

# Know your audience

DATA VISUALIZATION IN POWER BI



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# Dashboards versus "pixel-perfect" reports

## Dashboard

- Tells us about critical business or operational metrics, often in real time
- "Single pane of glass"
- The norm for Power BI (even when we call them reports!)

## "Pixel-Perfect" Reports

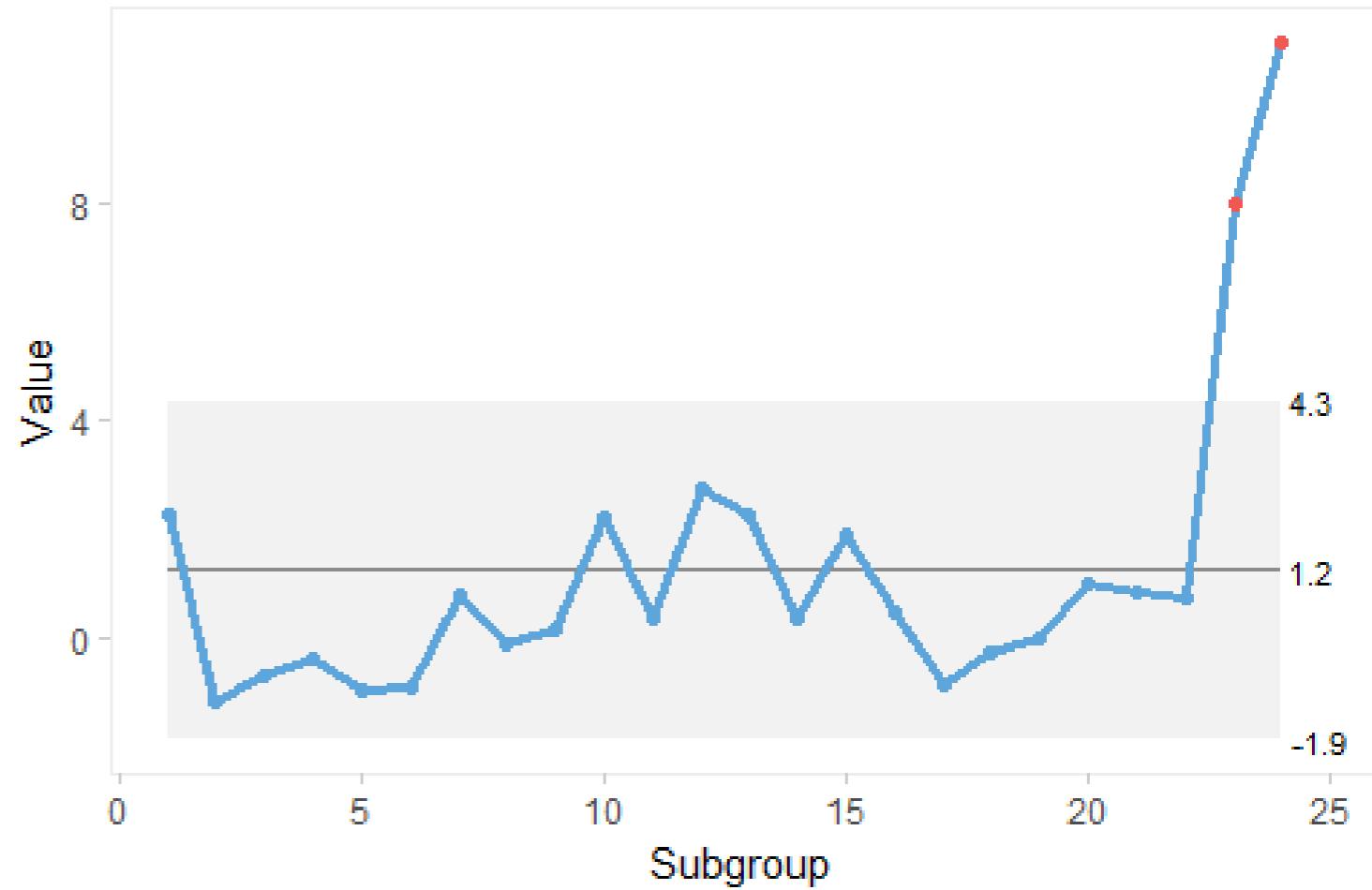
- Provides more detailed information on business or operational metrics, usually delayed
- Intended to fit on sheets of paper, not just on screen
- Called "Paginated Reports" in Power BI

# Your intended audience

## Questions to ask

- Who is your intended audience?
- How will they use your dashboard?
- What actions do you want them to take as a result of what you show?
- Are you showing the right measures in the right way?

