- 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

Thursday, 30 September 2010

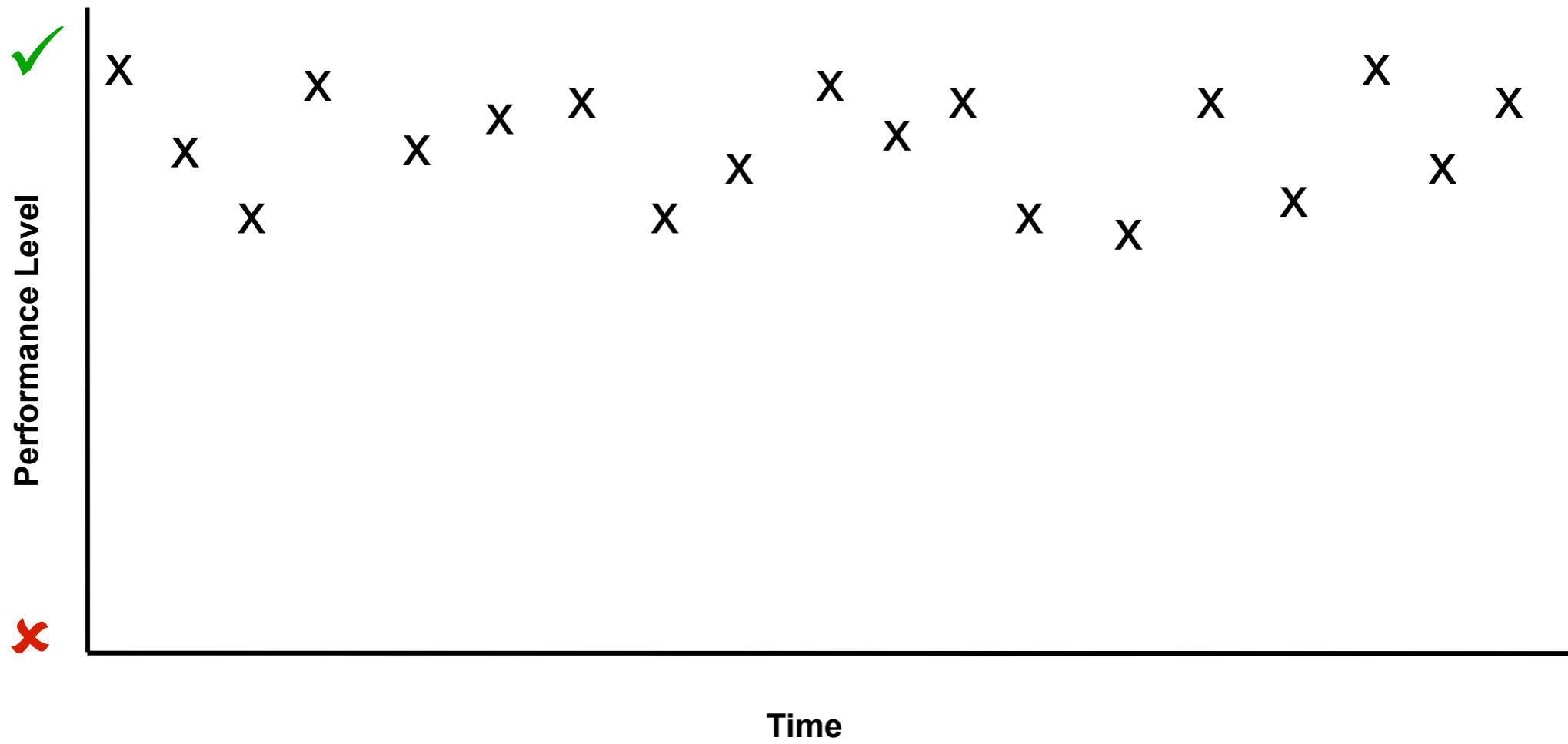# Variation and Targets

