

# ***March Madness Workshop***

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# Objectives

- Understand what the National Collegiate Athletic Association (NCAA) is
- Be prepared for *March Madness = College Basketball Tournament in March*
- Calculate and understand the NCAA Evaluation Tool (NET)
- Be able to fill out a “bracket”
- Understand what the selection committee is and how they choose teams to be in the tournament (Analytics and Statistics) – 364 total teams but only 64 spots in division I

# National Collegiate Athletic Association (NCAA)

- Non-profit association
- Oversees athletes of 1,281 institutions (~5,300 total colleges and Universities)
- [Awards 90 national championships yearly](#)
- Divided into three divisions, generally based on school size
  - Division I
  - Division II
  - Division III



# Fordham University – Division I

<https://fordhamsports.com/>



# Men's College Basketball

- College basketball season begins in November and ends in March with an end of year *March Madness* tournament where a championship is won by one university
- 364 total teams in Division I men's college basketball
- Teams play approximately 30 games during the regular season and if they make the tournament, can play upwards of 6 more
- The 32 teams that win their conferences make the tournament; the other 36 teams are chosen by a selection committee
  - Later we will discuss how these 36 teams are chosen

# NCAA Division I Men's Basketball Conferences

- 364 total schools (i.e. Fordham)
- 32 total conferences
- Conferences decided on geography, how school has performed and potential revenue for the rest of the teams



# NCAA Division I Conferences

Atlantic 10 Conference

# Fordham Women's Basketball

Atlantic 10 Conference



# Rankings and RPI (Old News) vs. NET

- Main rankings:
  - [Associated Press](#)
    - Rankings are compiled by polling 65 sportswriters and broadcasters from across the nation. Each voter provides his own ranking of the top 25 teams, and the individual rankings are then combined to produce the national ranking by giving a team 25 points for a first place vote, 24 for a second place vote, and so on down to 1 point for a twenty-fifth place vote
  - [NET \(NCAA Evaluation Tool\)](#)
    - RPI (Old System)
  - [USA Today](#)
    - Compiled by the USA Today Sports Board of Coaches which is made up of 32 head coaches at Division I institutions. All are members of the National Association of Basketball Coaches (NABC)
  - [College Basketball Power Index \(BPI\)](#)
    - The College Basketball Power Index (BPI) is a measure of team strength that is meant to be the best predictor of performance going forward. BPI represents how many points above or below average a team is. Strength of Record (SOR) is a measure of team accomplishment based on how difficult a team's W-L record is to achieve. Game predictions account for opponent strength, pace of play, site, travel distance, day's rest and altitude, and are used to simulate the season 10,000 times to produce season projections. Numbers update daily.

# Rankings and RPI

- RPI = Rating Percentage Index
  - Used to rank teams based on wins, losses and strength of schedule

$$\text{RPI} = (\text{WP} * 0.25) + (\text{OWP} * 0.50) + (\text{OOWP} * 0.25)$$

- WP = Winning Percentage (A home win counts as 0.6 win, while a road win counts as 1.4 wins. Inversely, a home loss equals 1.4 losses, while a road loss counts as 0.6 loss. A neutral game counts as 1 win or 1 loss.)
- OWP = Opponents' Winning Percentage
- OOWP = Opponents' Opponents' Winning Percentage

# NET

*The NCAA Evaluation Tool, which will be known as the NET, relies on **game results, strength of schedule, game location, scoring margin, net offensive and defensive efficiency, and the quality of wins and losses.** To make sense of team performance data, late-season games (including from the NCAA tournament) were used as test sets to develop a ranking model leveraging machine learning techniques. The model, which used team performance data to predict the outcome of games in test sets, was optimized until it was as accurate as possible. The resulting model is the one that will be used as the NET going forward.*

# N.E.T. NCAA EVALUATION TOOL RANKING



## 1 TEAM VALUE INDEX

Algorithm set up to reward teams who beat other good teams. Results-oriented component of the N.E.T.

\*Game results versus Division I opponents only.

BASED ON:

GAME RESULTS\*

FACTORS:

OPPONENT

LOCATION

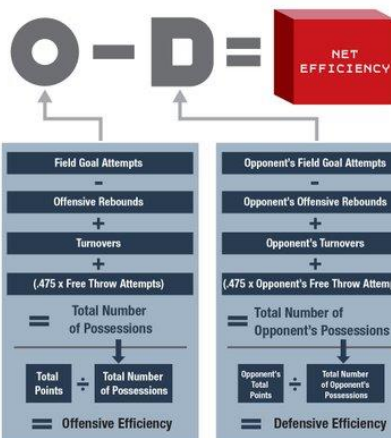
WINNER

TEAM  
VALUE  
INDEX  
SCORE



## 2 NET EFFICIENCY

Offensive efficiency minus defensive efficiency.



## 3 WINNING PERCENTAGE

Same calculation for any sport.



## 4 ADJUSTED WIN PERCENTAGE

Weighted value based on location and result.



## 5 SCORING MARGIN

Point differential capped at 10 points in each game.\*



\*All overtime games are capped at 1 point.

NOTE: "Quadrant system" will still be utilized for selections, and the N.E.T. is how those games will be sorted into those quadrants. Components listed in descending order of weight in the N.E.T. calculation.



