Using Strategy and BracketBrains.com Odds to Win NCAA Bracket Pools

Thoughts on Winning NCAA Tournament Pools from the Nerds at TeamRankings.com

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You have one goal in your bracket pool: to win.
You need to do one thing to win: outperform your competitors.

The reality that many college basketball fans either don't realize (or don't care to admit) is that winning an NCAA bracket pool has less to do with the number of games you pick correctly than you think.

In fact, smart NCAA bracket strategies focus first on the teams that your competitors are picking. These strategies recognize that you gain nothing by picking winners that your competition picks too. On the other hand, finding even just a few situations where you can go against popular sentiment with the odds in your favor can make all the difference between first and twentieth place.

Independent of any knowledge about your bracket competitors, over the long term, BracketBrains should serve as a valuable tool for improving your office pool performance. But once you learn to use it as means to identify undervalued NCAA tournament teams, it becomes a lethal weapon.

Brace yourself, because this is not going to be easy. You'll need to find a way to ignore your personal biases about teams that you've watched play and teams you like. You'll have to face the ridicule of the guys at the sports bar. You'll also need to block out all the hype and misinformation shoveled at you by the media, the bloggers, and your best friend who thinks he knows college hoops better than 99% of people in the galaxy.

We personally employ the bracket strategies outlined in this paper and consistently place in the top 10% of our bracket pools, including a two first place finishes and three second place finishes in seven tries over the past three years, all in pools of 15+ people.

We have achieved this performance despite the fact that the vast majority of college hoops fans out there watch many more games each year than we do. Look, I'll admit it right now. I barely watch any college hoops before the NCAA tournament. Off the top of my head, I can't name more than two or three players on any college hoops team except Stanford, my alma mater. Actually, now that the Lopez twins are gone, I take that back.

With only 64 games to pick in a bracket, it's a mathematical reality that luck can play a significant role in determining who wins your pool. Consequently, your ultimate goal is to employ systematic and repeatable tactics that position you for a shot at the title year

after year. Fortune favors the well informed, and used together, BracketBrains and the strategies outlined below should help you achieve consistent high performance in bracket competitions. Guaranteed to win? No way. But you should be in the top 20% way more often than the bottom 20%.

Step 1: Know Your Enemy

Odds are that you know most or at least some of the people in your bracket pool. You know where they live. You know where they hang out. You probably have a sense of which of them are avid followers of college hoops. These are your enemies.

As with any tactical operation, you're only as good as your intel. So you need to gather it. Go deep undercover. Lurk around the sports bar. Buy your enemies a beer and ask them what teams they like, which they think are the can't-miss picks. Find out who they think the sleepers are, and especially, what teams they think will go deep in the tourney.

Keep a little list of the team names that you keep hearing mentioned. Better yet, find a crafty way to get your adversaries to show you their bracket sheets, or view them online if you can. Getting a competitor to show you their bracket is like asking Achilles to expose his heel, but many people are so proud of their picks they'll gladly share.

Most importantly, bookmark the pages on major bracket pool sites like ESPN and Yahoo! that publish information on the percentages of people who are picking each of the teams throughout the tournament. This information represents the public's implied valuation of each team, which should serve as the foundation for determining your own bracket strategy. The two links below are worth their kilobytes in bracket gold

http://tournament.fantasysports.yahoo.com/t1/group/all/pickdistribution

http://games.espn.go.com/tcmen/nationalBracket

Step 2: Use Win Odds to Identify Value Picks

Once you have a sense of what your opponents are thinking, you can begin plotting their destruction. For starters, take everything that any talking head has ever told you about how to pick a bracket and forget it. Even if you need to watch fifteen reruns of *Charles In Charge* to block conventional bracket picking wisdom out of your mind, do it.

With this fresh slate, your new objective is simple. Your mission is to find as many games as possible that feature large differences between:

1. The odds to win of each team in a bracket matchup, as computed by BracketBrains, and…

2. Your best estimate of the percentage of people in your bracket pool that will pick each of the two teams in question

Unless you're in a very small pool where you know everyone's picking tendencies, the best approach for #2 is to use the Yahoo/ESPN user picks data as your starting point, and then apply some subjective adjustment.

For example, if your pool is full of people from Memphis, odds are that most of them are irrationally biased towards the Tigers, at least more than the average American bracketologist. So play the odds. Bump up the Yahoo/ESPN numbers a few points for Memphis; ditto if you know the favorite teams of other perennial contenders in your pool.

