QI Basics

**Laura Allison
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NHS Education for Scotland**

The Scottish Improvement Journey

| Build will and conditions for change | Understand current system | Develop aim and change theory | Identify specific change ideas, test and refine in context | Implement locally, using PDSA cycles to build in sustainability | Scale up / spread where relevant |

Leadership, project planning and management, communication and measurement
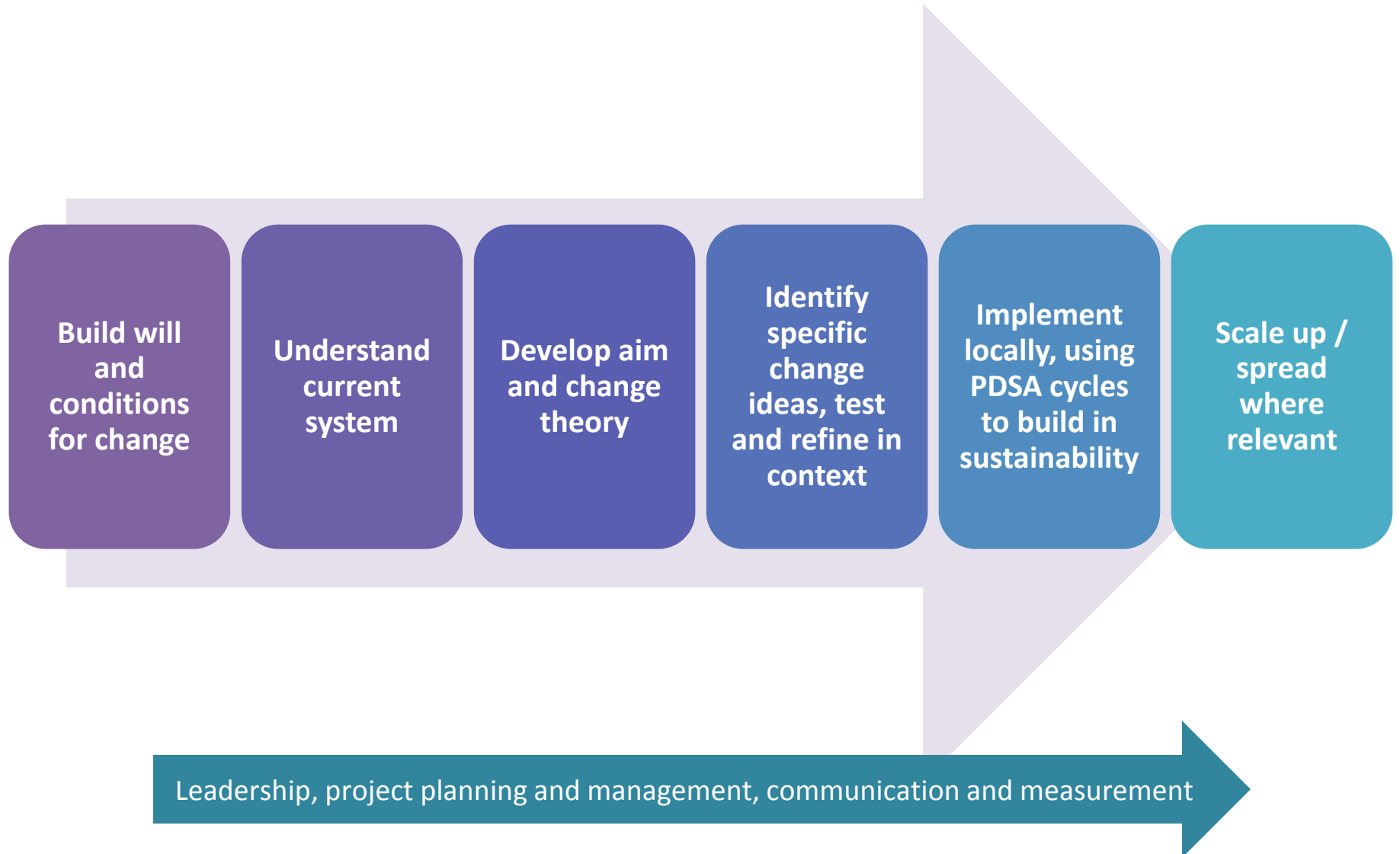
The Scottish Improvement Journey
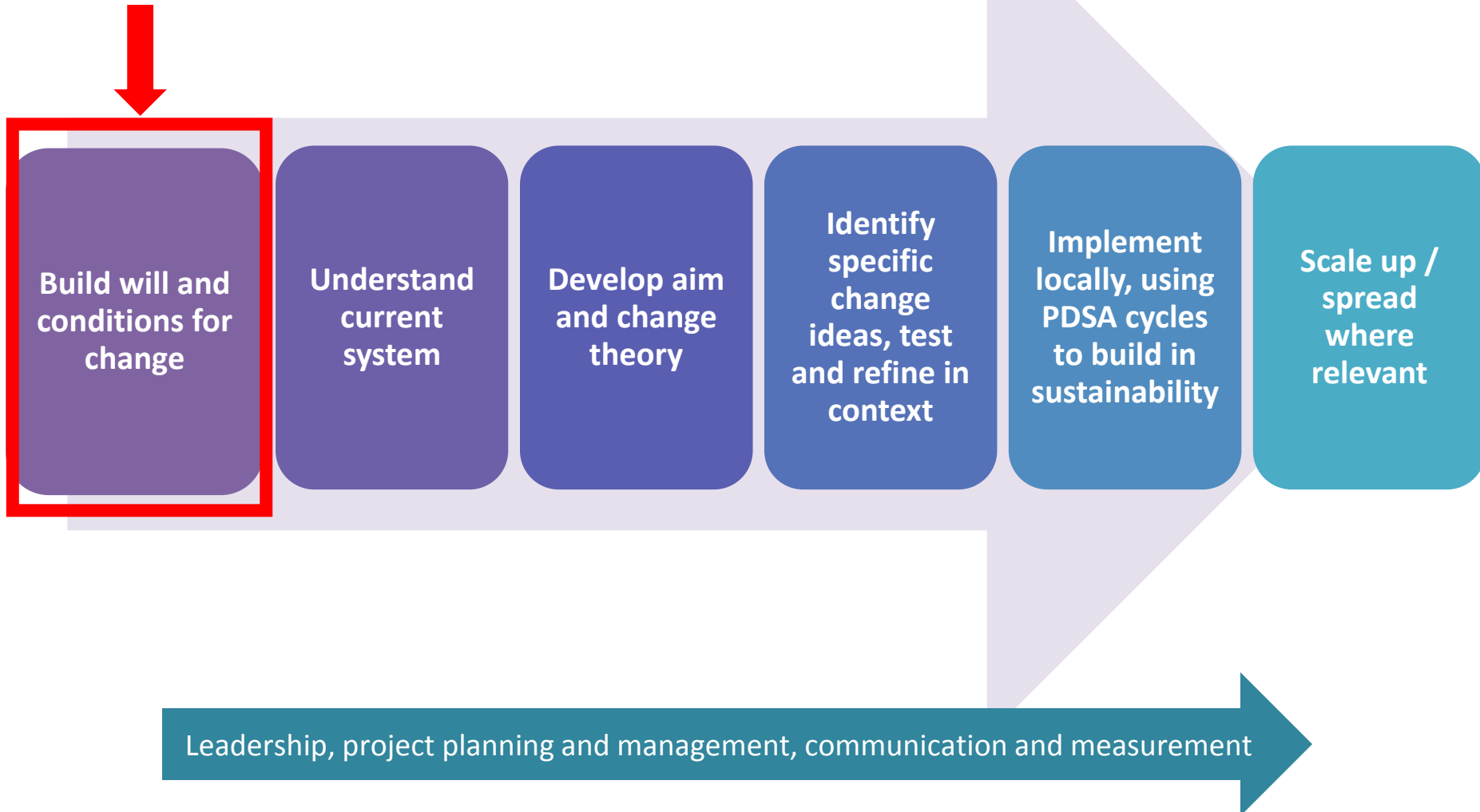
AN ACTION PLAN FROM THE WORLD'S
FOREMOST EXPERT ON BUSINESS LEADERSHIP

Leading
change

John P. Kotter

HARVARD BUSINESS SCHOOL PRESS

Supporting Improvement Leaders to:

Demonstrate use of change management theory to lead and motivate people in quality improvement

