



CEREBRO
SPORTS

**NUMBERS-BASED PLAYER EVALUATIONS
IN 60 SECONDS OR LESS**

NBA Draft Pick Archetype Analysis

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NBA Draft Pick Archetype Analysis

Case Studies

Glossary:

RAM - Overall evaluation metric ranging from 0 to 1000+

C-RAM - Comparison metric to average performance in event

10+ = GOLD Rating, Elite performer

8.5 - 10 = SILVER Rating, All-Star performer

7 - 8.5 = BRONZE Rating, Above-average performer

4.5-6.5 = Average performer

5MS (5-Metric Suite) - A group of 5 metrics evaluating a players skillset ranging from 0 to 100+

PSP - Pure Scoring Prowess

3PE - 3-Point Efficiency

FGS - Floor General Skills

BMS - Big Man Strengths

DSI - Defensive Statistical Impact

60+ = General competency in skillset

80+ = Extreme proficiency in skillset

100+ = Elite proficiency in skillset

NBA Draft Pick - Case Studies

Case #1 - The Immediate Superstar (NCAA)

Case #1 - The Immediate Superstar (NCAA)

This draftee is a young, elite prospect who will be 19 or younger during his Pre-Draft Season (PDS).

He displayed extremely elite NCAA production as a Freshman at a young age through a GOLD C-RAM as well as other outlier benchmarks.

He played for Top NCAA program within a Top 7 conference.

We have historically seen this player in the very early lottery, and at times has been the consensus 1st overall choice. He will be an immediate contributor to an NBA team and can be the focal point of a franchise rebuild. He will achieve a SILVER C-RAM (Top 10%) in the NBA at age 21 or earlier.

Zion Williamson- 1st pick, 2019

YEAR	Team	RAM	C-RAM	Age	MPG	PSP	3PE	FGS	BMS	DSI
2018-19	Duke	1066.0	15.0	18.2	30.0	103.1	59.9	58.8	89.7	100.4
2019-20	NO Pelicans	763.8	8.7	19.2	27.8	93.5	52.1	58.3	74.7	71.3
2020-21	NO Pelicans	929.2	10.3	20.2	33.2	103.6	41.5	69.9	77.9	74.7

PDS Qualifiers:

- GOLD C-RAM
- Age: Under 19 for Freshman Season
- Class: Freshman at Top NCAA Program
- At least 1 outlier characteristic:
 - 14.0+ C-RAM
 - 1 or more 110.0+ 5MS score
 - 2 or more 100.0+ 5MS scores
 - 3 or more 90.0+ 5MS scores

Career Trends:

- Immediate NBA contributor
- SILVER C-RAM by age 21 (Top 10%)
 - PSP dips a bit but stabilizes with NCAA->NBA jump
 - Franchise cornerstone

Other Examples

YEAR	Team	RAM	C-RAM	Age	MPG	PSP	3PE	FGS	BMS	DSI
2011-12	Kentucky	1036.8	15.3	18.6	32.0	76.1	28.3	53.6	91.8	117.4
2012-13	New Orleans Hornets	657.2	8.3	19.6	28.8	66.9	0.0	48.1	77.1	92.5
2013-14	New Orleans Pelicans	866.3	10.8	20.6	35.2	82.5	0.0	55.2	83.0	96.9
2014-15	New Orleans Pelicans	1055.4	12.8	21.6	36.1	90.7	0.0	61.9	83.4	105.0

Anthony Davis - 1st pick, 2012

YEAR	Team	RAM	C-RAM	Age	MPG	PSP	3PE	FGS	BMS	DSI
2017-18	Oklahoma	803.1	11.3	19.0	35.4	93.5	92.1	90.2	55.4	76.4
2018-19	Atlanta Hawks	637.7	7.4	20.0	30.9	75.6	75.7	89.0	54.9	65.8
2019-20	Atlanta Hawks	824.9	9.4	21.0	35.3	97.4	90.2	92.4	56.9	65.8
2020-21	ATL Hawks (Playoffs)	779.2	9.5	22.0	37.9	94.9	84.6	93.7	48.8	66.6

