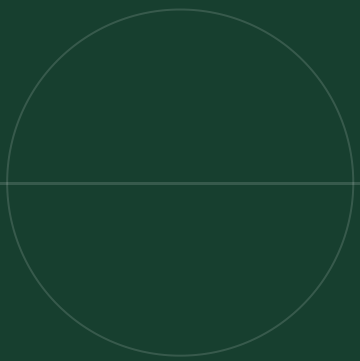
PROJECT UNDERDOG · OCTOBER 2026

FOOTBALL BELIEVES 20 THINGS. WE TESTED THEM.

Most failed. Three held up. Here's what a coach could use on Monday, drawn from 3.6 million real decisions and 30 tracked matches.



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IN 60 SECONDS

FIVE THINGS TO KNOW

84–89%

Going long? Have one more of you than them where it lands.

That's how often you keep the ball, against 63–72% when the numbers are level and 37–48% when outnumbered. A second extra player adds nothing.

⅓–⅔

Set pieces are the underdog's equaliser.

Team quality drives set-piece chances only a third to two-thirds as much as open-play chances, in three separate datasets.

+1.3 m

Work the ball down one side and their block slides across.

The far side opens up, as tracking data confirms. What you do with that space is still up to you.

16

Popular coaching beliefs showed no edge at all.

They include "most vulnerable after scoring", pressing triggers, quick free kicks and attacking the opponent's "weak side". See the scoreboard on page 5.

+0.3

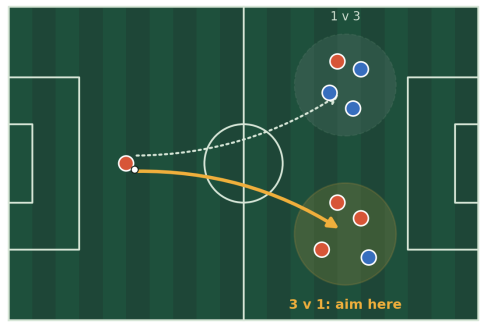
"Shoot more" is a data illusion.

Shots look valuable because players shoot when it's already good. The extra shots a coach adds are worth almost nothing (+0.3 goals per 100).

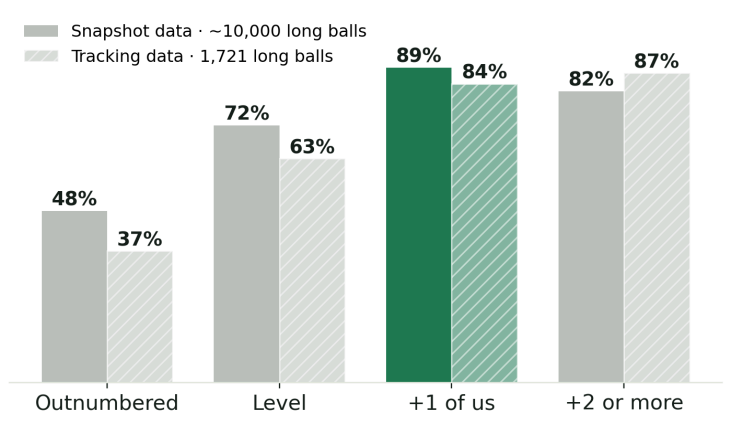
WHAT WORKS · 1

GOING LONG? ONE MORE WHERE IT LANDS

The ball rarely stays with the player it's aimed at. It's won by whoever has numbers around the landing spot. So don't aim at a player; aim at a place where you have one more than them.



Same kick, two targets. Bottom: 3 v 1, aim here.



Share of long balls you still have 5 seconds later, by numbers around the landing spot. Two independent datasets: StatsBomb snapshots (men's international, men's club, women's) and tracking (Bundesliga, A-League).

HOW TO COACH IT

On goal kicks and long balls, the target is never alone. Name one runner to arrive next to him so it's 2 v 1. Everyone else holds shape: a second extra player adds nothing.