Let's apply this analysis technique to a specific example. As of Tuesday morning, according to the ESPN numbers, so far about 80% of the ESPN users had picked #5 Florida State to beat #12 Wisconsin in the opening round. Both win odds models in BracketBrains, though, had Wisconsin's win odds pegged in the 40% range. Who should you pick?

No one is denying who's the favorite in this game: Florida State is still the expected winner according to BracketBrains. So if you were only trying to maximize your expected number of winners picked, you would pick the Seminoles.

However, with the valuable information you now have about how the public is leaning, Wisconsin could be a strong upset call. If the BracketBrains projections are accurate, for a 60% chance of missing out on some points, you gain the potential benefit of differentiating your pick from 80% of the competitors in your office pool. That's strategic knowledge.

There are some caveats for applying this logic. For example, you need to be extra careful about making an upset pick over a team that BracketBrains analysis shows has strong odds of going deep in the tournament. In the case above, you can use BracketBrains to do some scenario analysis.

First, advance Florida State to the 2nd round, and model their win odds against either of their two potential opponents in that round. If it turns out that Florida State doesn't have very good odds to make it past the second round, then Wisconsin becomes an even more attractive upset pick – there's low downside even if your upset call is wrong.

However, if Florida State looks like the odds-on favorite to go another round or more if they get past Wisconsin, then the benefit of picking the upset may not be worth the longer-term risk.

Step 3: Get Smart About Defining Upsets

Conventional wisdom regarding upset picking is all over the map. "Always pick one #12 seed over a #5 seed," right? Not so fast. It's true that since 1985, at least one #12 seed has won an opening round game more than 85% of the time. But that doesn't mean you should blindly follow the historical trend.

The cause of what most people call "trends" is often just random luck, and in addition, these "trends" do not take into account the specific matchup scenarios of this year's bracket field. With BracketBrains, you now have a powerful tool for examining the odds of all the #5 vs. #12 games, to give you a more educated viewpoint regarding whether 2009 is likely to be one of the rarer years when no #12 seeds win.

Your competition will most likely use seed numbers as their guideline for picking upsets. As a BracketBrains user, you're smarter than that. Especially in the 7-10 seed range, the NCAA Selection Committee historically has done a very poor job grading relative performance. By our analysis, a whole bunch of historical games in which a #10 seed beat a #7 would not be considered upsets according to our computed win odds.

You get the point here. Forget about seeds – all you should care about is win odds. When you come across games where the win odds for the higher seeded team are about the same (or worse) than the win odds of the lower seeded team, your opportunity buzzer should start humming. If you then notice that two teams with nearly equal win odds are more than one or two seeds apart, that buzzer should be waking up the neighbors.

As in Step 2 above, there are a few things to watch out for as you strategically choose upset picks based on odds. As you conduct game-by-game analysis, recognize that the lower the win odds of the teams you pick, the more risk you likely introduce into your overall bracket strategy (unless your competitors are doing the exact same thing).

For example, as of Tuesday morning, less than 1% of ESPN users had picked #15 Morgan State over #2 Oklahoma in the opening round, but both BracketBrains win odds models had Morgan State's win odds at nearly 10%. That is a huge difference: 10x the market expectation. Despite this difference, through, BracketBrains is still expecting Morgan State to lose this game 90% of the time.

Unless you are in a huge bracket pool or one that assigns a gigantic point premium for upsets that no one else picks, picking Morgan State is probably not a risk worth taking, especially since it means knocking out a good team in the first round. Also, even if Morgan State wins and you didn't pick them, 99% of your enemies likely did the same.

In short, keep your eyes peeled for games where teams that the public believes will lose have win odds close to or better than 50%. Remember that a team with 50-55% win odds in BracketBrains is by no means a strong favorite to win. That's toss-up territory.

In some cases it may make sense to get more risky. For example, if you see a team with 35% win odds that you are convinced no one else in your pool will pick, and you have the winner of that game losing in the following round anyway, it's probably worth picking the expected loser.

In cases like these, take a deep breath, count to ten, and remember: it doesn't matter if BracketBrains has technically "predicted" the other team to win. You are increasing your competitive edge by choosing the expected loser. That's a good thing.

Step 4: Develop a Risk-Driven Strategy

Now that you have a solid understanding of how to use BracketBrains and competitive intelligence to pick individual games and upsets, recognize that you also need to employ an overall strategy for your bracket pool.

Your high level strategy should be driven by one simple question: how much risk do I probably need to take to maximize my odds to win this pool? The answer to this question is critical, because it changes the logic you apply to many individual bracket decisions.

