



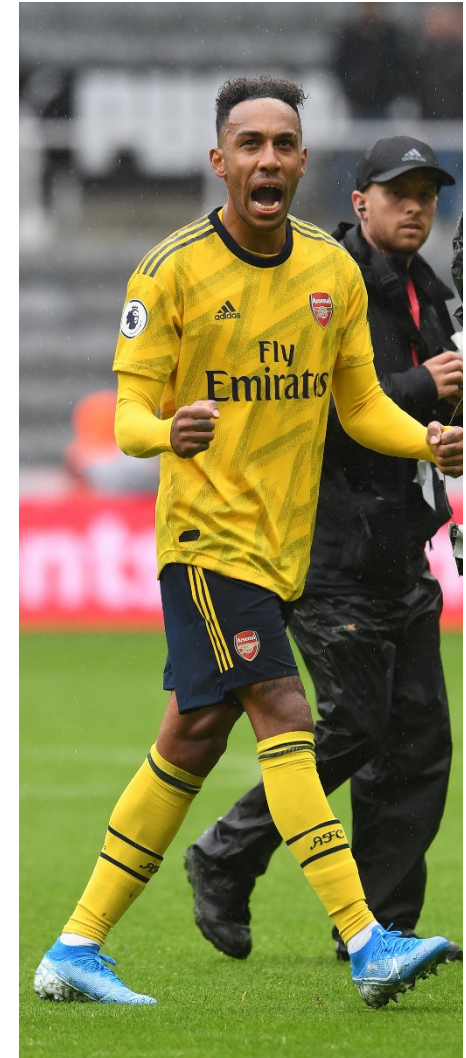
A New Playbook for making better decisions in football (sports)

ARSENAL PERFORMANCE & RESEARCH TEAM
Presented: 10th October 2019



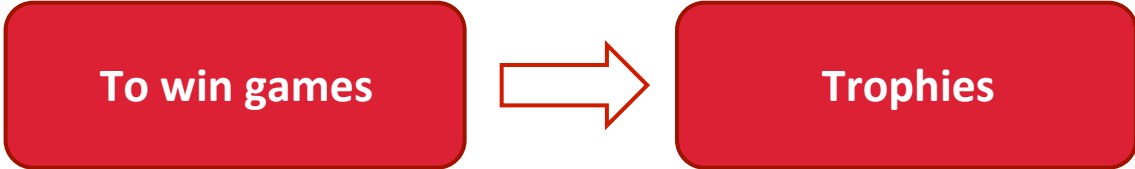
PLAN

- Objective of football
- Decision-making
- Introducing a New Play Book
- Some examples





WHAT IS THE OBJECTIVE OF FOOTBALL (SPORTS)