Trae Young - 5th pick, 2018

2021 Prospects

<u>PDS Qualifiers:</u>	Cade Cunningham	Jalen Suggs	Evan Mobley	Scottie Barnes
C-RAM: 10.0+	X		X	
<u>Outlier Qualifiers:</u>				
C-RAM: 14.0+				
5MS: 1 110.0+				
5MS: 2 100.0+				
5MS: 3 90.0+				
<u>Biometric Qualifiers:</u>				
Age: 19 or less	X	X	X	X
Class: Freshman	X	X	X	X
Top Program/Conf	X	X	X	X

Case #1 - The Immediate Superstar (NCAA)

Evan Mobley (USC) came the closest to fitting the mold, with his 12.5 C-RAM and 98.7 DSI. His PSP and BMS are not quite strong enough to hit the mark however, implying that while he certainly can be a star, it might take some time.

Cade Cunningham (Oklahoma St) also came close however failed to hit one of the outliers. His well-rounded 5MS implies star power in his future, but again maybe not immediately.

Jalen Suggs (Gonzaga) and Scottie Barnes (Florida St) failed to hit the C-RAM threshold of 10.0 as well as any outliers.

NBA Draft Pick - Case Studies

Case #2 - The Superstar from Abroad (INTL)

Case #2 - The Superstar from Abroad (INTL)

This draftee is a young, elite prospect who played overseas during his Pre-Draft Season (PDS).

He displayed all-star level production at a young age through a SILVER C-RAM as well as other outlier benchmarks.

He played in a relatively major International League, in their top tier.

We have historically seen this player in various stages, from early lottery to the 2nd round. In more recent years, international prospects have been getting more attention earlier in the draft. He can be the focal point of a franchise rebuild, and his game will carry over well due to his experience in professional leagues. He can achieve an elite GOLD C-RAM (Top 2%) in the NBA by his 3rd season.

Luka Doncic - 3rd pick, 2018

YEAR	Team	RAM	C-RAM	Age	MPG	PSP	3PE	FGS	BMS	DSI
2017-18	Real Madrid	645.5	8.7	18.7	24.0	66.2	65.0	78.2	64.7	77.1
2018-19	Dallas Mavs	755.5	8.7	19.7	32.2	81.0	79.5	80.9	69.3	71.2
2019-20	Dallas Mavs	946.1	10.7	20.7	33.6	97.7	82.5	91.1	74.5	64.1
2020-21	DAL Mavs (Playoffs)	1080.2	13.0	21.7	40.2	112	99.7	95.7	70.9	70.2

PDS Qualifiers:

- SILVER C-RAM
- Age: Under 20
- League: Top tier INTL League
- At least 1 outlier characteristic:
 - 10.0+ C-RAM
 - 3 or more 80.0+ 5MS scores
 - 4 or more 70.0+ 5MS scores
 - 5 or more 60.0+ 5MS scores

Career Trends:

- Immediate NBA contributor
- GOLD C-RAM by 3rd season (Top 2%)
 - PSP and FGS carry over strongly
 - DSI as well, but less so
 - Franchise cornerstone

Other Examples

YEAR	Team	RAM	C-RAM	Age	MPG	PSP	3PE	FGS	BMS	DSI
2014-15	KK Mega Bemax	758.8	8.7	19.7	30.5	74.6	72.8	69.4	79.7	82.9
2015-16	Denver Nuggets	585.4	7.1	20.7	21.7	59.8	51.9	63.8	72.6	79.9
2016-17	Denver Nuggets	846.5	9.9	21.7	27.9	81.4	57	77.1	83.6	74.4
2017-18	Denver Nuggets	889.2	10.5	22.7	32.6	80.4	75.8	82.3	82.2	77.8

Nikola Jokic - 41st pick, 2014 - 2021 NBA MVP

YEAR	Team	RAM	C-RAM	Age	MPG	PSP	3PE	FGS	BMS	DSI
2019-20	Illawarra Hawks	702.8	9.1	18.1	30.8	66.6	67.4	86.8	66.2	78.5
2020-21	Charlotte Hornets	673.8	7.6	19.1	28.8	70.7	76.8	82.3	64.7	77.3

