

Module 3. Relaying information to the front office. What to do and what not to do

This module begins to narrow in from general principles to more towards case studies and context around shared decision-making models. This is geared towards a deeper understanding of 'what to do' and 'what not to do', with a chance to test your skills in scenarios you may face.

Unit 3.1 Who is the front office? Defining roles and implications

The 'front office' is a colloquial term used across professional sports, referring to the team's management staff. However, the roles are diverse and so this provides a good opportunity to understand, in this module, the different lenses and some of the key aspects where communication and subtleties of these roles can impact sports science and performance perspectives. In the broadest sense, the front office usually refers to the owner, general manager, and other executives who are involved in organisational level decisions. However, this also extends to people that interact with fans, vendors, and the public, through the management of the team and aspects of the team's business.

3.1.1 Summary of roles

Insight into each of the roles described below was previously shared in module 4.1. However, the emphasis here shifts to the themes that can emerge when communicating information and stakeholder perspectives from grouped disciplines; in this module, the key stakeholder is the 'front office'. As we explore scenarios and some common pitfalls, as well as opportunities, the intent is to be aware of the possibilities and navigate this space with sensitivity, awareness, and the role communication can play. The aim is to make sure voices are heard, assumptions



are challenged and that ultimately alignment is made with the goal of sharing more accurate information for the benefit of the players and organisation.

3.1.1.1 Ownership

As previously stated in module 1, there are multiple different ownership structures, from board directed corporate ownership groups, to individual private ownership. In all the variations and permutations, it should be recognised that, at some level, the mission, vision, and values, held by the people paying the bills, will influence the culture of the organisation. Regardless of whether the owners ever set foot in the building or not, their ability to approve or remove budget, or support or restrict hiring and firing, can dramatically influence decisions that can impact player signings, as well as the day-to-day operational budget for medical and performance staff. For example, some organisations may support the signing of a multi-million-dollar player signing, at the same time as they reject the hiring of a \$60,000 athletic trainer role. The degree of involvement or empowerment that they show may vary significantly; however, it is important to understand the landscape with regards to communication, since the access to resources, budget and approvals may directly rely on your ability to present a business case, and show the impact of interventions and opportunities, to improve impact on player health, performance, and development.

3.1.1.2 CEO, president & business division

There is no single organisational blueprint with which all teams follow. Each will have its nuances, but there's a typical structure that many do, indeed, follow. In many cases, there is a top executive who is the Chief Executive Officer (CEO), who focuses on the broadest business strategies and dictates the organisation's vision and long-term goals, whereas a team president often concentrates on the team's daily operations as the number two in command. In many cases, however, these roles are combined into a single CEO/president position. As may be gathered, this role is hugely influential and reports up to the ownership, and has the ultimate say in budget, resources, and strategy. Their ability to facilitate or undermine efforts can be significant, thereby rendering this relationship a key to long-term success. Alignment of vision is, perhaps, one of the



most important aspects, since delivering on both short- and long-term objectives, and understanding of timing and pace of change will be significant.

The CEO and president roles often take a heavier role across the business side of a sports organisation, as opposed to the team operations. The main difference here is that the business runs the money, generating aspects of the organisation, from selling tickets to games, to sponsorship, merchandising, marketing, and anything that adds revenue. This is public facing and allows the operational team the luxury of being able to spend and be supported by the profitability of the business. As such, the CEO and president are essentially looking to the balance of the books and the investment in the team as a true business, for long-term success, assuming that it is in alignment with the team ownership. For the sake of communication, this is a helpful perspective to remember, since as a sports scientist or a performance staff member you are often needing to ask for resources, like personnel, money and time.

3.1.1.3 General manager

For professional sports in North America, it is typical that the general manager (GM) is the leader of the team's operations, from construction of the team roster and player acquisition, to hiring and firing of the team's coaching staff. They report to the CEO/president and are the face of the leadership team. The intensity and pressure of this role can be significant, and it is arguably one of the most complex roles, requiring management of stakeholders across a gigantic spectrum. From players, agents, ownership, coaching staff, to scouting, the media and fan base, everyone is probably asking for something, and it's rare to be able to keep everyone happy. They also hold the destiny and fate of people in their power too. From negotiating contracts, to providing job security and dealing with the pressure of armchair fans and critics, this is an extremely challenging job, although the status, compensation and ability to control the fate of an organisation is the privilege of achieving this position.

From the perspective of communication, the GM is always in need of knowing. As described with the stakeholder management, they often want visibility of issues so that they can stay one step ahead and anticipate conversations they need to have, and they



often want to mitigate risks as much as possible. General managers are in charge of activities that go from managing costs, to seizing opportunities as they come, as they typically have to make decisions that may have far-reaching implications on a daily basis. Cutting to the chase, outlining options, and presenting information in a succinct, but complete way, are important aspects of supporting the GM's role, while letting them support you. Winning is important; however, they must have a clear idea on the opportunity window that they are working with. Their job may have short-term security, so sometimes they are willing to sacrifice the long-term sustainability for current success, and, as a result, it is critical that their needs and definitions of success are in your lens of awareness.