Sustainable success

Reputation

Financial rewards



WINNING IS COMPLEX & MULTIDIMENSIONAL

COMEBACK



STRONG

RECRUIT WISELY



OPTIMISE



GAME STRATEGY

WIN GAMES



& TROPHIES

RECOVER FAST



TRAIN SMART



MAXIMISE



PERFORMANCE

THEN *versus* NOW

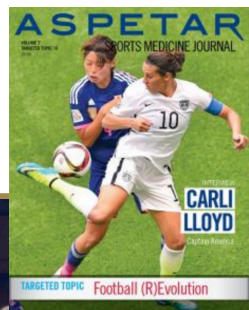
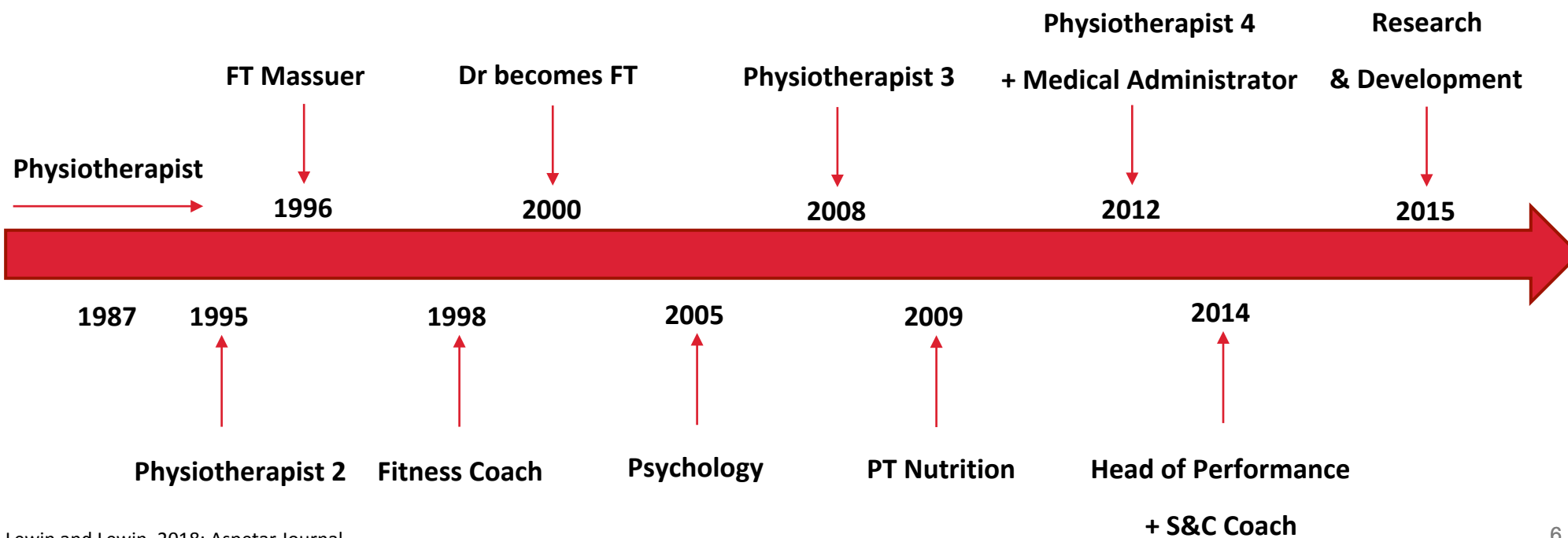


Figure 5: The first team squad photograph in 1987.



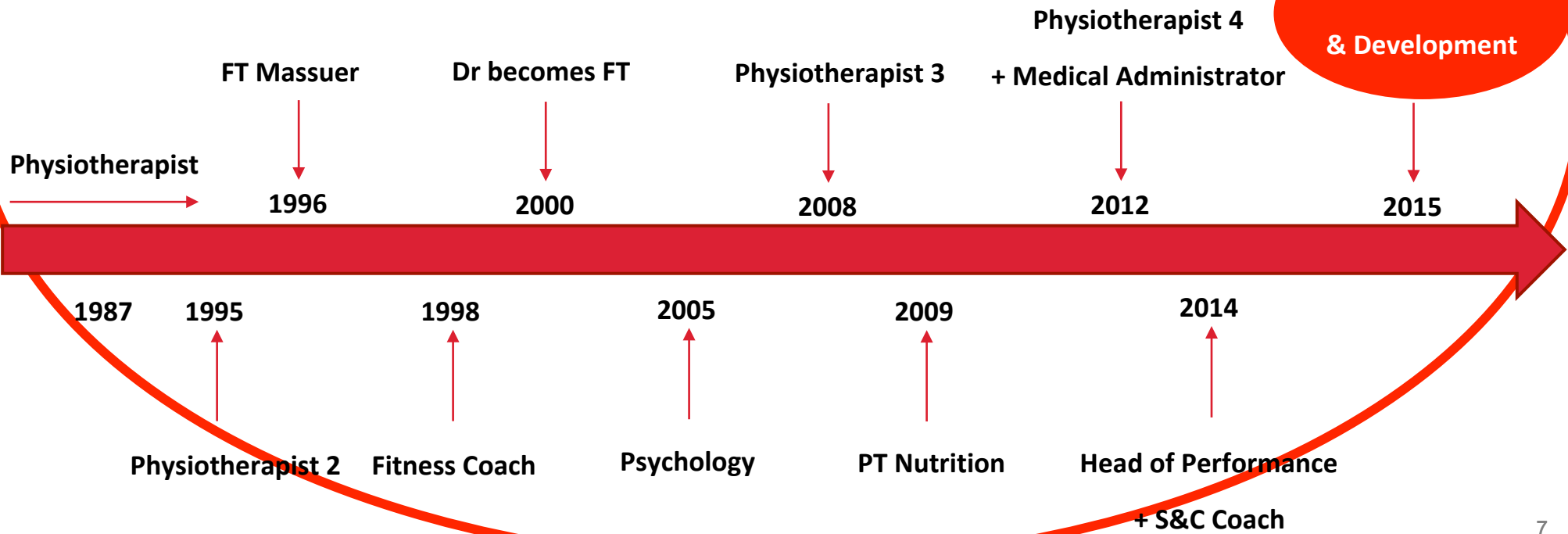
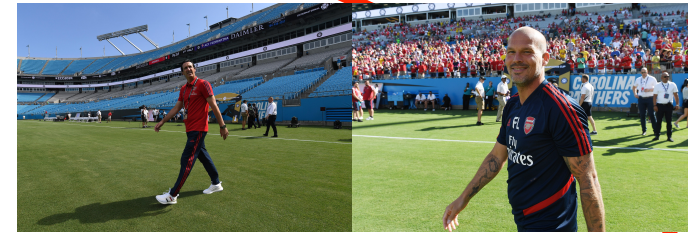
2019/20