LaMelo Ball - 3rd pick, 2020 - 2021 NBA ROY

2021 Prospects

<u>PDS Qualifiers:</u>	Roko Prkacin	Usman Garuba	Alperen Sengun	Josh Giddey	Filip Petrushev
C-RAM: 8.5+			X	X	X
<u>Outlier Qualifiers:</u>					
C-RAM: 10.0+			X		X
5MS: 3 80.0+			X		
5MS: 4 70.0+					X
5MS: 5 60.0+	X				
<u>Biometric Qualifiers:</u>					
Age: 20 or less	X	X	X	X	
Top Flight League	X	X	X	X	X

Case #2 - The Superstar from Abroad (INTL)

Alperen Sengun (Besiktas Sompso Japan) is the only prospect who meets all of the criteria, however he is coming from a slightly weaker league (Turkish BSL). Still he projects to be a very solid prospect and could very well be the foundational piece for a franchise, as he turns 19 just before the draft.

Filip Petrushev (KK Mega Bemax) came very close to meeting all the criteria, however he barely misses the age qualification (20.5 years old). Despite this, his superior performance in the Adriatic League makes him a very enticing prospect, and he also has the potential to be a franchise centerpiece.

Roko Prkacin (KK Cibona), Usman Garuba (Real Madrid) both miss the outlier criteria, but their age makes them raw prospects with potential and time. Josh Giddey (Adelaide 36ers) just barely missed the 5 60.0+ 5MS benchmark, with his 58.1 PSP and is also promising.

NBA Draft Pick - Case Studies

Case #3 - The Eventual Star

Case #3 - The Eventual Star

This draftee is an elite prospect who displays some, but not all, of the qualities of the Instant Superstars.

He displayed elite level production with at least a SILVER C-RAM in the NCAA as well as meeting 5MS benchmarks during his Pre-Draft Season (PDS).

He played in NCAA DIV I, and ideally but not necessarily a top conference.

We have historically seen this player selected at various stages of the 1st round, ranging from the early lottery to the late first. He can become a very integral part of a rebuilding franchise and can thrive in a duo next to another star player. His game will take some time to develop and mature. He can achieve a strong SILVER C-RAM (Top 10%) or better in the NBA by age 25.

Brandon Ingram - 2nd pick, 2016

YEAR	Team	RAM	C-RAM	Age	MPG	PSP	3PE	FGS	BMS	DSI
2015-16	Duke	716.7	10.4	18.0	34.6	75.0	84.3	58.3	72.2	86.8
2016-17	LA Lakers	453.3	5.5	19.0	28.8	51.0	57.4	60.4	55.2	68.8
2018-19	LA Lakers	635.5	7.4	21.0	33.8	77.2	56.9	65.4	61.9	61.9
2020-21	NO Pelicans	777.1	8.7	23.0	34.3	88.8	83.3	76.9	61.1	69.0

PDS Qualifiers:

- C-RAM: 8.5+, higher C-RAM improves draft stock
- Age: Under 20 for NCAA Freshman season
- Hits at least 1 5MS Benchmark:
 - 2 or more 80.0+ 5MS scores
 - 3 or more 70.0+ 5MS scores

Career Trends:

- Adjustment period in NBA
- SILVER C-RAM by age 25 (Top 10%)
- PSP and FGS carry over strongly
DSI as well, but less so
- Important piece to rebuilding franchise

Other Examples

YEAR	Team	RAM	C-RAM	Age	MPG	PSP	3PE	FGS	BMS	DSI
2015-16	Gonzaga	765.3	11.0	19.5	31.9	84.0	37.9	55.2	88.4	71.0
2016-17	OKC Thunder	371.6	4.6	20.5	20.1	41.7	57.6	49.1	52.9	64.7
2018-19	Indiana Pacers	688.3	8.0	22.5	24.8	75.0	42.9	65.2	80.4	65.7
2020-21	Indiana Pacers	921.1	10.2	24.5	36.0	84.9	60.5	84.0	84.2	71.4