Official Cloud of the NCAA\*

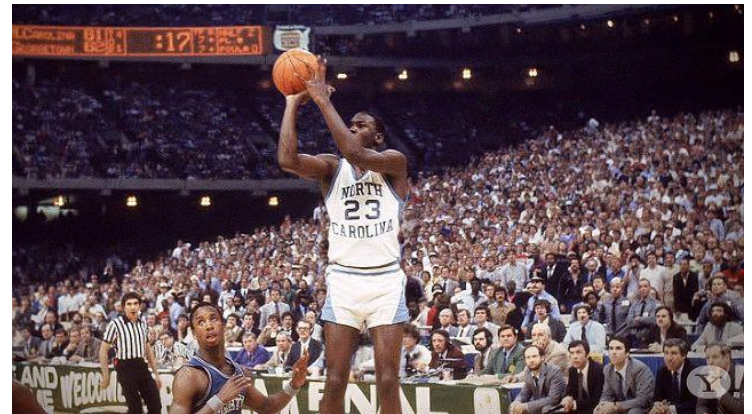
The NCAA Evaluation Tool was developed in partnership with the NCAA and Google Cloud. NCAA and March Madness are trademarks of the National Collegiate Athletic Association. All other licenses or trademarks are the property of their respective owners.

# March Madness by the Numbers

- \$10 billion wagered (bet) on tournament (\$300 million legally in Las Vegas) (*American Gaming Association*)
- 98 million live video streams (*USA Today*)
  - 35 hours of coverage during 9AM – 5PM shift
  - 24% of respondents in a survey said they watched games during a meeting (*Intuits TSheets*)
- Nearly 40 million Americans will fill out a total of 70 million brackets this year, or bet a total of \$2 billion (*American Gaming Association*)
- Americans distracted by March Madness will cost their employers \$2.3 billion (*Challenger, Gray & Christmas*)
- CBS and Turner paid \$8.8 billion for NCAA March Madness rights through 2032 (*Variety.com*)
- Warren Buffet's \$1 billion offer for perfect bracket

# NCAA Men's Division I Basketball Championship

- Created in 1939
- Single Elimination Tournament – if you lost, you're out!
- Also known as “March Madness” or the “Big Dance”
- 68 total teams
  - 32 Conference Champions (automatic)
  - 32 “at-large” (chosen by NCAA selection committee)
  - 4 play-in games
- “Selection Sunday”
  - Committee divides 64 teams into four regions and ranks or “seeds” each team from 1 to 16



Yahoo! Sports

# NCAA Men's Division I Basketball Championship

- Divided into four (4) regions – each regions has 16 teams (one play-in game)
  - West
  - South
  - East
  - Midwest
- Selection committee ranks all 64 teams and divides them amongst the regions. Top four (4) teams get a number 1 seed or rank within their region.
- Games are played at neutral sites



# 2024 Bracket



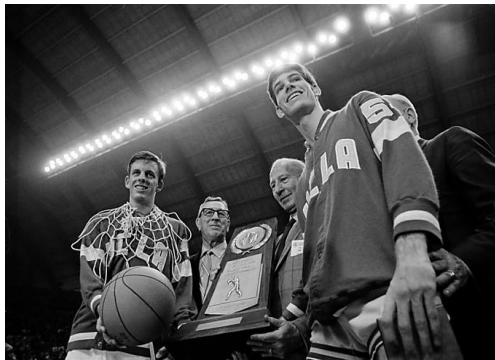
# NCAA Men's Division I Basketball Championship

- Six (6) total rounds
  - The First Round
  - The Second Round or “Field of 32”
  - Sweet Sixteen
  - Elite Eight
  - Final Four
  - National Championship
- Fordham last made the tournament in 1992
- [Performance of Seeds](#)



# NCAA Men's Division I Basketball Championship

- In 2018, UMBC became the first No. 16 seed to defeat a No. 1 seed in the men's tournament, shocking Virginia 74–54.
  - The No. 1 seed is 154–2 against the No. 16 seed
  - The No. 2 seed is 145–11 against the No. 15 seed
  - The No. 3 seed is 133–23 against the No. 14 seed
  - The No. 4 seed is 123–33 against the No. 13 seed
  - The No. 5 seed is 118–58 against the No. 12 seed
  - The No. 6 seed is 109–67 against the No. 11 seed
  - The No. 7 seed is 109–70 against the No. 10 seed
  - The No. 8 seed is 91–89 against the No. 9 seed Source: [mcubed.net](http://mcubed.net)
- UCLA has won the most championships (11)
- In 1985, Villanova as an 8-seed was lowest to win the tournament



*Washington Post*



*time.com*

# Most Successful Low Seeds

# Terms

- *Cinderella Team*
- *Sweet 16*
- *Elite 8*
- *Final Four*
- *March Madness*
- *Seeds*
- *Selection Sunday*
- *Cutting Down the Net*
- *Bracket Buster*
- *Bracketology*



skysports.com

# Great Moments

- *Christian Laettner*
- *Drew Nicholas*
- *Bryce Drew*
- *Lorenzo Charles*
- *Mario Chalmers*
- *Kris Jenkins (Villanova)*