THEN *versus* NOW





Team behind the team





ARSENAL

DECISION-MAKING
AND PERFORMANCE





DECISION-MAKING AND PERFORMANCE

Harvard
Business
Review

DECISION MAKING

A Checklist for Making Faster, Better Decisions

by Erik Larson
MARCH 07, 2016



Managers make about three billion decisions each year, and almost all of them can be made better. The stakes for doing so are real: decisions are the most powerful tool managers have for getting things done. Setting goals (another tool) is aspirational. Decisions actually drives action.

Decision Conflict in Army Leaders

Adrian Wolfberg, PhD

[Download the PDF](#)

May-June 2019



DECISION-MAKING IN FOOTBALL



- During 1 day this week keep a diary of decisions you make related to health & performance
 - **Minor** – little impact for performance but needed to be made
 - **Moderate** – some direct impact on performance but not essential
 - **Major** – direct impact on performance (may have monetary implications too)

DECISION-MAKING IN FOOTBALL



My main interactions are with coaches, players, support staff



DAY 1 MD+1 (off)	DAY 2 MD-2 (train)	DAY 3 MD-1 (train)
MINOR [®]	MAJOR	MAJOR
	MAJOR	MAJOR
	MAJOR	

CHALLENGES TO DECISION-MAKING IN FOOTBALL

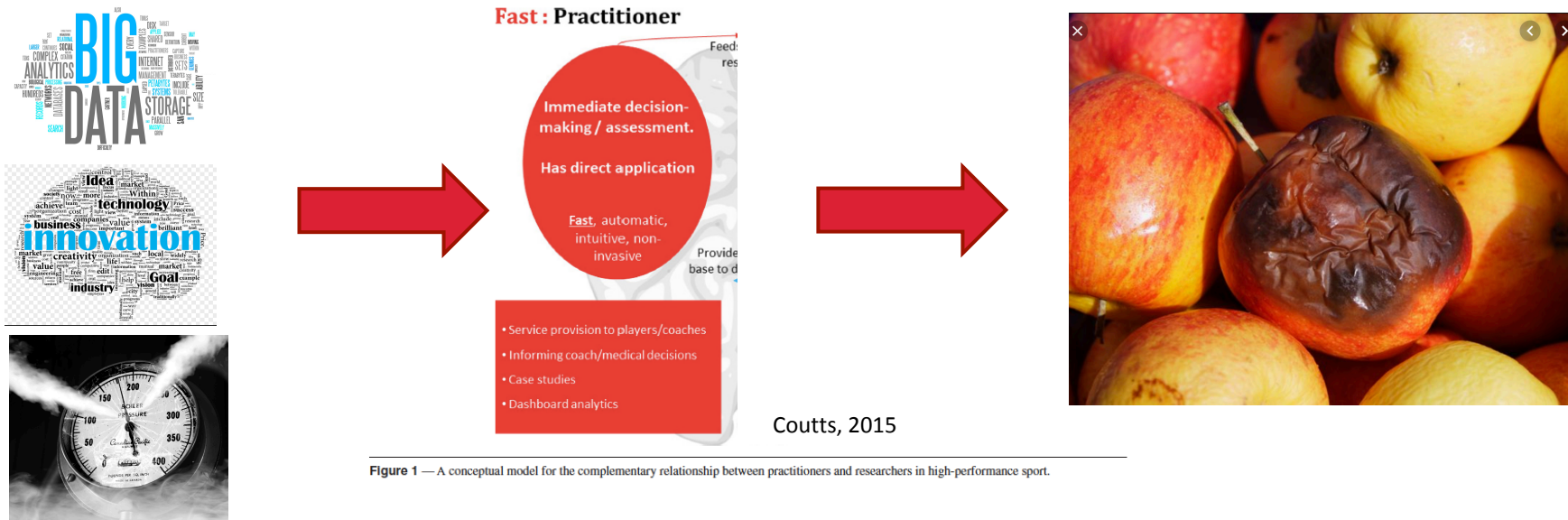
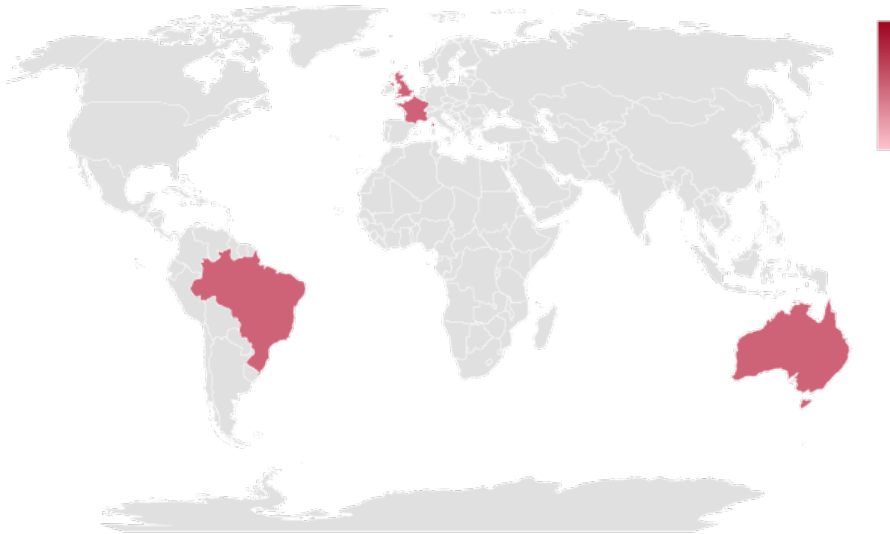


Figure 1 — A conceptual model for the complementary relationship between practitioners and researchers in high-performance sport.



CHALLENGES TO DECISION-MAKING IN FOOTBALL



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A NEW PLAY BOOK FOR MAKING BETTER DECISIONS





A NEW PLAY BOOK



Definition of *research and development* in English:

research and development



NOUN

[mass noun]

(in industry) work directed towards the innovation, introduction, and improvement of products and processes.

[+ Example sentences](#)



Noise

Signal

Noise

SONY PICTURES
NOW ON DIGITAL, BLU-RAY™ AND DVD
MONEYBALL





R&D: AIM & VALUES

Help people to make the right decision at the right time  increase the likelihood to win matches

- CEO / COO / Technical Director / Board
- Coaches
- Players
- Support staff
- Front Office

