

Pro cycling – manage the risk, achieve success

The 2018 Tour de France finished as usual on the Champs Elysees in Paris, with [Welshman Geraint Thomas crowned the victor](#). Bradley Wiggins, Chris Froome (four times) and now Geraint Thomas have won six of the last seven Tour de France GC "yellow jerseys", riding for Team Sky. With this victory, Team Sky were confirmed as the "General Classification" (or GC) winners of four grand tours on the trot (the Tour de France twice, the Giro d'Italia and the Vuelta a España).

In the wake of the 2019 Giro d'Italia, which was the first Grand Tour in five events not won by Team Sky, now known as Team Ineos (the race was won by Richard Carapaz of Team Movistar), and in the run-up to the 2019 Tour de France, we take a look at the way risk management is applied in Professional cycling.

The world of professional cycling has, like many sports at the professional level, changed a great deal over the years. This article focuses on how data- and facts-driven risk management is embedded into modern-day race strategy, tactics and decision-making in the grand tour races. Examples from Team Sky (now known as Team Ineos – as this article is looking back, they will be referred to as Team Sky) are provided in this article, with parallels drawn to achieving success in business.



Photo credit: G Byatt. Geraint Thomas of Team Sky wins the iconic "Queens stage", stage 12, of the 2018 Tour de France at the top of l'Alpe d'Huez on 19th July 2018. As any amateur cyclist who has climbed l'Alpe d'Huez will know, being able to sprint uphill like this after such a tough day in the mountains is something most of us can only dream of doing.

Pro cycling takes many forms and spans many types of races. The races most people know of are the "grand tours", especially [the Tour de France](#). This article focuses on how risk management is stitched into the business of winning a grand tour in modern times.

To win the Tour de France, the Giro and the Vuelta grand tours (and, indeed, smaller-duration cycling races), meticulous planning and preparation is vital. The winning team will have anticipated and adapted to change during the race. The overall winner in the race "General Classification" will have worked incredibly closely with his team to quickly spot and take advantage of opportunities when they present themselves, and to manage risk over the race duration.

Here are five points about how risk-informed decision-making in modern Pro cycling leads to success:

1. Risk management is central to team strategy and execution
2. Performance management and attention to detail is critical
3. It sounds obvious, but working closely as a team is key
4. Risk management helps marginal gains be achieved
5. Operational risks in Pro cycling need careful focus too

1. Risk management is central to team strategy and execution

Risk-informed decision-making is central and in-built into the careful and detailed plotting of race strategy and tactics, and the execution of the plan whilst anticipating and adapting to change. It's not about trying to win every stage of the three-week race; it's about positioning the GC contender for the best overall performance.

Tactics in pro cycling races have always been important. Nowadays, teams use technology and manage performance with data to make risk-informed decisions mid-race (just like other sports do, such as F1). The use of data includes managing and monitoring a rider's level of effort to optimise performance over the race duration. The use of technology covers all manner of things, from the riders' use of power meters on their bikes to them wearing ear pieces to discuss in-flight mid-stage tactics with team management.

In the 2018 Tour de France, Team Sky employed a carefully planned and executed strategy throughout its three-week duration. They had two riders well-placed for the GC prize throughout. Risks were ever-present – a rider's race can be over in an instant, for example if they misjudge a corner or they have bad luck (as happened to [the Italian rider, Vincenzo Nibali](#)). The route of the 2018 Tour de France covered perilous cobblestones in the north of France, the usual strenuous mountain stages, a team time trial and a testing individual time trial at the end. Unusual events can and do occur. Who would have anticipated, for example, that during the 2018 race, a protest by farmers 29km into stage 16 in the Pyrenees, on 24th July, would lead to police using pepper spray to disperse them, which inadvertently (due to winds)

passed over the riders, resulting in the race being stopped for 15 minutes so that they could rinse their eyes.

The winner of the 2018 Tour de France, Geraint Thomas, worked with his team during the whole race to make sure they were positioned appropriately. They took advantage of little opportunities throughout the race to make incremental gains over their competition, and they managed the risks that presented themselves.

As an example of a different approach to data-led risk-informed decision-making, with a “big bet” decision, the defining moment in the 2018 Giro grand tour in Italy in May was when Team Sky cyclist Chris Froome launched a courageous successful solo attack some 70km from the finish line of a difficult mountain stage (day 19), turning a time deficit he had into a winning race margin in one powerful solo ride. His team, Team Sky, judged that [it was appropriate to take the risk](#) – and it paid off.

What can businesses take from this? Ask yourself: as well as having a robust plan, are you making the best risk-informed decisions to seize opportunities and achieve great results, or are you happy with being “good enough”?