More than any other variable, the number of people in your bracket pool should determine whether you apply a risk-averse or risk-seeking strategy. The laws of probability are immutable: the more people you play against, the lower your odds of winning. If you're in a pool of 50,000 people, you'd better believe that you are not going to win that pool by picking all public favorites.

In a bracket pool of 10 people, on the other hand, it absolutely does not pay to get all wild and crazy with your picks. All else being equal, you're starting with 10% odds to win that pool, which isn't bad at all. Comparatively, you will pay a much larger premium for making risky picks than you do in the 50,000 person pool, where your base odds to win are .002%.

The amount of risk in your bracket is essentially a combination of three things:

- How many upsets you are pick
- The relative win odds of your upset picks
- How you balance your early-round and late-round picking strategies

Again, if you are in a pool with hundreds or thousands of people, it makes sense to make multiple long-odds upset picks. When you come across games where the difference between BracketBrains computed win odds and the public's perceived opinion are very large, you must have the confidence to pick the underdog, even if its odds to win are only 30% or even 20%.

Unfortunately – or fortunately, if you can do it -- few people can get themselves to play this way. It's emotionally difficult. Most bracketeers we talk to seem to think that the best way to win a huge pool is to pick mostly favorites (to maximize their odds of getting a decent score), but then make a few upset picks here and there, hoping that with a little luck those picks will come through and serve as the differentiators.

Just remember that probably 95% of your 49,999 competitors are thinking the same way. That means dozens of them are probably making the same few upset picks you are.

In a smaller pool, don't even think about making a lot of long shot odds picks. You still need to be strategic and use the principles outlined in Steps 1-3, but concentrate on upset picks where the perceived underdog actually has close to a 50% chance to win.

Step 5: Hedge Your Bets

In Step 4 we alluded to early and late round picking strategies and how they also drive the level of risk inherent in your bracket. Let's explain. With most standard scoring systems, there are two areas of the bracket that typically play a major role in determining who wins the office pool:

- The middle seeded early round games
- The games in the final few rounds

The middle seeded early round games are important because there are many of them, the performance levels between teams can be slight, and on account of the voodoo inherent in the NCAA tournament selection process, higher performing teams often hide behind lower seed numbers.

With BracketBrains, a balanced strategy, and a little bit of luck, you should be able to outperform the majority of your competitors in forecasting these games.

The late round games are a different story. With only a few games to pick between teams that likely have similar performance levels, luck plays a much greater role in your overall prediction accuracy across the last 5 to 13 games.

For example, in our 2008 bracket, we got all the picks right from the Final Four on. At this time last year, while researching our picks, BracketBrains analysis had made it clear to us that the odds of all four #1 seeds making the Final Four were high -- much greater than in prior years. That was largely good data at work. Picking Kansas over Memphis in the final, however, was as lucky as it comes.

You can't change the role that luck plays when huge points are on the line in one or two games. However, you can adopt a balanced bracket strategy that reduces your risk of performing terribly (perhaps keeping you in the hunt for a something like a third place prize) while still giving you a shot to win it all.

A balanced bracket strategy involves hedging your short and long term bracket bets. Hedging bets and managing risk is good. Back in the day before we knew what a sub-prime mortgage was, Wall Street traders with big yachts and mansions in the Hamptons made it big by effectively insuring themselves against incorrect bets. Your bracket strategy needs to borrow from their playbook.

One principle we employ is to concentrate risk in one, but not both, of the two critical bracket areas mentioned above. If you are conservative in choosing the winners of your

late stage games – let's say you've got #1 Louisville vs. #1 North Carolina in the final – then you're not differentiating yourself from many of your competitors with those decisions. In this case, a more aggressive upset picking strategy in the earlier rounds should increase your relative odds to win the entire pool if those two teams do end up playing in the final.

On the other end of the spectrum, if you've got #4 Gonzaga winning it all (which, incidentally, may represent a decent champion pick this year for huge pools), then it makes little sense to expose yourself to additional risk by also picking lots of early round upsets. In this case, the Zags as champions is your big gamble, and if they do it, there won't be many, or any, other folks sharing those points with you.

In this case, the most likely thing that could still compromise your first place status is an absolutely atrocious early bracket. So don't even risk it. If we picked Gonzaga as champion, we'd forget about upsets entirely and just pick whatever team BracketBrains listed as having the higher odds to win for every game during the first few rounds.

In smaller pools especially, this strategy of balancing late and early pick risk has proven highly effective for us over the years. We typically compete against 15 to 30 people in our pools. With that number of people, it usually takes some success at both ends of the bracket to win the pool, but an effective early or late round strategy alone can still secure a second or third place prize.