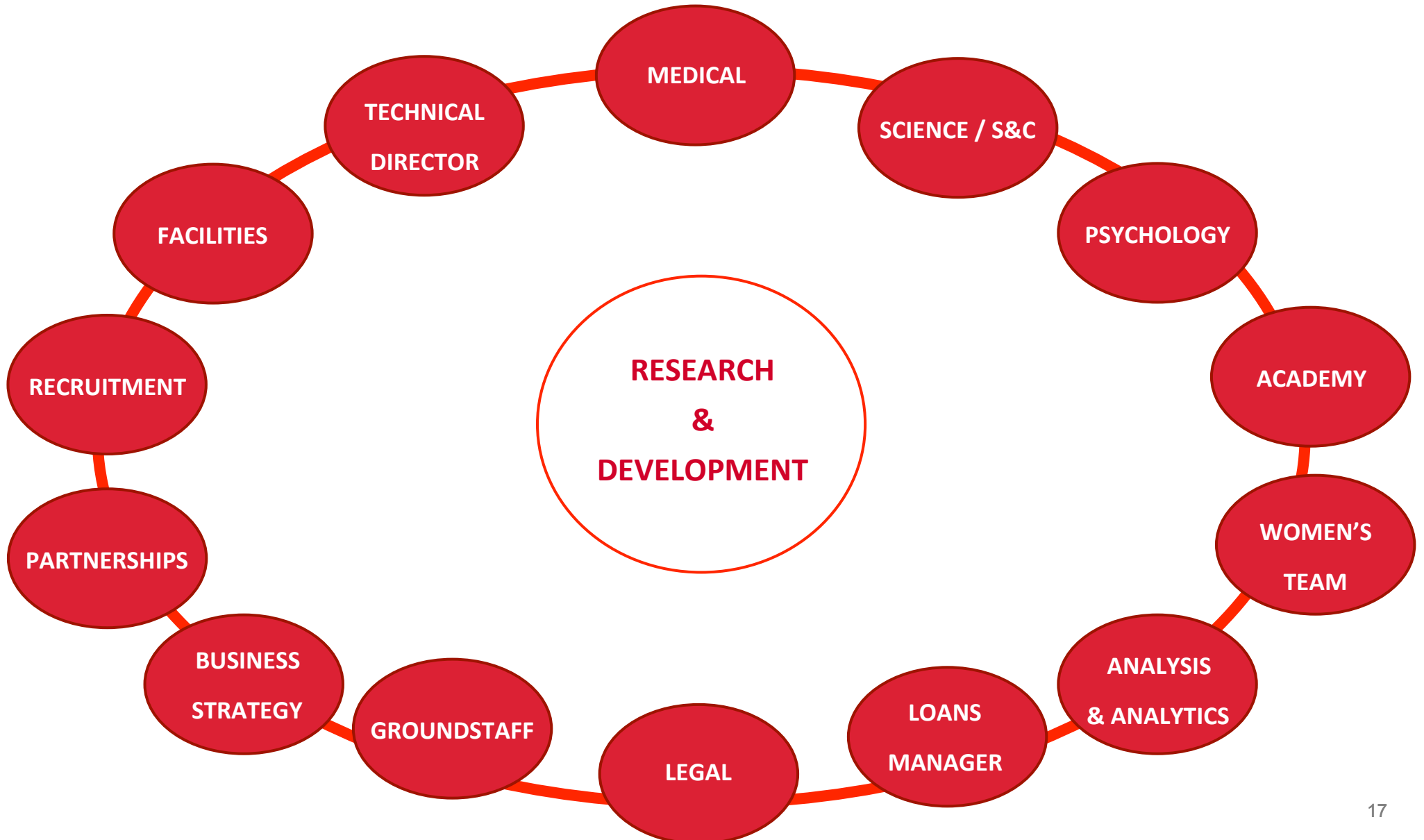
Filter to identify
the signal



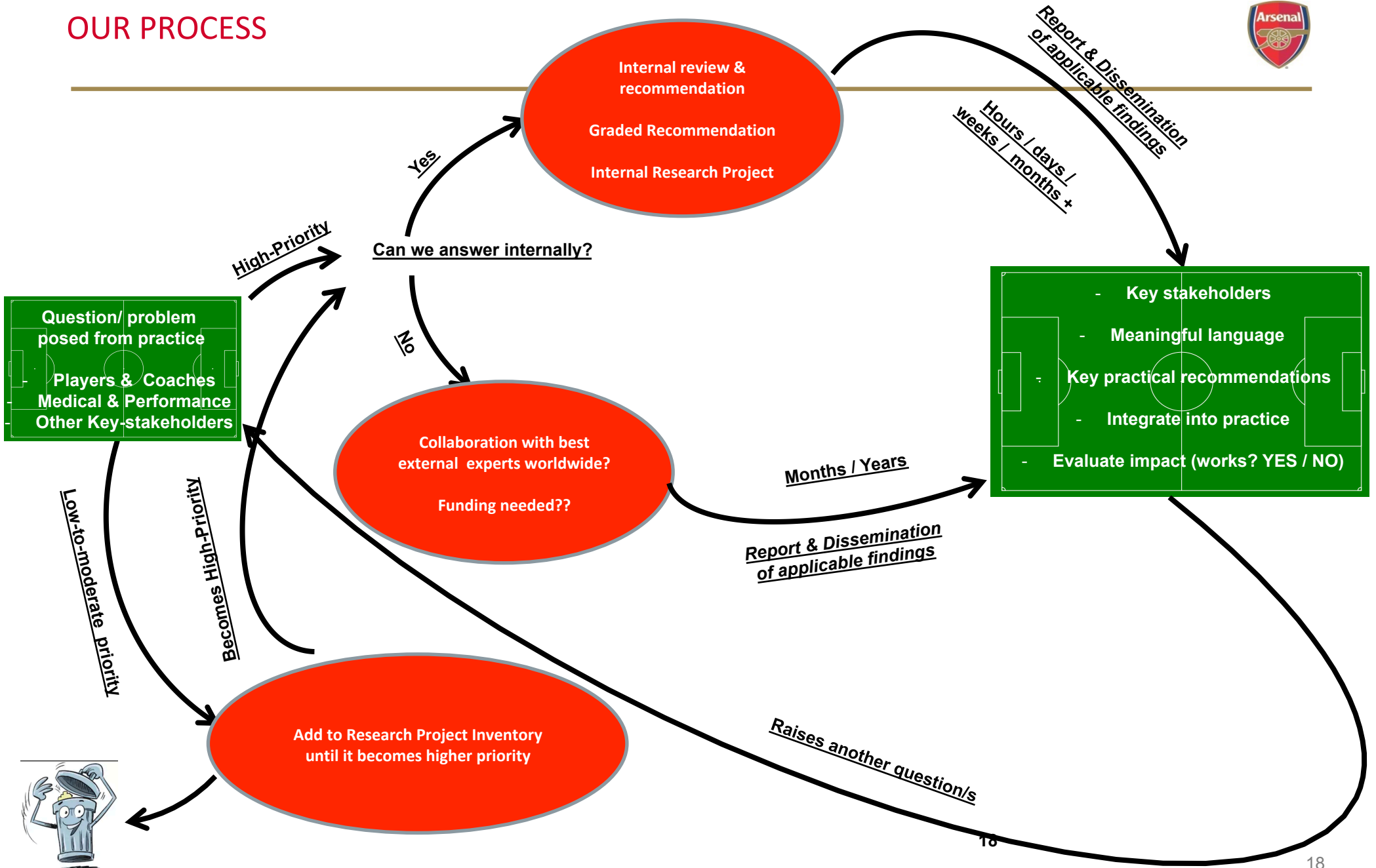
Values

- **Integrate & collaborate** within our team to answer questions that impact practice (3 points)
- Prioritise player health and performance
- Invest wisely (money, time, energy)
- Maximise and protect the clubs reputation
- Openness to **integrate & collaborate** with the best experts in the world
 - Co-design & develop solutions / products / innovations

INTEGRATION & COLLABORATION



OUR PROCESS



QUESTIONS FROM THE FIELD