2. Performance management and attention to detail is critical

Let's continue with the 2018 Giro victory of Chris Froome. Team Sky [released detailed data describing Chris Froome's diet, power output and heart rate](#) during [his successful win at the Giro d'Italia in May 2018](#). Froome is the first Briton to win the race in its 109-year history, and only the third man to hold all three grand tour titles – le Tour de France, la Vuelta and the Giro – at the same time.

This insight into Team Sky's use of data is a prime example of a professional sports team using data and performance management to manage risk to compete and win.

The information released includes details of when Team Sky wanted Froome to lose weight during the race (for the mountain stages), and their careful and finely balanced nutritional and energy plan to obtain peak performance, plotting calorie intake with calorie burning for each day's racing. Other aspects of data management are not covered in the information release, such as the specifics to training for big races and detailed team tactics.

When Froome and members of Team Sky were interviewed after the stage win that set up his victory at the 2018 Giro, their replies revealed [the level of detail in their planning](#), talking about things like grams of fuel per hour required to sustain a big solo attack.

Team Sky are one of the most successful teams in the last six years of Pro cycling. Surely their approach to performance management plays a large part in their success.

What can businesses take from this? Thinking through your plans in fine detail and being ready to anticipate and adapt helps you achieve success. You can't predict the future, but by plotting a good plan to achieve objectives, using data for informed decision-making and thinking through scenarios and how you would respond to them, you can set yourself up for success.



Photo credit: G Byatt. Team Sky prepares for stage 13 of the 2018 Tour de France in Bourg d'Oisans

3. Working as a team is key

Pro cycling is well known for its team ethos. Whilst the name of the winner of big cycling races is reported around the world, the whole team – not just the riders, but all management and support staff – contributes to success. In the grand tours, the “GC winner” always shares the spoils with his team mates. You will notice in all interviews they give that riders talk about their team togetherness.

The 2018 Tour de France win by Geraint Thomas, and the 2018 Giro win by Chris Froome, were [triumphs by the team](#) working in unison to ensure collective success.

For a detailed example of Pro cycling teamwork, including by the people who are not riding the bikes, let's again look at Froome's stage 19 win in the 2018 Giro.

Here's an extract taken from an interview Team Principal [Dave Brailsford held with the BBC](#):

"Tim divided the stage into segments - the first 90 minutes, then the transition into the first climb, the climb itself. Then he translated all that into the wattage Chris would be producing in each section, and the carbs Chris would need to do that. And then we put that into a nutritional strategy.

"Each water bottle weighs 500g. We obsess over losing 30g from a bike. On this hour-long climb of the Finestre, which could be the decisive moment of the entire race, was it worth carrying an extra 500g up this possibly pivotal climb? But if you didn't, if he didn't hydrate, there was a very real risk he could blow.

"OK, Let's get a feed at 10-minute intervals on that climb, so Chris can carry minimal food and water.

"We told Rod the plan. Any chance? His face dropped.

"He came back. 'We can do it, but we're going to need everybody in the team - press officers, mechanics, security guy, me. That's the only way it can work.' Then we thought, some of these guys have never given a bottle to a moving rider before. So we would have to move around.

"Rod did the logistics of that. James worked out what Chris should eat, when and where. Tim did the calculations about energy expenditure and where. And then we got the riders together and said, this is what we're going to try to do."

This interview is an example of the following points:

- Actions from team leaders result in great teamwork and togetherness;
- All team members are involved in race planning, working with each other to deliver success;
- The shared understanding of the controls they require is clear (including things such as who will bear the load for fuelling during a race and each stage).



Team Sky riders take on board fuel during the Tour de France 2018 (image by SIS)



Photo credit: G Byatt. Drinks refuelling at the top of a climb – le Col de Port, Pyrenees, on 16 July 2015

What can businesses take from this? Businesses are dependent on good teamwork to succeed with their objectives.