Domantas Sabonis - 11th pick, 2016

YEAR	Team	RAM	C-RAM	Age	MPG	PSP	3PE	FGS	BMS	DSI
2016-17	Duke	663.1	9.6	18.7	33.3	72.7	71.2	58.5	70.0	79.4
2017-18	Boston Celtics	612.2	7.4	19.7	30.5	68.8	75.4	55.5	62.0	78.3
2018-19	Boston Celtics	640.9	7.5	20.7	31.1	70.6	74.5	60.3	64.8	80.2
2020-21	Boston Celtics	856.3	9.5	22.7	35.8	93.2	88.5	73.5	68.9	76.2

Jayson Tatum - 3rd pick, 2017

YEAR	Team	RAM	C-RAM	Age	MPG	PSP	3PE	FGS	BMS	DSI
2016-17	Louisville	639.4	9.3	20.1	32.3	69.4	82.3	65.6	61.4	89.4
2017-18	Utah Jazz	654.8	7.9	21.1	33.4	80.3	81.2	69.9	55.4	74.5
2019-20	Utah Jazz	719.4	8.2	23.1	34.3	87.5	83.9	73.5	58.4	66.5
2020-21	Utah Jazz	779.7	8.7	24.1	33.4	92.4	92.2	78.1	59.5	69.0

Donovan Mitchell - 13th pick, 2017

2021 Prospects

<u>PDS Qualifiers:</u>	Jalen Suggs	Jalen Johnson	James Bouknight	Franz Wagner	Moses Moody	Ziaire Williams
C-RAM: 8.5+	X	X	X	X	X	
<u>5MS Qualifiers:</u>						
5MS: 2 80.0+						
5MS: 3 70.0+	X					
5MS: 4 65.0+	X		X	X	X	
<u>Biometric Qualifiers:</u>						
Age: 20 or less as Fr.	X	X	X	X	X	X
NCAA DIV I	X	X	X	X	X	X

Case #3 - The Eventual Star

Jalen Suggs (Gonzaga), James Bouknight (Connecticut), Franz Wagner (Michigan) and Moses Moody (Arkansas) meet all the criteria. This group of players projects to be very successful down the line, but might take some time to develop into their respective roles. In the right situations, these players can become All-Stars and extremely integral parts of their respective franchises.

Jalen Johnson (Duke) came extremely close to meeting all the criteria, but just failed with his 63.5 3PE. Despite this, he can become a very impactful and important player for an NBA team. Ziaire Williams (Stanford) missed all of the metric criteria.

NBA Draft Pick - Case Studies

Case #4 - The Raw Bigman (F/C)

Case #4 - The Raw Bigman (F/C)

This draftee is a raw prospect, who will be under the age of 20 at the time of the draft.

He displayed strong BMS and DSI in his PDS, and thrives in the role of a rim runner and protector. He does not need to play large minutes during his PDS, but his production must be strong relative to his minutes.

He has a wingspan of at least 7' and has played in a Top 7 NCAA conference.

We have historically seen this player at various stages, depending on PDS C-RAM and biometrics. He will take time to develop and adjust to NBA defensive schemes and might not make the rotation in his first few seasons, but will post an efficient C-RAM on low minutes per game when he does get opportunity.

Jakob Poeltl - 9th pick, 2016

7'1" wingspan

Year	Team	RAM	C-RAM	Age	MIN/G	BMS	DSI	BMS: MIN	DSI: MIN
2014-15	Utah	616.2	9.3	19.0	23.3	81.8	83.2	2.6	2.7
2015-16	Utah	807.4	11.6	20.0	30.4	85.2	82.4	2.2	2.0
2016-17	Toronto Raptors	359.5	4.5	21.0	11.6	59.6	67.4	2.4	3.2
2017-18	Toronto Raptors	534.7	6.5	22.0	18.6	72.1	78.3	2.4	2.9
2020-21	SA Spurs	661.2	7.5	25.0	26.7	82.6	88.5	2.3	2.8

PDS Qualifiers:

- BMS and DSI > 70.0
- BMS:MIN/G Ratio > 1.8
- DSI:MIN/G Ratio > 1.8
- Age: Under 19 for Freshman Season
- Wingspan: 7'+, Top 7 NCAA Conference
- C-RAM: 7.0+, Higher C-RAM improves draft stock