Has he recovered enough to play on Wednesday?



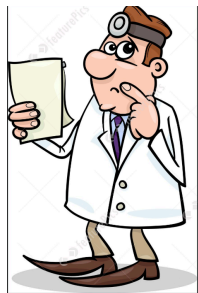
Can psychological factors predict if the player will make it?



What do we do if there is an acid attack on one of the players or staff?



What should we measure to see if he has recovered?



I want you to show me the levels of evidence for recovery strategies?



What's better for recovery, fatigue and injury? Airfibre or Desso Grassmaster?



GLOBAL COLLABORATIONS



REAL LIFE QUESTIONS

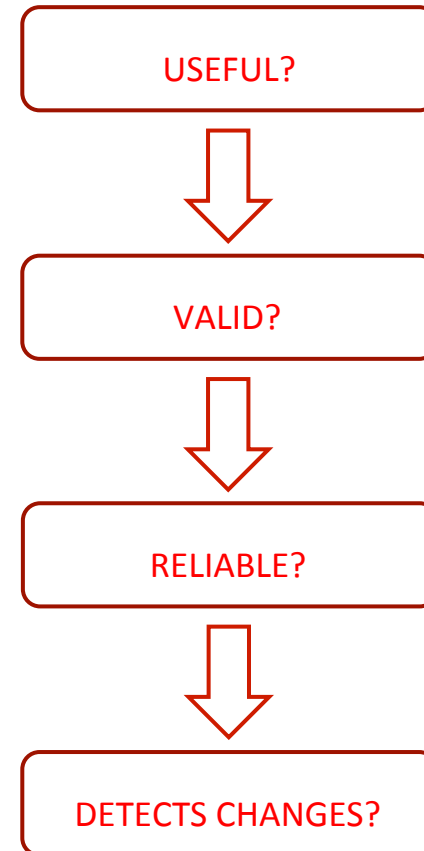
Has he recovered enough to play on Wednesday?