3.1.1.4 Assistant General Managers (AGMs) and Vice Presidents (VPs)

These roles are significant in professional sport, but like many other roles discussed, can vary greatly in their influence and scope from team to team, and from league to league. One of the interesting insights, however, is that the average tenure can be longer and more secure than those of president or GM (Guiroli and Sarris, 2022). Part of the reason for this is the public scrutiny, pressure and accountability is significantly higher in those elevated positions, whereas the AGMs and VPs are often not as public as the aforementioned. These positions often directly support and report into the GM to help funnel and translate insights from various departments like scouting, analytics, development, and even now, performance (historically often under the coaching staff). It's, perhaps, most common for scouting directors to be promoted into positions of AGMs, where the emphasis and role on player acquisition continues, and their insight on players across the league, and relationships with their peers at other teams allow for an efficient model of identifying talent, negotiating, and helping support a team strategy for roster construction, free-agency and trades.

Communication is key for any role, but AGMs are often very politically savvy, have a good understanding of the industry and can help you navigate the complexities of perspective taking, decision-making processes and unwritten rules that may influence a market or even the key stakeholders. Building relationships, trusting and leaning on these individuals with questions can be particularly fruitful to close your learning curve.



3.1.1.5 Scouting (amateur, professional and international)

Personnel decisions and player acquisition are a core part of the business in any business, but particularly in the sports industry. Termed 'recruitment' elsewhere in the world, there has been a deep investment and evolution within the scouting industry in North America. Professional baseball has, perhaps, seen some of the most extreme evolution, exemplified by *Moneyball: The Art of Winning an Unfair Game* (Lewis, 2003), both a concept, as well as book and movie telling the story of the integration of scouting and analytics. This is commonplace in professional sports now; however, the story of the Oakland As utilizing undervalued statistical models to project player value has literally changed the way that professional baseball organisations weigh talent value. This process challenged conventional wisdom around scouting norms of things like hitting percentage and technical form, into objective stats like a batter's ability to get on base through 'walks' or other non-traditionally recognised means.

It may be argued that the abundance of talent in places like North America has created a scouting bias. The tolerance for how long an organisation keeps a player who is under performing or below the potential the scouts projected, will often depend on the amount of investment they made (e.g., first round draft pick compared to a sixth round pick). However, the belief and knowledge that more talent is available by draft or trade means that often more resources and time in development is not taken. For many countries without depth of talent, talent will often be forced into scenarios of development, because there is not an option to go to the next player available, although this can be an expensive model. Many pro sports in North America, therefore, may be more likely to trade, cut or move on from a player and onto the next. This wasteful approach has led to a more objectively driven shift towards investing in talent development and performance programs that can help maximise the potential of assets. This can feed into the philosophy and communication style of scouting departments and how they view the relationship between potential, development, and their willingness to invest in time before they would look at acquisition of new talent.



Scouting is often split into three types that are worth articulating here. **Amateur** scouting refers to the evaluation of talent in high school or college settings. They are players that are (or will be) eligible for draft, but that have not played professionally yet. **Professional** scouting refers to players that are already professional and likely to play on other teams in a league. These might be minor league or development league players, prospective free agents, or assets who are candidates for trade. **International** scouting refers to players—that are eligible for signing—that compete in international (non-US) leagues. There are often different rules and regulations, and more layers of complexity to manage talent evaluation in this space, although there is a lot more creativity and freedom to innovate and assess new pools of talent—that are less saturated than a domestic market. Each sub-culture of scouting is different, and front offices are often made up of staff and leaders who've had a heavy influence and career path through scouting and talent evaluation. This often impacts on perspective on development and on how players continue to be evaluated, which can impact on attitudes, biases and on how they may communicate.

3.1.1.6 Performance analytics, research and development

As mentioned previously in regards to scouting, analytics have surged in prevalence in professional sport within the last 10 years. Where there perhaps were staff of one or two, there are now departments of ten to twenty analysts. The amount of data being consumed by organisations, both on the operations and business side of teams, is significant and growing. The complex evolution of scouting and analytics is an interesting metaphor for how analytics has also evolved in coaching, performance, and development. Scouting and analytics at their most basic have displayed the metaphor of subjective and objective data being pitted against each other, as if one is correct and the other wrong. If we continue the metaphor of 'objective' versus 'subjective', we are almost talking about two philosophically different languages. Words of mathematics and science versus art and literature. Overly simplistic perhaps, but not only are the languages fundamentally different, but there is also a layer of fear that scouts may be replaced by computers, and that there is a lack of respect for the years of work and labour, to understand the process and training of these coaches and scouts. Of course, the reality is that a combination of those methods



can provide rich context and complimentary insight; however, it's the analysis, interpretation and accurate utility of information for decision-making that has, perhaps, the greatest impact.