I Chart of y



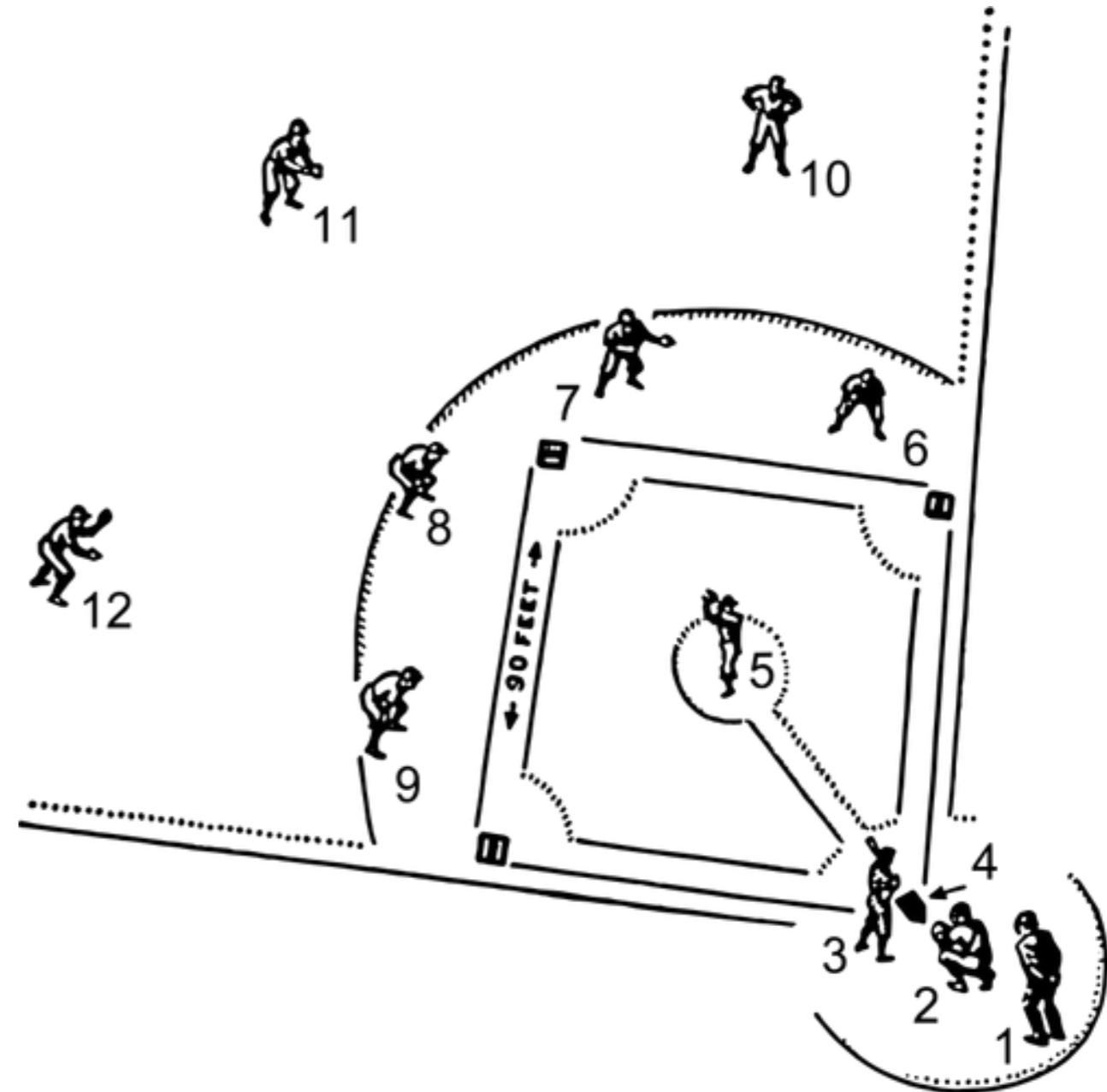
# The dataset

## Lahman's Baseball Database

- Complete batting and pitching statistics from 1871 to 2020
- Includes fielding statistics, standings, team statistics, etc.
- Available in several formats (including an R package!)

# A primer on baseball

- Played on a diamond with home plate (4) and three bases.
- Games typically last 9 innings. Each team bats (that is, plays offense) until they commit 3 outs.
- 9 players on the field for the defense, including the pitcher (5) and catcher (2).
- One person bats at a time (3). Each base may have 0 or 1 baserunners.
- Goal: get on base. Then, score by touching home plate after touching all three bases in



<sup>1</sup> <https://publicdomainvectors.org/en/free-clipart/Baseball-diagram/62196.html>

# Batting measures and statistics

- At-Bat (AB)
- Hit (H)
- Batting Average (AVG) =  $\frac{H}{AB}$
- Walk (BB)
- Hit by Pitch (HBP)
- Sacrifice Fly (SF)
- On-Base Percentage (OBP) =  
$$\frac{H+BB+HBP}{AB+BB+HBP+SF}$$



# Our audience

## The Baseball Historian

- Has knowledge of the sport
- Wishes to dispel or confirm "folk knowledge"
- Does not work for a franchise (team)

# **Let's practice!**

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# Tables and scatter charts

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**Kevin Feasel**  
Instructor

# **Let's practice!**

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