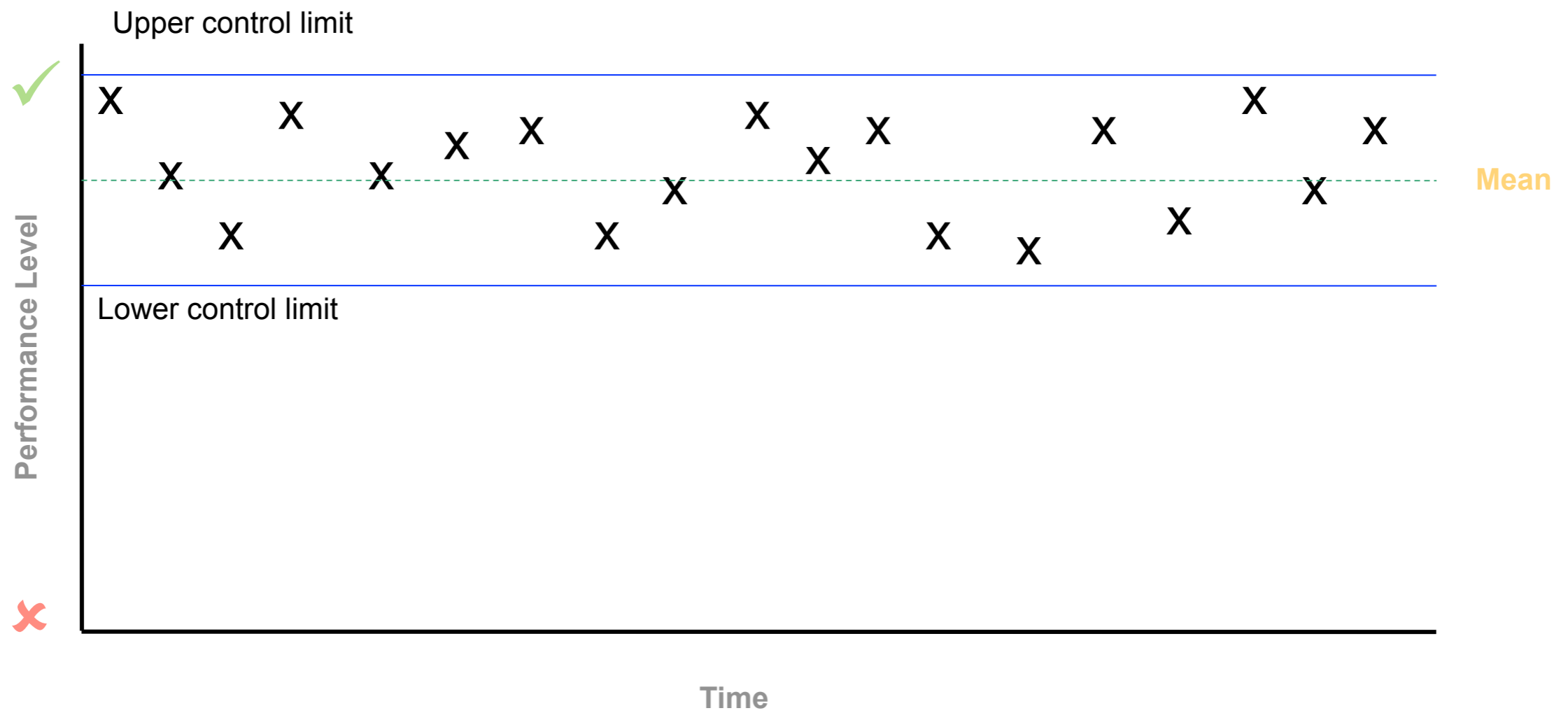# David Joyce

ThoughtWorks

The First Principle of the Theory of Variation

We Should Expect Things to Vary, They Always Do