Implementing & sustaining for change

8. Make it stick

7. Build on the change

Engaging & enabling the organisation

6. Create quick wins
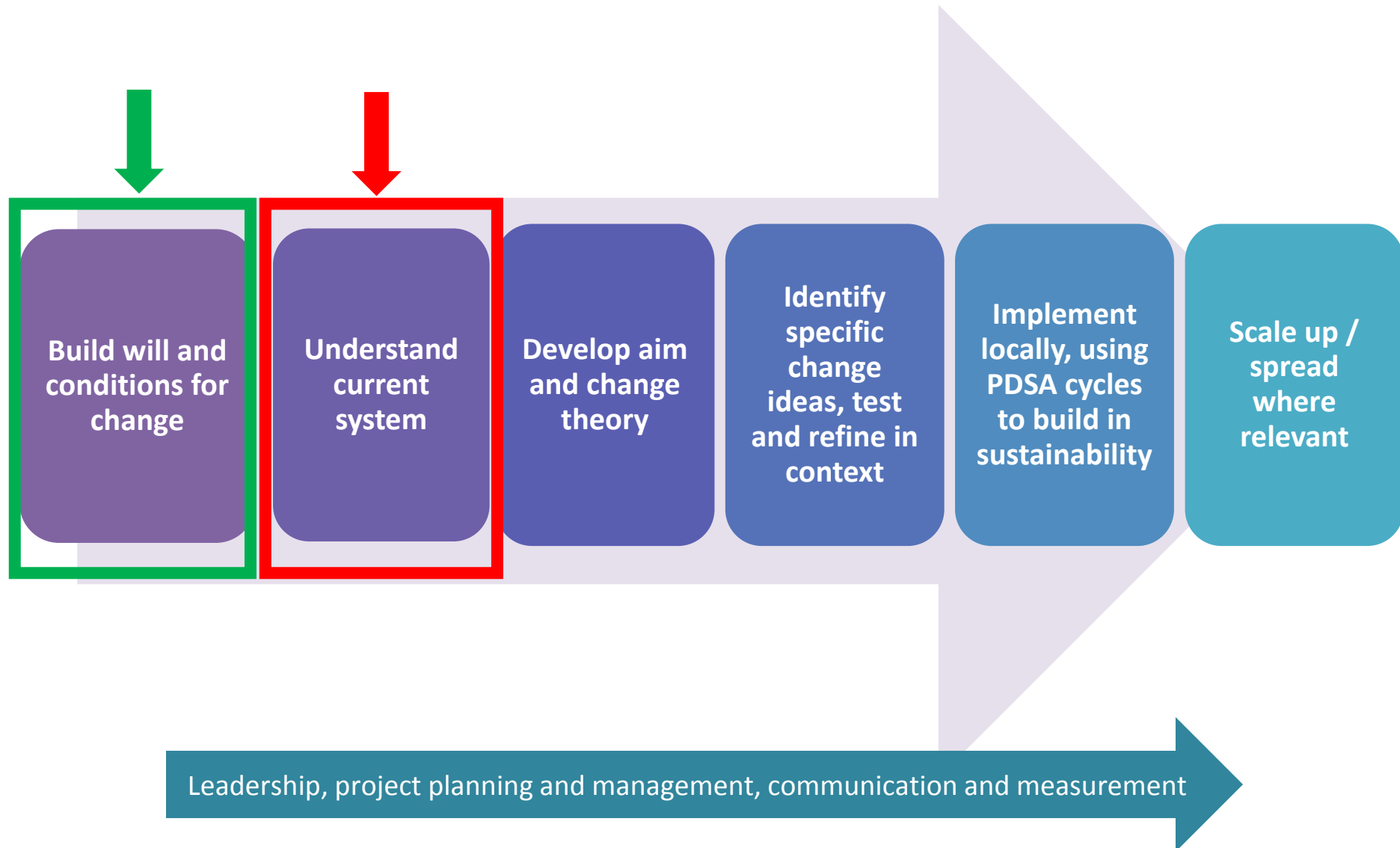
5. Empower action

4. Communicate the vision

Creating the climate for change
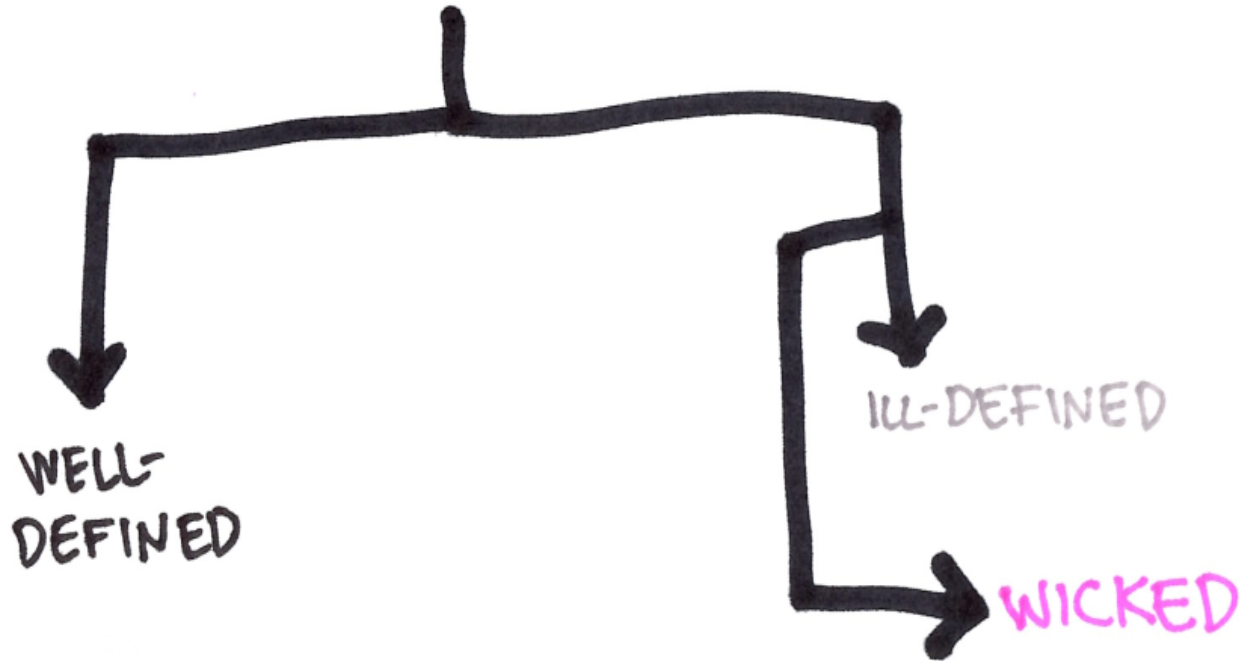
3. Create a vision for change

