

Presented by Orlin Data Analyst

# Premier League Stadium Attendance Analysis (2018–2023)

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# Agenda

01.

PROJECT  
OVERVIEW



02.

DATA SOURCES &  
METHODOLOGY



03.

KEY METRICS



04.

VISUAL INSIGHTS



05.

CONCLUSIONS





# 01. Project Overview

This project analyzes Premier League match attendance from 2018-2023 to understand how stadium capacity, team performance, and scheduling factors influence demand. The goal is to understand what drives match attendance in English football.

# 02. Data Sources & Methodology

## 01. Integrated data:

- Match data (source: FBref.com)
- Stadium capacity (source: kaggle.com)
- Team performance - points, position (source: kaggle.com)

## 02. Cleaned inconsistencies in team and stadium naming

## 03. Removed COVID-affected matches

## 04. Engineered data:

- Seasons
- Weekend vs weekday
- Capacity Fill Rate (capped at 100%)



# 03. Key Metrics

- Attendance Metrics (Demand)
- Capacity & Utilization Metrics (Supply Constraint)
- Scheduling Metrics (Timing Effect)
- Performance Metrics (On-field Success)

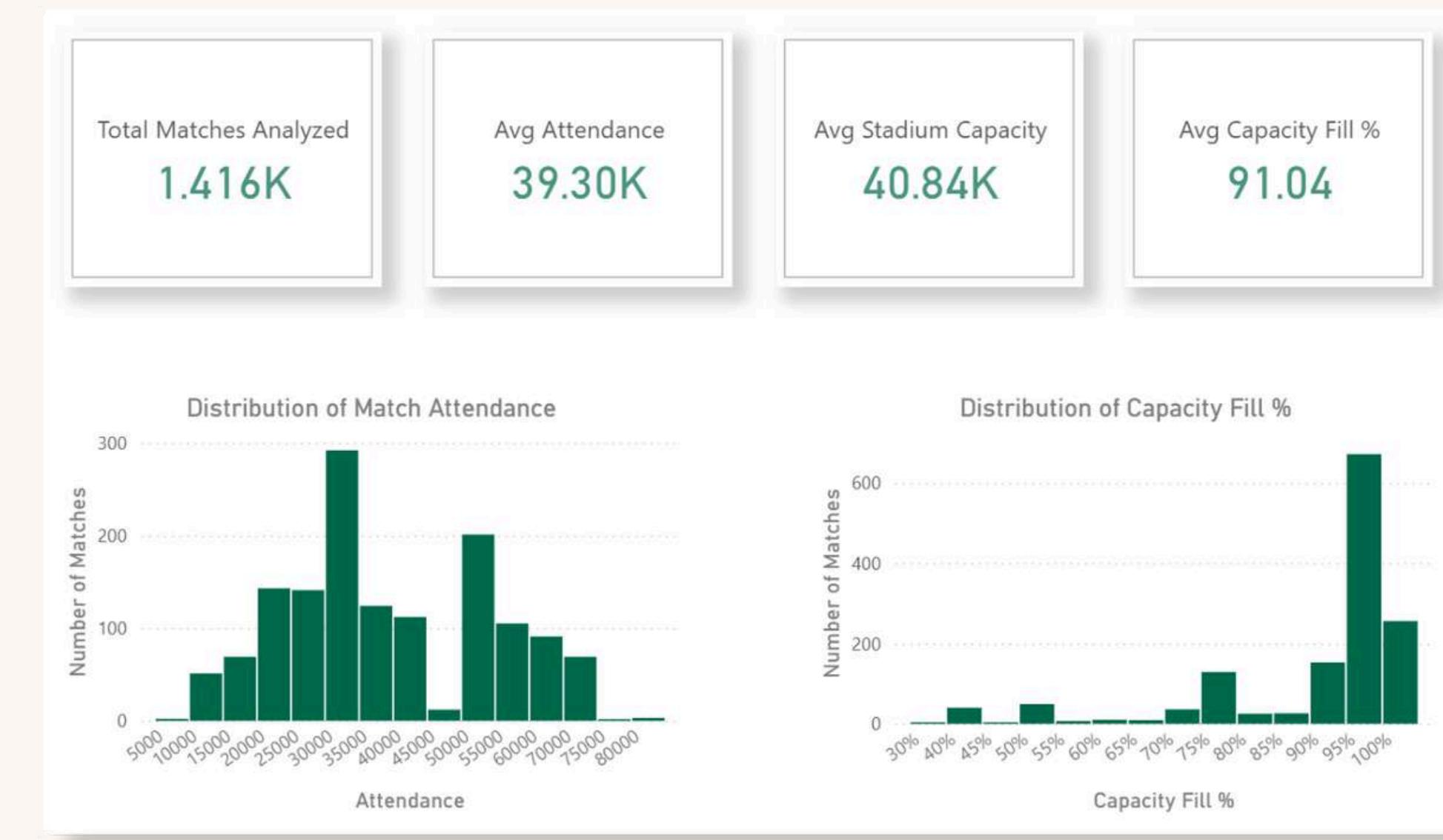


# 04. Visual Insights - Overview

## Key takeaways:

- Attendance distribution is multi-modal
- Capacity fill rate heavily skewed toward 90–100%
- Different stadium size tiers create natural attendance clusters
- Sell-outs are common across clubs, not just top performers

The Premier League operates close to full capacity most of the time — suggesting attendance is supply-constrained rather than demand-constrained.

