A 10-Year Look at UCI WorldTour Team Performance

Multiple performance, economic and organizational metrics can be dissected to evaluate the competitive performance of UCI WorldTour cycling teams. The Outer Line published a brief survey of historical team performance two years ago; and this more thorough analysis updates that evaluation with 10 years of men's WorldTour data, revealing unanticipated insights into the sport and the key drivers of success in managing pro teams. For this new analysis, we primarily analyzed team wins, podiums, and top-10 race placings, as well as the ProCyclingStats annual point totals.

(As previously discussed, the UCI has its own point system for ranking and selection processes, but the PCS system is more detailed and user-friendly and is generally considered to be a more precise estimate of performance; in addition, the UCI completely changed its points system a few years ago, making longer-term trend analysis and comparisons impossible. Also, a few teams that participated in the World Tour for only one or two years, generally at the beginning of this period — including Vacansoleil, Cannondale, Euskaltel, IAM, and Europcar — were not included in this analysis.)

Analyzing WorldTour wins

We first evaluate the number of WorldTour wins by each team, shown in chart 1. This data is densely clustered but we show it for three reasons: (1) to graphically demonstrate the "amplitude" in the fortunes of most WorldTour teams (i.e., the extent to which most teams bounce up and down year-to-year), which, as we will see, is a recurring theme in this analysis; (2) the apparent but uniform 2020 performance dip due to the COVID pandemic-shortened season that is apparent in most of the following charts; and (3) the dramatic and sustained dominance of Deceuninck-Quick-Step (DQS), now Quick-Step Alpha Vinyl (QST), that single green line standing clear above all the other teams. And as we'll see, this dominance is not just reflected in team wins; it repeats itself in the metrics shown below.

As discussed in more detail elsewhere, DQS always seems to have at least one rider capable of winning a race, no matter its style, profile, or length. Although we've often been critical of team manager Patrick Lefevere's bombastic public persona and treatment of his riders, there can be no denying the team's competitive success. While many teams have had two- or three-year winning streaks, none comes close to the consistency of DQS.

We qualitatively filtered out those teams that have shown identifiable improvement or regression over the last 10 years to better parse the trend lines and make chart 1 more understandable. Some tentative conclusions and hypotheses emerge as a result.

Chart 2 shows three teams that demonstrate a mostly upward-trending performance: Jumbo-Visma and the relatively newer UAE Team Emirates and Bahrain Victorious. Jumbo-Visma is a longstanding WorldTour organization (previously known as Rabobank, Blanco, and Belkin) but has reinvented itself under the watchful eye of general manager Richard Plugge over the past nine years. The same is

essentially true of UAE, which evolved from the longstanding Lampre team, thanks to the injection of considerable new funding and the fortuitous signing of superstar Tadej Poga?ar. Bahrain snagged 28 wins in just its second WorldTour season and seems poised to continue improving—especially as new funding enabled the acquisition of riders like Sonny Colbrelli, Mikel Landa, and Gino Mäder.

Perhaps as a direct outcome of the "makeover" of these three teams, each shows long-term upward trends, even with the significant 2020 Covid-related dip. The notable question that emerges from chart 2 is simply why there aren't more teams represented here; however, no other teams demonstrate a similar, consistent long-term improvement trend.

Chart 3 highlights several teams that have demonstrated a steadier or "flatter" performance during the past 10 years. This is a slightly deceptive chart, as it includes teams with both higher and lower numbers of actual victories. For example, DQS stands out with a consistent 60 to 70 annual victories. Likewise, INEOS (previously Team Sky) has turned in a consistent and top-ranking performance through most of this period. On the other hand, also included here are EF Education-First (now, EF Education-EasyPost for 2022), Groupama-FDJ (that had more wins than INEOS in 2020), and Trek-Segafredo, all of which have produced similarly consistent results, albeit with win totals in the middle of the pack. These teams, generating more like 15 to 20 wins a year, are not the strongest or best-financed teams in the sport, but

they should nevertheless be credited with the ability to generate relatively consistent performance year after year.