International Journal of Sports Physiology and Performance, 2009, 4, 269-277
© 2009 Human Kinetics, Inc.

Test Validation in Sport Physiology: Lessons Learned From Clinimetrics

Franco M. Impellizzeri and Samuele M. Marcora



REAL LIFE QUESTIONS PUT INTO PRACTICE



A DECISION-MAKING MODEL



Downloaded from <http://bjsm.bmj.com/> on August 18, 2017 - Published

BJSM Online First, published on August 17, 2017 as 10.11

NEEDS ANALYSIS

Meta-analysis
Systematic reviews

Randomised Controlled
Trials

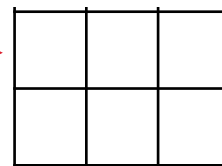
Observational
Studies

Non-analytic
Studies

Non-analytic
Studies

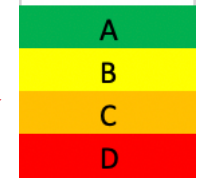
Unravelling confusion in sports medicine and sports science practice: a systematic approach to using the best of research and practice-based evidence to make a quality decision

Clare L Arden,^{1,2} Gregory Dupont,^{3,4} Franco M Impellizzeri,⁵
Gary O'Driscoll,⁶ Guus Reurink,⁷ Colin Lewin,⁶ Alan McCall^{3,6}



