Analytics Scouting Report for the Oklahoma City Thunder

OFFENSE ANALYTICS

TRACKING BY SHOT TYPE

CATCH-AND-SHOOT

- Thunder shot 35.2% on catch-and-shoot 3s per game. (23rd in NBA)
- Thunder shot 37.1% overall from field on catch and shoots (23rd in NBA)
- 27.2% of OKC's total FGAs came out of Catch-and-Shoot situations (24th highest percentage in NBA)
- (18.1% total shots came from 3PT-Catch-and-Shoots (22nd highest in NBA), 9.1% of shots were 2PT-Catch-and-Shoots (18th in NBA)
- 23.4 Total Catch + Shoot FGA per game (19th in NBA), 15.6 3FGA Catch + Shoots per game (19th in NBA), 5.5 3FGM on Catch-and-Shoots per game (22nd in NBA)
- 48.8% on Catch + Shoot Effective FG% (23rd in NBA)

PULL-UP

- Thunder shot 31.4% on pull-up 3s per game (14th in NBA)
- Thunder shot 37.5% overall (8.6-for-22.8) from field on pull-ups (tied for 10th in NBA)
- 26.4% of OKC's total FGA came out of pull-up situations (7th most in NBA)
- 22.8 pull-up FGA per game (7th in NBA), 6.5 3P pull-up attempts per game (6th most in NBA)
- 42% on pull-up Effective FG% (6th in NBA)
- 44.3% of total offense is accounted on shots within 10 feet (16th in NBA)

DRIVES (LESS THAN 10 FT)

- *54.2 FG% (19th in NBA)*
- *20.7 for 38.2 FGA per game (10th most attempts in NBA)*
- *Only 46% of 2PT FG were accounted for within 10 feet of the rim… this means AT LEAST 54 percent of 2-Pointers are coming in 10-19 FT range.*

OKC MONTH-BY-MONTH CHART

OKC MONTH-BY-MONTH SPLITS															
MONTH	GAMES	Wins	Losses	FGM	FGA	FG%	eFG%	2FG FREQ	2FGM	2FGA	2FG%	3FG FREQ	3PM	3PA	3P%
NOVEMBER	15	5	10	34.1	80.7	42.3	47	72.3	26.5	58.3	45.5	27.7	7.6	22.4	33.9
DECEMBER	16	11	5	40.1	86.1	46.6	50.6	74.4	33.1	64	51.7	25.6	7	22.1	31.7
JANUARY	14	7	7	37.9	88.9	42.6	46.9	72.1	30.3	64.1	47.3	27.9	7.6	24.8	30.5
FEBRUARY	12	9	3	41.6	88.8	46.8	51	77.1	34.2	68.5	49.9	22.9	7.4	20.3	36.5
MARCH	15	10	5	39.9	86.7	46	50.8	74.1	31.5	64.2	49	25.9	8.4	22.5	37.4
APRIL	8	3	5	41.4	92.4	44.8	49.8	72.3	32.1	66.8	48.1	27.7	9.3	25.6	36.1

MONTH-BY-MONTH ANALYSIS

- OKC's success in shot distribution fits within a blueprint of 86.1-86.7 FGA per game with 22.1-22.5 of those FGA coming from deep (~25% of shots).
- Admittedly hard to gauge properly because injuries disrupted the team's search for consistency.

OKC BY QUARTER CHART

THUNDER BY QUARTER						
QUARTER	FGA	2PT FREQUENCY	FG%	3PT FREQUENCY	3FGA	3FG%
1st QUARTER	21.9	78.7	48.7	21.3	4.7	36.3
2nd QUARTER	21.2	74.3	44.2	25.7	5.5	32.5
3rd QUARTER	21.2	73.7	44	26.3	5.6	36.2
4th QUARTER	21.1	68	42.5	31.93	6.7	31.5

OKC QUARTER-BY-QUARTER ANALYSIS

- OKC can afford to shoot more 3s in 1st, 2nd, and 3rd Quarters… but should shoot less 3s in 4th (surely attributed to quick shots to "catch-up" in games they trail).
- OKC scores more points per possession on 3-point attempts than 2-point attempts until 4th quarter.

RUSSELL WESTBROOK BY QUARTER						
QUARTER	FGM	FGA	FG%	3FGM	3FGA	3FG%
1st Quarter	2.9	6.5	45.3	0.4	1.1	37
2nd Quarter	2	4.7	41.5	0.2	0.8	26.4
3rd Quarter	2.5	6.1	40.9	0.5	1.4	33
4th Quarter	2.3	5.5	42.3	0.3	1.2	20.3

- Westbrook is much more aggressive before periods in which he has to sit on the bench. Finding the right times to give Westbrook rest are critical in finding his efficient shooting percentages.