Career Trends:

- Low Min/G in early NBA seasons
- Small but not extreme dips in BMS/DSI from NCAA -> NBA relative to MIN
- Performance improves over time (RAM and C-RAM)
- Rotation spot increases over time

Other Examples

Year	Team	RAM	C-RAM	Age	MIN/G	BMS	DSI	BMS:MIN	DSI:MIN
2019-20	USC	822.4	11.7	18.9	30.6	85.6	95.7	2.2	2.9
2020-21	Atlanta Hawks	441.2	5.1	19.9	12.0	62.3	75.4	2.6	4.1

Onyeka Okongwu - 6th pick, 2020 - 7'1" wingspan

Year	Team	RAM	C-RAM	Age	MIN/G	BMS	DSI	BMS:MIN	DSI:MIN
2017-18	Arkansas	617.2	8.8	19.0	22.6	76.1	83.5	2.2	2.8
2018-19	Arkansas	774.3	11.0	20.0	28.7	85.4	85.7	2.3	2.4
2019-20	Chicago Bulls	489.9	5.8	21.0	14.2	62.5	75.9	2.2	3.5
2020-21	WAS Wizards	652.8	7.4	23.0	17.7	77.4	92.2	3.0	4.6

Daniel Gafford - 38th pick, 2019 - 7'2.5" wingspan

Year	Team	RAM	C-RAM	Age	MIN/G	BMS	DSI	BMS:MIN	DSI:MIN
2016-17	UNC	474.0	7.0	18.8	14.6	70.9	74.7	2.9	3.3
2018-19	Utah Jazz	392.2	4.8	20.8	12.0	68.8	82.0	3.3	5.1
2019-20	Utah Jazz	465.3	5.5	21.8	11.4	70.6	70.2	3.7	3.6
2020-21	OKC Thunder	575.0	6.5	22.8	18.0	75.9	76.5	2.8	2.8

Tony Bradley - 28th pick, 2017 - 7'5" wingspan

2021 Prospects

<u>PDS Qualifiers:</u>	Evan Mobley	Hunter Dickinson	Isaiah Jackson	DayRon Sharpe	Moussa Cisse
BMS: 70.0+	X	X	X	X	X
DSI: 70.0+	X	X	X	X	X
BMS Ratio: 1.8+	X	X	X	X	X
DSI Ratio: 1.8+	X	X	X	X	X
C-RAM: 7.0+	X	X	X	X	
<u>Biometric Qualifiers:</u>					
Age: 19 or less			X	X	X
Wingspan: 7'+	X	X	X	X	X
Top 7 Conference	X	X	X	X	X

Case #4 - The Raw Bigman (F/C)

Isaiah Jackson (Kentucky) and Day'Ron Sharpe (UNC) are the only two players to fully fit the mold. If placed in a good situation - as a backup C on a team with scorers and playmakers - they have the potential to be impactful in their rookie seasons. If drafted by a team not chasing Ws, they will have the opportunity to garner more experience. As seen with historical raw bigmen, it will likely take time for these players to develop.

While missing the age qualification, Evan Mobley has a top tier DSI and all-around potential, and thus will be considered with a high lottery pick.

Hunter Dickinson's size and mobility may prevent him from draft consideration, while Cisse - who is extremely young - did not perform well enough in Memphis.

NBA Draft Pick - Case Studies

Case #5 - The Immediate Contributor (G/F)

Case #5 - The Immediate Contributor (G/F)

This draftee is a more ready-made NBA contributor, who has multiple years of NCAA experience under his belt.

He is a stronger 3-point shooter and defender, and thrives in a low-usage role next to a primary playmaker(s). He showed strong improvement in PSP throughout his time in the NCAA.

He is at least 6'6" in order to defend NBA players, and has played in a Top 7 NCAA conference. He received at least 30 MIN/G in his Pre-Draft Season (PDS).