3.1.1.7 Operations

Operations departments can encompass a wide variety of roles, depending on the type and scale of a team. Professional baseball, for example, tally an impressive sized roster of up to 300 players across a single organisation, from Major League to Minor League teams (up to seven different affiliates), in addition to Latin American academies. The logistical and operational support of that scale are substantial, compared to an NBA franchise that may have a full roster of 15, plus an additional 'G' (Gatorade) league team of 12 players, who are not under full contract rights. The **director of operations** role is often a key member of staff who has insight and coordinates a lot of strategic efforts to get tasks executed. From a communication standpoint, this individual likely knows where to go for what, who needs to be involved in discussions, and a calendar of events to know when certain things need to be decided. As a sports scientist or a member of staff needing help with the lay of the land and how things work, this individual can often be one of the most influential and resourceful members of the staff.

While operations often include the coaching and performance staff, in this context, you may also consider facility management, maintenance, security, clubhouse and equipment, as well as travel, contracts, and administration personnel as part of the operational staff. As the title conveys, 'operations' are the people who get things done, or make things work behind the scenes. Being cognizant that much of this work goes unpraised or seen can make people feel undervalued, but the truth is that nothing would work without their help and support. Trust and communication are as integral with these roles as it is with the front office leadership or coaching staff, so pay attention to these relationships and how to build a positive and team environment with all parties.

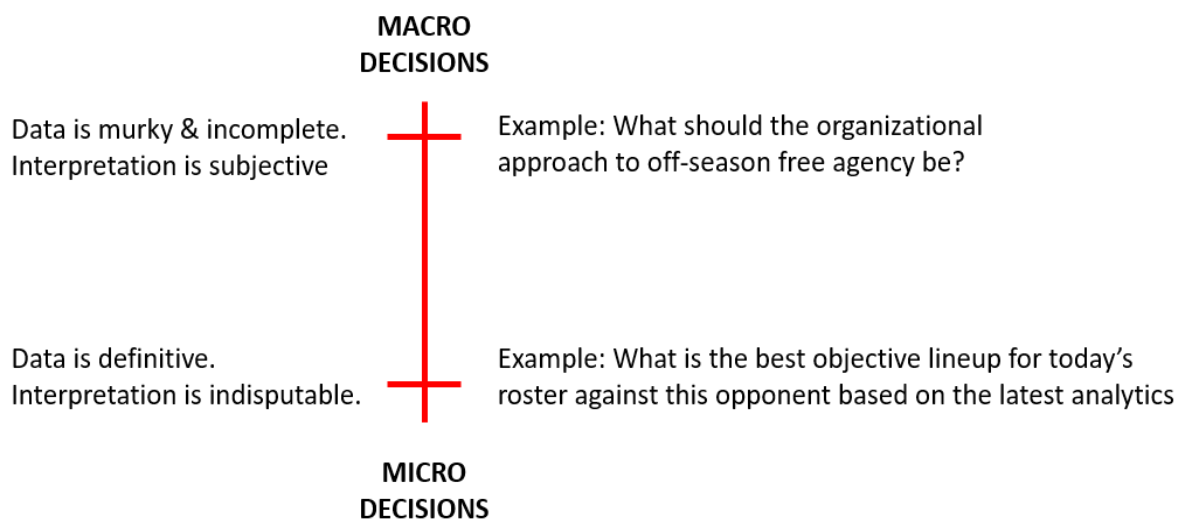


Unit 3.2 The role of communication in decision-making

3.2.1 Macro- vs micro-decisions

Macro-decisions are typically broad-picture items, the overall objectives of an organisation, new initiatives such as key hirings. Micro-decisions absolutely contribute towards these grand picture objectives; however, the types of information contributing towards these decisions can be very different.

Figure 1. Macro-decisions vs micro-decisions



Source: Gugel, 2019, <https://bit.ly/3H5jFZo>.

Even though the stakes of the macro-decisions are arguably greater and more important, the information to go with those is often 'murkier' and more challenging to get clarity on. Having definitive data that allows you to have full confidence in a decision is highly unlikely. Operating with ambiguity over the outcome feels like the art of decision-making and reason that operating at this level is not easy; but establishing a process and working to get better information is a way to compensate and stay ahead of others when subjectivity and intuition of decision makers sometimes rule the day. This is also the source of competitive advantage, especially when it shifts from the luck of making a great pick in the amateur draft, for example, to consistently making good decisions and picks over time.

Micro-decisions, however, can be grounded in very clear and specific objective data. If you're trying to decide on the best line-up for a gameday, looking at the performance metrics of each player and how they line up against the opposing teams' statistics, you can get a clear answer. However, this answer is only predictive and not certain of success. You can just generate a statistical probability of success. This combined with the manager and coach's insight and rationale, as well as other factors can help with the execution of more robust decisions that include the make-up, morale of the team, and other factors may lead to a more effective outcome. The presence of analytics in virtually all professional sports provide this as a basic framework for the coaching staff to start from when it comes to these kinds of regular game day decisions. Closing this gap into more objectively driven metrics into daily team management has been a trend across front offices and coaching departments, and the different ways teams have been approaching this have had varying levels of success.

