

The Shape of Scoring: How NBA Shot Selection Evolved from 2000 to 2025

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Project Description

We propose to build an interactive narrative visualization article that explains how NBA scoring and shot selection have transformed over the past 25 years. Using a Pudding-style, time-driven storytelling approach, the article will illustrate how the league shifted from a mid-range-dominant era in the early 2000s to the three-point revolution that defines modern basketball.

Our project will combine text, interactive charts, and player-level shot maps to show both **league-wide structural change** and **individual player evolution**. Readers will explore how rule changes, analytics, and generational superstars—such as Stephen Curry, James Harden, LeBron James, Kevin Durant, and DeMar DeRozan—collectively reshaped the “geometry” of scoring.

We plan to include 3–4 interactive visualizations:

1. **League-wide shot distribution timeline (2000–2025):** A stacked area chart showing the decline of mid-range shots and the rise of three-pointers.
2. **Event-driven turning points:** A timeline where users can highlight seasons associated with rule changes and strategic innovations.
3. **Player-level shot selection evolution:** Selectable players with season-by-season shooting profiles.
4. **Interactive shot charts:** Animated heatmaps showing how a player’s shot locations migrated over time.

The article will be written for a general audience, using clear explanations supported by visual, data-driven evidence in the style of modern data journalism.

Data Sources

We will use the [nba_api](#) Python package to pull official NBA Stats data, including:

- **LeagueDashTeamShotLocations** – league- and team-level shot distribution by zone
- **PlayerDashboardByShootingSplits** – player seasonal shooting breakdowns
- **PlayerCareerStats** – basic seasonal shooting and scoring stats
- **ShotChartDetail** – individual shot locations for heatmaps

These endpoints allow us to obtain historical data back to 2000 with no major cleaning difficulty.

Preliminary Sketches (Conceptual)

Our envisioned visual design includes:

- A morphing heatmap showing the league’s shot chart shift from 2000 to 2025.
- A scrollytelling timeline combining rule-change annotations with league-wide trends.
- Player comparison panels showing changes in shot selection over their careers.

Sketches will be refined during the implementation phase.