OKC MISCELLANEOUS ANALYTICS

- OKC is the only team that's been better with Pull-Up FG% than Catch-and-Shoot FG% (37.5% and 37.1%, respectively)
- OKC leads NBA in rebounds per game (47.5) and is second in NBA to only Utah in Rebounding Rate (percentage of available rebounds they grab) with 52.6%.
- Roberson is a fantastic defensive rebounder for his size, grabbing 35% of contested boards (on par with Kris Humphries, Lamarcus Aldridge and Marcin Gortat)
- Nearly all of Steven Adams' passes come in fast and low. Brooks experimented with Adams as a fulcrum to the offense on the interior. Passes would come in to Adams and he would quickly feed Westbrook on the perimeter and sets a pick for a Westbrook drive-by. Problem was that Adams' passes generally were delivered to tough catching positions, making the catch-and-shoot a low efficiency option for any recipient.
- On shots Durant attempts, 35.6% of the passes are delivered from Westbrook.
- On shots Westbrook takes, only 10.7% of the passes are delivered from Durant.
- Westbrook's shot attempts come off of passes from Ibaka, Adams, and Kanter more than 53.1% of the time.
- 45.6% of Ibaka's passes went to Westbrook.

STAR PLAYER EFFICIENCY CHARTS

WESTBROOK SHOT TYPE EFFICIENCY BREAKDOWN

TYPE	FGM	FGA	FG%	3FG	3FGA	3FG%
CATCH AND SHOOT	0.4	1.4	31.5	0.4	1	35.7
PULL-UP	3.9	10.8	36.2	0.9	3.1	27.5
<10 FEET	4.9	9.3*	52.5			
		*These field goals may consist of catch-and-shoots and pull-ups				

IBAKA SHOT TYPE EFFICIENCY BREAKDOWN

TYPE	FGM	FGA	FG%	3FG	3FGA	3FG%
CATCH AND SHOOT	2.9	6.9	42.1	1.1	3	38
PULL-UP	0.3	0.8	37.7	0	0.1	9.5
<10 FEET	2.3	3.8*	60.6			
		*These field goals may consist of catch-and-shoots and pull-ups				

DURANT SHOT TYPE EFFICIENCY BREAKDOWN

TYPE	FGM	FGA	FG%	3FG	3FGA	3FG%
CATCH AND SHOOT	2	5	39.7	1.3	3.4	38
PULL-UP	3.1	6.6	48	1	2.3	43.5
<10 FEET	3.3	4.9*	60.6			
		*These field goals may consist of catch-and-shoots and pull-ups				

STAR PLAYER EFFICIENCY ANALYSIS

- Westbrook should shoot more 3-pointers out of Catch-and-Shoot and less in Pull-up. Westbrook's pull-up is efficient in comparison to the rest of the league but he can afford to turn the ball over more if it means he will drive to within 10-feet more
- Ibaka understands his efficiencies well and rarely takes low efficient shots.
- Durant should have the green light to shoot pull-up 3-pointers. He's actually more efficient from deep out of the pull-up, albeit on less attempts

WHY OKC NEEDS TO PLAY FASTER ON OFFENSE:

OKLAHOMA CITY EFFICIENCY CHART BASED ON SHOT CLOCK				
SHOT CLOCK	3P%	EFFECTIVE FG	2FG%	FGA PER GAME
24-22 seconds	33.8	49.30	48.7	5.6
22-18 seconds	37	58.8	60	13.8
18-15 seconds	38	48.7	45	13.8
15-7 seconds	35.8	48.6	47	38
7-4 seconds	29	44.7	45	7.8
4-0 seconds	25.2	38.1	38.3	4.9

ANALYSIS

- OKC was best when they shot within the first 9 seconds of the possession. However, last season, they attempted nearly three times as many shots in the 15-7 second range on the shot clock, in spite of the lower efficiencies. SPEED UP THE OFFENSE!

