twelve

The AI skills clubs need

Where football is heading, and the tools to keep up



David Sumpter
Twelve Football

FREE WEBINAR, 12 NOVEMBER 2026

THE SHIFT

Agentic AI is pulling our skills two ways

Towards automation

Building a tool is no longer the slow part, so far more people can build one.

- Describe the problem in plain English
- An agent writes and tests the code
- Minutes of your effort, not weeks

Towards understanding

Somebody still decides what is worth measuring, and whether the answer is right.

- Definitions that say what they mean
- Metrics tied to what coaches see
- Knowing when the answer is wrong

THE POINT

Both directions matter, and each one asks for a different kind of skill.

PART TWO

The problems clubs face

Some questions the data can answer today. Others need somebody to define the measure first.

SORTING THE WORK

Club problems come in two kinds

Questions the data answers

Everything needed is already in the data, so it is a matter of asking well.

- Ask clearly, then check what comes back
- Minutes to build, once you can ask
- Anyone in the club can do this

Problems with no measure yet

Nobody has defined the thing you care about, so it has to be built first.

- Research before anything is measured
- A definition a coach recognises
- Weeks of work, with a data scientist

COMING UP

Two courses, one for each kind of problem.

KIND ONE

Questions the data can answer today

Are we going in the right direction?

Points and expected goals per match, with the manager change marked.

Did anything change after the intervention?

A team's style over chosen matches, against its own season average.

What kind of team do we play on Saturday?

How they press, how direct they are and which formations they use.

Who improved most last season?

Before and after for every player, with a written summary underneath.

Would this player fit how we play?

A player's current team compared with yours, across style of play.

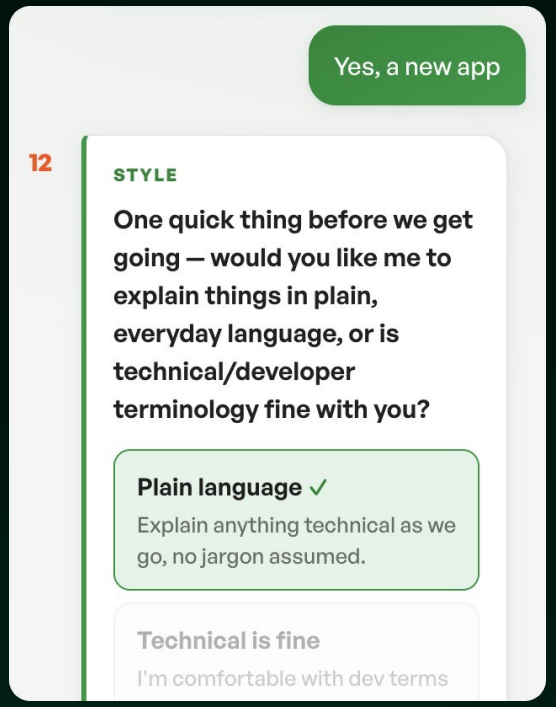
Which teams are flattered by the table?

Points against the quality of chances created and conceded.

ALL BUILT ON EARPIECE DATA, ACROSS 300+ COMPETITIONS

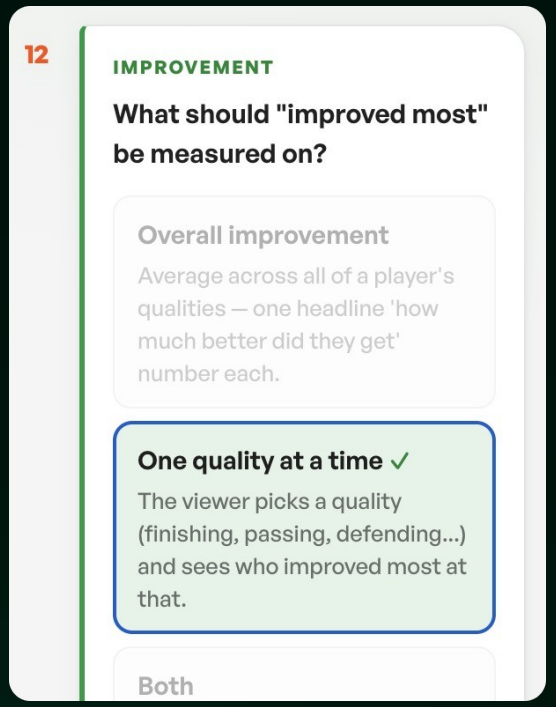
TOWARDS AUTOMATION

An app built from four questions



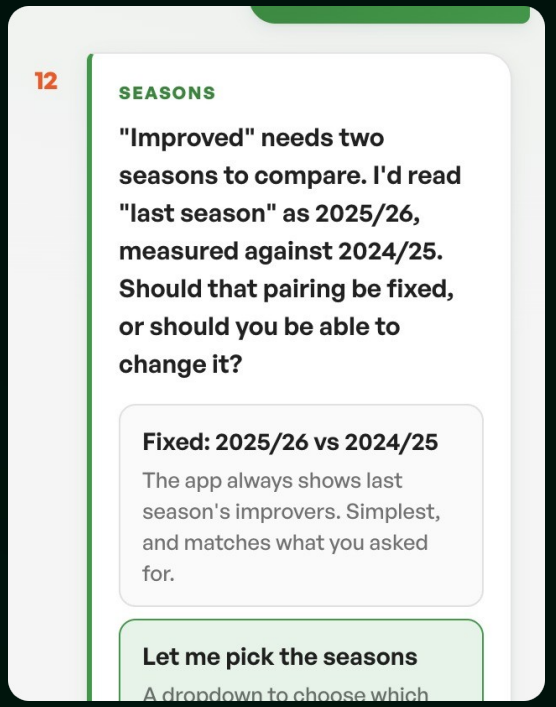
STEP 1

Plain or technical?