Like any industry, the ability to translate theory into practice is where the magic lies. We've talked a lot about theory, but the upcoming case studies share examples where your collaboration with front office stakeholders will be tested, and your opportunity to discuss and use insight from data can directly impact decisions that may heavily influence the success of an organisation. The stakes can be high, and the reality quite messy. These case study scenarios can be the fun and challenging aspects of this work. It is recommended that you



reference the topics of communication, stakeholder management, trust, emotional intelligence, behaviour change, and key performance indicators, so that it can help you prepare and create the optimal conditions for successful outcomes.

Unit 3.3 Case studies: Decisions impacting key performance goals with front office

3.3.1 Health/availability scenario

Availability is a key term, because it's not the idea of preventing injuries, as much as it's keeping a roster as healthy and durable as possible, so that players are available to play as much as possible. However, injuries are part of the landscape in professional sport. In the medical field, the training a professional athlete goes through could even be considered traumatic in the sense that their bodies undergo such repetitive motion that 'chronic trauma' is acquired in certain areas of their bodies. Of course, the presence of medical staff in the support team, and the extensive measures to help an athlete prepare and recover are designed to keep players healthy as much as it is possible. When they are injured, the goal is to help them return to play as soon as possible. It is important to be cognizant of the financial impact of keeping a player (also considered an asset) available, which is significant for an



organisation. Conversely, injuries are a significant expense; directly as a loss of salary cost, but also indirectly through the cost of playing an equivalent talent, bandwidth of support staff, opportunity cost of a roster spot, and opportunity for the team to have their best team and chances of success. Both these direct and indirect costs can be a huge competitive disadvantage.

Player "placeholder" is a 25-year-old professional pitcher, and successfully pitched a half season post-Ulnar Collateral Ligament (UCL) reconstruction. The organisation must decide whether to protect his contract in the upcoming off-season or not. They are looking to see if he can remain healthy and increase the velocity of his fast ball pitching. There is concern from the medical staff that adding pressure to the player in a big contract year and asking him to increase velocity simultaneously, may be a recipe for another injury.

The general manager tells the head ATC that he doesn't mind taking the health risk, since if he's healthy and can't pitch above 92 mph, he's not going to be of much organisational value. The GM asks you as an experienced sports scientist to gather information and present it back to him to help inform a decision about what they should do.

- (a) Who would you want to engage in discussion, and why?
- (b) What further information might you want from these stakeholders to present a complete picture to the GM?
- (c) What further considerations might you want to include in the presentation?

● **Potential approach**

(a and b) Each stakeholder and reasons why are listed, in addition to the kind of information that may provide the most comprehensive insight to the GM.

o Performance staff

- **Medical staff** - They will have the best perspective on injury history. Their insight into the implications, both of likelihood of injury and severity, as well as precedent and examples within baseball, and what options would look



like in the case of injury, can be helpful in providing costs, scenarios, and probability.

- **Strength and conditioning** - Will have context on potential mitigating factors to protect from injury, including potential resources, assumptions, and precedents for success and failure. Collaboration and discussion with the medical staff will help make this more of a robust insight to make sure there are no assumptions or misunderstanding of the unique features of the player's injury history and pathology and training programming recommendations.
 - **Mental performance coach** - It's perhaps most helpful for the MP coach to hear and understand the assumptions that each of the stakeholders are raising and integrate those points into the understanding of the player as an individual based on his profile or experience and insight. They can help build some assumptions or blind spots into how conscientiousness, ability to comply with preventative care or routines may protect or mitigate risk. In addition, they may provide valuable recommendations for how to manage emotional responses and maximise the support and process of communication, and designing a plan together.
 - **Nutritionist** - Assuming there are no complicating physiological aspects to the recovery and body composition of the player, the nutritionist may not have a significant role; however, in rehabilitation they often can play a significant role in providing supplements that have been evidenced to play a role in a speedy recovery as well as implement the latest in individualized fuelling strategies for a player.
- o Non-performance staff - While not the direct focus of this module, these stakeholders will be important to shape insight and recommendations.
- **The player** - The autonomy and informed consent of a program will be important for the player, and potentially the agent, especially if surgical options are being presented. In the case of medical information, it is easy for there to be a technical and sometimes literal language barrier and concerns over the impact of their career and implications. Checking for understanding, clarifying their fears and any unique factors they should be aware of like



contract status, family support, past trauma or experiences, and other factors are good to know.

- **The pitching coach** - Understanding the role of tactical and technical implications are significant. Knowing both the strategic aspect of the players' role, the likelihood of stress, and the likelihood of reinjury or effectiveness going forward are thoughts to be taken in consideration. Also, important to consider is whether biomechanical changes or interventions have been or should be considered, and what the risk/ reward factors are making these kinds of changes.
- **Front office/performance analyst** - Often this analyst may have the deep dive information on the KPIs of this player and access to the comparisons and data sets across the league, especially for players of similar playing style or position, as well as managing similar injuries scenarios presented by the medical team.
- **Head coach/manager** - Perhaps minimal contribution here, but would be relevant to understand the degree of involvement that the coach would like, and how they see the contribution or impact of this player in the roster.
- **General manager** - Ultimately knowing the guiding principles of value that is laid before the GM will be on answering the objectives of (a) availability, (b) performance, and confidence in any one of the scenarios from happening, as well as the options and resources it would take to do this, and long-term opportunity costs and benefits.