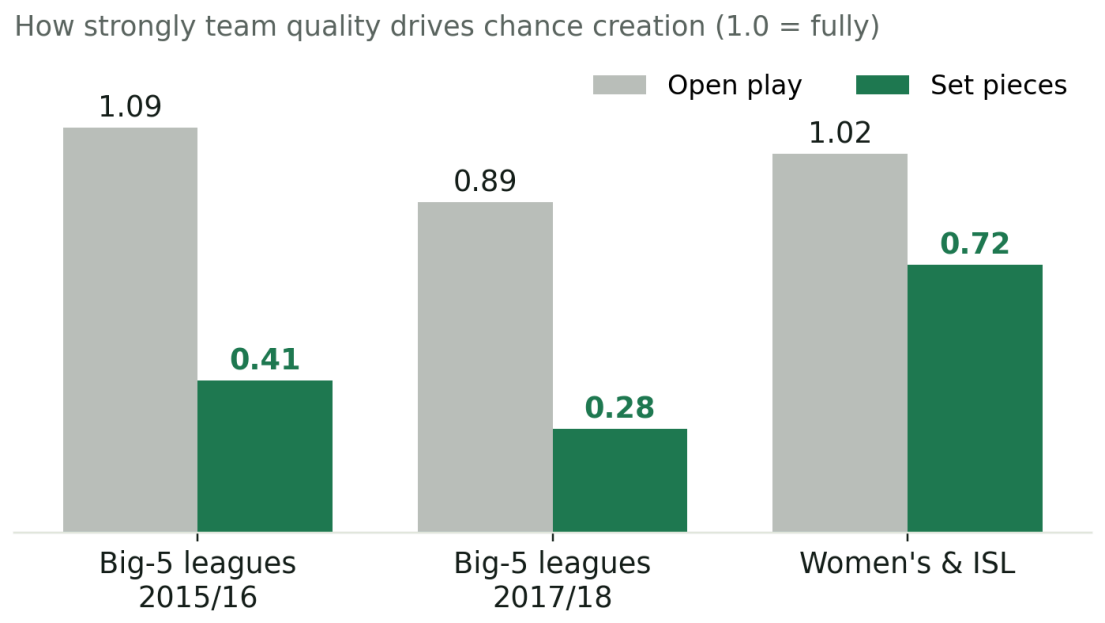
WHY UNDERDOGS SHOULD CARE

Underdogs land long balls with a numbers advantage least often and lose them most. It's the cheapest fix in the game.

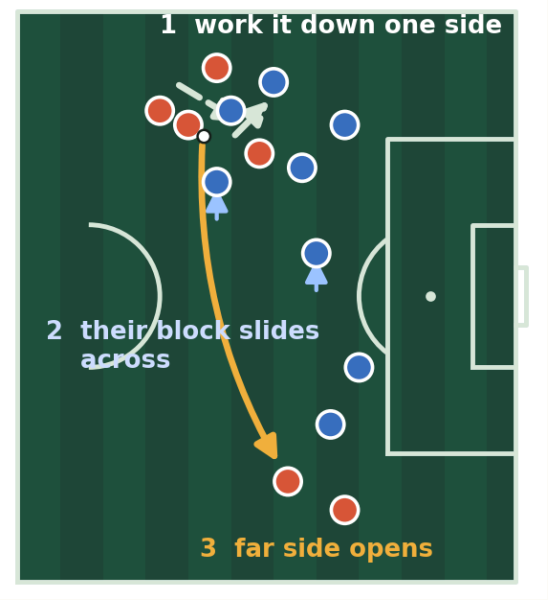
Limit: keeping the ball didn't turn into more shots within 45 seconds. This rule stops you giving the ball away; it doesn't create goals by itself. It held under our strictest test in all three populations.

SET PIECES, AND THE BAIT

SET PIECES: WHERE QUALITY MATTERS LEAST



In every dataset, a better team's advantage shrinks at set pieces. In mismatches, underdogs win 37–38% of set-piece chances but only 33% of open-play chances. How many players attack the box made no difference; the quality of the routine is the lever.



THE BAIT: ONE SIDE OPENS THE OTHER

Keep the ball on one side for a few passes and the defending block slides across. In tracking data the far-side winger gains 1.3 m of space. Teams already sense it: they switch twice as often after a bait.

Limit: the switch itself didn't produce more chances in our data. The bait reliably opens space; turning it into goals is the coaching problem.