Chart 4 examines teams with a decline in trending performance, although each peaked with 35 or 40 victories for at least one year. Nonetheless, most posted just five to 10 wins in 2021. Several (perhaps conflicting) conclusions could be hypothesized here. Some of these teams could attribute their downward trends to sponsor uncertainty or general financial instability—this has certainly been the case for Astana, BikeExchange, and NextHash-Qhubeka. On the other hand, one could simultaneously observe that two of these teams, Movistar and Lotto-Soudal, have enjoyed consistent sponsor stability and hence few of the distractions around sponsorship that had to impact the other teams. So, overall, chart 4 does not correlate

financial security with greater success.

DSM is the odd team out here, having struggled to recapture past winning form. It has actually improved its financial situation by acquiring a stronger sponsor and strategically "selling" talented riders in mid-contract. However, DSM's biggest sporting issue seems to be an inability to hold onto winning riders due to reportedly strict internal rules and expectations.

Of historical interest here (referenced in chart 1) was the dramatic slumps of CCC (formerly BMC) and Katusha—two teams no longer in the sport. CCC went from 48 wins in 2017 to a mere six in 2019 and was gone a year later. Katusha's collapse was almost as dramatic, from 40 wins in 2015 to just five in both 2018 and 2019, and then relinquishing its WorldTour license to the upstart Israel Start-Up Nation team. Despite our previous discussions to the contrary, the history of CCC and Katusha suggests that a collapsing-performance trend may drive off sponsors and spell the ultimate death of the team; in other words, winning *is* important. But more surprising is the fact that, according to a L'Équipe report in 2016,

these two teams had the second and third largest budgets of any teams in the WorldTour at the time—underlining the theory that money is not the only [determinant of success](#) in pro cycling.

Analyzing podium and top 10 finishes

First and second place is often determined by less than the width of a tire; first place may be separated from 10th place by a second or two. So, it makes sense to extend this analysis beyond simple wins and look also at the podium and top-10-placing statistics. This analytic profile flattens the amplitude of the corresponding charts, particularly for top-10 finishes, leading to some more nuanced conclusions.

Chart 5 is another dense cluster of trendlines showing the number of top-10 finishes for each of the 20-or-so teams rather than outright victories. These flatter or less "wavy" lines suggest that total top 10s might be a steadier or more predictable way of assessing overall team performance. Most teams are clustered between 100 and 250 top-10 finishes per year.

This chart more accurately measures the true strength or "health" of a team by accounting for "luck." For example, a few bad breaks and injuries can drastically decrease a team's number of wins and podiums, but it takes an overall team performance drop-off to cause a serious decrease in top-10s. On the flip side, it would take a real team performance bump to cause an increase.

Comparing a team's number of podium finishes relative to its top 10s, as shown in chart 6, provides a simple metric for a team's "conversion rate"—how many of its top 10s are also podium finishes. This helps identify under- and over-achieving teams. For example, for the 2021 season, DQS and Jumbo-Visma stood above the rest of the WorldTour teams with almost half of their top 10s being appearances on the podium, while AG2R-Citroën brought up the rear with only half of that conversion rate.

The metric could be used to identify teams that have difficulty converting fourth- to 10th-place finishes into podium finishes like Intermarché in its initial year or potential "sleeping giants," such as AG2R, DSM, or Astana, which seem to have funding and talent to convert a far greater share of their podiums but haven't for one reason or another.

Evaluating PCS points

Top-10 finishes may be a more nuanced way to view team performance compared to outright victories, but we can extend this approach by looking at the overall points generated by each team. This is the most detailed and nuanced measure of evaluating team performance. Even though most fans may focus on or only remember the winner of the grand tours or the monument classics, a detailed review of team points should, in theory, be a better guide to the true performance ranking of all WorldTour teams.

The all-teams PCS points view is another dense cluster of crisscrossing lines, but this approach yields new insights when extracting subsets of teams. For example, if we only look at teams with an increasing trend over time, DQS, Jumbo-Visma, and UAE still stand out, but now Bahrain Victorious also demonstrates a positive trend. Bahrain might not have won as many races or stood on a podium as many times, but overall it performed at a level more commensurate with the top players.