(c) Further considerations

Organising information from so many stakeholders into an efficient and succinct presentation, with clear recommendations and next steps can be a challenging process. Having a process to weigh different pros and cons is helpful, especially to demonstrate to the front office what some of the confounding variables may be, including the potential risks and downsides, and the opportunity costs, not just financially, but also in terms of staff and time resources. A classic miscalculation is often medical rehabilitation, and the number of staff and time involved in intensive treatment on one player, which may



inadvertently mean diminished time, and attention on another player. There are potential costs to increasing the quantity within a rehab group, to the quality-of-service provision that can be offered.

The process outlined below is one simple example of how that may be presented at a conceptual level, but clearly the individual dimensions of a player’s risk factor, and the interventions being recommended. However, being able to demonstrate the thought process, potential comparisons and likelihood of success to stakeholders can give that much more context and confidence to a decision. It also allows for better feedback loops in evaluating the effectiveness of a decision so that the next time a similar decision needs to be made the lessons learned are more likely to be captured accurately in true scientific fashion.

Figure 2. Process overview and decision analysis

Process Overview:



Decision Analysis:

Decision to be made: *Is there a level of acceptable risk for being more aggressive with mid/late career prospect pitchers?*

	Option 1	Option 2	Option 3
Potential risks	4	3	1
Direct resource costs	2	3	2
Implications for success	3	3	3
Likelihood of success	4	3	4
Score	13	12	10

Rating Scale: 1 – Doesn’t meet criteria; 2 – Somewhat meets criteria; 3 Meets criteria; 4 Slightly exceeds criteria; 5 – Significantly exceeds criteria

Source: own source.

- **Potential outcomes for each of the possible responses**

- o Performance staff

- **Medical staff** – Reaching a consensus in risk assessment can be challenging, and there may sometimes be fundamental philosophical differences that create breakdowns in



communication. Concluding on what's acceptable, risk is particularly sensitive to a medical group. It may ultimately be a player's and GM's decision, but the medical oath of 'do no harm' could be in conflict, if the level of risk accepted is high. Time for open discussion and strong leadership around this area would be considered important.

- **Strength and conditioning** - As previously stated, the collaboration with medical and coaching staff is critical for S&C, and, again, being aligned and comfortable with the player and front office decision on what is deemed acceptable risk.
 - **Mental performance coach** - Their ability to manage some of the sensitivities create awareness and alignment around the process, and stakeholders may be particularly helpful. Breakdowns in communication or assumptions could be a recipe for conflict, if the outcomes are adverse.
 - **Nutritionist** - Despite being a lower involved role, excluding providers like this or not including them can have a detrimental effect due to increasing insecurity and feelings of isolation from the team.
- o Non-performance staff - While not the direct emphasis of this module, these stakeholders are affected by the insights and recommendations.
- **The player** - Key stakeholder who has the right to say no to any recommendation, and so their buy-in to a program, especially if risks are presented is extremely important. An agent can exert tremendous influence over a player and is also responsible for helping provide insight into the long-term and career implications. Making sure to include both agent and player, answer questions and communicate both pros and cons of suggestions is important. Nothing is without risk, and if things do go wrong or not the way intended, you could open yourself up to litigation or harm by pushing a player one way or the other. It is far easier to be supported by an organisation or player and agent, if you're thorough in presenting options and documenting a robust process.



- **The pitching coach/ sport specific coach** - Typically plays a key role in the player's performance. Their voice in conversations will be important. If ignored or excluded, it could create division among the team and voices of influence over a player, but also the likelihood of a successful and comprehensive programme.
- **Front office/performance analyst** - Identifying who needs to be involved, or informed (even after the fact), compared to who needs to be consulted before a decision, will be helpful. You might use a RACI process to consider this and keep things streamlined.
- **Head coach/manager** - Asking the head coach for the level of visibility and involvement will be a helpful guide in not over communicating, and, hopefully, in not creating any surprises either.
- **General manager** - As the main stakeholder who has asked for support around this decision, and gave you a deliverable to follow through on, it is critical to keep the process transparent and check for understanding on timelines and deliverables. These may change and be dynamic, so figuring out expectations and communicating clearly around these will determine much of the success.

3.3.2 Performance scenario

Front office perspectives are typically strategic and organisational in nature. Putting the team in a position to win, and be consistent with the ownership budget and goals, can lead to all manner of compromises and constraints that can foster creativity and innovation. In an era where new data streams and perspectives are being generated each year, sports science presents new opportunities to leverage competitive advantage. In many ways, this is the essence of sports science, to use evidence to optimise and maximise conditions for success. This alignment between front office and sports science for problem solving is a great match; however, there are complexities and blind spots that can have unintended consequences.