THE SCOREBOARD

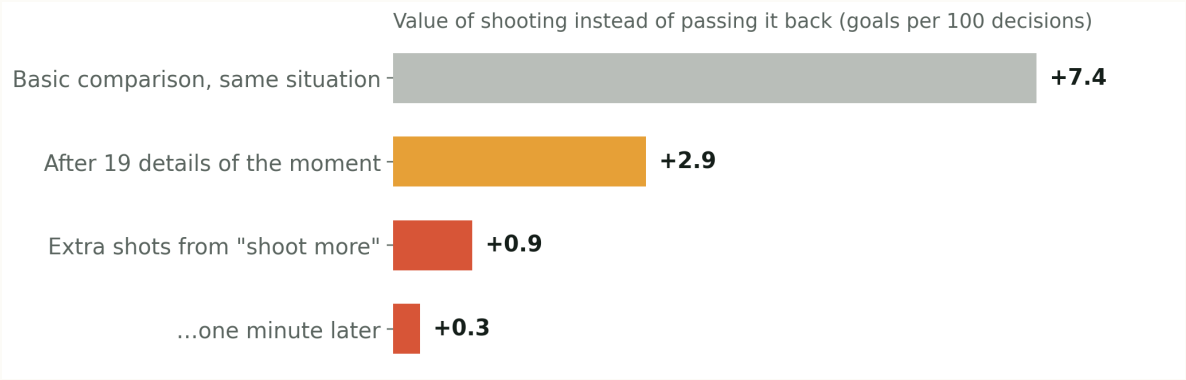
20 BELIEFS, TESTED

DEFENDING AND PRESSING		
"You're most vulnerable right after scoring"	✕ No edge	No more goals conceded in the 5 minutes after scoring, in all four datasets.
Press on triggers (back pass, bad touch)	✕ No edge	None of the five classic triggers made pressing pay more.
Press more, everywhere	✕ No edge	No gain once the situation is described in detail.
ATTACKING		
Have one more where a long ball lands	✓ Works	84–89% kept vs 63–72% when level, in two datasets (page 3).
Work it down one side to open the other	✓ Mechanism	The block slides and the far side opens; the payoff is unproven.
Pass into the lane where you have more players	✓ Small	Completed 2–4 points more often; no extra chances.
"Shoot more"	✕ Illusion	The gain was there before the shot (page 6).
"Only cross with bodies in the box"	✕ No edge	Crossing beats carrying from wide either way.
Find the opponent's weak side	✕ No edge	Weaknesses don't repeat from match to match; attacking them didn't help.
Take free kicks and throws quickly	✕ No edge	Catches defenders out, but creates no better chances.
More runners on the counter	✕ No edge	Once the defenders are counted, extra runners add nothing.
"Go forward more", "pass faster"	✕ No edge	Good teams do both. At equal quality, no gain.
Carry into space rather than dribble	✕ Not proven	Held in men's internationals only.
SET PIECES AND GAME MANAGEMENT		
Train set pieces as a weapon	✓ Works	Quality matters least there (page 4).
Overload the six-yard box at corners	✕ No edge	The number of attackers made no difference.
Early or attacking subs when losing	✕ No edge	No measurable benefit.
Chase earlier when losing	✕ No edge	Late goals reflect the leader sitting back, not the chaser's choice.
Pick a formation for the matchup	✕ No edge	Back three vs two strikers and similar matchups: no effect.
ANALYTICS AND AI		
Tactics only underdogs should use	✕ None found	369 tests: what helps the weak helps the strong.
Let an AI tactics engine or simulator decide	✕ Misleads	Ours found "95% win" tactics. All were bugs, and simulators overreact 10–50×.

THE BIG LESSON

WHY FOOTBALL STATS LIE

Near the box, shooting looks far better than passing it back. That has fuelled a decade of "shoot more" advice. Look closer, and the gain disappears.



WHAT'S GOING ON

Players aren't random. They shoot *when the shot is on*: keeper out of position, clean contact, a scramble. So the shot inherits a moment that was already good.

The giveaway: the 20 seconds **before** a shot were already better than the 20 seconds before a pass back. The "effect" existed before the decision was made.

THE TEST THAT CATCHES IT

For every idea we asked: **was the moment before the decision already different?** If yes, the idea describes a good moment, not a good choice.

That one question removed "shoot more", "carry into space" and "press the exposed receiver", three findings we had believed ourselves. Any analyst briefing a coach should ask it.

FOR COACHES

Trust the player's read. Neither "shoot more" nor "keep it" is a proven rule. Train the shooting technique, not a shooting quota.

HOW WE KNOW

BUILT TO BE PROVEN WRONG

3.6M
real on-ball decisions, plus 30 matches of player tracking

~9,400
ideas and candidate rules tested automatically

3
held up under every test

EVERY IDEA HAD TO PASS FOUR TESTS

- **Found once:** in men's international football.
- **Repeated twice:** in men's club *and* women's football.
- **Like for like:** same zone, same pressure, same defenders around the player.
- **The "moment before" check** (page 6).

Each test was written down publicly *before* we looked at the results, and every failure is published.

DATA

- StatsBomb open data, including 418 matches with every player's position at each touch.
- About 4,500 full league matches (StatsBomb, Wyscout) and 45,000 matches of betting odds.
- 30 tracked matches (Bundesliga, A-League, Metrica sample).

LIMITS

- This is observational data, not a controlled trial. The final proof is on a pitch.
- Free data shows where players stand, not where they're running. A truly new attacking tactic will need far more tracking data.

Ten numeric predictions are locked publicly on GitHub and will be checked against the next StatsBomb data release, whatever the outcome.

ABOUT

WHO DID THIS, AND WHY

I'm an independent football analyst. I started Project Underdog with one question: is there something a weaker team can do, in the moment, that gives it a real edge over a stronger one? This paper is the honest answer so far: fewer magic tactics than football believes, and a few small edges that hold up.

WHAT I CAN DO FOR A CLUB

- Measure how often your team wins the second ball, using your own data.
- Test any belief your staff holds, with the same method.
- Build a set-piece and long-ball review for the weekly cycle.

CONTACT

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The code, every pre-registration and every failed test are public in the repository.

Data: StatsBomb Open Data (including 360), Wyscout public dataset (Pappalardo et al. 2019), Metrica Sports sample data, SkillCorner open data, DFL/IDSSE open tracking data (Bassek et al. 2025), football-data.co.uk. "Chances" means expected goals (xG). All results are observational estimates.