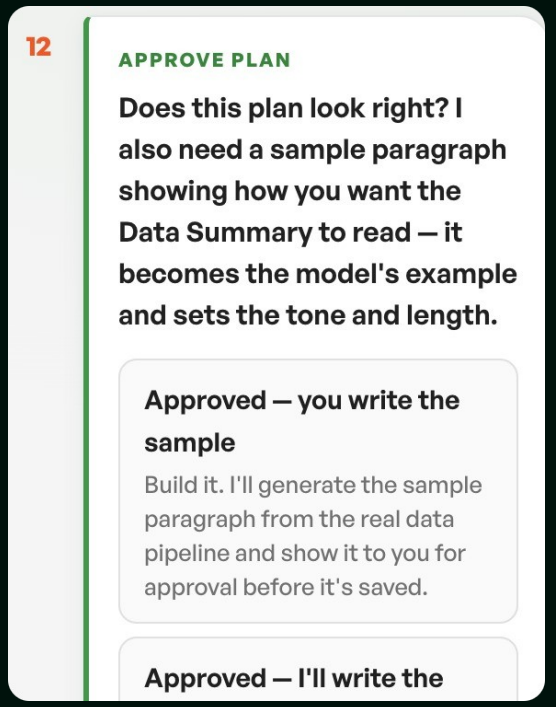
STEP 2

Improved at what?



STEP 3

Which seasons?



STEP 4

Approve the plan

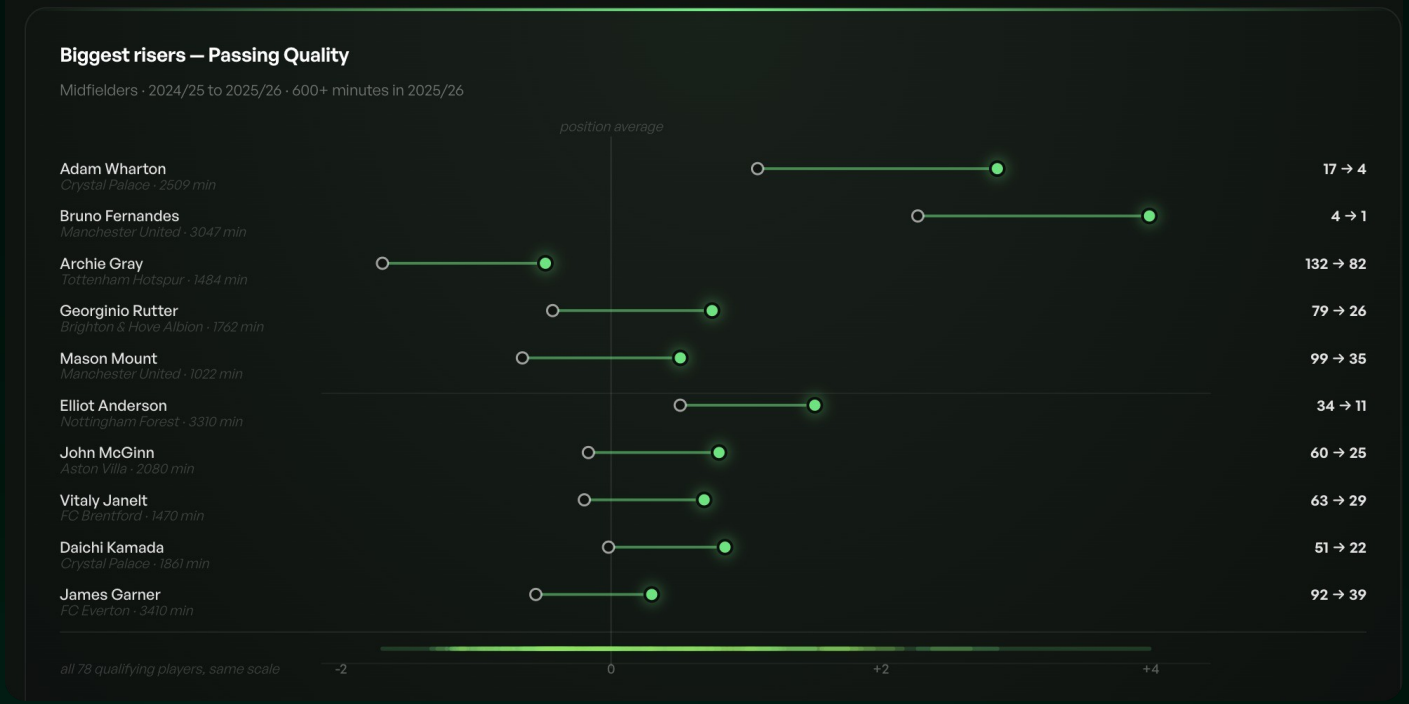
THE RESULT

Who improved most last season?