Of note is chart 7, which compares teams that exhibit a flat or slightly decreasing performance in terms of PCS points. This view captures a seemingly disproportionate number of teams—roughly half of the pro peloton—that have been flat or somewhat declining over the full 10-year time frame, whether at a higher or lower absolute level. So, while INEOS has generated huge visibility for its string of victories at the Tour de France during this period, its performance in terms of points is much more pedestrian—which may be a result of the team's specific competitive strategy.

Assessing team diversity

Another insightful way to assess team performance is to ask what percentage of a team's victories (or PCS points) come from either a single rider or a small handful of key riders. One representation of the percentage of victories attributable to a single rider is shown in chart 8 for 2021, with teams ranked from left to right in terms of total victories. First, note DQS on the far left. As we've already seen, its number of total wins far outstrips all the other teams, yet its reliance on a single rider is the lowest in the peloton – its top rider accounted for just 15 percent of total wins.

Conversely, on the right-hand side of the chart, note the last six or seven teams – all of which have been able to generate only a handful of victories, but have a much higher dependence upon a single rider. DQS is clearly the most "diversified" team, with many riders who can churn out the victories, while many lower-ranking teams are heavily dependent on a single rider.

Other teams rating higher on this basis are Astana, where top rider Aleksandr Vlasov accounted for 15 percent of total victories, and Trek-Segafredo, where Mads Pedersen had 16 percent of total team wins. Interestingly, this metric is highly variable year to year and is dependent on the team's *total* number of wins. A case in point here is Movistar: in 2021, Alejandro Valverde accounted for just 20 percent of the team's 15 wins, while in 2020, the entire team marked just two WorldTour victories, both taken by Marc Soler (for a 100 percent "dependency" rate).

It is also clear that different teams take very different approaches toward "diversity." For example, Jumbo-Visma ranks second in terms of 2021 wins. However, in contrast to DQS, the Dutch team relied on Wout Van Aert and Primož Rogli? for 60 percent of its wins, 30 percent each, or exactly twice the inferred dependency rate of DQS. (Indeed, Rogli? accounted for 60 percent of the team's wins by himself in 2020.) The same strategy is currently employed by UAE, which relied upon Poga?ar for more than 40 percent of its total wins in 2021. (Changing the units from wins to PCS points generally results in similar conclusions: Poga?ar was, unsurprisingly, the team leader for UAE in terms of both wins and points, in

both 2020 and 2021.)

Looking right across the chart, Groupama-FDJ ranked seventh in terms of total victories in 2021, with more than 40 percent of them coming from their star sprinter Arnaud Démare. With roughly the same number of total team wins in 2020, leveraging on his outstanding performance at the Giro, Démare accounted for 70 percent of the team's wins that year.

Plumbing deeper in the victory rankings, teams like Cofidis, Lotto-Soudal, DSM, and NextHash-Qhubeka (previously Dimension Data) have frequently relied on a single rider for more than half of their total wins. To some extent, this observation may be at least partially due to budget constraints—they simply can't afford more than one top rider, and the evidence makes it clear that reliance on a single rider is a risky strategy.

Past team drop-offs, following an injury or transfer of star riders, are numerous. For example, Mark Cavendish accounted for 31 percent of Dimension Data's first WorldTour season victories in 2016, and Edvald Boasson Hagen accounted for 40 percent the following year. The departure and/or decline of these key riders was devastating for the team. Or look at Lotto-Soudal, which finished the 2019 season ranked ninth in terms of total wins but relied on Caleb Ewan for 44 percent of them. With Ewan suffering from crashes and injuries over the past two seasons, Lotto hasn't been able to replace those wins and has seen its overall team fortunes fall as a result.

Perhaps the clearest examples of this potential risk today are UAE and Groupama-FDJ. One hates to imagine what might happen to either team's future should Poga?ar or Démare sustain a career-ending injury. UAE seems to be working to address this over-reliance and backing up Poga?ar by recently hiring Valerio Conte, Alexander Kristoff, Matteo Trentin and Marc Hirschi. Groupama-FDJ, on the other hand, seems to be forging ahead with the single-rider-reliance strategy.