2. Form a powerful coalition

1. Create urgency

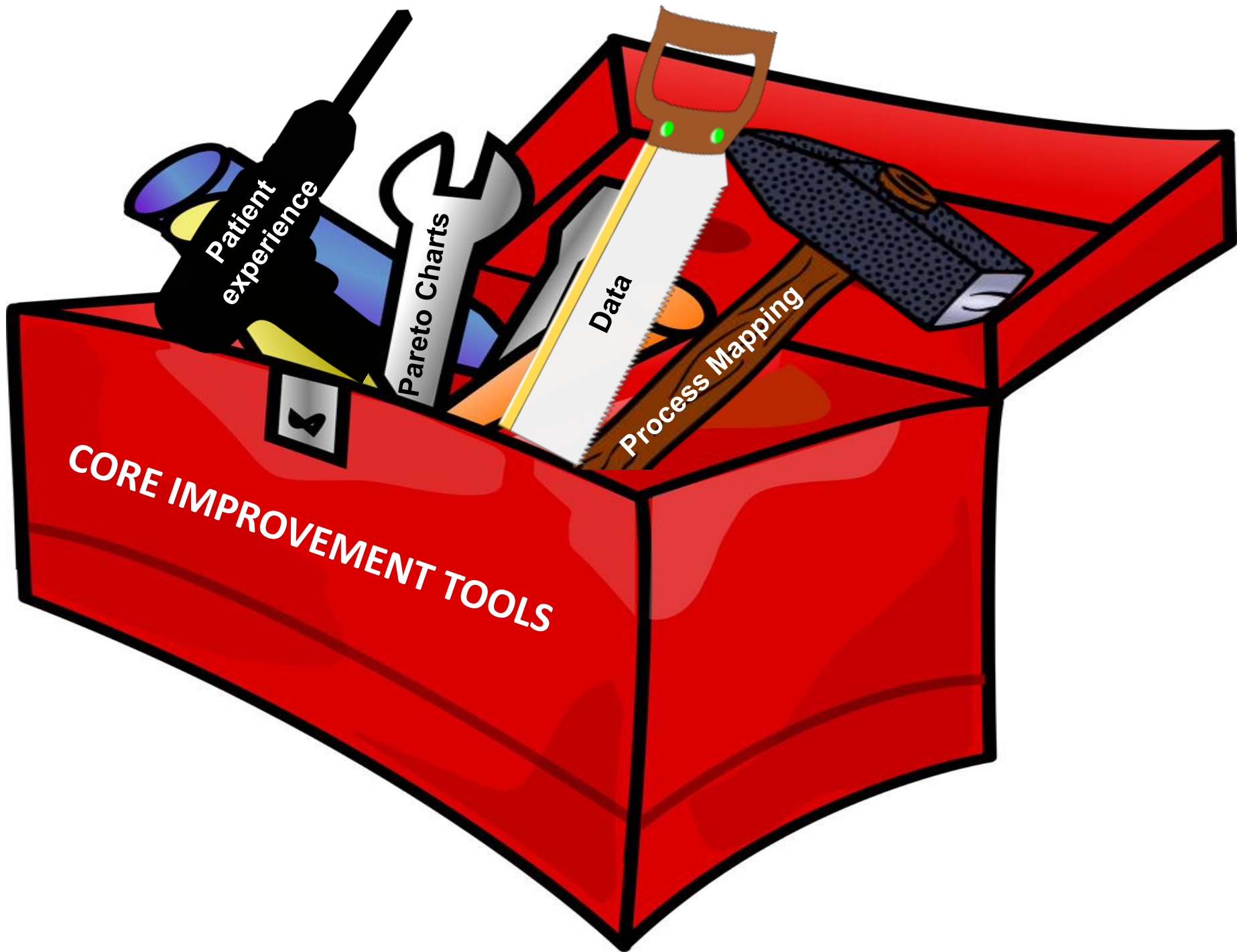# The Scottish Improvement Journey

PROBLEM*

WELL-
DEFINED

ILL-DEFINED

WICKED

* THORNDIKE, 1931: PROBLEM = WHERE THE ACTIONS NECESSARY TO ATTAIN GOAL(S) ARE NOT OBVIOUS.

CORE IMPROVEMENT TOOLS

Patient experience

Pareto Charts

Data

Process Mapping

Technical Tools: Understanding a System

Process Mapping

Pareto Chart

Force Field Analysis

Cause & Effect Diagram

Surveys

QI Zone: Improvement Tools
https://learn.nes.nhs.scot/741/quality-improvement-zone

The Scottish Improvement Journey

Constructing an aim statement

What?

How much?

By when?
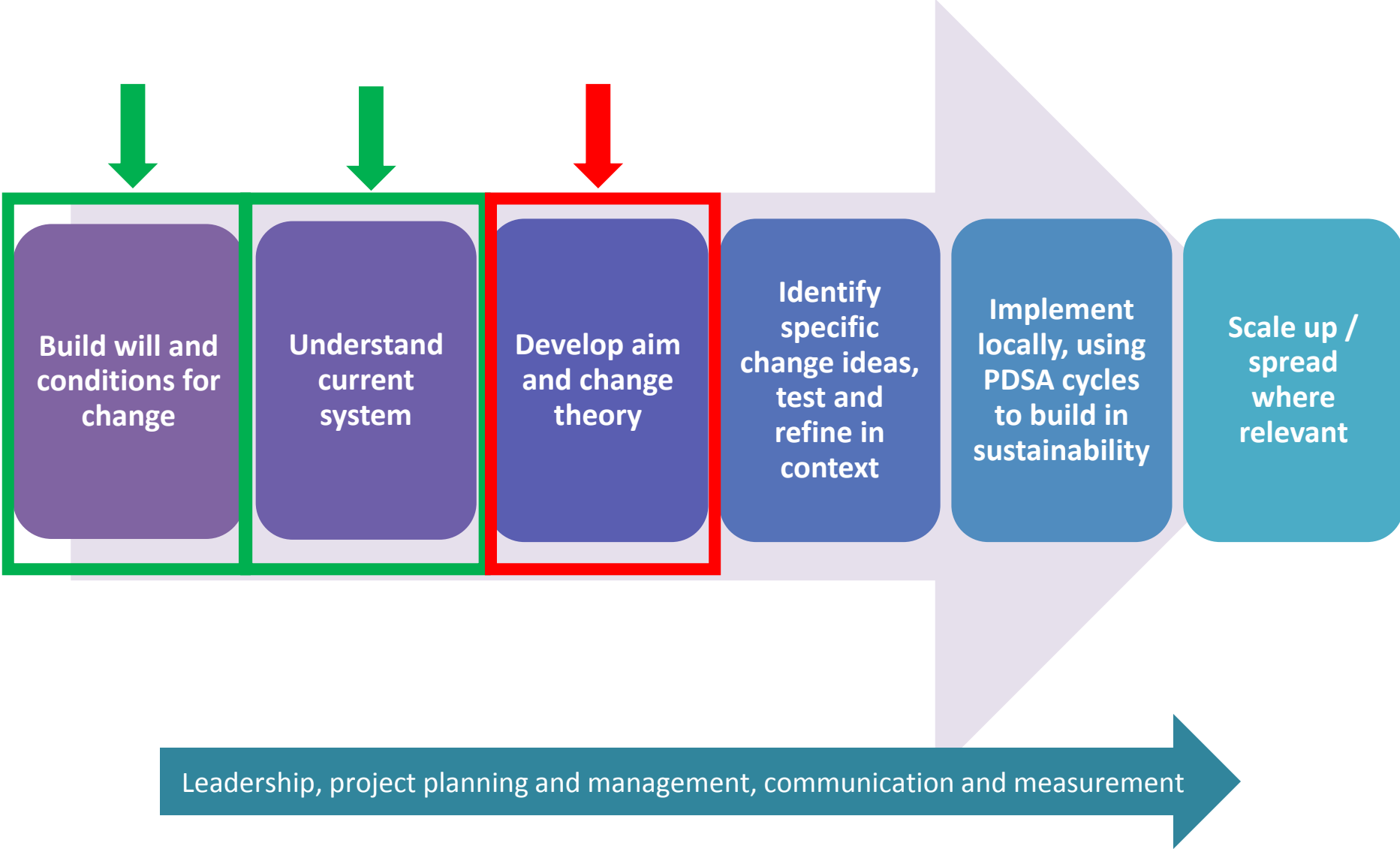
By December 2018, there will be a reduction of 50% in the amount of GP time spent issuing special prescriptions

Increase awareness of Acute Kidney Injury (AKI) risks in patients in a general practice and reduce 'days between' AKI with patients who have existing chronic kidney disease

100% of patients will have an effective medicines reconciliation completed by practice staff and local community pharmacy within 3 working days of discharge from hospital

Constructing an aim statement

What?

How much?

By when?