Five minutes of human effort, and thirty minutes of build time.

- Each quality opens with its definition
- Before and after for every qualifying player
- A written data summary underneath

Passing Quality — Passing quality refers to a player's ability to deliver a variety of passes that pose a significant threat to the opposition's defense, leading to goal-scoring opportunities or advantageous positions for the receiving player. It is evaluated by how threatening the passes are, rather than the quantity.



WYCOMBE WANDERERS

Improving final third throw-ins

A set-piece project in English League One, 2024/25.



STARTS WITH RESEARCH

Long or crossed throw-ins triple the chances

LONG, OR SHORT AND CROSS

15%

of throw-ins lead to a chance

Share of throw-ins	24%
Lead to a goal	1.4%
xG per 100 throw-ins	1.7

SHORT WITHOUT A CROSS

5%

of throw-ins lead to a chance

Share of throw-ins	76%
Lead to a goal	0.6%
xG per 100 throw-ins	1.2

SOURCE: TWELVE RESEARCH ON FINAL THIRD THROW-INS

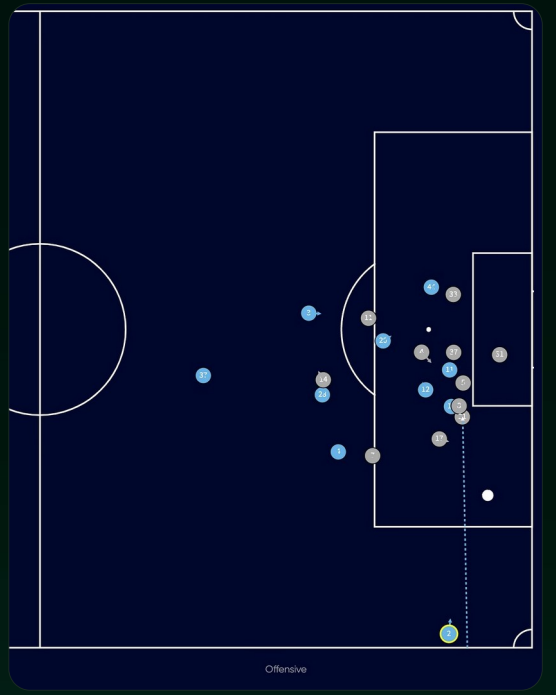
IMPLEMENTATION

Taking the routines onto the pitch

ON THE TOUCHLINE

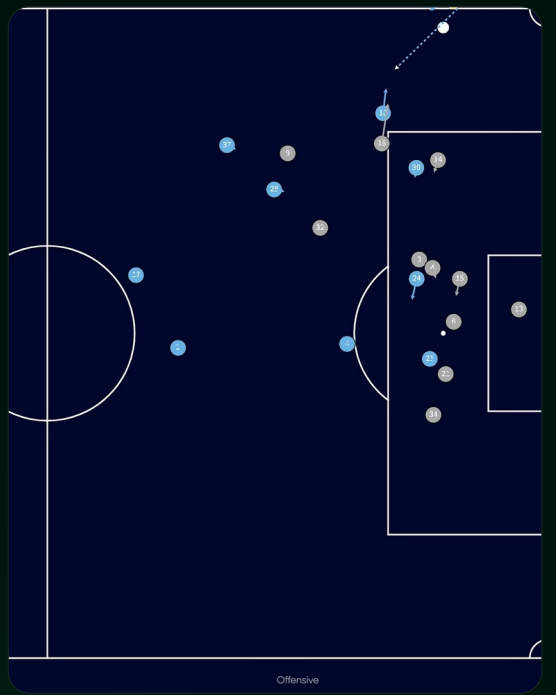


LONG THROW



Against Peterborough

SHORT THEN CROSS

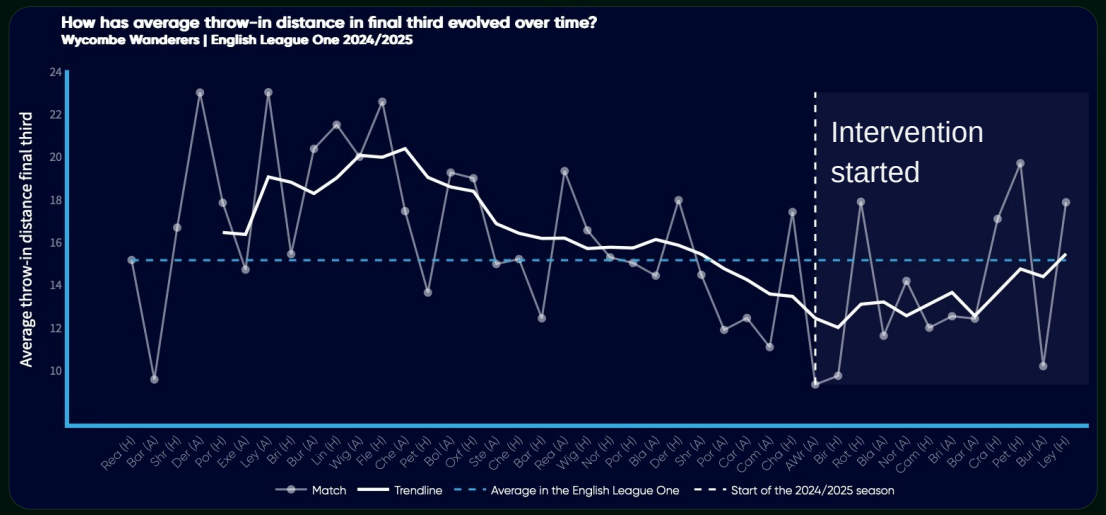


Against Burton Albion

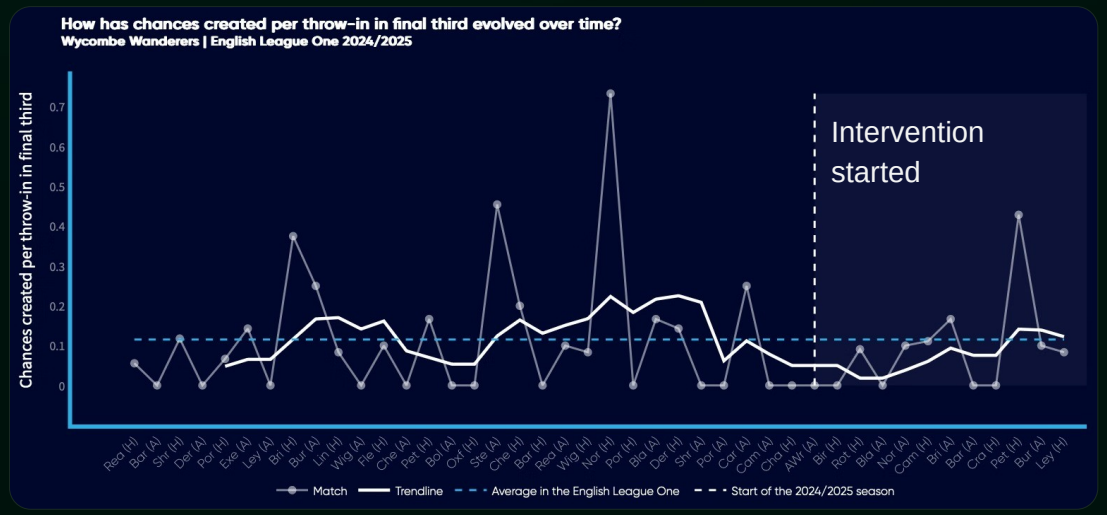
MONITORING AND FOLLOW-UP

Following every match after the change

AVERAGE THROW-IN DISTANCE



CHANCES CREATED PER THROW-IN





Jernej Flisar

Worked with the Wycombe staff on the project

SOURCE: WYCOMBE WANDERERS, ENGLISH LEAGUE ONE 2024/25

MANCHESTER UNITED

Making a difference at the highest level

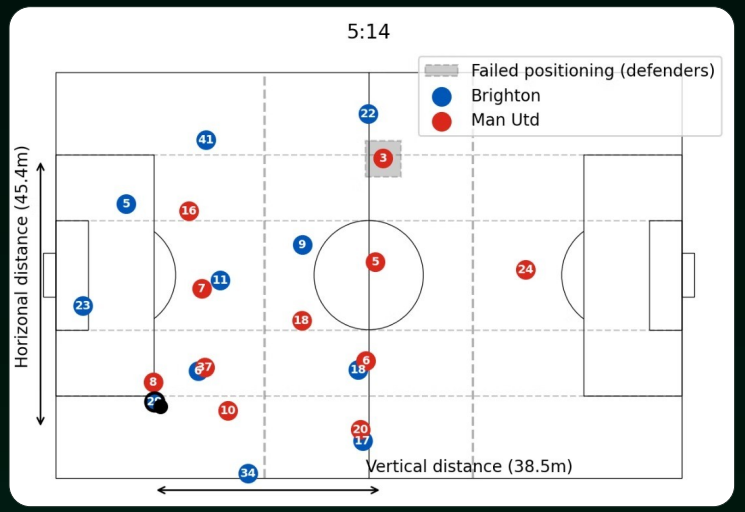
Off-ball compactness on the way to the FA Cup final.