In a mega-pool, our strategy most likely would entail picking a relatively unconventional national champion or Final Four, *and* throwing in a several good odds-driven upset picks in the early rounds as well.

Step 6: Know the Rules of Your Pools

It sounds silly, but it's true. Most bracket pickers (a) don't give more than two seconds of thought to the actual point system of their pool before they (b) dive into the process of trying to choose as many correct winners as possible.

By now hopefully you understand why (b) is not always the optimal strategy.

Still, before you reach for that pencil to mark down your first bracket picks, make sure you are aware of the exact value each of your decisions carries. Think about it this way: if the NCAA made three pointers worth two points next year, who in their right mind would keep shooting from beyond the arc? Yet many people pick their brackets without so much as a glance at the scoring system.

There are probably thousands of permutations of bracket scoring rules out there, and we can't hope to outline specific tips for each one here. We've blabbed on long enough. Just remember two general guidelines:

- If you're playing with a traditional system that features increasing (typically doubling) point values as the rounds go on, with no bonus points for picking upsets, then a decision to take a team with good odds to make it deep into the tournament and eliminate it in the early rounds carries high risk. Before you pick any team to lose, use BracketBrains to see how they might fare versus probable future round opponents, compared to the upset team your thinking of picking. (Note: BracketBrains Bettor Pro users also can use the powerful round by round tournament win odds matrix at http://www.teamrankings.com/ncaa-tournament/bracket-odds/?tt=22)

- If your pool weights upsets heavily or assigns dynamic point values for correct picks based on how many other people also made the same pick, then your bracket should look entirely different. These types of pools call for strategy similar to the 50,000 person pool mentioned in earlier examples. Even if an underdog's win odds are less than 40%, picking that expected loser to win may still represent a much higher value choice.

Conclusion

A lot of people will read this article and say, "Whatever. Winning a bracket pool just comes down to luck anyway. Last year Joey in accounting won the pool and my great grandmother knows more about hoops than that stooge. And she lives in Siberia. Research like this doesn't mean anything in the end."

We don't disagree that winning any given year's bracket pool often requires luck. Randomness and probability dictate as much. However, when you adopt strategies that effectively adjust for your competition's biases and enable you to understand odds more precisely, you at least need *less* luck to win.

When you use BracketBrains, your understanding of the odds of each matchup is likely far better than that of your average foe. As a result, you can make informed decisions about when to take calculated risks and when to go for the long shot, and more importantly, you know how to distinguish the former from the latter.

Coupled with the strategy pointers explained in this document, we are confident that using BracketBrains will give you an edge in your pools: a long term, systematic, repeatable edge. But let's set some expectations here:

- Just taking BracketBrains' "picks" (defined as whichever team BracketBrains indicates has the better than 50% odds to win in each game) should help you outperform the majority of your pool competitors over the long term, assuming that on average their bracket picking prowess is the same as most other people. In 2008, if you had just taken all 50%+ odds projected winners in BracketBrains and picked them all the way through, you would have kicked the butt of the average bracket picker on ESPN or Yahoo!, and probably had a great shot at a first place

finish too. Over 30% of our surveyed users reported at least one #1 finish. That result certainly doesn't happen every year, but the overall track record is strong.

- Just picking all BracketBrains expected winners does not necessarily maximize your odds to win your bracket pool. That process still requires some effort on your part, and there's no way around it. You need to spend a little time learning to use BracketBrains in the right way (as a tool to help implement an overall bracket strategy based on pool size, competitor bias, and individual game odds), as there may be cases where a BracketBrains expected winner is not the right strategic pick for you.

There are people out there who always pick a decent amount of winners every year in their pools, but they never win their pools. This fact confuses and frustrates them. The reality is that they're fighting the wrong battle altogether. They are designing their strategy to avoid a horrible score, but not to maximize their shot at a title.

It's not a battle against the bracket, and it's not necessarily a battle to get the upset picks right either. It's a chess game. If you don't employ a proper strategy given your pool size, scoring system, and opponent tendencies, then you've given up a huge potential edge before the tournament even starts, and not even a great year of BracketBrains predictions may be able to make up for that.

With the right strategy and unbiased BracketBrains win odds projections, though, you can transform yourself into a lethal force in the bracket picking universe. Then sit back, forget about math, and enjoy watching some hoops. We'll be doing the same – just not before Thursday.

Also, remember that BracketBrains Pro subscribers get to use our tools throughout the NCAA tournament, and we'll be adjusting odds and data after every round.

Good luck,

The Team Rankings Nerds
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