Your turn:
Construct an aim statement for your improvement project

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Driver diagrams

Driver Diagrams

Primary Drivers　　**Secondary Drivers**　　**Change Ideas**

Aim

Key factors that drive the aim/outcome

Secondary factors which will influence delivery of the primary drivers

Changes or interventions that can be tested out
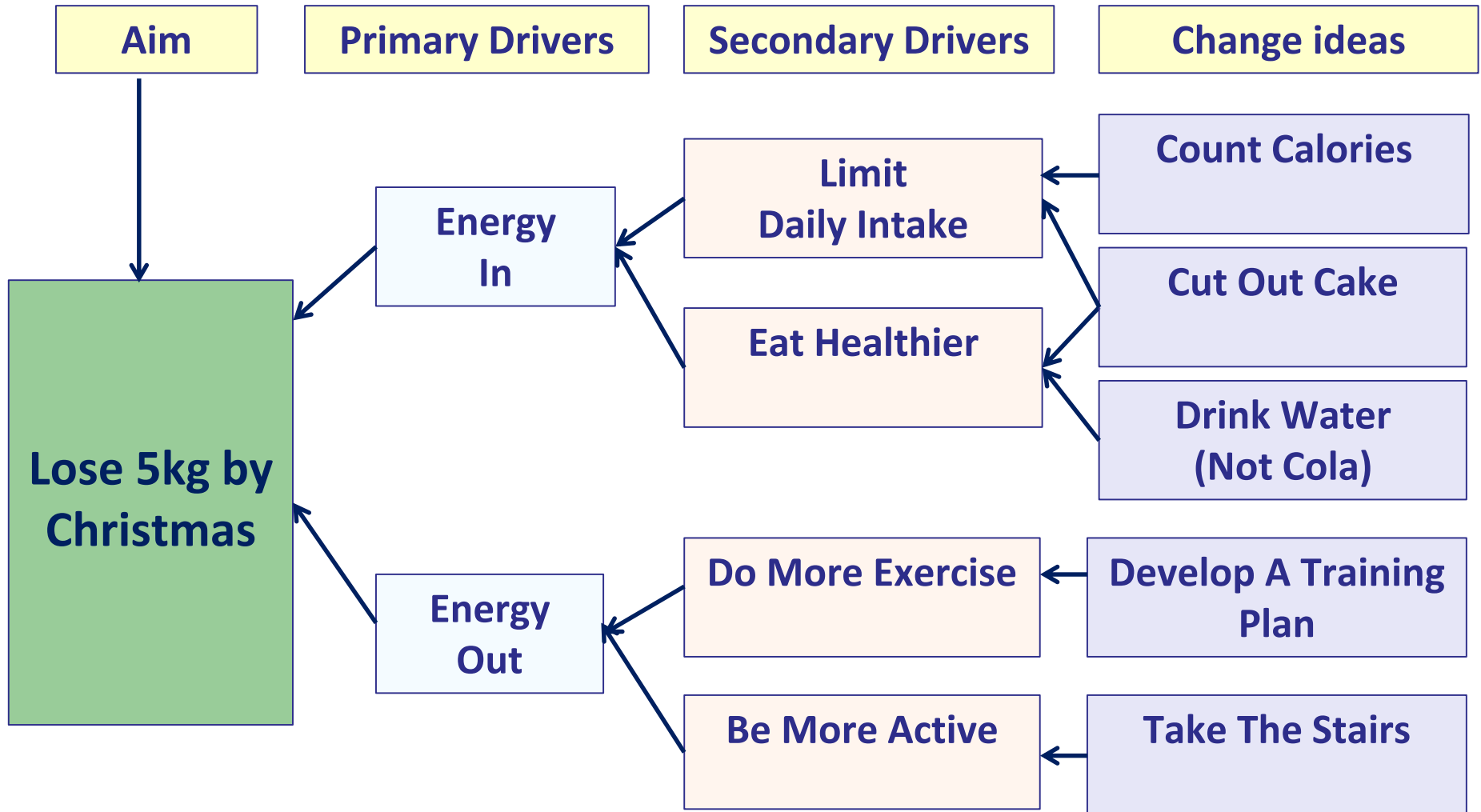
Drivers

Result　　**Cause**
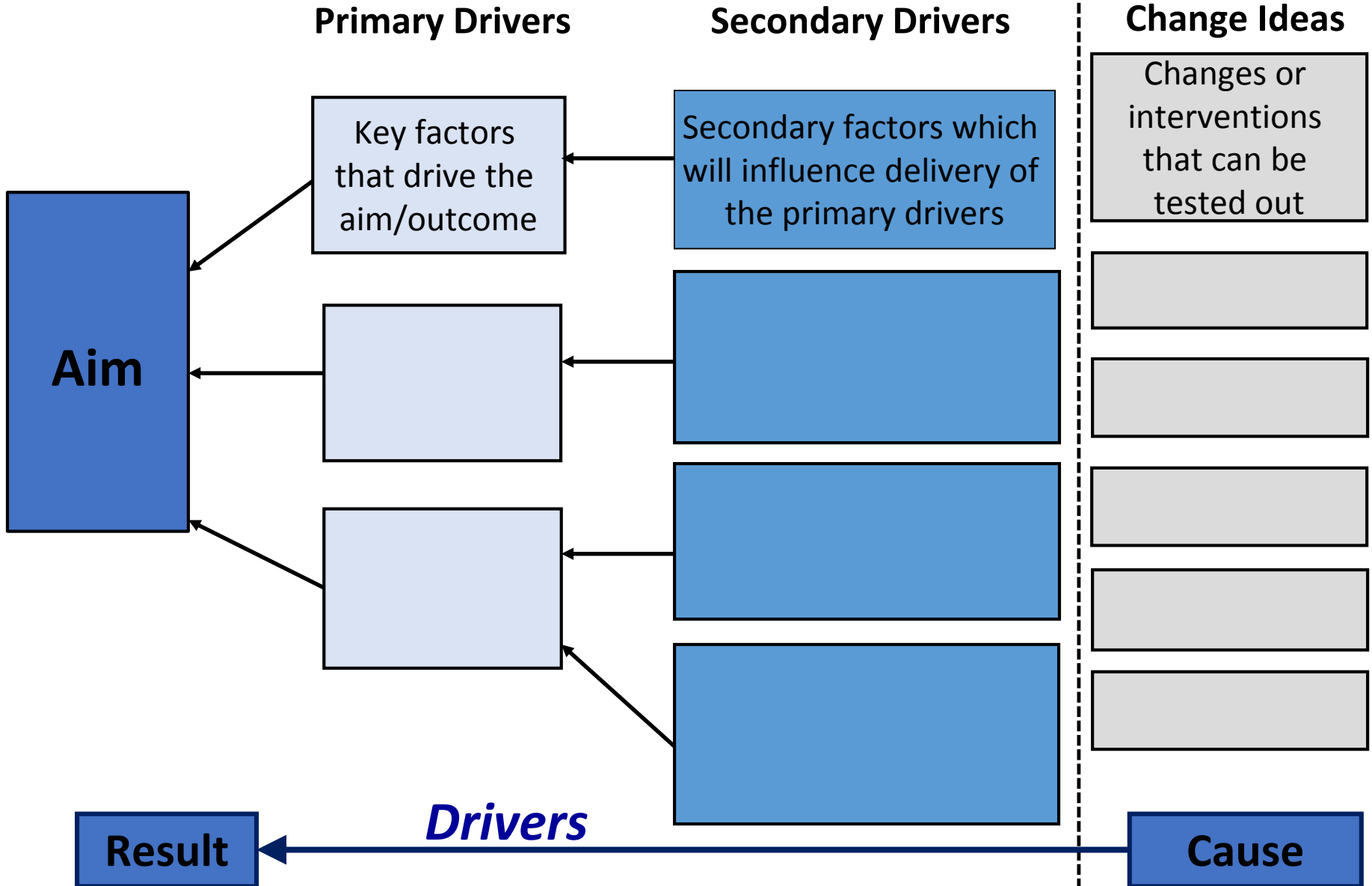
Change ideas:

These are the specific ideas that teams can test to see if they influence the secondary drivers and ultimately the aim

Driver Diagram: Individual Example

Aim	Primary Drivers	Secondary Drivers	Change ideas

Lose 5kg by Christmas

Energy In
- **Limit Daily Intake**
  - Count Calories
  - Cut Out Cake
- **Eat Healthier**
  - Cut Out Cake
  - Drink Water (Not Cola)

Energy Out
- **Do More Exercise**
  - Develop A Training Plan
- **Be More Active**
  - Take The Stairs

Driver Diagram: Service Example

At primary care practice X increase by 20% the number of patients offered an appointment within 24hrs by end Dec 2019.

Reduce "Did Not Attends"
- Enable access through improved appointment booking process
- Make it easier to cancel an appointment
- Issue effective reminders
- Offer more convenient surgery times

Match Capacity To Demand
- Schedule appointment types to fit day or time of demand (e.g. "long" appointments, "same day" appointments)
- Schedule appointment types to fit patient health needs (e.g. short slots for monitoring, nurse/doctor)

Shape Demand
- Use more effective telephone triage to reduce face-to-face GP bookings
- Strengthen the contribution of local pharmacists
- Encourage attendance at "shared" appointments (e.g. smoking cessation)