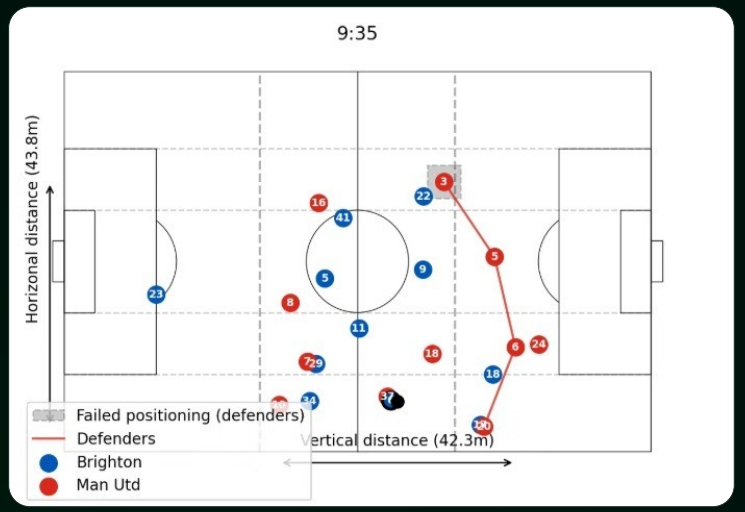
THE COACH'S RULE

Defenders at most three lanes from the ball

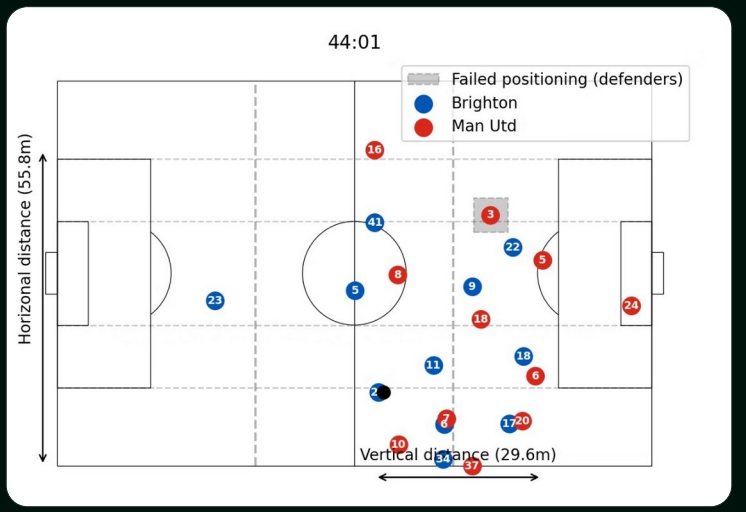
AGAINST BRIGHTON, 5:14



AGAINST BRIGHTON, 9:35



AGAINST BRIGHTON, 44:01



The grey box marks a defender who is too far from the ball.