- ***THUNDER HAVE PLAYERS WHO ALL PERFORM WELL ANALYTICALLY WHEN THEY SHOOT EARLY IN THE CLOCK:***

INDIVIDUAL PLAYER EFFICIENCY CHARTS BASED ON SHOT CLOCK

WESTBROOK EFFICIENCY CHART BASED ON SHOT CLOCK				
SHOT CLOCK	3P%	EFFECTIVE FG	2FG%	FGA PER GAME
24-22 seconds	57.1	52.70	49.1	0.8
22-18 seconds	39	53.6	52.7	6.1
18-15 seconds	28.3	42.3	42.3	3.1
15-7 seconds	30.7	44.4	44.1	7.8
7-4 seconds	25.7	40.6	41.6	1.7
4-0 seconds	29.2	35.8	41.4	0.8

DURANT EFFICIENCY CHART BASED ON SHOT CLOCK				
SHOT CLOCK	3P%	EFFECTIVE FG	2FG%	FGA PER GAME
24-22 seconds	N/A	60.00	80	0.7
22-18 seconds	36.4	68.9	80.5	2.7
18-15 seconds	51.9	63.7	50	3.9
15-7 seconds	40.8	56.9	55.6	7.8
7-4 seconds	14.3	38.3	43.5	1.1
4-0 seconds	28.6	35.7	28.6	0.5

IBAKA EFFICIENCY CHART BASED ON SHOT CLOCK

SHOT CLOCK	3P%	EFFECTIVE FG	2FG%	FGA PER GAME
24-22 seconds	33.3	61.00	62.3	0.9
22-18 seconds	45.5	71.4	72.7	1.2
18-15 seconds	38	49	44.9	2.3
15-7 seconds	40.2	52.9	50.5	6
7-4 seconds	36.4	45.6	43.5	0.9
4-0 seconds	31.3	40.7	37	0.7

MORROW EFFICIENCY CHART BASED ON SHOT CLOCK

SHOT CLOCK	3P%	EFFECTIVE FG	2FG%	FGA PER GAME
24-22 seconds	42.1	57.10	52.2	0.6
22-18 seconds	46.2	69	68.8	1.7
18-15 seconds	46.8	62.2	48.1	1
15-7 seconds	47.1	58.2	47	3.5
7-4 seconds	26.1	48	55.6	0.7
4-0 seconds	27.8	36.3	31.8	0.5

ADAMS EFFICIENCY CHART BASED ON SHOT CLOCK

SHOT CLOCK	3P%	EFFECTIVE FG	2FG%	FGA PER GAME
24-22 seconds	N/A	57.10	57.1	0.9
22-18 seconds	N/A	66.7	66.7	0.3
18-15 seconds	N/A	71.1	71.1	0.5
15-7 seconds	N/A	49.5	49.5	2.9
7-4 seconds	N/A	41.2	39.5	1.1
4-0 seconds	N/A	61.1	64.7	0.3

ROBERSON EFFICIENCY CHART BASED ON SHOT CLOCK

SHOT CLOCK	3P%	EFFECTIVE FG	2FG%	FGA PER GAME
24-22 seconds	N/A	48.00	52.2	0.4
22-18 seconds	N/A	72.2	86.7	0.5
18-15 seconds	37.5	54.8	53.8	0.3
15-7 seconds	32.6	51.3	54.8	1.1
7-4 seconds	16.7	42.9	66.7	0.3
4-0 seconds	14.3	30	37.5	0.2

KANTER EFFICIENCY CHART BASED ON SHOT CLOCK				
SHOT CLOCK	3P%	EFFECTIVE FG	2FG%	FGA PER GAME
24-22 seconds	N/A	59.40	59.4	2.6
22-18 seconds	N/A	64.3	64.3	1.1
18-15 seconds	N/A	57.5	57.5	1.5
15-7 seconds	75	55.2	53.8	6.3
7-4 seconds	N/A	62.1	62.1	1.1
4-0 seconds	N/A	44.4	44.4	0.3

WAITERS EFFICIENCY CHART BASED ON SHOT CLOCK				
SHOT CLOCK	3P%	EFFECTIVE FG	2FG%	FGA PER GAME
24-22 seconds	N/A	50.00	58.3	0.3
22-18 seconds	24.2	54.1	61.8	2.3
18-15 seconds	33.3	41.2	36.2	2.3
15-7 seconds	41.7	43.5	38.1	5.8
7-4 seconds	30.8	41.2	39.5	1.1
4-0 seconds	12.5	21.7	22.7	0.6