A baseball team have a young and talented roster. With enough players under team control, they can afford to spend money in free agency to help make the team compete for playoffs.



Expectations from the ownership are for the team to push into a 'winning' phase. The GM is trying to make sure the roster is designed for winning, and they have maximised the performance potential of their personnel. They have had success in moving talented players into different skill positions that's helped give them flexibility; however, there is a lack of evidence to say what physical attributes work better in different player positions. The GM asks you to help facilitate a process, and to look at the pros and cons of one of their most athletic younger players to see what other positions he may be suitable for.

- (a) What would be your first steps to understand the deliverable?
- (b) How would you organise your thoughts to tackle this request?
- (c) What biases, limitations and unintended consequences should you be aware of?

Potential approach

- (a) Checking for understanding as to the following:
 - i. Overall goal of the GM, which, in this instance, sounds like he wants to add flexibility to the team roster and find the best matches based on the athletic profile of this specific player.
 - ii. Clarify the deliverable back to the GM and the timeline, and other stakeholders that the GM would like to be involved in the process.
 - iii. Creating a repeatable process that establishes the pros and cons, or opportunities and risks for matching an athletic profile with positional demands.
- (b) To think about how to organise thoughts and approach this request, there is no perfect answer. However, you might consider the following types of questions and approaches:
 - i. Clarify from scouting and coaching sources if there are already criteria for fundamental positional requirements.
 - ii. Establish positional norms across ranges of physical attributes.



- iii. Cross-reference critical skill-specific demands of positions from objective data that already exists (e.g., number of acceleration/decelerations, distance travelled, number of throws, or any other differing task specific loads).
- iv. Identify how the individual player moves in relation to these demands.
- v. If there are strengths or weaknesses, do these match the positional demands?
- vi. Are there additional injury risks or implications to longevity to consider?

(c) Much of the work and communication with the front office is about managing risk, and maximising opportunity. When using data, making recommendations, or predicting future results, there is inherently error and risk. Accounting for that error and being aware if it can be managed or minimised are key aspects of how we implement effective communication. Below are some areas of error or biases that could be acknowledged and shared to frame the confidence you might have in sharing these projections.

i. Potential constraints directly from people

1. Confirmation bias - People will typically recall examples or interpret information in ways that confirm or support their beliefs.
2. Selective perception - Similar to confirmation, bias in people seeing what they want to see; however, in the case of selective perception, they will also have a tendency to ignore or minimise opposing or contradictory viewpoints.
3. Framing bias - The manner in which information is presented can affect decision-making. This can be done positively or negatively, and 'frame' the audience into perceiving the importance or risk of the decision and how they think about it.
4. Groupthink - Decisions made in a group setting can be influenced by this bias, which encourages conformity and harmony within a group.

ii. Potential constraints directly from data and sources of data

1. Issues of reliability - Consistency and trust of information
2. Issues of validity - Quality and cogency of information



- **Potential outcomes for each of the possible responses**

(a) Checking for understanding is a key element of communication, especially where there may be so many assumptions in play. Depending on the sophistication of both the sport and the sports science and data capture capability, there may be an abundance of information to pull, or there may be a complete void of data and information. Each of these would present very different scenarios in the confidence to present back, and would, perhaps, be ideal to share initially to manage expectations of what is realistic. There is also a risk here that you are exposed beyond your skill and expertise to focus on collecting skill-specific and sport specific insights, without the contextual knowledge and understanding of the game itself. Narrowing the scope of your expertise, and identifying and collaborating with the right experts would also help, although, as a key stakeholder, you may be able to co-facilitate an effective process.

(b) As outlined above, clarifying which experts can bring insight into the question will help tremendously in setting up an interdisciplinary and more comprehensive set of responses. Posing these as questions may allow the pulling of existing data sets, or creating the opportunity to identify what data would be helpful to collect in the future.

(c) The sources of potential error here are relevant, but could be multiplied infinitely across the complex interaction of people and processes. The bigger question is what level of risk you're willing to accept, which could be weighed based on the level of consequence, opportunity, or risk. This is where developing a process for actual decision-making based on the level of confidence and recommendation is, perhaps, more helpful to help front office design and consider.

3.3.3 Development scenario

The front office roles and strategic leadership involved are grounded in having to make decisions. While much emphasis is put on who you acquire in a draft or trade, or the line-up for a game, or RTP for a high leverage player, there can be more subtle or less obvious decisions that can be just as significant. For example, one of the most challenging developmental decisions an



organisation can make is when to cut their losses. At what point is a return on an investment no longer worthwhile? Roster sizes are almost always limited, and there is an investment and development that needs to happen, but also a window of time and appropriate number of resources that make these investments positive. Being able to have a process to follow, and to accurately assess this, is important, in order to give the GM or front office leadership the information to decide on whether or not to release a player or invest more time and money into the player as an asset. This is not to necessarily make a decision, but to as accurately as possible provide the insight and information, so the key stakeholders can make that decision for themselves.

