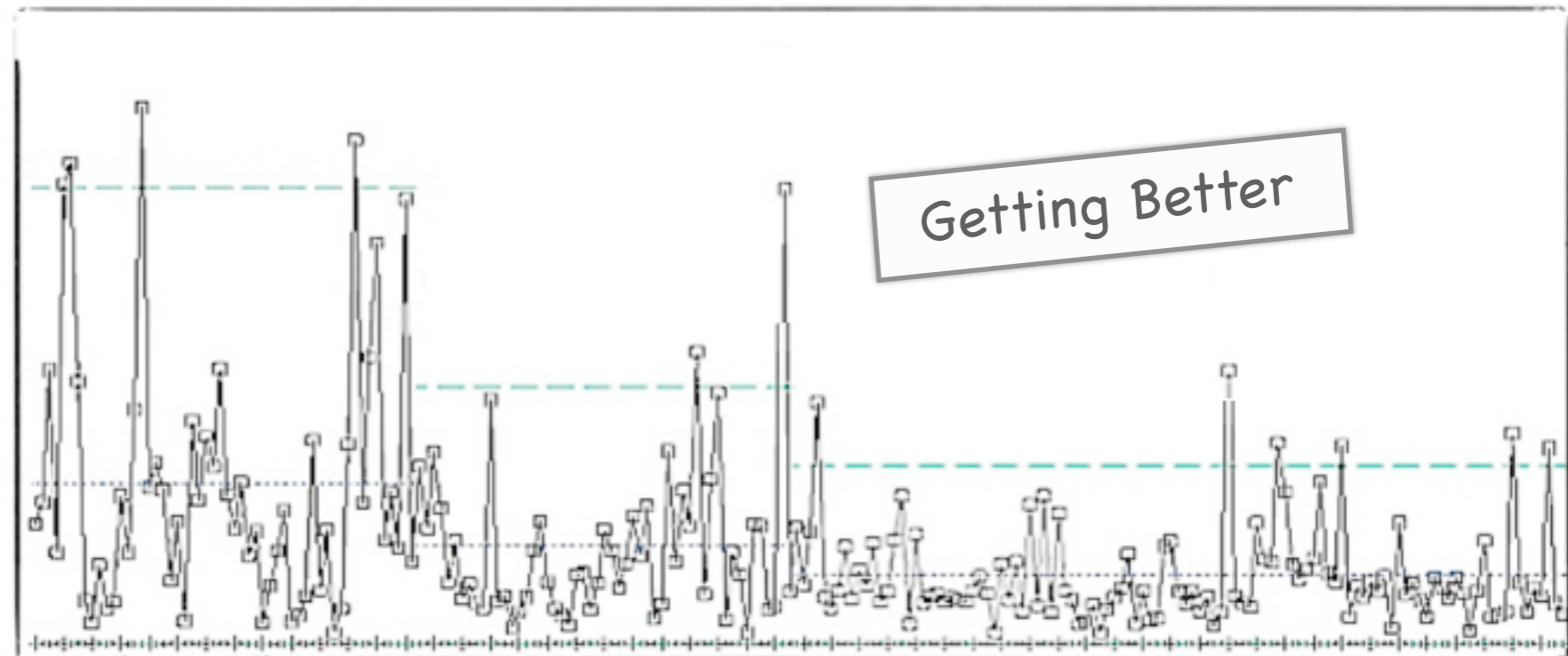
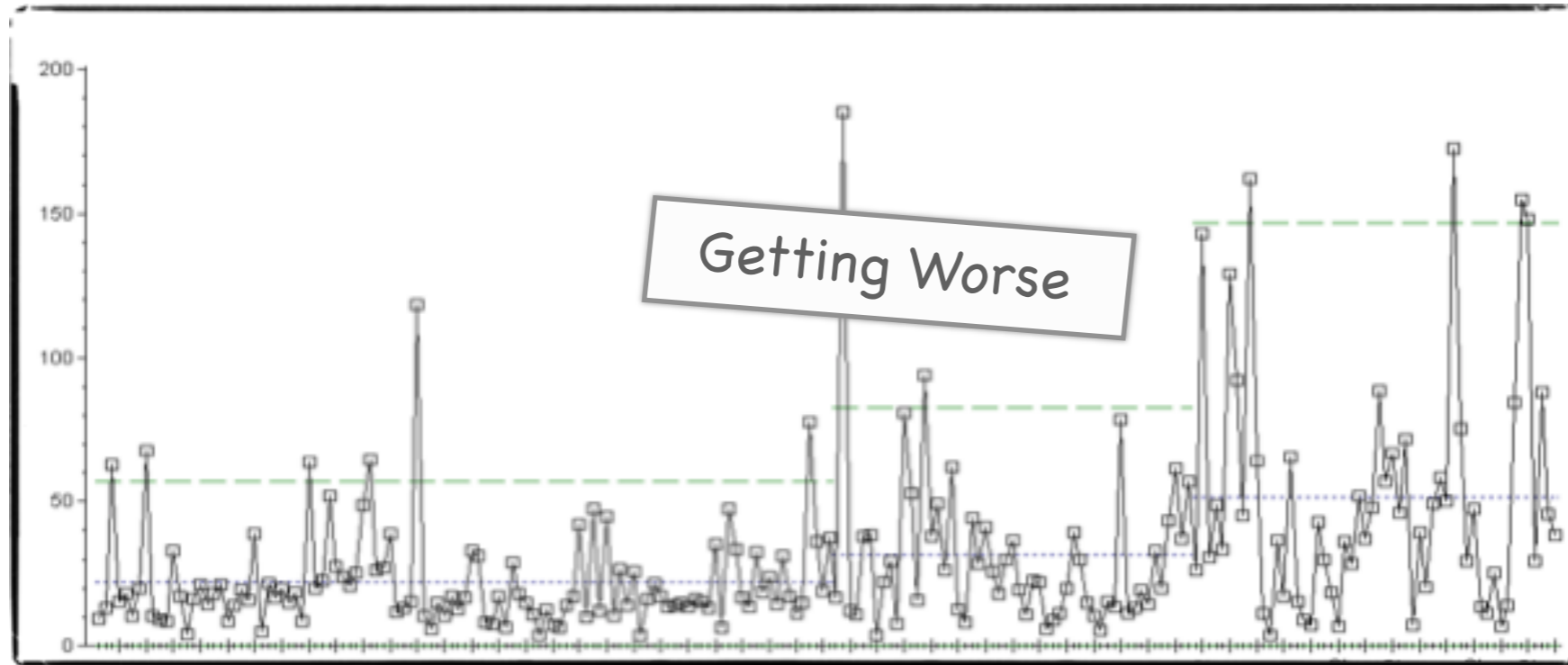
The Fourth Principle of the Theory of Variation