THE MYSTERY OF HOME ROAD SPLITS APPLIES FOR CERTAIN THUNDER PLAYERS

SOME OKC PLAYERS SHOOT BETTER AT HOME, SOME ON ROAD						
WESTBROOK 3-POINT EFFICIENCY BASED ON HOME/ROAD SPLIT						
LOCATION	3PM	3PA	3P%			
HOME	47	140	33.6			
ROAD	39	148	26.4			
IBAKA 3-POINT EFFICIENCY BASED ON HOME/ROAD SPLIT						
LOCATION	3PM	3PA	3P%			
HOME	33	96	34.4			
ROAD	44	109	40.4			
MORROW 3-POINT EFFICIENCY BASED ON HOME/ROAD SPLIT						
LOCATION	3PM	3PA	3P%			
HOME	89	197	45.2			
ROAD	52	128	40.6			
ROBERSON 3-POINT EFFICIENCY BASED ON HOME/ROAD SPLIT						
LOCATION	3PM	3PA	3P%			
HOME	3	40	0.075			
ROAD	18	45	0.4			
WAITERS 3-POINT EFFICIENCY BASED ON HOME/ROAD SPLIT						
LOCATION	3PM	3PA	3P%			
HOME	45	133	33.8			
ROAD	28	113	24.8			

- Roberson was actually a GOOD perimeter shooter on the road last season but was dreadful at home.
- Anthony Morrow was far more aggressive with his shot at Chesapeake but was efficient both at home and on the road.

THUNDER TEAM ON/OFF SPLITS FOR INDIVIDUAL PLAYERS

PLAYER	Offensive Rating On Court	Offensive Rating Off Court	Defensive Rating On Court	Defensive Rating Off Court	Net Rating On Court	Net Rating Off Court	DIFFERENCE
KANTER	112.8	106.2	111.7	103.9	1.1	2.3	-1.2
IBAKA	108.2	106.9	104.3	107	3.9	-0.1	4
ROBERSON	108.6	107.1	102.5	107	6.1	0.1	6
SINGLER	109.7	107.3	112	104.7	-2.3	2.6	-4.9
ADAMS	106.5	108.4	105.5	105.6	1	2.9	-1.9
MORROW	109.3	106.1	104.1	106.8	5.3	-0.7	6
WESTBROOK	112	101.1	107.3	103	4.7	-1.9	6.6
DURANT	110.7	106.6	102.3	106.5	8.5	0.1	8.4
COLLISON	105.8	108.2	102.4	106.7	3.4	1.5	1.9
AUGUSTIN	107.4	107.6	107.2	105.2	0.2	2.4	-2.2

EXPLANATION OF ON/OFF SPLITS CHART

This is my absolute favorite statistic… it measures how the team performs with a player on the court compared to how the team performs with that player on the bench.

For example, according to the data, when Enes Kanter plays, Oklahoma City scores 112.8 points per 100 possessions. When Kanter sits, OKC scored 106.2 points per 100 possessions. Kanter makes the Thunder offense approximately 6.6 points better per 100 possessions.

However, when Kanter plays, Oklahoma City's defense also allows 111.7 points per 100 possessions. When Kanter sits, Oklahoma City's defense allows just 103.9 points per 100 possessions. Kanter makes the Thunder defense approximately 7.8 points worse per 100 possessions.

So while Kanter's lineups manage to outscore opponents by just over a point per 100 possessions, Oklahoma City's lineups without Kanter outscored opponents by more than 2 points per 100 possessions. This renders Kanter as a net negative of approximately 1.2 for his team when you account for both his offensive and defensive efficiencies.

Surprisingly, Andre Roberson actually helps the Thunder's defense *AND* offense. OKC is so loaded with elite talent between Durant, Westbrook and Ibaka that the smartest approach analytically is to surround those three players with one elite defender and one elite shooter at all times.

Roberson's length and athleticism helps OKC get stops defensively. This, in turn, gives OKC's offense a head start to start a fast break (because there is no need to inbound). Roberson recognizes his limitations on offense and does not take shots away from his more proficient teammates.

While the data is not publicly available, I would predict that the volume of Oklahoma City's early offense attempts increases significantly with Roberson. This helps explain why his team's offense thrives with him on the court, in spite of his perceived deficiencies on offense.

Conversely, Anthony Morrow's elite shooting helps mitigate whatever spacing issues that a player like Roberson might present on offense. Morrow's touch from deep gives the Thunder increased offensive efficiency when he's on the court. But Morrow has also turned himself into an adequate perimeter defender. This can partially be explained by the defensive advantage a team gains when they make shots, which enables them to get back on defense as the opponent is forced to inbound the ball.