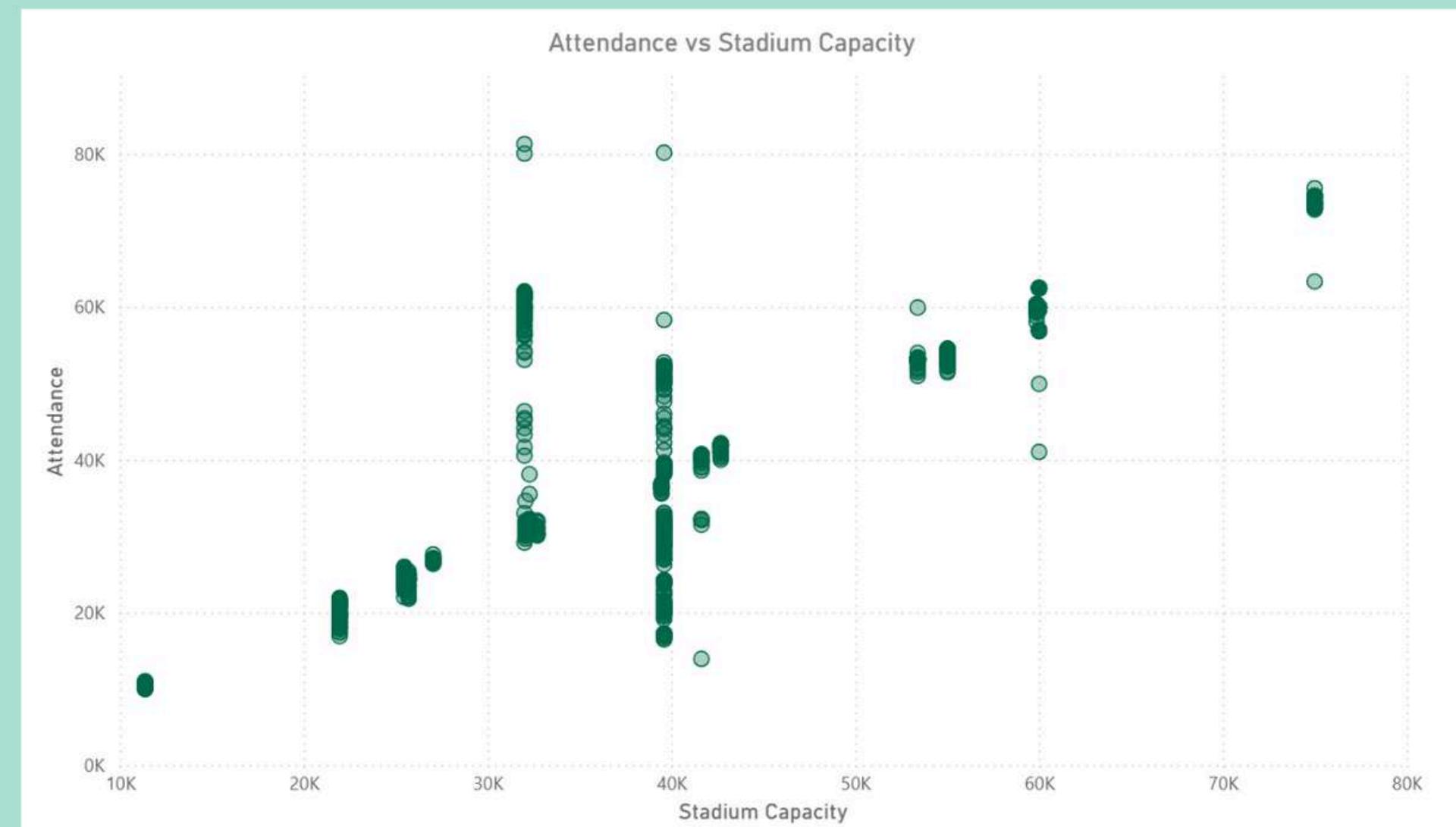


# 04. Visual Insights - Capacity & Demand

## Key takeaways:

- Strong linear relationship between capacity and attendance
- Little evidence of “empty stadiums” at higher capacities

Stadium size is one of the strongest predictors of attendance — expansion or relocation can matter more than short-term results.