Player "Placeholder" is a 26-year-old baseball player, who is a former first round pick and multi-million-dollar investment, who's been in your team's system for 5 years. He's progressed very slowly through the system and is now at AAA, the level below the Major League team; but early projections put him 2 years behind the developmental goals. He still has trade value, but his poor performances hitting make it hard to market. He's above average defensively, and is extremely competitive, which factors into his inability to overcome poor hitting mechanics. His routines and willingness to focus on mechanical changes are low, and he has a habit of consistently tinkering and changing technique based on the position coaches' assessment.

The director of player development is responsible for minor player assignments, promotions, and releases. He's working on a process to gather information to consider releasing players like such, whose potential is either limited. The resources required would be greater than the potential that they would fulfil, or other reasons to no longer invest. He's asked for how you would integrate sports science to help the organisation arrive at a decision in what to do.

- (a) What questions would you want to ask, or information you might want to know?
- (b) How might you organise this information to present the recommendation of a release?
- (c) What other staff might you include in your approach?

Potential approach



(a) The factors that make a successful athlete are multifactorial, and answers are complex. Relaying sports science data in isolation will not add as much value as acknowledging assumptions, understanding the actual question being asked, and providing quality information to the right audience. The following are examples of good questions to ask to help gain that context and more directly tie data to help support a decision-making process:

a. How has the player developed so far?

i. Can you objectively measure how they've moved through the system, or their scouting grades have evolved over time in the organisation?

ii. How has their career differed from their projection and vision for their potential? For example, was there an anticipated mechanical change needed that has limited their movement and trajectory?

b. What is their remaining potential?

i. From a fundamental skill, physical capacity, or mental skill standpoint, are there signs or signals of further growth and depth to tap into?

c. What are their inhibitors to grow?

i. Are there particular barriers that this player has hit over time?

ii. Are there any additional future barriers also that can be foreseen?

iii. What are the risk factors that they already have, including medical factors, and also lifestyle or behavioural factors?

d. What are their attributes that you think could make them elite?

i. Assuming that a player doesn't have to be complete, are there any particular standout strengths or areas that are or could be elite?

e. What resources would be needed to help support this player?



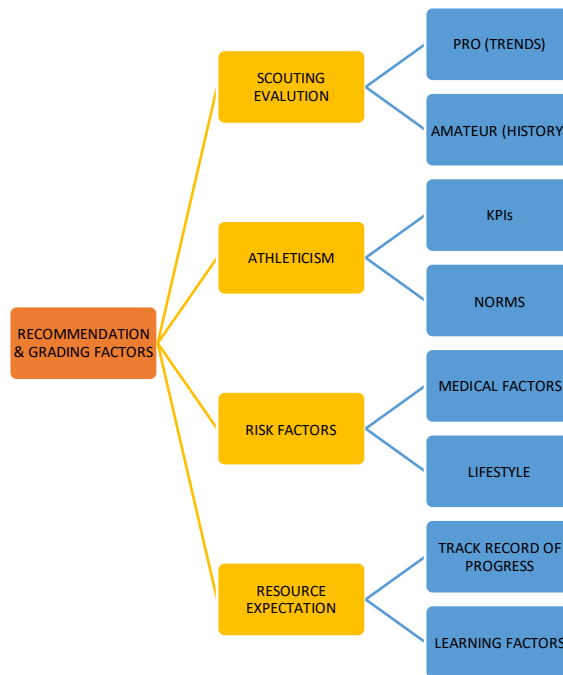
- i. What kind of learners are they, and do we have the resources and coaching environment to support them?
- ii. Have they shown a track record of being able to show the ability to learn and adapt?

(b) There is a lot of information in the list of questions above, and many of these are beyond the scope of the sports scientist. However, the added value of the information a sports scientist can present will be in the context of the questions being asked. Thus, taking the time to ask the questions will help use a design process to bring the information together in the most meaningful way.

The flow chart below indicates a way of thinking through contributing factors that ideally would present objective and subjective information from each of the various stakeholders, from scouting, sports science, medical, mental performance and coaching vantage points. Front office personnel would help set this framework and bring the data together if it isn't already, ideally through the Athlete Management System (AMS). The research and development team may also be able to create weighing and scores to help grade and drive an overarching recommendation, which could be tested against data modelling and ultimately into discussions and an efficient process.

Figure 3. Recommendation and grading factors





Source: own source.

● **Potential outcomes for each of the possible responses**

(a) Even though you may be thinking about a comprehensive and holistic response to this question, it may not always be received with open arms. If there's no precedent and openness to a thorough, interdisciplinary process-driven approach, you may be met with resistance or frustration. Given the complexity and nature of questions you want to know, they may desire a simple and specific answer and deliverable of relevant physical data metrics. These would serve a function, but taking additional time up front to design a process and really understand the question may be perceived as taking more time and involving more people, which will slow the process down. This doesn't mean that you don't still pursue this approach, but it should be met with its own context and understanding that organisational readiness and change management process may also need to happen.

a. How has the player developed so far?