These data suggest that there is a strong correlation between a team's win share coming from a single rider and its general level of success and future prospects. This is just as true in cycling as it is in business and other endeavors in life—diversity leads to success, as roughly shown in chart 9. Qualitatively, if a team's win share for a single rider is above 35 to 40 percent, a warning light should be coming on, and if it reaches or surpasses 50 percent, alarm bells should be ringing. Rising win share by a single rider is a worrisome sign of an undiversified team, one that could at any moment experience a steep decline. While it must be fabulous for a team to sign a star rider like Poga?ar, management must also be constantly worried about what would happen to the fortunes of the whole team should they lose Poga?ar.

But, once again, a rule is defined by its exceptions. A consistently strong diversity factor isn't the only factor driving great competitive success, as shown in chart 10, which illustrates the relationship between diversity and overall success. The examples in the top-right corner, DQS, and Ineos, have both had good success with well-diversified teams. Bora-Hansgrohe also had a fairly low percentage of wins coming from its top rider (Pascal Ackermann with 20 percent) while coming in an impressive fourth place with 21 total victories. This means it's a deep squad and has a strong position going into 2022 with its addition of a healthy Sam Bennett from DQS, who will most likely rack up more wins than both outgoing stars, Peter Sagan and Ackermann, did in 2021.

In the top left of the matrix, UAE and Groupama have both had reasonably good success, at least so far, with relatively undiversified teams. Meanwhile, in the bottom left box are relatively hapless teams that are neither very well-diversified nor very successful: the NextHash and Cofidis teams in 2021.

Chart 10: Diversity/Success Matrix (2021)
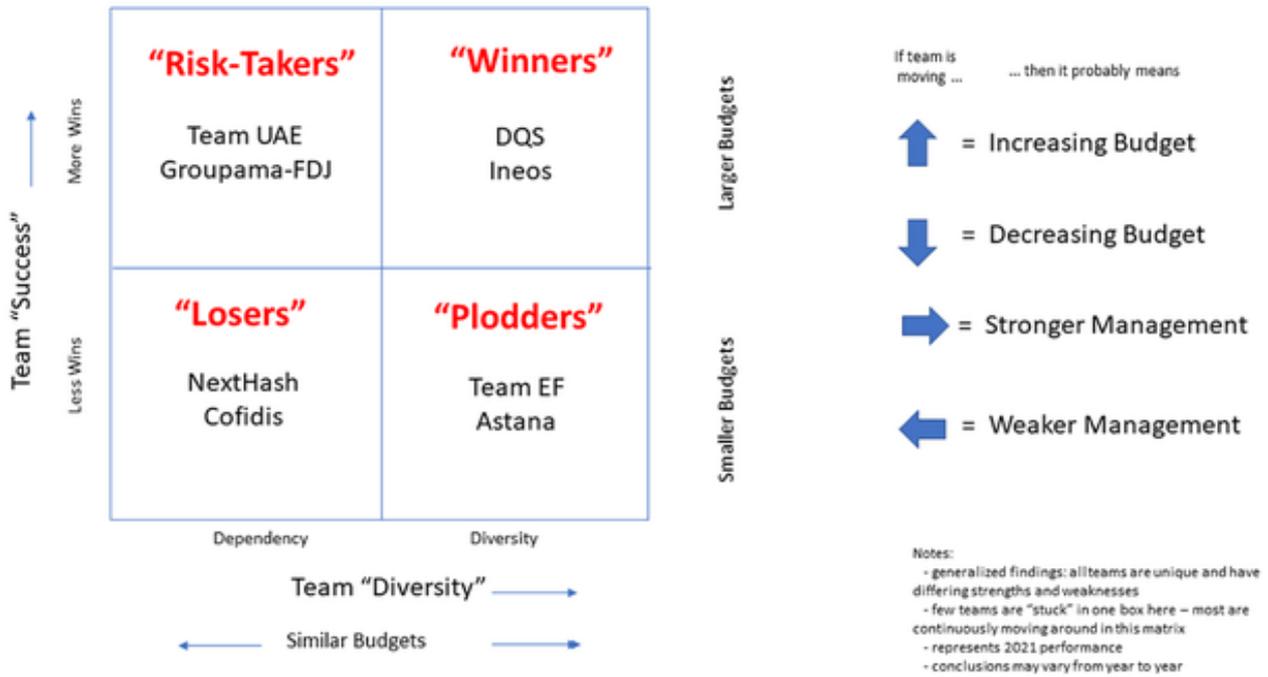
Perhaps most interestingly, in the bottom-right box, are examples of teams that are reasonably well-diversified but still operate in the middle or lower tiers of the peloton. EF hasn't had a single rider claim more than 33 percent of its annual victories since 2015—a testament to the diversity of talent the team has been able to assemble as well as its ability to consistently pull off a handful of surprising victories every year. Nonetheless, as already discussed, the team typically ranks in the mid-to-lower ranks in terms of overall performance, averaging around 10 to 15 wins a year. Astana shows similar characteristics.