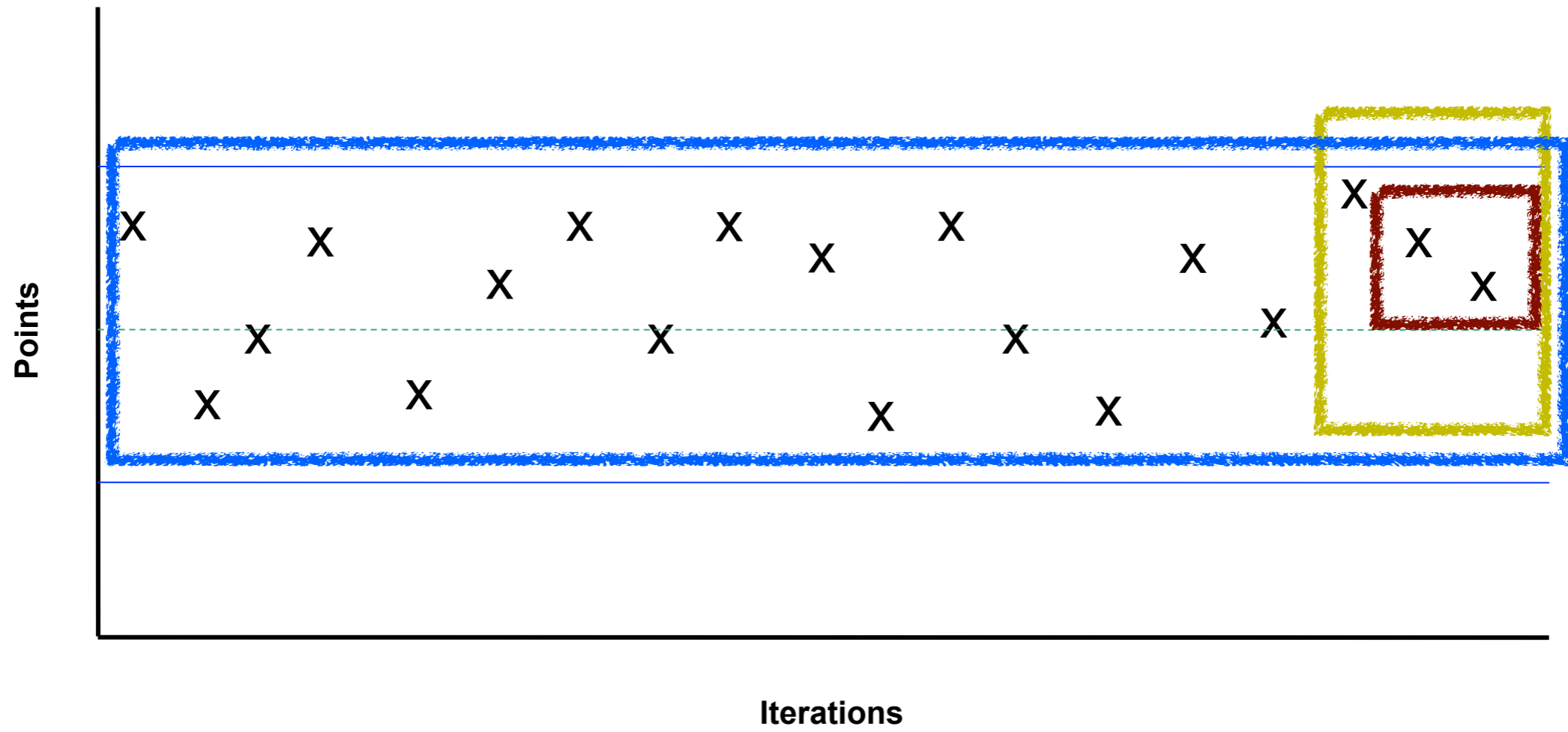
David's Performance
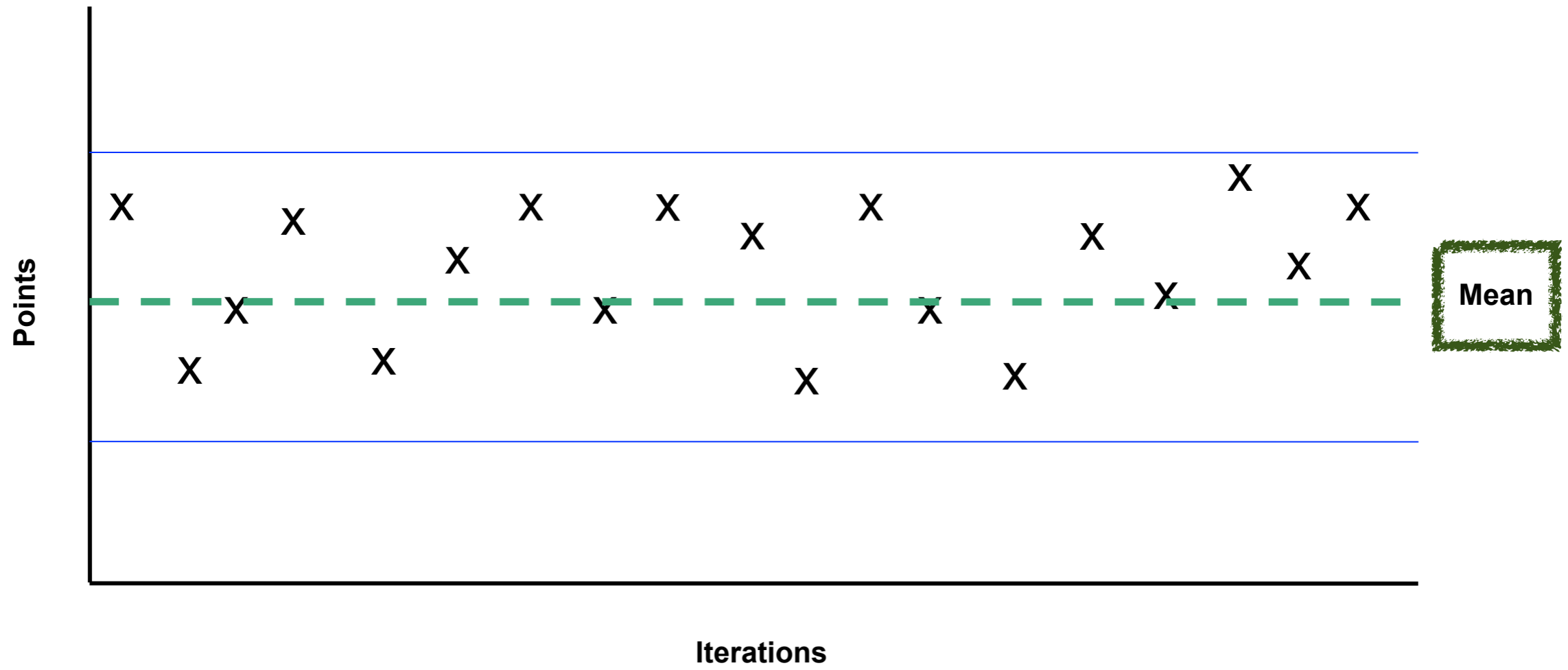
Statistical Process Control Charts