i. It's arguable that there are three categories here, 'above expectation', 'met expectation', or 'below expectation'. Being able to define these objectively could be extremely beneficial to provide some benchmarks and evaluation systems, that will help evaluate the effectiveness of scouting profiles, as well as the development system



itself. As an aspiration and process in itself, this should be a mechanism for feedback and evaluation.

b. What is their remaining potential?

i. Potential is a very subjective measure; however, concretely defining the parameters around that allows some deeper discussion and insight around the accuracy of projections, where errors or bias may have influenced perceptions and what opportunities for development there may be. To be accurate in this area is probably limited, but worth discussion and challenging assumptions.

c. What are their inhibitors to grow?

d. What are their attributes that you think could make them elite?

i. Both c and d are similar in their ability to challenge the insight into strengths and weaknesses, although they could be quite limited by the source and quality of information. Trying to make sure there are subjective and objective measures to support perspectives would be an important consideration in an effort to not fall trap to biases.

e. What resources would be needed to help support this player?

i. This list could be pretty exhaustive, but can be a valuable exercise in assessing the breadth of resources already existing inside the organisation, as well as identifying gaps. There is also an opportunity here to do a financial and budgetary analysis on the resources provided and the cost assessment of the investment for player development.

3.3.4 Acquisition scenario

One area of competitive advantage between teams is being able to acquire undervalued talent. There are numerous examples of young prospects who are drafted high, with much anticipated promise, but who ultimately underachieve as young professionals. The reasons can be varied, from poor scouting evaluations, with too few evaluations, to the pressure and expectation management a player has as they struggle to fulfil their status as a 'prospect'. Indeed, injuries and complications arising from mechanical changes and the demands of higher levels of



competition can make a highly complex set of factors result in wasted potential. However, professional scouting can recognise unique opportunities for player acquisition that other teams might not. This might be identifying a reason that a player has underperformed, and finding a solution that allows them to flourish. This can be extremely complex for many reasons, including how difficult it can be to directly gather information on a player from a different team, but being able to assess the ability to impact an undervalued player can be a competitive advantage.

In this scenario, the pro scouting director brings up these concepts and how to recognise the barriers to a player's potential and the resources needed to help. This isn't the core part of your job, and it isn't in your job description, but it is essential to understand it's a high leverage opportunity. Which of the following approaches make the most sense to you?

- **Potential approach**

- (a) You promise the scouting director that sports science can help identify any player's strengths and weaknesses, and that, given the resources and opportunity, it can make any player better.
- (b) You share how excited you are for the idea of exploring potential and undervalued talent. Especially with the opportunity to help a player fulfil their potential. You recognise this is a big interdisciplinary effort that would require input from scouting, coaches, and performance team all collaborating. You promise to do your best and ask for support and follow-up asking more questions.
- (c) You discuss the idea of using data from your own organization and comparing that to amateur scouting data, as a marker of their 'potential' upon their entry to the league at the draft, compared to their current reality.
- (d) Create your own.

- **Potential outcomes for each of the possible responses**

- (a) Promising anything should be done with extreme caution. Providing deliverables that have actionable steps and



recommendations is important; however, promising or predicting absolutes is non-scientific and setting you up for failure. While the process may include a profile of 'strengths and weaknesses', and recommending opportunities and resources for development, there are many variables that influence these, as well as the known accuracy of these observations or measures that would ideally be acknowledged.

- (b) Sharing excitement, but acknowledging the shared insights and input of other stakeholders, is an accurate reflection of an interdisciplinary model like this. It is good practice to check for understanding, and to take a moment to highlight assumptions and questions. For example, what is the most helpful deliverable to give to you? What would be the timeline or most valuable information we could give back? What's your overall goal? Who else would you recommend involving in this? These clarifying questions will give you much richer context and feedback to work with and design the best product for the decision they're trying to make, or information, if there's not a decision, but creating awareness as a research project. This will likely save time and energy by not creating something that is not needed or useable.

- (c) While the concept of using scouting projections with current KPIs is interesting and makes intuitive sense, you don't know if this is actually answering the core questions for pro-scouting. It's easy to follow many **interesting** questions, but it can waste a lot of time, energy, and resource to purely follow interest, and not focus on designing solutions and tools for decisions.

- (d) Any solution created that seeks clarity, and checks for understanding and communication across stakeholders, is likely to hold some validity and serious consideration. Every team, organisation, and sport is going to have its own context and specific situation, as will each practitioner and individual be working through this exercise. Respecting your own individual approach and answer is the ideal.

In conclusion, the front office stakeholders are often overlooked in the education and training of the sport scientist, or sport science practitioner. Obvious emphasis goes into the direct player care, and interdisciplinary collaboration with coaches and performance staff. However, a deep understanding of the decisions that organisational leadership manage, and how



communication and information influence the strategy and operations, are significant. Gaining insight into these questions and the demands, risks and opportunities these individuals manage, can allow much greater organisational impact, that, in turn, can benefit the players, staff, and overall success. Similarly, underrepresenting this perspective, or ignoring their influence and demands, can lead to a great deal of frustration, misunderstanding, and disempowered efforts to maximise performance, development, and organisational goals.

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