It would appear from the chart 10 matrix that being more diverse doesn't *necessarily* mean that a team is going to be more successful and healthier from an absolute perspective; rather, it may just mean that the team will be consistent at whatever level it tends to operate in. It may also simply imply that the team doesn't have the resources to employ or develop many riders who can consistently win races. The flip side of being too dependent on an individual rider seems to be that all teams need at least a couple of strong performers, or they simply aren't going to win many races.

The lower half of this matrix tends to represent teams that presumably have smaller budgets. They may have a big win now and then, and they may be consistent, but their chance of moving into the top half of the chart is limited by sponsorship dollars. Teams move to the right in this chart by diversifying within given budget constraints. Teams move upward in this chart by increasing budgets. Teams sliding down in this chart have probably lost a key sponsor, and teams sliding to the left may need better talent management. Teams tend to move around in this hypothetical matrix from year to year, and hence—as we've seen repeatedly above—we see the high amplitude in terms of performance.

Summary and takeaways

The most notable findings in this analysis are the consistent year-to-year variability observed in almost all these metrics. What emerges is a picture of a sport in constant competitive flux—in fact, a sport defined by its very name, "cycling." It seems surprising that over this entire 10-year period, while many teams have had a good year or two, DQS is the only team that has generated consistent performance. INEOS, at least until recently, has dominated the sport's biggest event, while teams like UAE and Jumbo-Visma may be

working on it, but so far no one else has mastered the art of building a consistently successful team.

An immediate second conclusion is that being cyclical is not necessarily a disadvantage. Competitive unpredictability is perhaps one aspect of the sport's fan appeal. Regardless of the media hype, we really don't know how good a team is going to be two years from now. For example, there was much gnashing of teeth in the cycling media a few years ago when the conventional wisdom was that INEOS had developed the sport's clearly dominant team. Many observers predicted a dulling of interest in the sport due to the British team's metronomic dominance of the Tour. Upon further reflection, however, while INEOS did assemble a very talented team, it was only "dominant" in one domain: the grand tours.

The importance of money to winning in pro cycling remains an open debate. Unfortunately, any serious analysis of this topic is severely hampered by the fact that accurate budget data is simply not available for most teams. (Note: The UCI has indicated to The Outer Line that there is on-going discussion about making more team budget information available.) Related to the *level* of sponsorship is the degree of sponsorship *certainty*—i.e., regardless of absolute size, is next year's budget assured or is the team distracted with trying to find a new sponsor and guarantee its employees a job for the following year? Some teams have put together longer-term and more stable arrangements with their sponsors, while others seem to be constantly changing; and, as shown here, that doesn't necessarily correlate positively or negatively with overall competitive success.

