Everything I know about project time management I learned in sports car racing[1]

By Stacy Goff

Introduction

The parallels between managing a successful project (including meeting due dates) and managing a successful amateur sports car racing campaign are striking. In this article, we explore those parallels, and the insights to be gained even by those who have never experienced life ***"at speed"***.

Background: for six years, from 1975 through 1981, the author raced in Sports Car Club of America's West Coast circuit. While this was amateur racing, we began with a Fiat 124 Spyder, and competed with some professional teams, who were funded by the car factories. The rationale: excel on the track on the weekend, and buyers will flock to the showrooms to buy the cars the following week. And it worked!

We were often successful competing with professional teams, but our greatest success came from a more-level playing field when we switched to Showroom Stock. In this class, cars had no modifications but increased tire pressure. *The Great Racing Rabbit* (left, 'at speed') set lap records on every track we ran, and was undefeated in three years of the toughest competitions West of the Mississippi. From these experiences we can distill the essence of managing project time.

The Edge Moves

Life on the edge on a closed-course racetrack (one with left and right turns, plus plenty of vertical curves) is an emotional high—approaching self-actualization, for some people. And yet, the more you practice, and the more you understand your abilities and those of your car, *the faster you go*. What was the very edge of control last weekend is your starting-point for optimization this weekend.

[1] *Editor's note: Second Editions are previously published papers that have continued relevance in today's project management world, or which were originally published in conference proceedings or in a language other than English. Original publication acknowledged; authors retain copyright. This paper was originally published in 2008 and posted on the IPMA-USA (asapm) website. It is republished here with the permission of the author. 2008 reader reactions are included at the end of this version.*

Preparations during the week certainly help. Making minor adjustments or major expenditures for new racing tires could significantly improve performance.

Our preparations were focused on the major events, with consistent-enough individual event success hopefully leading to a season championship. Our success measures and strategies were clear to all. Risks (threats and opportunities) applied both to us and our competition.

Through it all, the edge continued to move, until each new improvement had only minor impact on our success—we had hit the wall. Then we tried radical new approaches to go faster. Some of our innovations didn't work at all; others did not work well at first, but opened the doors to new opportunities in the non-stop quest for speed.

Some race drivers don't know *where lies the edge*. They never fail, so they don't know what it feels like. Worse, they never learned how to recover from a failure. The secret we discovered was to fail small, to fail safe. Some fail big: Dead drivers *never* learn. So our **first lesson** to learn from racing in Project Time Management is to learn how to fail small so you know where your edge lies.

The Science of Driving Fast

On the track, there is a science to driving fast. As explained by such racing demigods as Piero Taruffi[1] and Alan Johnson[2], it is not just a matter of zooming around the track, constantly on the edge of control. Instead, it is a precise combination of ballet, positioning, strategy, and super-consciousness.

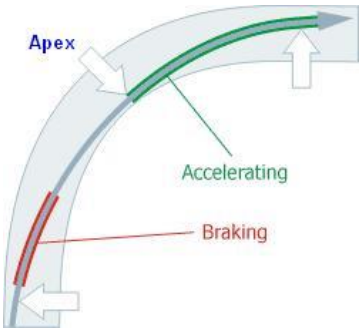
The difference between ineffective and effective *at speed behavior* can be seen in two scenarios; imagine yourself **as a passenger** in each:

Scenario A: Your car screams down the front stretch at top-speed, with the engine at redline, and the first sweeping right turn approaches. Heavy braking throws you first forward, then to the left. G-forces acting on your helmet make it impossible to see ahead: Your head is lolling about somewhere to your left and near the dashboard. You can, however, see your driver frantically steering, braking, clutching and shifting; and then repeating. Snapped back to the right, you hit the passenger-side window as you navigate through the first of the "Esses" (a series of S-shaped turns). Feeling like a bobble-head doll, you tuck your head into the next set of curves, and maintain more body control. Finishing the hot-lap, you get out of the car with legs wobbly, and high respect for the skill of the driver.

Scenario B: Quickly moving beyond the roar of the engine and the gravity forces acting on your body, you observe the near-transcendental calm of the driver as she precisely apexes the sweeper, skates through the Esses, and powers onto the back straight. You appreciate that she seems to be running 9/10's speed, perhaps to avoid terrorizing her passenger. The shifting, steering, braking, accelerating are purposeful and efficient, and their precise integration a wonder. You decide to ask, on your next ride, that she show you what 10 tenths feels like.

The difference: Scenario B was *2 seconds per lap faster* than A *in the same car*. **Project Lesson**: Calm and precise can be faster than frantic and terrifying. The most-competent Project Managers are most-often speedily smooth, like the second driver; *not* chaotic and raucous.

Apexing, and Maximum Speed: Part of the difference between *feeling fast* and ***going fast*** is to widen the curves. Tight turns slow you down; you lose momentum, and your engine labors to regain speed. Instead, faster drivers move from outer edge to inner edge, back to outer edge of the turn, significantly increasing the turn radius, and increasing speed.[3]



Simple, yes? Similarly, in projects, maintain higher speeds by straightening or widening the curves. Project curves include new team-member startup, activity assignment initiation, and hand-offs between activities. Top-performing Project Managers smooth these curves with better communication, and with effective teamwork in structuring, estimating, delegation, scheduling and execution. Those who don't, *aren't top performers.* **Project Lesson**: Smooth, widened curves can be the true critical path, and one secret to maintaining project momentum.

Minimizing Braking and Acceleration: If you *want to go fast*, minimize the braking and re-acceleration that you do. To illustrate, here is a personal story: When I started racing, I wore out brake pads and rotors really fast—and they often overheated. My friend and expert driver Dave Edgar informed me that *once I learned to drive fast, my brakes would really last*. It took an entire season to learn that lesson. Sure, I knew he was right, but just as in projects, knowing and performing are worlds apart.