Understanding Variation Tells you When
Something has Happened

Special Cause vs Common Cause

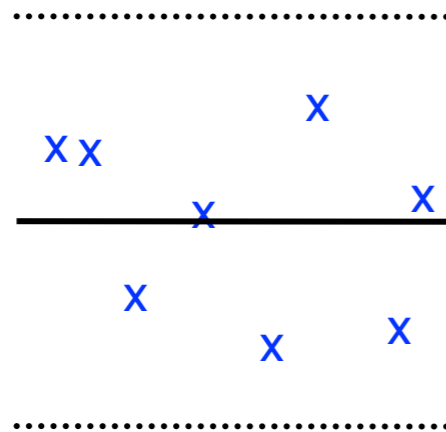


Split Data After a Change

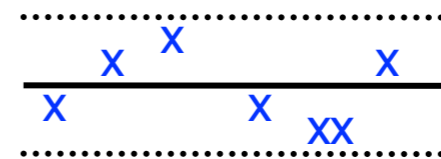


SPC as a Comparison Tool

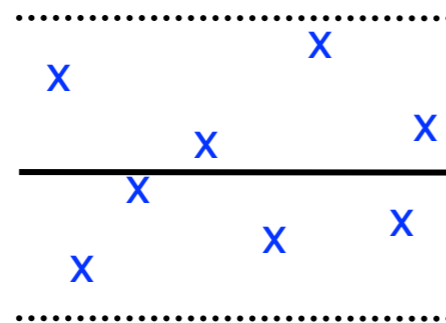
Team 1



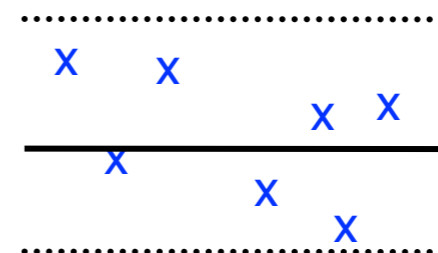
Team 3



Team 2



Team 4



Variation in the Red Bead Experiment

Recommended Reading