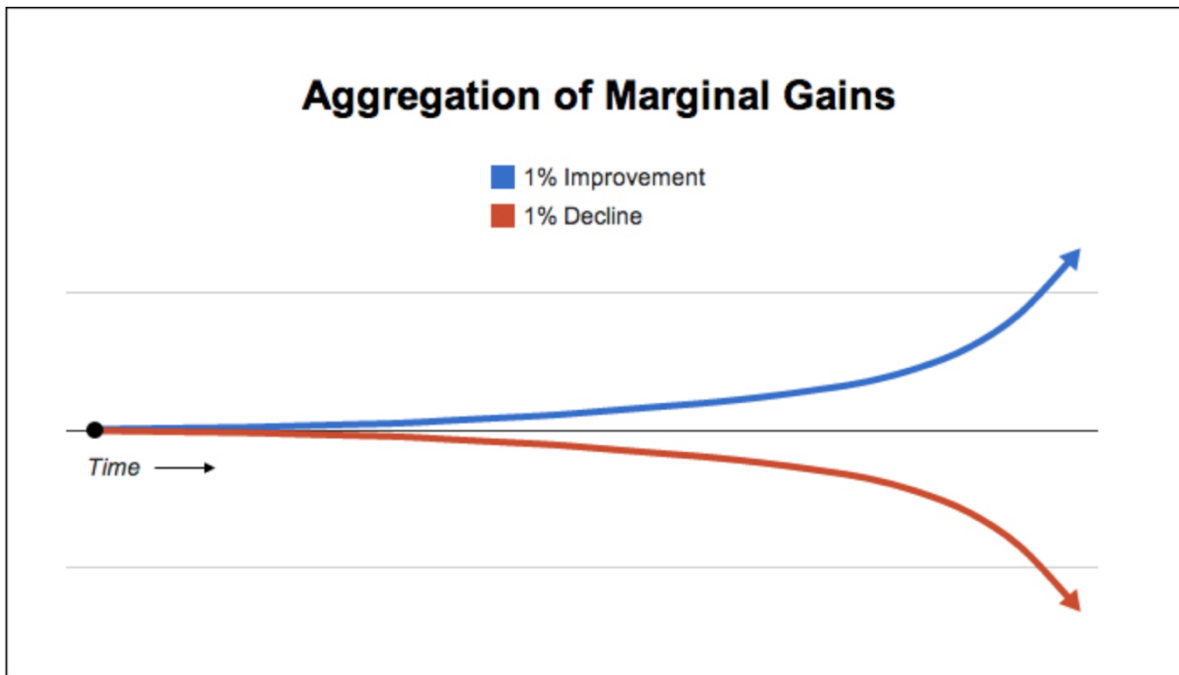
Does your business map out how everyone plays their part in achieving success in a similar amount of detail? If not, could you achieve better performance if you did?

4. Continuous improvement in Pro cycling: marginal gains count

An example of focusing on marginal gains in Pro cycling is modern nutrition. It is one of many focus areas of the marginal gains strategy employed by Team Sky, who have a partnership with Science in Sport for their nutritional needs. Science in Sport state that science underpins everything they do.

Nutrition is of course just one of many factors that add up to marginal gains. Team Sky's pursuit of one percent marginal gains permeates their whole set-up. As well as the obvious things such as training and the ergonomics of the bike, they go into the detail of finding out marginal differences such as the best pillows to take with them on grand tours, the best types of massage gel to use, and teaching riders the best way to wash their hands to avoid infection. The approach of one percent gains applies to everything they do.

[This article](#) is an excellent summary of what Team Sky's marginal gains strategy is all about.



What can businesses take from this? Success is not an event. You don't build a successful Pro cycling team, or a business, with stand-alone events. Success is the sum of the decisions and actions over time that enable us to continuously improve. Aggregating marginal gains adds up to a big difference over time, which leads to success at events as part of your journey. Are you ready to keep up such a focus on marginal games?

5. Operational risks in Pro cycling need focus too

This article has discussed a few examples of race tactics. Operational risks "off the bike" also need managing. Pro cycling teams are involved in a year-round logistics programme to get teams to different events during the year, often having teams take part in different races at the same time.

There are many operational risks associated with transporting the bikes, equipment and teams to many destinations around the world each year. There are risks of bikes and/or parts being damaged, delays to travel schedules, and ensuring people travel safely and stay in good health.

One example of the risks involved in transportation and logistics in the 2018 Tour de France concerned the time trial "skin suit" of Tom Dumoulin, the rider who finished the Tour in second place. It somehow got lost just before the penultimate stage 20 of the race. The team had to frantically [get another one made virtually on the spot](#). He won the stage by just one second.



Photo credit: G Byatt. Team Sky get ready for stage 13 of the 2018 Tour de France in Bourg d'Oisans

Conclusion

The world of Pro cycling is a sports example of a team of people in varied roles working in unison, and to a clear plan, to take and manage risk to achieve success. The winning teams use good data, a well-planned strategy and tactics, and they anticipate and adapt to change to ensure they make good risk-informed decisions, which is what good risk management is all about.

Just one example of a team having to adapt to unexpected circumstances is Team Ineos having to adapt its strategy for the 2019 Tour de France, after Chris Froome [crashed heavily during a reconnaissance ride for a time trial](#) as part of a warm-up race and will not be competing in the 2019 Tour.

About the author

[Gareth Byatt](#) is a Director of Satarla Australia and owner of [Risk Insight Consulting](#). He is based in Sydney, and has over 20 years experience across multiple geographies in risk and project management. He's a competitive amateur cyclist and frequently attends Le Tour de France.