Driver Diagram: Theory into Practice
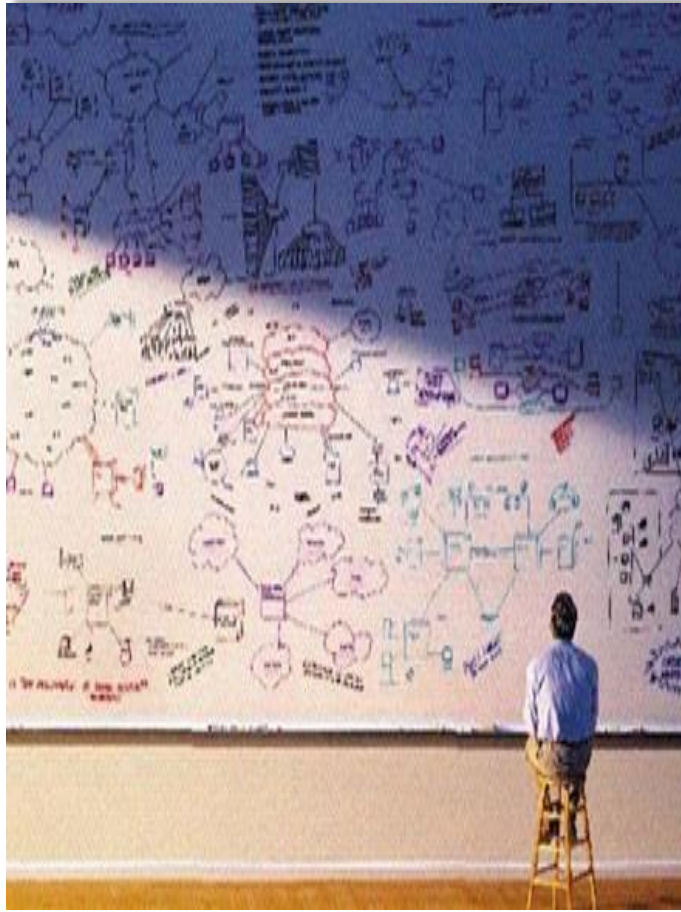
There's too much!
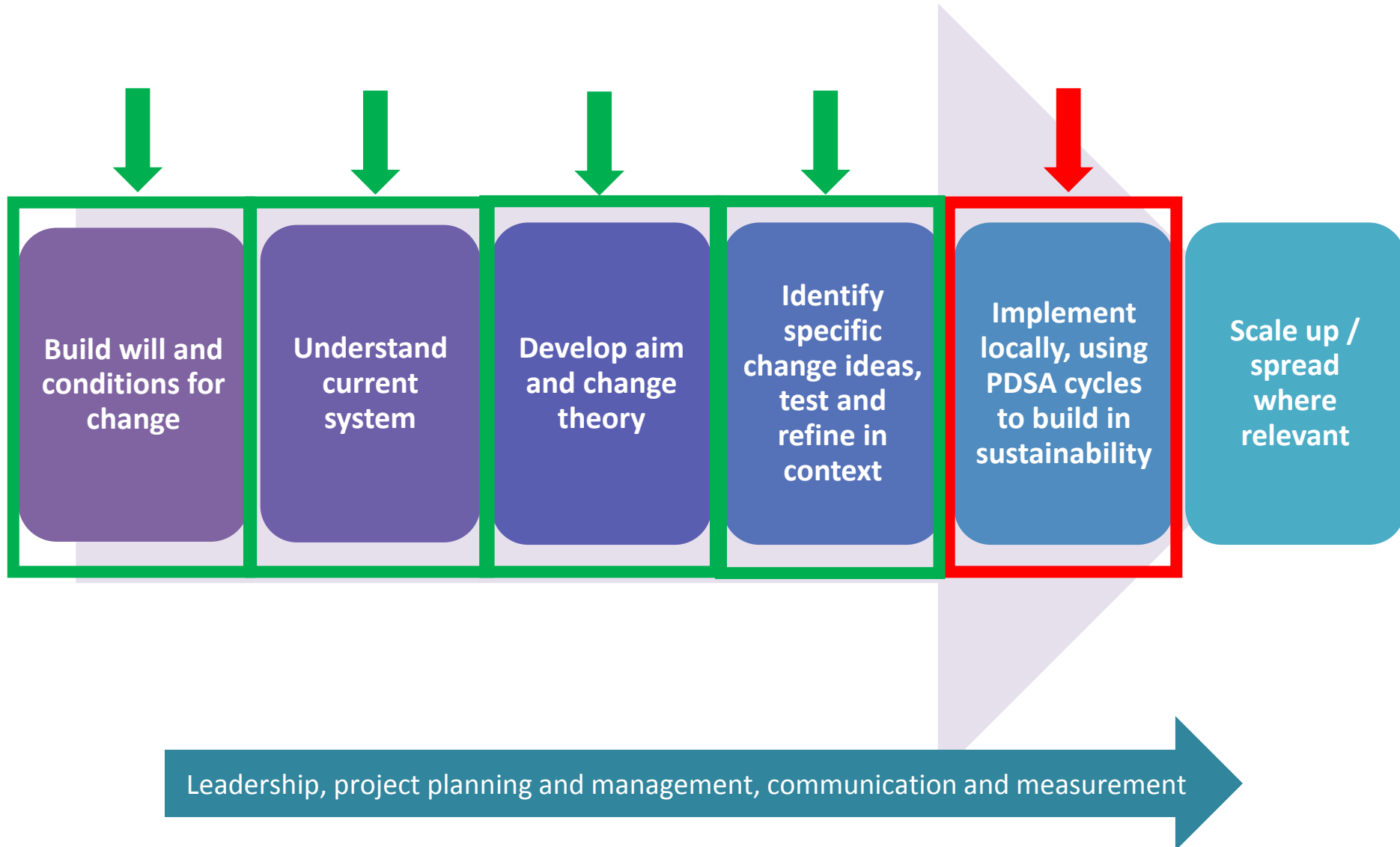
Where do I start?

The main change is too expensive/complex.

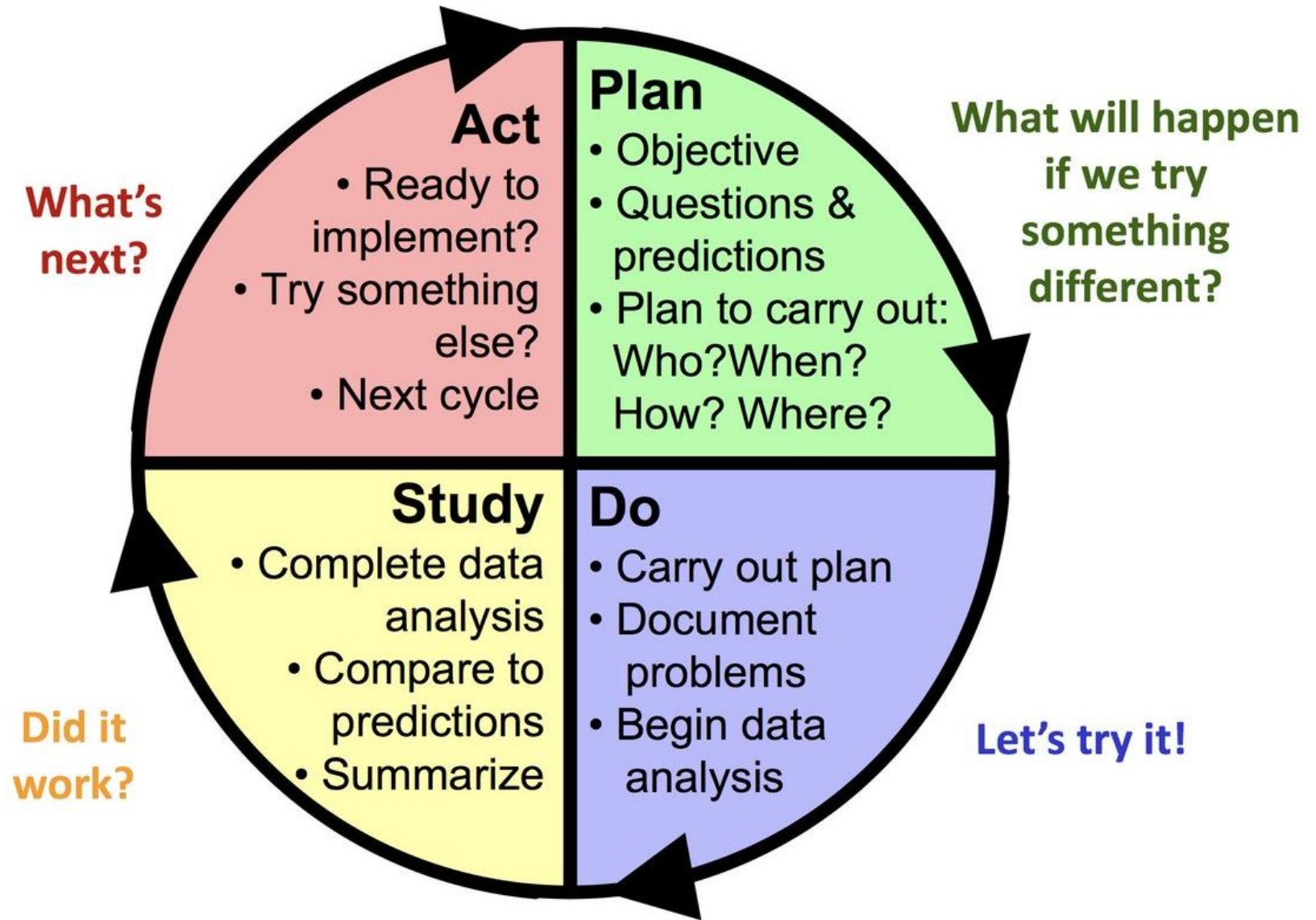I have no influence to change the thing(s) that matter.

