PLAN-DO-STUDY-ACT GAME: COIN SPINNING

PRACTICING PDSA CYCLES

COIN SPINNING

Coin spinning—it's a thing!

Longest coin spinning duration
Who: Keita Hashimoto
What: 25.71 seconds second(s)
Where: Tochigi, Japan
When: 17 July 2014

Do you have any theories on how Keita can spin a coin for so long?

BASELINE TEST

HOW LONG CAN WE SPIN A COIN?

- PLAN – Record your current theory and a prediction
  - Time starts when the coin starts spinning
  - Time stops when the coin stops wobbling and lays flat
- DO – Record results and other observations
- STUDY – Study results and record learning
- ACT – Decide what to test next

OUR NEW AIM:

By the end of this session, we will increase the length of time we spin a coin by 50%.

LET'S SPIN SOME COINS!

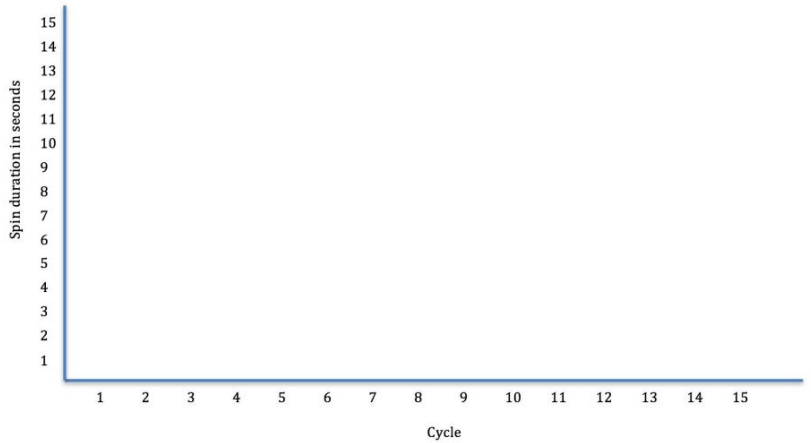
- **Objective**
  - Spin a coin for the longest amount of time (15 min)
- **Materials**
  - Coins -quarter, dime, nickel, penny
  - Plan-Do-Study-Act (PDSA) tracker form
  - Smartphone timer
- **Directions**
  - Get into groups of 3-5 people (2 teams per table)
  - Designate a spinner, timekeeper, and recorder
    - Time starts when the coin starts spinning
    - Time stops when the coin stops wobbling and lays flat

PDSA Tracker

	Plan		Do	Study	Act
#	What theory will you test?	Prediction: What coin and how long?	What do you see? How long did it spin?	How did what you see match your prediction?	What to test next?
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Adapted from the Institute for Healthcare Improvement 2015

Run Chart



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LET'S SPIN SOME COINS!

- **For Each Cycle**
  - PLAN – Record your current theory and a prediction
    - Time starts when the coin starts spinning
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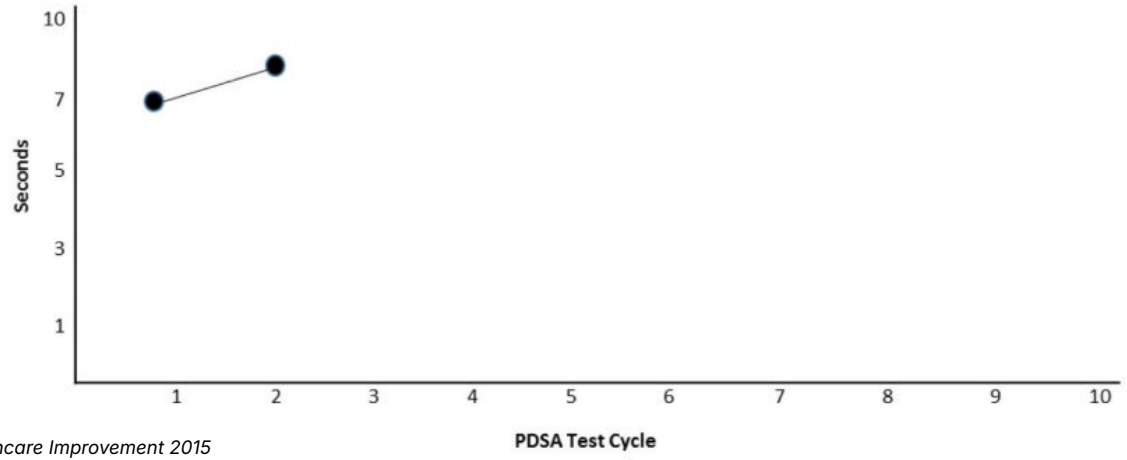
Run as many cycles as possible

Coin Spinning Exercise

Example PDSA tracker and run chart

#	Plan		Do	Study	Act
#	What theory will you test?	Prediction: What coin and how long?	What do you see? How long did it spin?	How did what you see match your prediction?	What to test next?
1	Large coins last longer	Nickel = 10 seconds	Started to wobble. Time = 7	No, Three seconds short.	Test Quarter as larger coin
2	Even larger quarter will spin longer	Quarter = 10 seconds	Started to lose spin fast. Time = 8	Two seconds short but longer than nickel. Size may be more important	Test quarter again
3					

Data Collection on a Run Chart



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BACK TO TESTING CHANGE IDEAS!

- **For Each Cycle**
  - PLAN – Record your current theory and a prediction
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  - DO – Record results and other observations
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Run as many cycles as possible

TRIAD DISCUSSION

- What's your theory about what makes a coin spin for a long time?
- Did your theory change as you conducted tests? If so, in what ways? What did you learn?
- What roles did recording your theory and making a prediction play for you in the testing cycle?
- What value did you see in each step in the PDSA process?