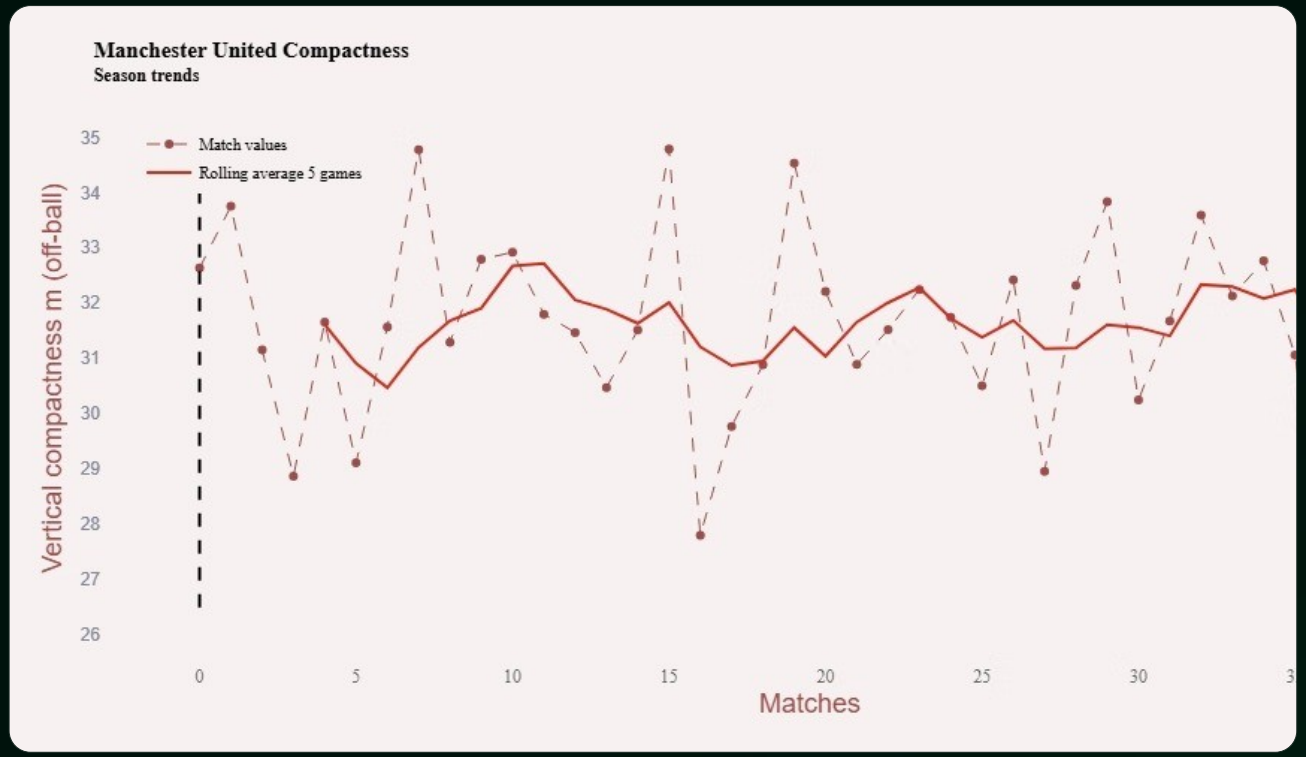


Jernej Flisar

Turned Erik ten Hag's rule into a measure we could check in every match

MONITORING

Measuring compactness match by match

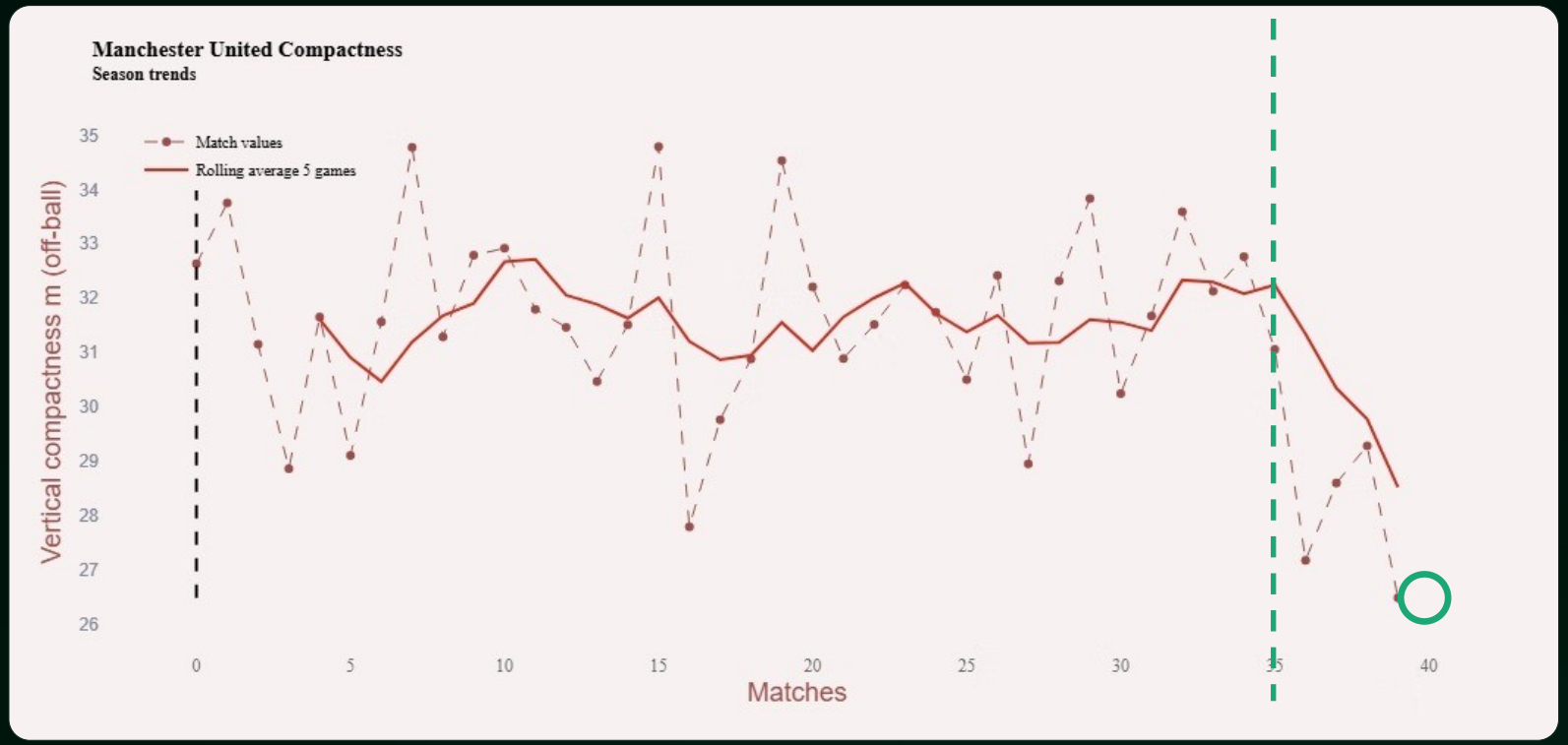


VERTICAL COMPACTNESS

How stretched the team is from front to back without the ball. Lower is tighter.

MONITORING

Measuring compactness match by match



VERTICAL COMPACTNESS

How stretched the team is from front to back without the ball. Lower is tighter.

Intervention started

FA Cup final

PART THREE

Build quickly

Building football solutions with Agentic AI: take a question from your own work and leave with an app that answers it.

DAVID SUMPTER AND MAHI SEWINET · ON DEMAND FROM 16 NOVEMBER

TWELVE.FOOTBALL/COURSES/VIBE-CODING-FOR-FOOTBALL

EARPIECE APP BUILDER

You describe the problem, it works through it

Understand

It asks what you mean, until the question is clear enough to answer.

