# NYM Pro Player Personnel Associate Questionnaire

1. *Looking at trades in the past two years, describe a trade that you see as mutually beneficial. Why did it make sense for both sides?*

Prior to the 2023 season, the Miami Marlins and Minnesota Twins completed a trade which centred around Luis Arraez going to Miami and Pablo Lopez heading to Minnesota. The Marlins are known to develop strong pitching but have lacked in the offensive department in recent years. During the offseason, the Marlins had reigning Cy Young Award winner Sandy Alcantara and plenty of young pitchers/prospects such as Jesus Luzardo and Trevor Rogers. This made Lopez expendable for the Marlins as they needed a good batter.

The Minnesota Twins were an ideal trade partner for the Marlins since they had a surplus of infielders such as Willi Castro and Royce Lewis and were weak in the pitching department. Tyler Mahle underwent Tommy John Surgery during the 2022 season and the Twins rotation depth was very thin. Adding a font-line starter that would help elevate the Twins to playoff contenders. Arraez was coming off his most productive season of his career, but with younger talent making its way up the Twins pipeline, the Twins made the decision to trade Arraez to bolster their rotation.

Both have mutually benefited from the trade Both Lopez and Arraez had career best seasons in 2023 and fulfilled the needs for their respective teams. Lopez led the Twins to a top 5 rotation in baseball and signed a contract extension which keeps Lopez in Minnesota through 2027. Arraez was the most productive batter on the Marlins in 2023 and he is under team control through the 2025 season.

1. *Describe an effective 40-man roster management practice(s) that you’ve seen over the past few years. Why do you think that the strategy/strategies added value to the organization? Consider elements such as waivers, options, free agency, trades, salary, etc.*

An example of an effective 40-man roster management practice that I have seen recently is the utilization of left-handed and right-handed specialists on a team’s 26-man roster. The expansion to a 26-man roster from 25-man roster in 2020 provided teams the flexibility to carry either an additional batter or pitcher on their major league roster. Adding an additional player to the team provided many options to a team in how they could approach filling that position, but I believe the usage of the spot to include a batter that excels against pitchers of specific handedness is very effective. For example, teams such as the Tampa Bay Ray and Los Angeles Dodgers have acquired players who have struggled in recent seasons and placed them into roles where they are used exclusively against pitchers of the opposite handedness.

An example of this was the acquisitions of Jason Heyward for the Dodgers and Luke Raley for the Rays. Both players were failing to find success and their biggest flaw was their production against pitchers of the same handedness as them. Both Heyward and Raley had strong tools and defensive utility, which made them promising acquisitions. The Dodgers and Rays were confident that with the proper training and utilization, that these players could return surplus value. During the 2023 season, both Heyward and Raley saw approximately 90% of their plate appearances come against pitchers of the opposite handedness, and both players had their one of their most productive offensive seasons of their careers.

1. *Assume you’re tasked with ranking an organization’s top prospects. What information do you see as important to your process? Feel free to use player examples for your argument.*

The most important information regarding the ranking of an organization’s prospects would be the utilization of Trackman data such as batted ball metrics for batters and pitch shape metrics for pitchers. These metrics should form the baseline for comparing a prospect’s current value to others and they can assist in projecting a prospect’s future value.

Other information that will be important is biomechanics and swing data which can help identify any flaws a prospect may have and how easily it can be addressed. For example, if a hitting prospect has really strong batted ball data but has struggled with producing in games there may be issues with the player’s swing and movements that limit their ability to fully utilize their tools.

A simple way to rank the prospects amongst each other is to assign each of them grades for their traditional baseball tools. These grades would be calculated using the aforementioned data and analysis. After grading the prospects, a list of top prospects can be compiled by comparing the tools of each prospect.

1. *Considering the 2023-2024 free agent class, what area of the market do you believe will yield the most value on a dollar-for-dollar basis and why?*

The area of the 2023-24 Free Agent market that will yield the most value is the Relief Pitching market. Generally, relief pitchers are not the most value efficient players as their production are limited by the volume of innings they pitch. The reason why I believe the RP market will return greater value this season is due to the abundance of strong RP and the lack of other high-quality players in different positions. Relief Pitchers such as Josh Hader, Jordan, Hicks, and Phil Maton have the potential to lock down relievers and would become one of the best arms in most bullpens around the league. There are other veterans such as David Roberston and Robert Stephenson which had great 2023 seasons but still remain unsigned.

Since there are a lot of high-quality RP available, teams have many options to maximize their value by pursuing RP which fall within their budget. With the lack of depth at other positions, the cost to sign the best players at their respective positions rise. For example, Cody Bellinger is the highest profile OF available in the free agent pool and there have been rumours that he is seeking a $200 Million contract. The other free agents OF this off-season are not expected to sign long term deals which only heightens Bellinger’s price as the supply of star OF is limited to just him. This is similar to the 3B market where Matt Chapman is the best option amongst the few available MLB quality 3B.

1. *Using the attached file, identify a major league pitcher who you think would benefit from a pitch usage change based on their 2023 arsenal. What is your proposed change and how do you expect this to affect their performance in 2024? Feel free to download additional pitch-level data from Baseball Savant’s search feature. Use of coding to support your reasoning is strongly encouraged. Include any relevant visualizations and/or code that you use.*

After reviewing the pitch arsenal data provided, I have concluded that Cole Ragan’s would benefit from a pitch mix change in 2024. Cole Ragan’s was very effective last season following his trade to the Royals where he showcased large rises in velocity and the ability to generate swings and misses. Taking a look at Cole Ragan’s pitch usage, he is primarily a 4-Seam fastball pitcher, and his usage of his secondary pitches is highly correlated to the batter’s handedness. His changeup is thrown approximately 30% of time to right-handed hitters while his Slider is thrown 25% to left-handed hitters. When flipping the handedness, the changeup and slider usage both drop to 5%. His changeup and slider rank as his most effective pitches, and his situational approach optimizes this result.

I wanted to know how much more effective his slider and changeup depending on the batter handedness and if an increase in usage overall would be beneficial. I gathered data from Baseball Savant via PyBaseball and noticed that his changeup performs significantly better against righties than lefties. This makes sense as changeups are generally more effective against opposite handed opponents. As for his slider, there was a marginal difference in the efficiency of his slider against lefties than righties. The Slider RV/100 for left-handed and right-handed batters was 4.44 and 4.37 respectively. Generally, sliders are most effective against batters of the same handedness as the large horizontal movement of the pitch makes it is difficult for batters to make contact on as it is moving away from them. In Cole Ragan’s case, a modest increase in his slider against righties seems beneficial as it was effective against them in 2023 and the pitch grades out extremely well in all metrics.

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