As we saw, both Movistar and Lotto-Soudal have had consistent and dependable team sponsorship throughout this time, but both have experienced declining competitive performance. And while the INEOS team's presumed WorldTour-leading budget did buy it a number of Tour wins, it didn't buy many total wins nor a particularly high WorldTour ranking. In fact, it would appear that the team's wins and top 10s have decreased as its budget has increased, while DQS continued to dominate all three categories with (according to limited public information) presumably a smaller payroll. We may be entering a new era with the seemingly bottomless reservoir of funding for the new state-backed teams, but it's too early to draw conclusions there.

While collapsing performance can lead to sponsor withdrawal, sponsor uncertainty or regular rider turnover doesn't necessarily lead to poor performance. Teams like EF have generated consistent performance over the years, despite working under different sponsorship arrangements and coming close to extinction a couple of times. Even DQS, the sport's most successful team, has seemed to struggle to find consistent financial backing beyond its Quick-Step backbone, but it hasn't suffered performance drop-offs. In fact, one could argue that constant innovation and cost-cutting with its roster has become a competitive advantage.

From a broader perspective, we can hypothesize that cycling's inherent performance variability (whether a result of sponsorship and financial uncertainty or not) can act in a similar way that salary caps or promotion/relegation schemes work in larger franchise sports (ensuring a longer-term competitive balance of power between the teams). However, there appears to be a limit to this variability and performance equality. As our data show, even a massive-budgeted team like INEOS has had down years, but so far it appears that a solid level of spending ensures that a team stays in the top half, while squads without the luxury of a big budget are forced to fight it out in the relegation zone. Indeed, if some of the lower-ranked teams are not able to generate a higher volume of UCI points during the 2022 season, they are faced with the very real possibility of effective relegation at the end of the year. This "race within a race" and the various unintended consequences it will cause will be the focus of much media attention during 2022.

Another clear conclusion is the adage of not putting all your eggs in one basket. Once again, DQS stands alone in terms of demonstrating the value of diversity, of having the ability to field a stable of riders that's always in the mix for victory. Other teams, including Jumbo-Visma, INEOS, and Bora-Hansgrohe, have built strong organizations and deep rosters of talented riders without necessarily focusing on a single star.

(In contrast, teams like DSM identify and sign lesser-known riders who are patiently developed into bigger stars.) Developing diversity and spreading around the talent allows teams to flourish even if one or two of their top riders hit a rough patch or decide to move on. Other teams, like EF, have built reputations as consistent workhorses—being good for a predictable number of wins each season, even while not performing at the peloton's very highest level.

Building a successful cycling team is a multi-faceted challenge, but this analysis illuminates three key and intertwining drivers for sustained success: (1) money, the purely quantitative size of the team's budget; (2) the related and less quantifiable but critical significance of the "quality" of the team's riders, whether through luck or good planning; and (3) the qualitative and managerial aspects of running a team, including team philosophy, access to talent, development programs, operating structure, management style, and *esprit de corps*. How these three attributes interact and overlap and are employed by individual teams separates the winners from the losers—along with the teams that are improving versus those that are declining.

After aggregating, parsing, and distilling these metrics, it should be remembered that winning is not everything. The focus of many pro cycling teams is not just to win races; an equally important objective is to successfully promote the visibility and causes of sponsors. Perhaps the most instructive example here is the EF team. In terms of raw numbers, EF has generated a middle-of-the-road performance, operating on a low budget through most of the past decade. However, it has been able to drive a massive amount of fan interest by allocating its resources to maximize results at the biggest races and by developing an alternative program of races. On the flip side, DQS, the dominant WorldTour team organization by nearly every metric we've accessed for this 10-year view, has yet to win a grand tour — though under Lefevere's previous squad, Mapei, Tony Rominger won the Vuelta a España and Giro d'Italia in the mid-1990s. For the grand tours, it has been overshadowed by the likes of INEOS, Jumbo-Visma, and UAE—all of which fail to match DQS in terms of total results—and it has gone through several different co-sponsors.

At the end of the day, how should cycling teams best measure their success? This is a topic for another time, but viewed from this broader perspective we could reasonably ask: Which team has been more successful over the past 10 years? EF or DQS?

Written by Steve Maxwell & Spencer Martin, January 19th, 2021