Check the data

If the data cannot answer your question, it says so instead of guessing.

Plan

It shows you the plan it intends to follow, and waits for your approval.

Build and test

It builds the app and tests it against real matches before handing it over.

THROUGHOUT

It stops for your approval at every step, so you stay in charge.

HOW IT WORKS

Four modules, at your own pace

Setting up

Meet App Builder and build your first app, an expected goals app, by talking to it.

MODULE 1

Your own problem

Take a question from your own work through understand, check, plan, build and verify.

MODULE 2

When it gets it wrong

Read the agent's plan, correct its assumptions and iterate until the app answers you.

MODULE 3

Presentations

Present your app and get feedback from David and the Twelve team.

MODULE 4

FORMAT

On demand from 16 November 2026, beginner level, 795 euros plus VAT.

WHAT YOU GET

The tools, the data and the people

- Access to Earpiece App Builder, and the course videos for two years
- One month of unlimited Earpiece, worth 300 euros
- API access to event data across 300+ competitions
- Two feedback meetings with David on your project
- A Slack group, and weekly support sessions with Mahi
- A certificate of completion

YOUR TEACHERS



David Sumpter

Co-founder of Twelve, professor at Uppsala University



Mahlet Sewinet

The data scientist who built Earpiece App Builder

PART FOUR

Go deeply

Soccermatics Pro: the modelling underneath the answers, for the problems no tool has solved yet.

DAVID SUMPTER AND NICOLE KOZLOVA · STARTS 1 DECEMBER

TWELVE.FOOTBALL/COURSES

THE HARD PART

The hard part is knowing what to build

That means knowing the game, talking to coaches and scouts, and recognising a wrong answer when you see one. Its not just enough to be a good coder.

SOCCERMATICS PRO

Build the models, not just the apps

Python for football

Plot actions, handle event data and work the way club analysts work.

Modelling

Build a measure from scratch, and say exactly what it does and does not capture.

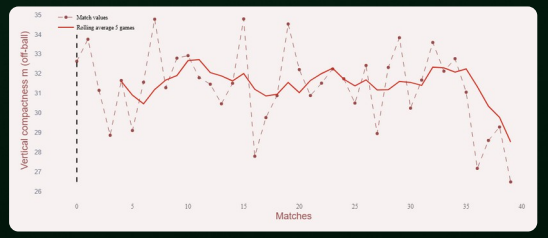
Machine learning

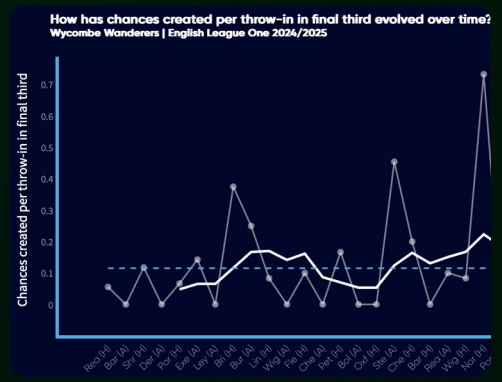
Fit, test and read a model, so you can tell a real pattern from noise.

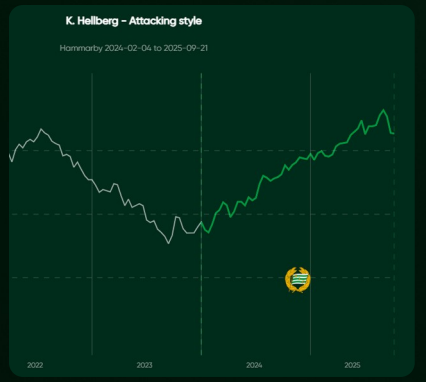
Making it count

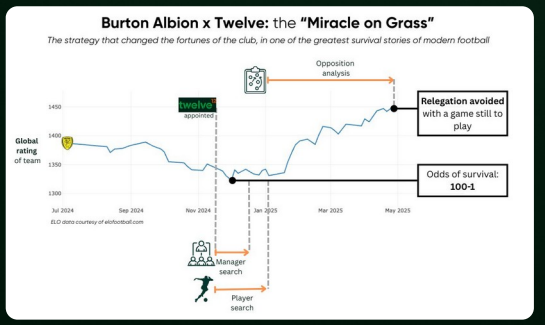
Communicate it to managers, scouts and the board so it changes a decision.