Why don't we just identify change ideas?

I want it done right (my way).

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PDSA Cycles

Act
- Ready to implement?
- Try something else?
- Next cycle

Plan
- Objective
- Questions & predictions
- Plan to carry out: Who? When? How? Where?

Study
- Complete data analysis
- Compare to predictions
- Summarize

Do
- Carry out plan
- Document problems
- Begin data analysis

What's next?

What will happen if we try something different?

Did it work?

Let's try it!

Small sequential tests to build knowledge and ability to predict

Changes that result in improvement

Increased knowledge through testing leads to predictability of the impact of change

Theories, hunches, best practice

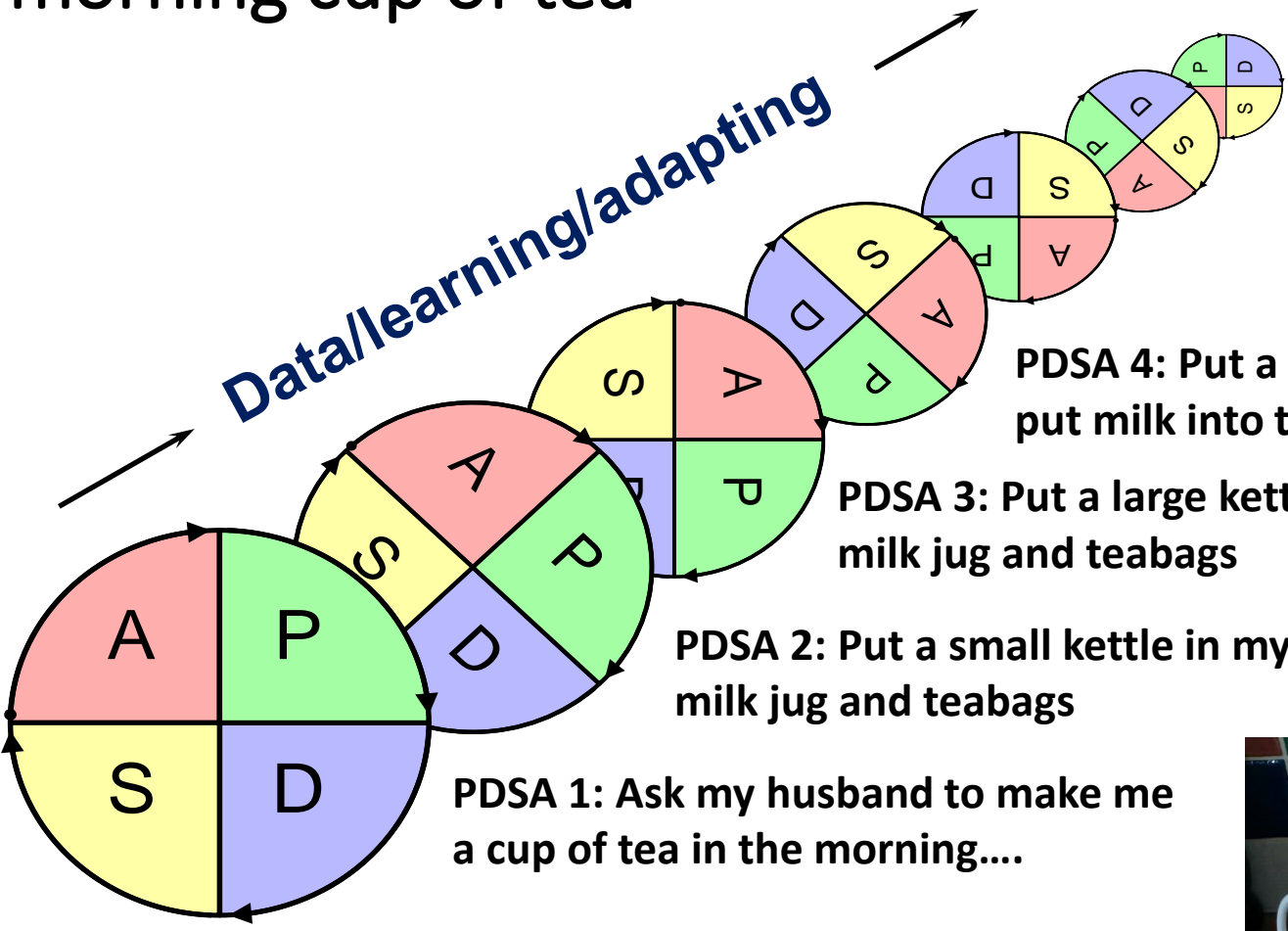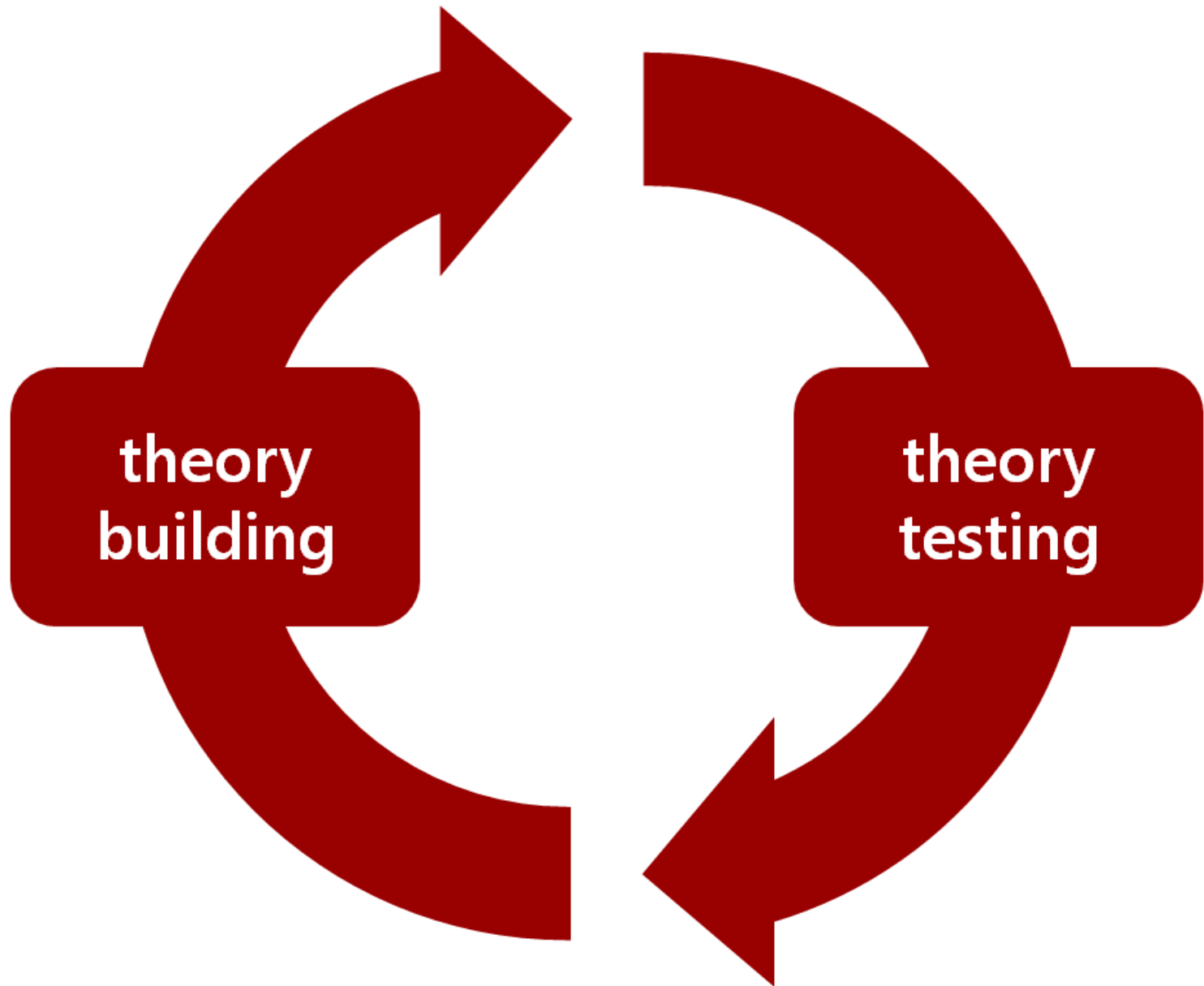©2014 Institute for Healthcare Improvement & Associate in Process Improvement
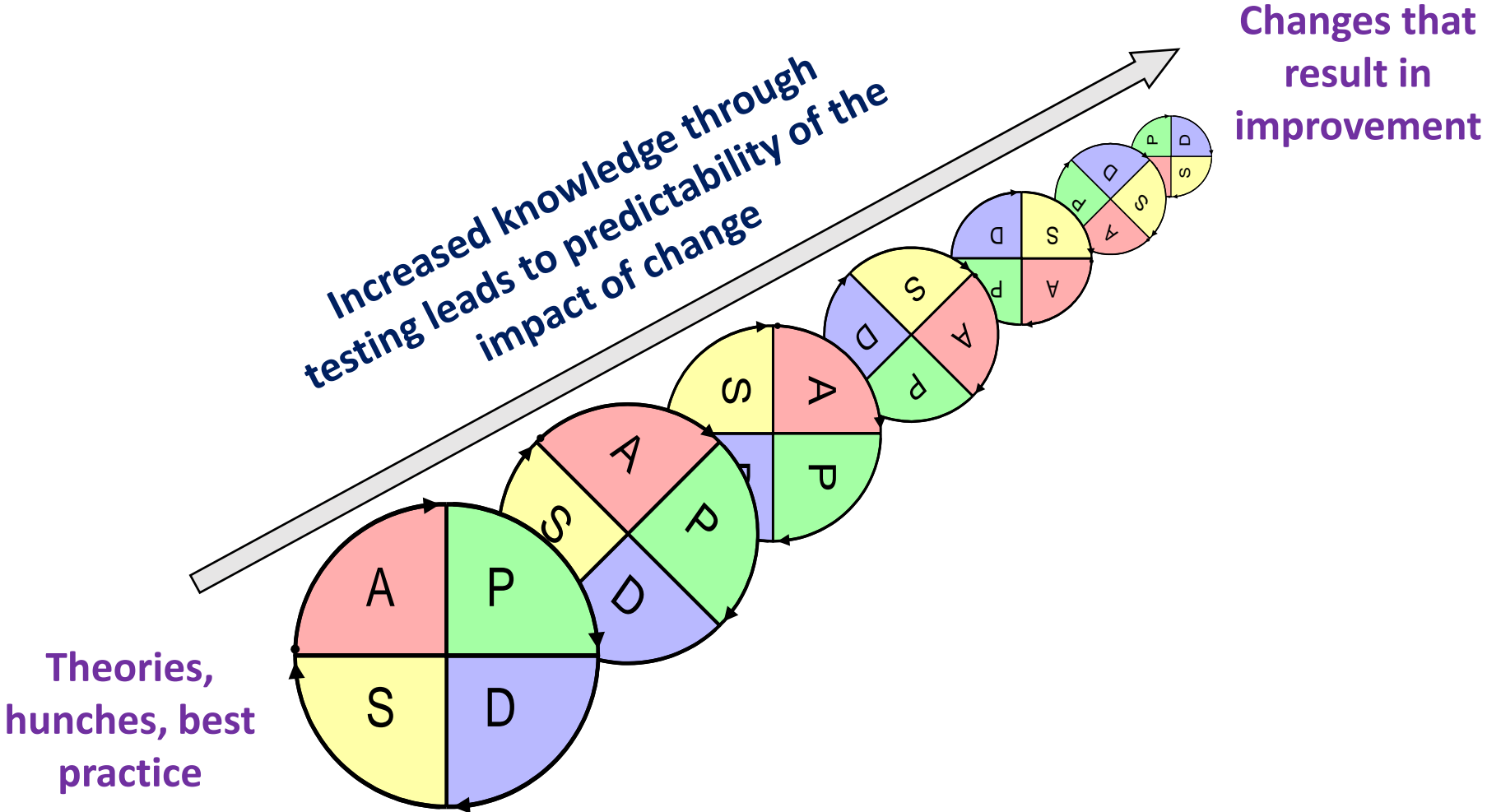
Meet 'Archie' – Scotland's National QI dog