We have historically seen this player selected in the 10-20th pick range - he is not a player you want to rebuild a franchise around, but instead a crucial piece for a work-in-progress. He can achieve a 6.0 C-RAM in his rookie season, placing him above the league average immediately.

Saddiq Bey - 19th pick, 2020

Year	Team	RAM	C-RAM	MPG	PSP	3PE	FGS	BMS	DSI
2018-19	Villanova	537.1	7.8	29.6	53.9	73.3	54.8	67.8	79.9
2019-20	Villanova	679.8	9.7	33.9	76.7	89.7	62.9	64.6	71.1
2020-21	Detroit Pistons	554.3	6.3	27.3	63.8	85.5	55.5	58.9	70.6

Trends for Pre-Draft Season (PDS):

- Approx 20-Point PSP jump
- PSP clears 75
- 3PE clears 85
- DSI above 70
- FGS/BMS above 55
- 9.5+ C-RAM

Biometric/Style Trends for PDS:

- In a Top 7 Conference
- Multiple years of NCAA experience
- Low Usage player, around 20%
 - 30+ MPG in PDS
- Height of 6'6" or higher

Other Examples

YEAR	TEAM	RAM	C-RAM	MIN/G	PSP	3PE	FGS	BMS	DSI
2016-17	Maryland	578.3	8.4	29.4	56.3	80.1	65.8	62.3	80.1
2017-18	Maryland	680.6	9.6	34.4	75.7	85.7	68.1	66.3	67.5
2018-19	Atlanta Hawks	515.2	6.1	27.3	56.5	79.1	67.3	55.1	71.8
2019-20	Atlanta Hawks	587.4	6.8	31.4	62.6	83.4	72.9	57.5	71.8
2020-21	Atlanta Hawks	586.7	6.7	30.8	62.7	79.4	73.0	54.1	78.0

Kevin Huerter - 19th pick, 2018

YEAR	TEAM	RAM	C-RAM	MIN/G	PSP	3PE	FGS	BMS	DSI
2016-17	Pittsburgh	619.9	9.0	33.3	66.0	86.6	63.7	61.3	71.5
2017-18	UNC	584.1	8.3	29.3	63.3	76.0	64.5	63.4	73.3
2018-19	UNC	752.2	10.7	29.9	81.9	92.1	63.2	71.6	82.2
2019-20	Phoenix Suns	514.6	6.0	22.0	56.9	81.0	56.5	57.6	74.9
2020-21	Phoenix Suns	512.4	5.9	24.0	57.7	79.1	58.0	54.9	71.9

Cameron Johnson - 11th pick, 2019

2021 Prospects

<u>Metric Trends (for PDS):</u>	Isaiah Livers	Davion Mitchell	Corey Kispert	Trey Murphy III	Chris Duarte	Sam Hauser	Joe Wieskamp
PSP: 20 point improvement	X	X	X		X	X	
PSP: 75.0+		X	X		X	X	X
3PE: 85.0+	X	X	X	X	X	X	X
DSI: 70+	X	X	X	X	X	X	X
FGS/BMS: 55.0+	X		X	X	X	X	X
C-RAM: 9.5+	X	X	X		X	X	X
<u>Biometric Trends:</u>							
Top 7 Conf + Multiple NCAA years	X	X	X	X	X	X	X
Low Usage%	X		X	X	X	X	X
30+ MIN/G	X	X	X	X	X	X	X
Height: 6'6"+	X		X	X	X	X	X

Case #5 - The Immediate Contributor (G/F)

Corey Kispert (Gonzaga), Chris Duarte (Oregon), Isaiah Livers (Michigan), Sam Hauser (Virginia), and Joe Wieskamp (Iowa) fit this mold the best. If placed in a good situation - as a 3rd or lower scoring option on a team with a strong playmaker - they have the potential to be extremely impactful in their rookie years. Kispert and Duarte are the only above-mentioned players with 1st Round buzz currently.

Davion Mitchell is too strong of a playmaker and a higher usage player and thus will be considered for a larger role with a higher lottery pick.

Trey Murphy III met all of the criteria besides achieving a 9.5 C-RAM and 75.0 PSP, thus indicating that while he fits the mold, his performance might not be strong enough.

Thank You