Upper control limit

Lower control limit

Performance Level

Mean

Time

The Second Principle of the Theory of Variation

Understanding Variation Will Tell us What to Expect

Variance

Natural Variation
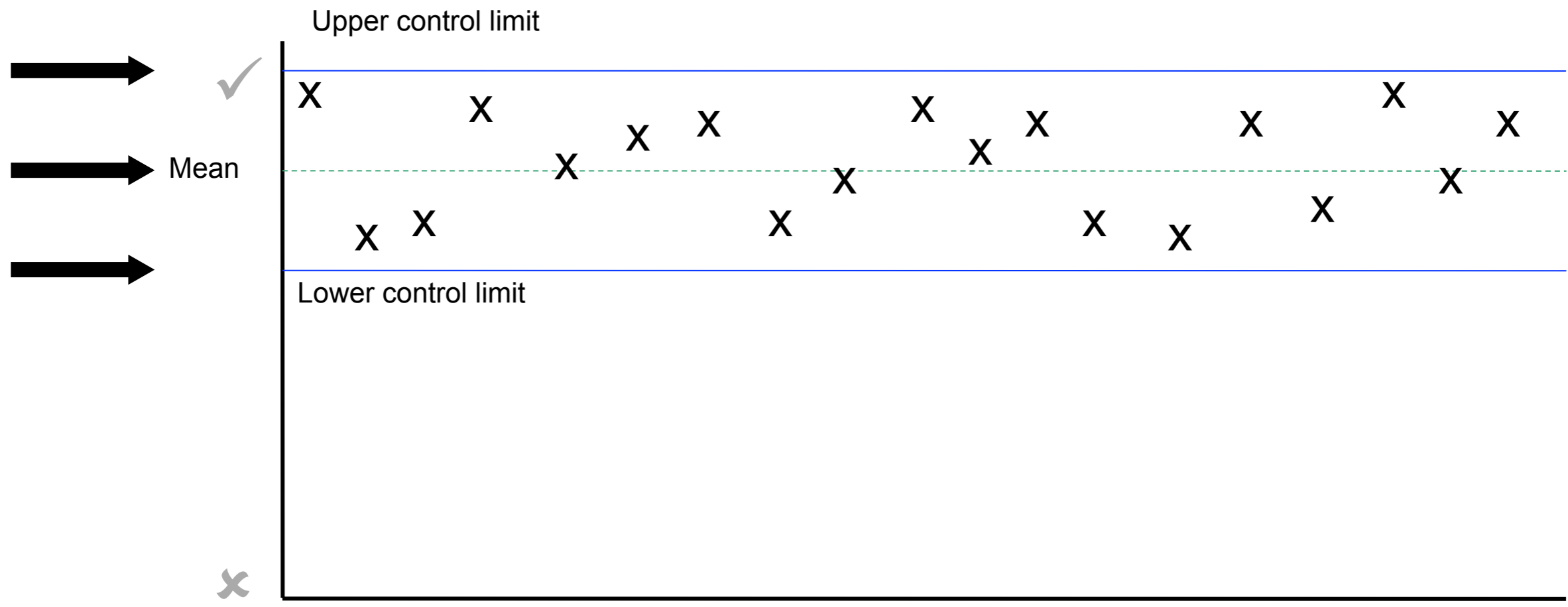

Points
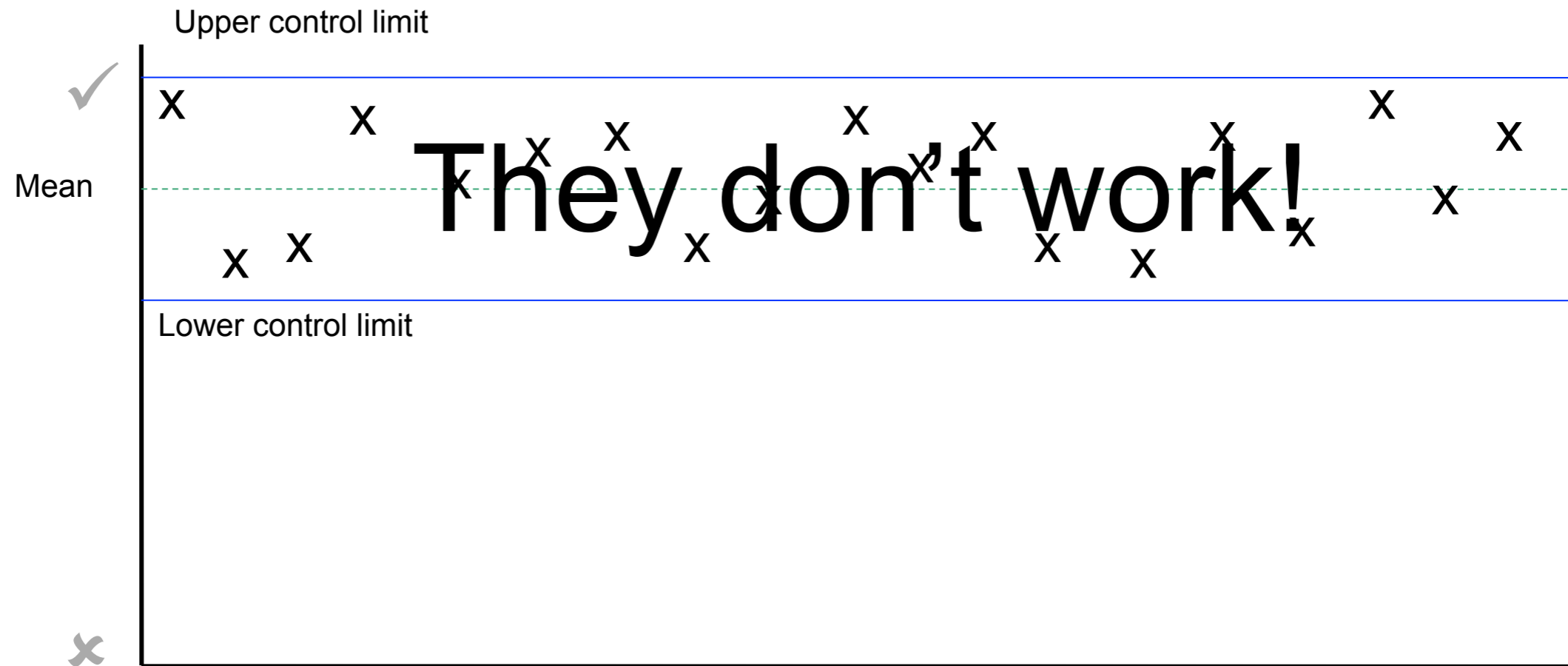
Mean

Iterations

Expectations

Setting a Target

Upper control limit

Mean

Lower control limit

What's the Problem with Targets?