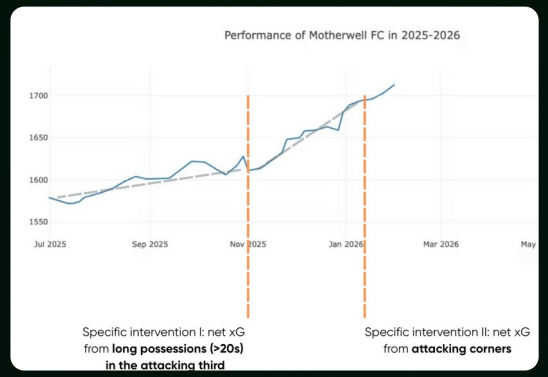
Where these methods changed results











Round 1-22

		M	V	D	F	+/-	P
1	Mjällby AIF	22	16	5	1	26	53
2	Hammarby	22	14	3	5	21	45
3	AIK	22	11	7	4	9	40
4	Malmö FF	22	10	8	4	16	38
5	GAIS	22	10	8	4	13	38
6	IFK Göteborg	22	12	2	8	4	38
7	IF Elfsborg	22	11	3	8	5	36
8	Djurgårdens IF	22	9	7	6	8	34
9	Brommapojkarna	22	8	2	12	0	26
10	BK Häcken	22	7	5	10	-6	26
11	IFK Norrköping	22	7	4	11	-10	25
12	Sirius	22	6	5	11	-4	23
13	Halmstads BK	22	6	3	13	-25	21
14	Östers IF	22	4	6	12	-14	18
15	Degerfors IF	22	4	4	14	-23	16
16	IFK Värnamo	22	2	6	14	-20	12

Round 22 -

		M	V	D	F	+/-	P
1	Mjällby AIF	8	7	1	0	13	22
2	Hammarby	8	5	2	1	10	17
3	Sirius	8	5	1	2	6	16
4	Djurgårdens IF	8	4	3	1	12	15
5	Degerfors IF	8	4	2	2	4	14
6	GAIS	8	4	2	2	2	14
7	Halmstads BK	8	4	2	2	-1	14
8	IFK Göteborg	8	4	1	3	4	13
9	Malmö FF	8	3	2	3	-3	11
10	BK Häcken	8	2	3	3	-2	9
11	AIK	8	2	2	4	-2	8
12	Östers IF	8	2	2	4	-5	8
13	Brommapojkarna	8	1	2	5	-7	5
14	IFK Norrköping	8	1	1	6	-7	4
15	IF Elfsborg	8	1	1	6	-11	4
16	IFK Värnamo	8	1	1	6	-13	4

THE FORMAT

Lessons built around your own project

Work at your pace

Ten lessons you take when it suits you, with tutors on hand when you are stuck.

Project work

Plot actions, build models and take on the Real Madrid Challenge on real data.

Your own club

People working at a club can do the project work on their club's own data.

AT THE END

A certificate covering the methods you learned and the project you built.

PROJECT WORK

Three projects, or your own club data

- Plotting actions and telling stories, on event data
- Evaluating passes with machine learning, over a season
- The Real Madrid Challenge, on tracking data

OR

You are also free to use your own club data.

AT THE END

A certificate for what you built



EXPERIENCE

Ten years of work inside the game



THE TUTORS

You are never stuck on your own



David Sumpter

AUTHOR OF SOCCERMATICS

Applied mathematician who has worked with clubs and federations for over ten years.



Nicole Kozlova

TUTOR AT TWELVE

Works with students on programming, and on getting results across clearly.

FROM PAST STUDENTS

What alumni say

I enjoyed the course very much. I enjoyed the relaxed atmosphere, in which I was nevertheless able to gain some exciting insights. It was a great opportunity for me to get familiar with event and tracking data in the context of game analysis/scouting. Especially the insight into presenting the results via Python Streamlit was a big game changer for me. We are now establishing this framework at TSG Hoffenheim.

Fabian Rupp, Business Intelligence & Data Analytics Hoffenheim

The course teacher dedicated time to sit with me individually, start from scratch, and write a customised step-by-step plan to wrangle one of the file formats I provided him. For me, this was going above and beyond his duties and really assisted me as a relative beginner in Python.

Liam Cody, Pro Solutions Team Lead StatsPerform

My Python coding was a weak area for me, and I really wanted to improve in this so I can be more responsive to the needs of the coach and team. It was a great course, with such useful skills being covered. There are so many analysts working in football, but so much mathematics missing from their skillsets.

Mark Carter, English FA

Thank you for all this course does for the community. I'll be joining a Brazilian club as a data scientist in the upcoming weeks, and it is crystal clear that it would not happen without your course.

Rodrigo Salvador, Red Bull Bragantino

I appreciated the course very much. I recommend it for anyone interested in gaining (additional) knowledge in data science/analysis in their organization.

Martin Vogelbein Scouting, Match Analysis and Diagnosis Deutscher Fußball-Bund

TWO ROUTES

Build quickly, or go deeply

BUILDING FOOTBALL SOLUTIONS WITH AGENTIC AI

Build quickly

Turn your own question into a working app, with no coding needed.

ON DEMAND FROM 16 NOVEMBER

twelve.football/courses/vibe-coding-for-football

SOCCERMATICS PRO

Go deeply

Learn the modelling that answers the questions no tool has solved.

STARTS 1 DECEMBER

twelve.football/courses

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PROMO CODES

Two codes to take away

BUILDING FOOTBALL SOLUTIONS WITH AGENTIC AI

VIBE25

25% off, applied at checkout.

TWELVE.FOOTBALL/COURSES/VIBE-CODING-FOR-FOOTBALL

SOCCERMATICS PRO

WEBINAR20

20% off, applied at checkout.

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