Curious and ready to investigate..

Testing cycles for Laura's morning cup of tea

Data/learning/adapting

PDSA 4: Put a large kettle in my room, put milk into teacup the night before

PDSA 3: Put a large kettle in my room, with milk jug and teabags

PDSA 2: Put a small kettle in my room, with milk jug and teabags

PDSA 1: Ask my husband to make me a cup of tea in the morning....

theory building

theory testing

PDSA Cycles: Deciding on Scale

BELIEF	COST OF FAILURE	Current commitment within organisation		
		No commitment	Some commitment	Strong commitment
Low degree of belief that change idea will lead to improvement	Cost of failure large	Very small scale test	Very small scale test	Very small scale test
	Cost of failure small	Very small scale test	Very small scale test	Small scale test
High degree of belief that change idea will lead to improvement	Cost of failure large	Very small scale test	Small scale test	Large scale test
	Cost of failure small	Small scale test	Large scale test	Implement

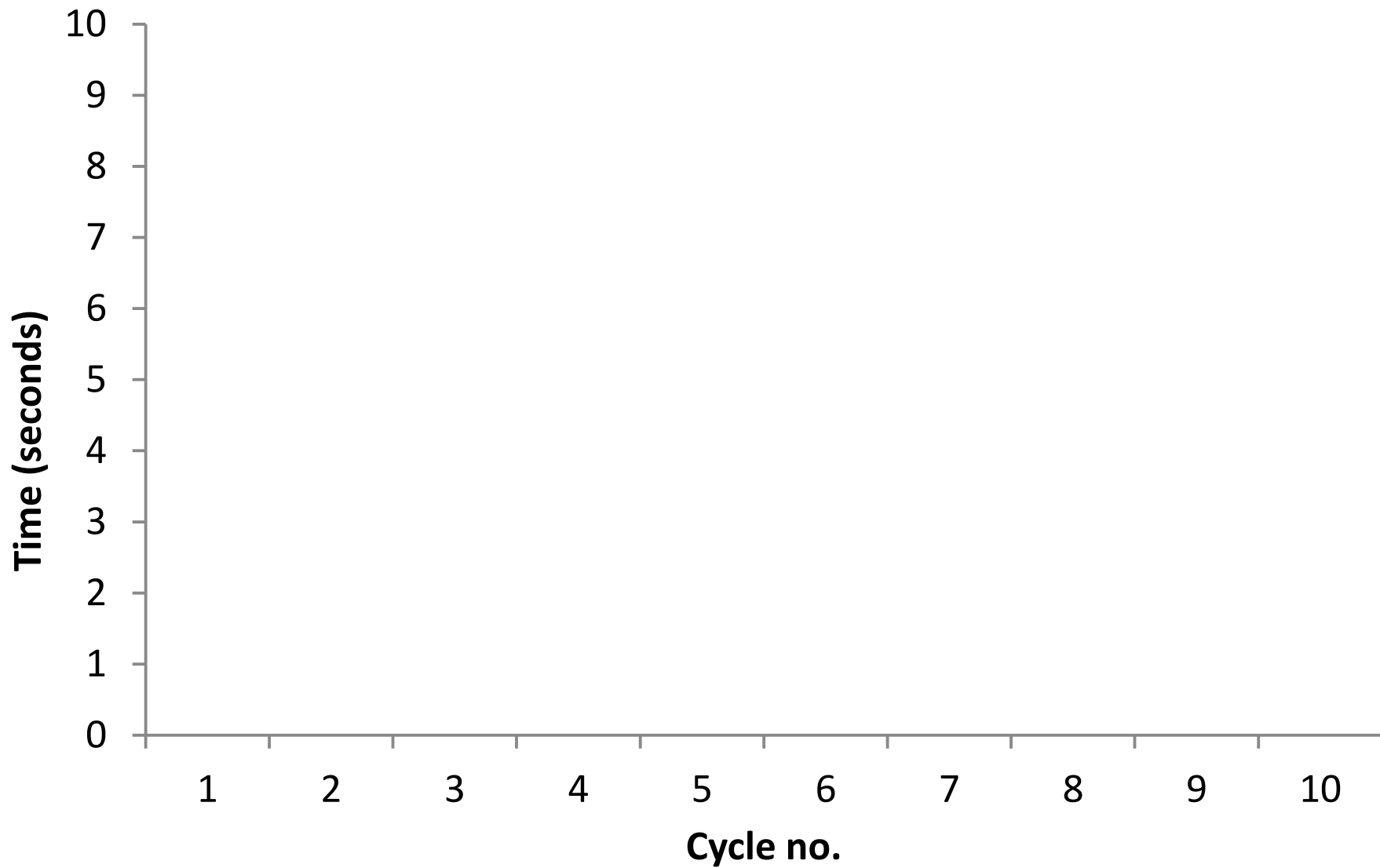*Source: The Improvement Guide, page 146*
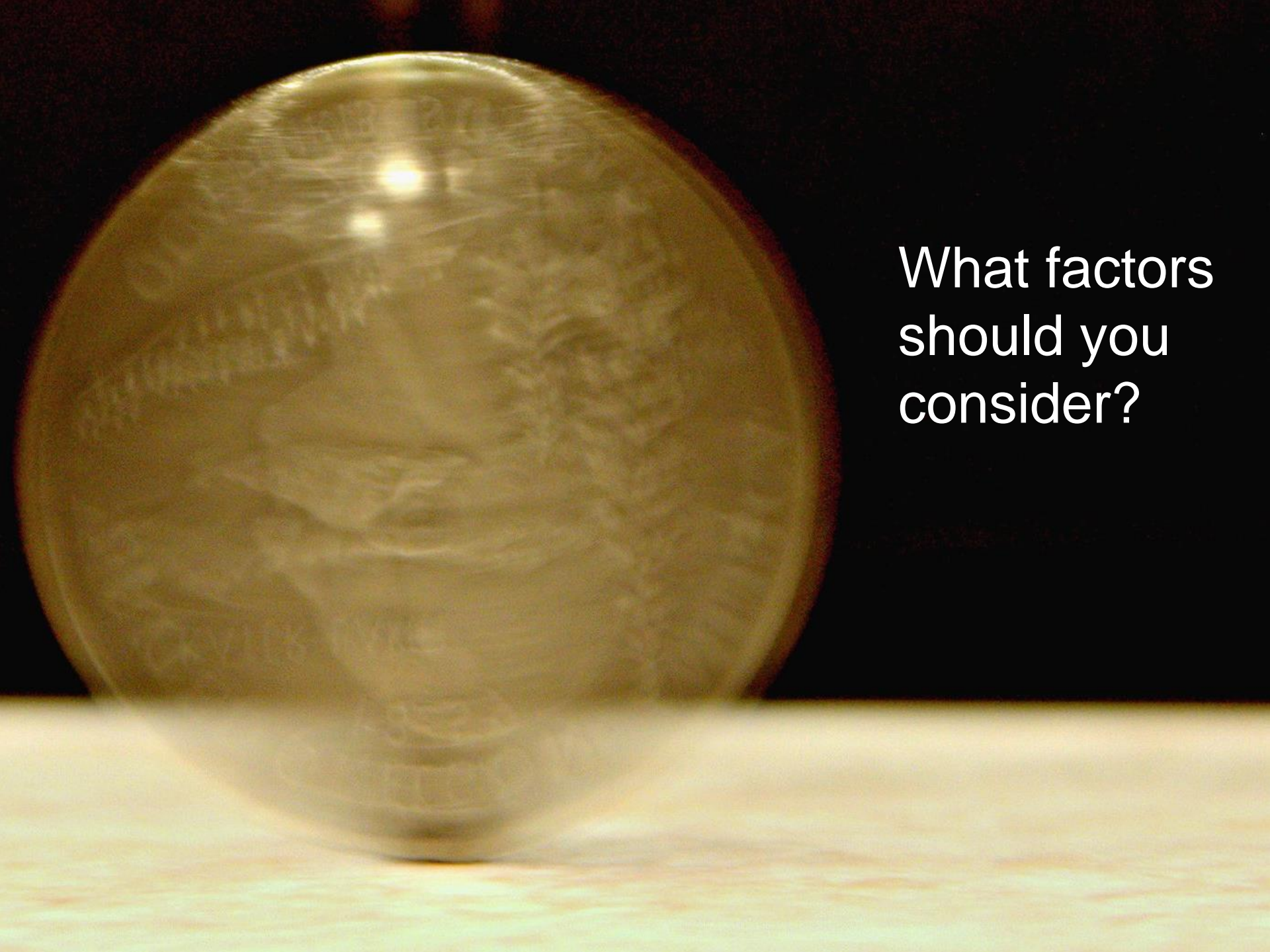
Which coins do you have?

Aim:

By the end of this session to spin a coin continuously for 10 seconds.

Cycle No.	Plan		Do		Study	Act
	What is your theory? Questions?	Prediction	What do you see?	Time	What have you learned?	What next?
1						
2						
3						
4						
5						

Duration of coin spin

Time (seconds)

10
9
8
7
6
5
4
3
2
1
0

1   2   3   4   5   6   7   8   9   10

Cycle no.

What factors should you consider?

Simulation: key points

Gain knowledge through testing

Tests should be small, rapid and sequentially
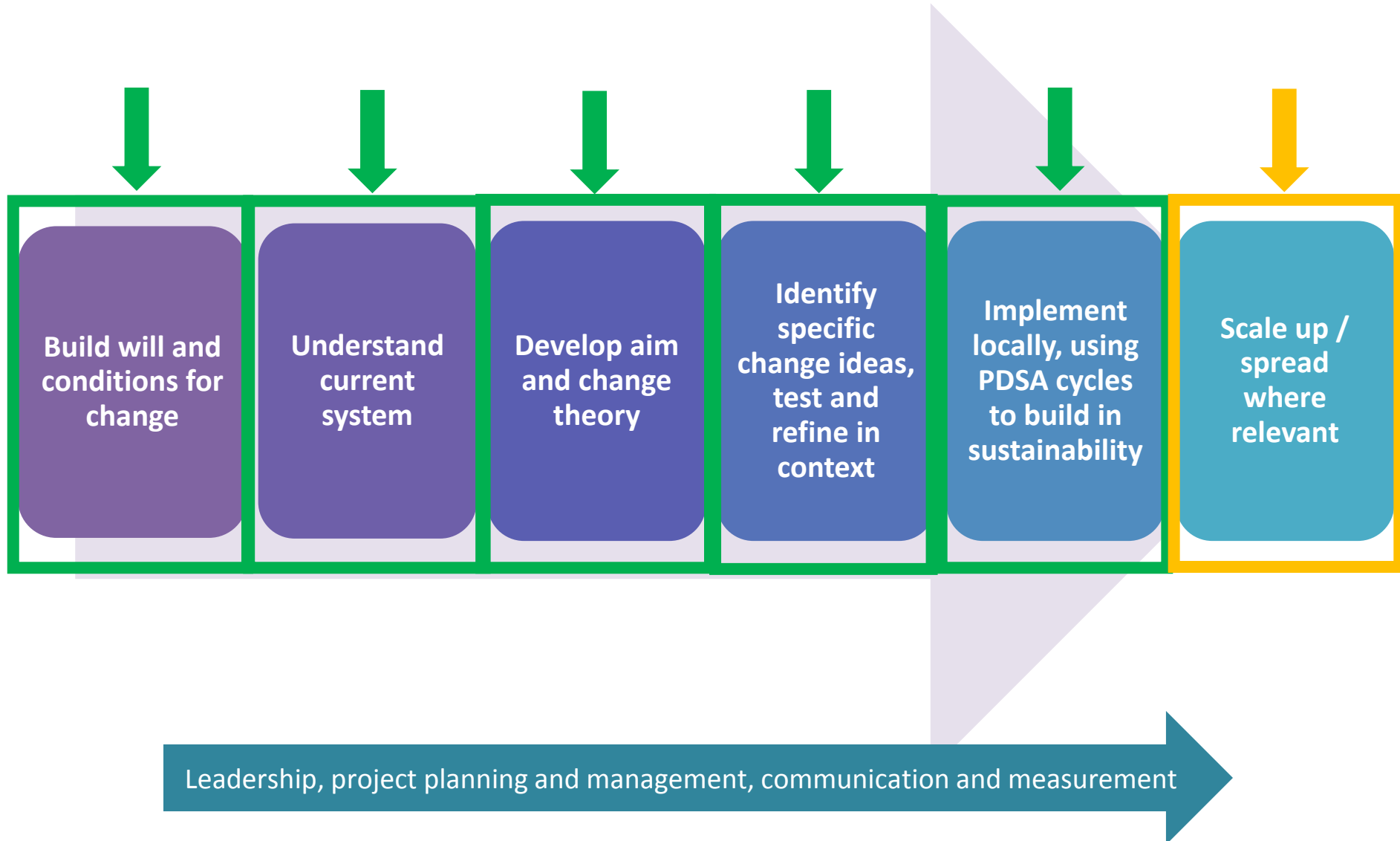
Tests require a theory and a prediction!

Review after each test

Learn from others

Measurement does not have to be hard & aids learning

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Time for a well deserved……