Upper control limit

Mean

Lower control limit

They don't work!

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.
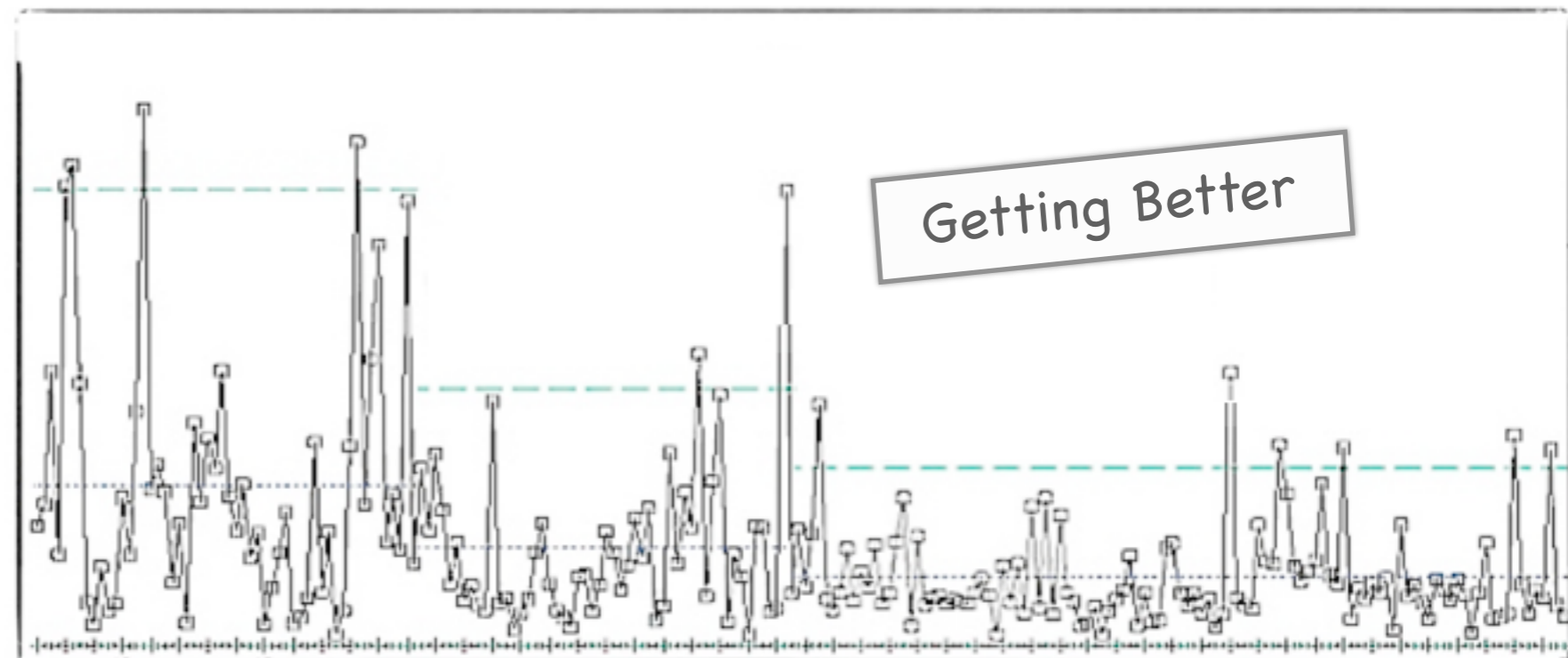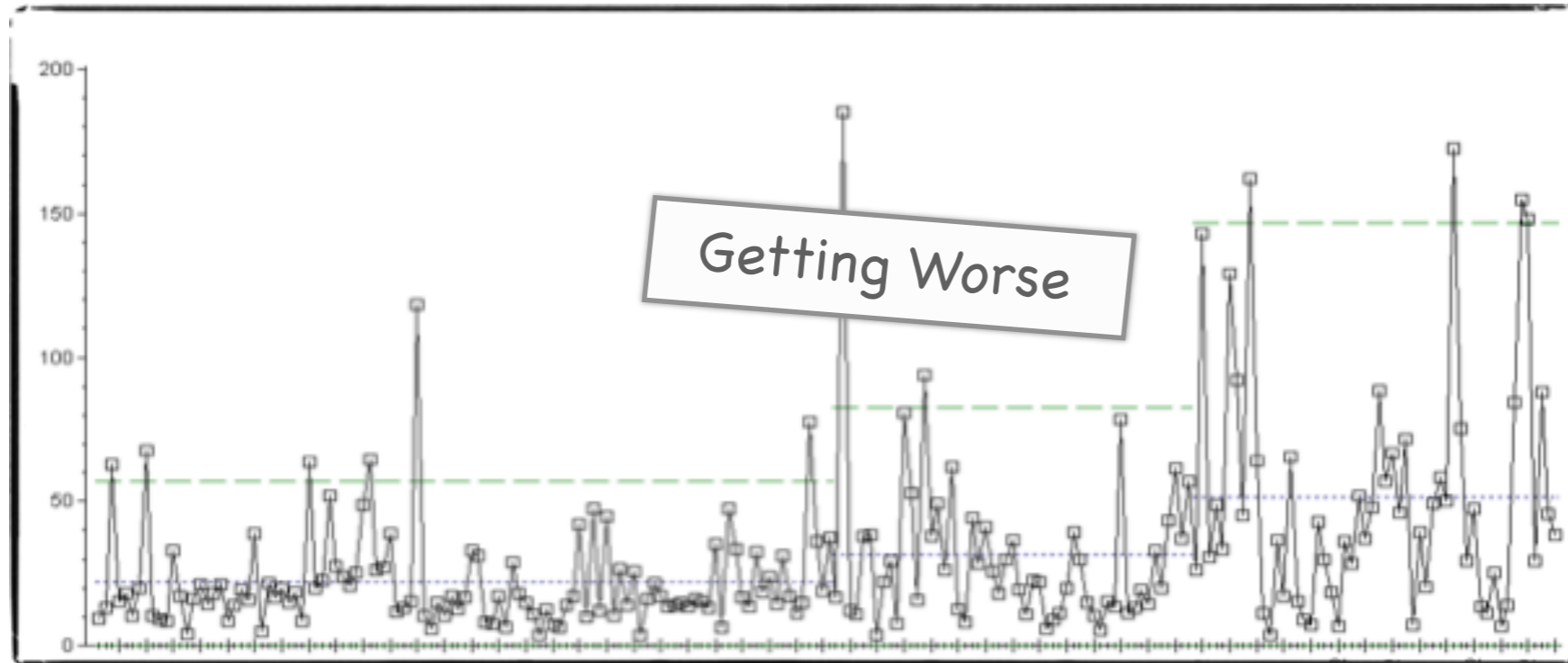
The Fourth Principle of the Theory of Variation