Considered
Judgement

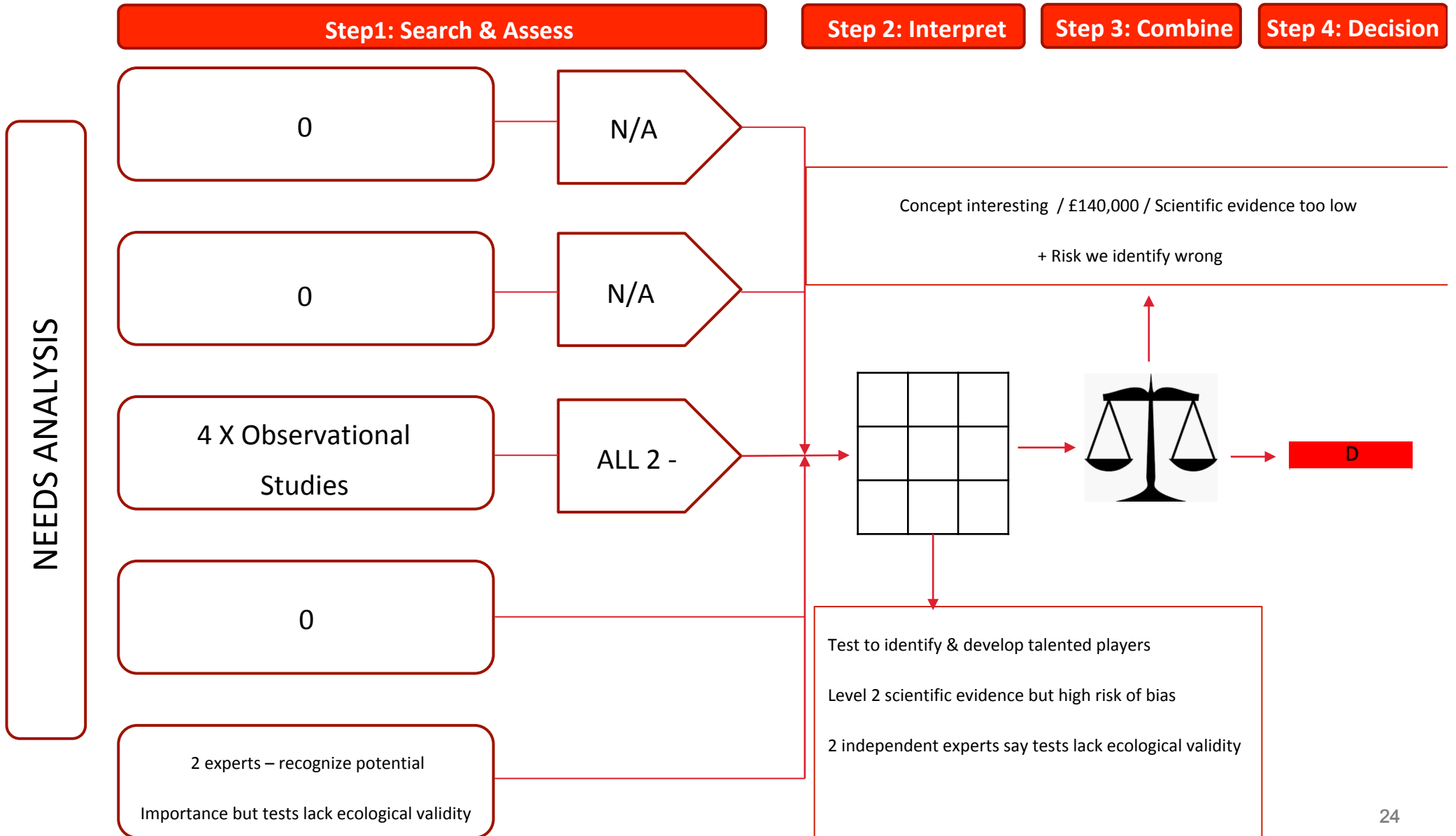
Graded
Recommendation



A DECISION-MAKING MODEL





- Test to identify talent
- Develop training program








A DECISION-MAKING MODEL



A screenshot of a file explorer interface with a red header. The header contains the Arsenal logo on the left, a search bar with the text "Search Files and Folders", and a search icon on the right. A left sidebar lists navigation options: All Files, Recents, Synced, Trash, Notifications, Notes, Admin Console, Favorites, and Monthly_literature... The main content area shows a breadcrumb path: "All Files > Arsenal FC R&D (Box) > ☆ Future Practice". Below this is a table with columns "Name ^", "Updated", and "Size". The table contains one entry: "Graded Recommendation Tables" with a share icon, updated "Today by Alan McCall", and "98 Files". A red arrow points from the folder name to the text ">30 Graded Recommendations on technologies and strategies". Below this text are five small images: a player sitting at a table with Arsenal merchandise, two players on a soccer field, a player sitting on a bench talking to a man, a man in a red shirt pointing on a soccer field, and two people in a large dark spherical structure.

Name ^	Updated	Size
 Graded Recommendation Tables 	Today by Alan McCall	98 Files

>30 Graded Recommendations on technologies and strategies



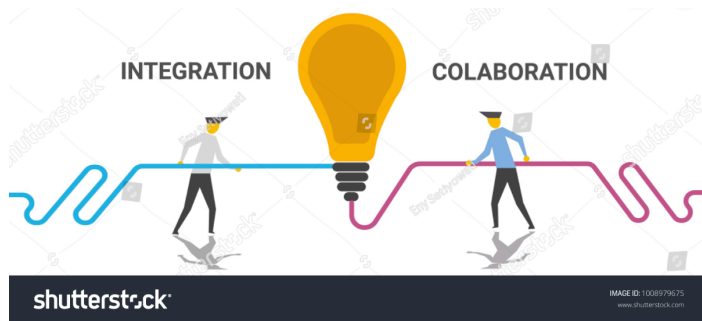


5 CEO's

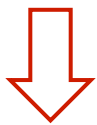


2 Technical Directors

TIPS



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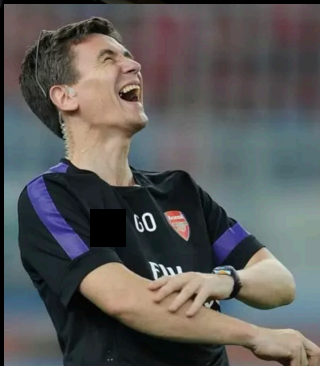
IT'S EASIER THAN
YOU THINK?



OPEN
& TRANSPARENT



THE DREAM TEAM



 **ARSENAL PERFORMANCE
AND RESEARCH TEAM**



@ArsenalSEMS



@ArsenalFCperformance