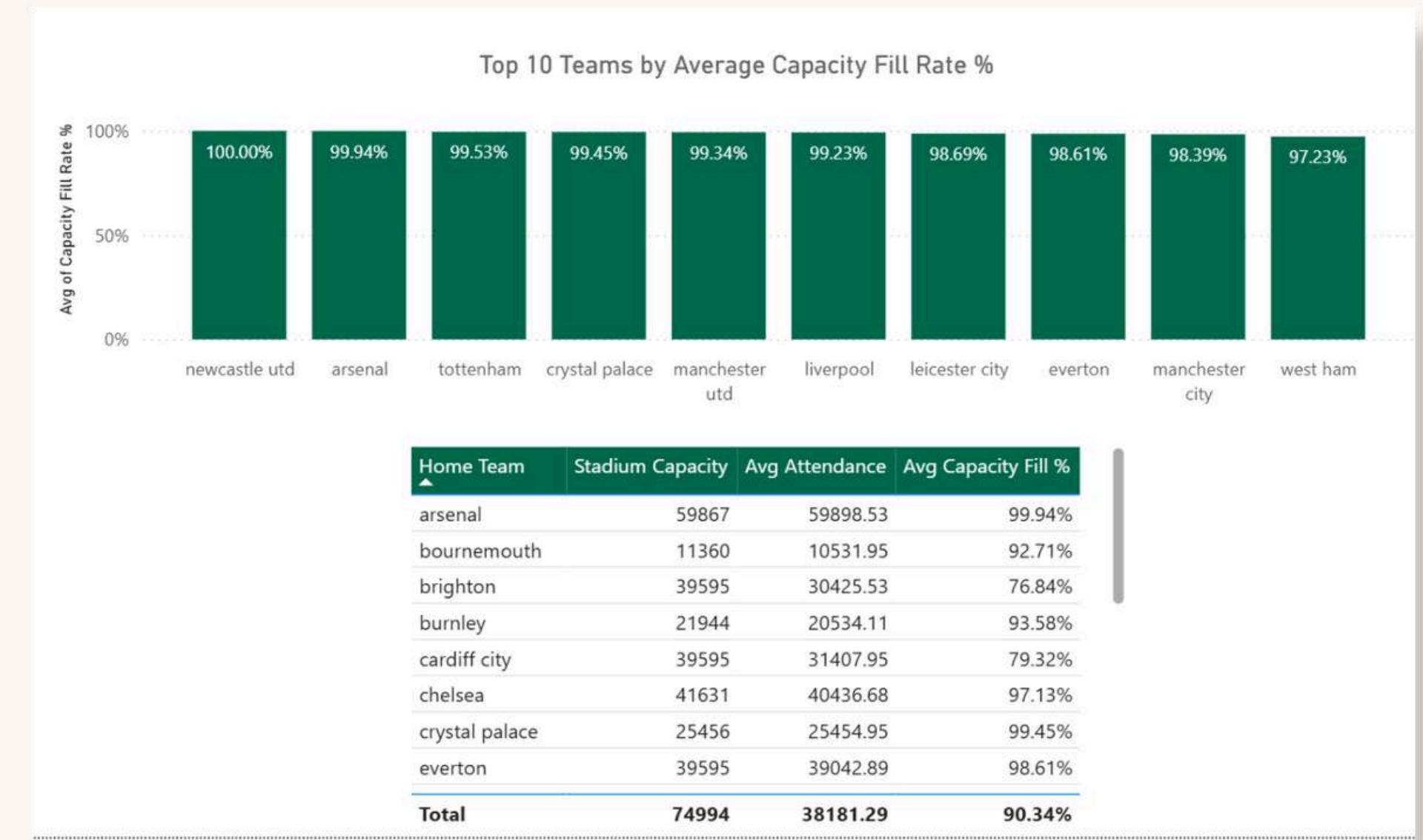


# 04. Visual Insights - Top Teams by Fill Rate

## Key takeaways:

- Clubs like Newcastle, Tottenham, Arsenal average ~100% fill
- Performance differences barely change attendance at top clubs

Brand strength and fan base loyalty dominate matchday demand.



# 04. Visual Insights - Scheduling & Performance

## Key takeaways:

- Weekdays matches draw slightly higher attendance
- Weak correlation between points and fill rate
- Attendance remains strong even with mid-table performance

Match timing and performance are not the primary driver of demand.



# 05. CONCLUSIONS

- Premier League attendance is structurally constrained
- Capacity > performance in explaining attendance
- Scheduling optimizations can yield marginal gains
- Data-driven planning is essential for revenue strategy



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# Thank you!

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