Understanding Variation Tells you When Something has Happened
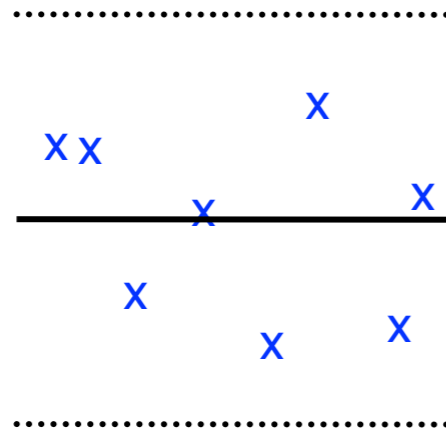
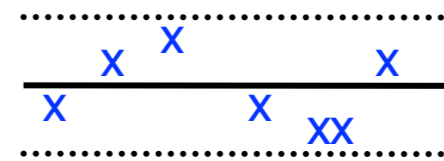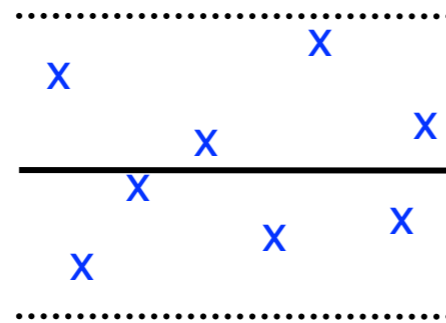# Special Cause vs Common Cause
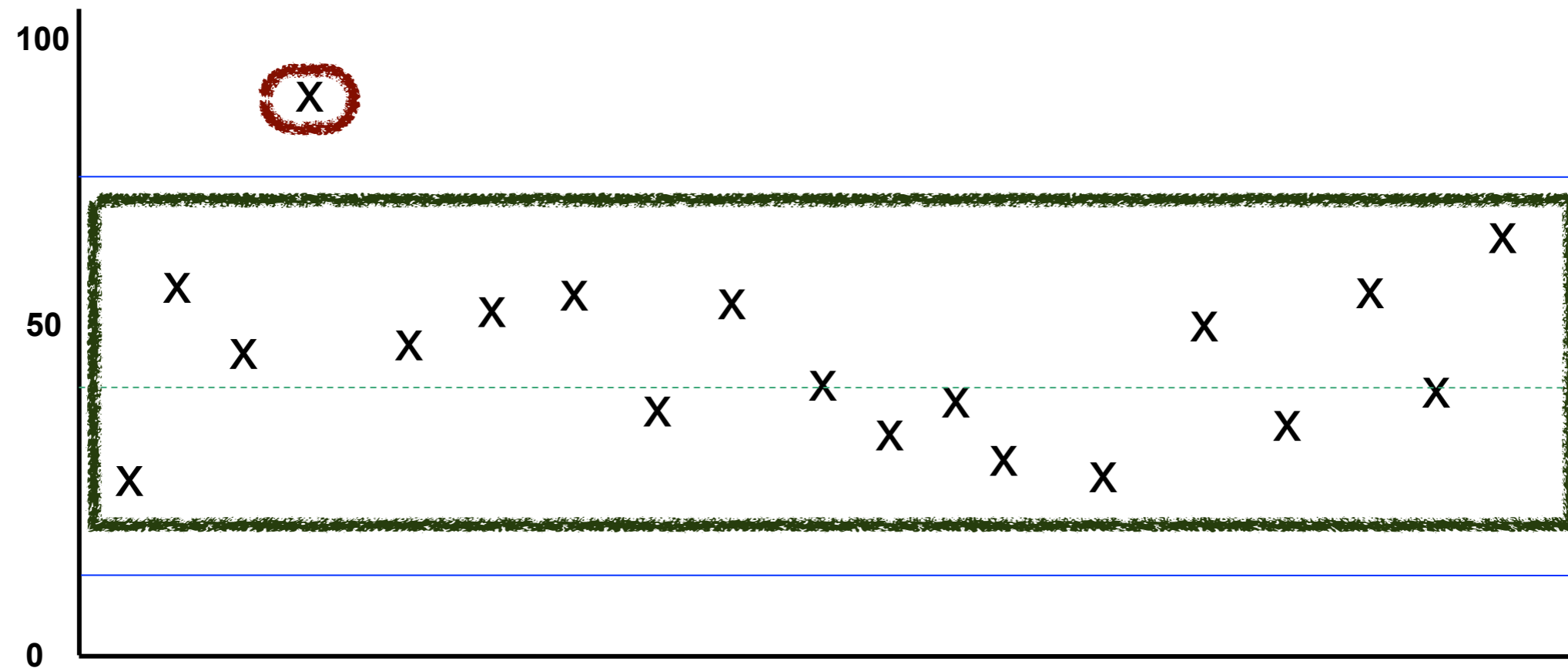
Split Data After a Change

Getting Worse

Getting Better

SPC as a Comparison Tool
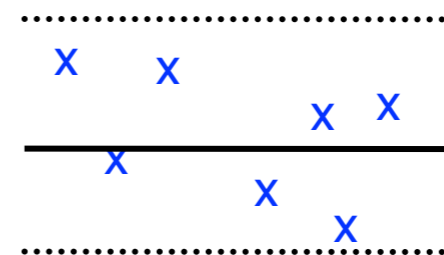
Variation in the
Red Bead Experiment

Recommended Reading