An example of minimizing braking and acceleration in projects is the practice of incremental reviews of results rather than *big bang* end-of-phase reviews. Those who wait until end of phase for their reviews believe they are saving time. Yet, not only are they doing excessive braking, they are increasing the cost of detecting and correcting the defects; *and* they catch fewer of them, later. Alan Johnson taught that the last curve before a long straight is the most important curve on a track. You want to exit a phase or stage with enough momentum to carry into the long high-speed straight of the next immediate phase.

Some teams spend so much time completing end-of-phase reviews that it's like a long pit stop—and everyone passes you. You won't win races that way!

The Importance of Preparation

Success in sports car racing is 90% Preparation, and 10% Execution. To state it more clearly, no matter how good you are on the track, if you are not well-prepared, you fail.

Similarly in projects, we see that the majority of the things that go wrong in most projects are the results of poor planning—and if you want to improve project success across ***all*** the vital signs, not just Time[4], ***plan better.***

In pre-race preparation, you make sure you have the right team members, the right "spare parts", and that all needed equipment and support is ready. You assess risks: Is it time to tear down the engine, or will it last another race? You look at trade-offs: Should we replace the gear ratios for this next incredibly tight, twisty track, or spend the time tweaking the suspension?

You review your funding, projecting how to make limited funds stretch through the end of the season. Truly learning how to do more with less, you might do things you would prefer to contract out to get a better job done, faster.

All while tenderly treating, wiping down, waxing and grooming your car, that you will throw through the nastiest curves in the West at Laguna Seca next weekend.

Great Racing Rabbit at risk on the Corkscrew at Laguna Seca

Teamwork is The Key

Of course, a big part of that preparation is your team. Although there is only one person in the driver's seat, *the whole team drives* a successful car. Whether their role is chef, crew chief, parts runner, fueler, emergency repair mechanic, cheerleader, or timer *and* logger (gotta record those lap times to make sure the tweaks really helped), everyone on the team shares a role in the success story.

And so it is with projects. Example: One of the reasons why we involve all the team in Precedence Analysis is because it helps each to establish the sense of urgency that less-competent Project Managers try to instill with fear. We don't just look at classic Time/Cost trade-offs when we do this precedence analysis. We also look at the trade-off impacts on Risk, Quality, Scope, and Project Management Time (a very special type of human resource).

Related to PM Time, planning the project with an intact team improves communication, and increases team member acceptance and effectiveness in managing their own part of the project. This is in contrast to those Project Managers who fail to optimize teamwork, and instead apply inept delegation, imposed deadlines, and inaction in response to raised issues. We've seen the successes generated by stellar teamwork, both in racing and in projects, and would not have it any other way.

Selling Projects to Your Stakeholders

Another important part of teamwork is selling your project to your Stakeholders. Our racing began with Oregon-based sponsorship; good-hearted company managers and proprietors sharing the cost of parts, oil, tires and other essentials. But it was not until we really learned how to sell to the sellers that our racing sponsorships started to bloom. **The lesson we learned was not to focus on what we needed, but to emphasize *what was in it for them*.**

After we settled on the VW Rabbit as our car of choice for our Showroom Stock efforts, we engaged the local VW dealer as a prime Sponsor. We snared the biggest local radio station as another prime Sponsor, and did joint appearances with them for their customers, creating buzz for ourselves, our Sponsor, and their customers. We turned the Great Racing Rabbit into a moving billboard, and pointed out to candidate Sponsors the thousands of favorable impressions of their brand that they would see per day in-person, and in the media.

Great Racing Fiat winning at Seattle International Raceway

Press releases and television interviews always made note of our Sponsors' role in our extended team that made the Great Racing Rabbit successful.

We tracked and reported the benefits to our Sponsors and their customers, keeping our visibility high. It helped when Sponsors rode on the victory lap in front of tens of thousands of cheering spectators. This *Selling Our Sponsors* effort was so successful we scored Nike Research as a sponsor. They helped by adding custom-built Nike shoes to our tee-shirt-and-jeans Great Racing uniforms. We looked more pro than the Pro teams! Our learning: committed Sponsors and decision-makers are critical for every project team that desires to maximize success.

Balancing Priorities to Manage Time

The greatest threat to Project Time Management in small projects (e.g.: preparing for the next race) was a change in priorities. In large projects, we insist on full-time team member engagement, with their ongoing responsibilities managed by others during the project. But trying to balance "a real job" with the race car projects was much like the challenge facing those who must deliver enterprise-changing projects without letting their other responsibilities suffer. All of us have these *projects versus operations* dilemmas, and savvy Project Managers balance each.

We had our priorities in place. The *real job* provided funding for the racing; the racing was our joy in life. And we had to make hard choices to make both sets of priorities work. Not only that, but each week had not just one, but multiple projects that had clear due dates—they would not change the race date just because we weren't ready.

This is where we learned ruthless prioritization, so we pared down the "nice to haves" on the project priority list to just the *must haves*.

Every March-October season was a portfolio of projects, each with funding, timelines, resources, risks, success measures, benefits, and talent. The portfolio included strategic choices: what were the likely consequences in year-end championship points if we chose to skip a far-away Riverside, California event? How could competing outside of Oregon help our Sponsors get desired exposure?

How could spending *more, earlier* help win more races so we did not have to compete so hard late in the season when everyone else was desperate?

Executing Well, While Adapting Even Better

Preparation was 90% of winning, but in a sport where success can be measured in tenths of seconds, that last 10% is a killer. In racing, you operate at 100% peak performance and acuity for an hour or more. Or, eight to ten hours in endurance races.

At times in the last half of a race, those who could not sustain that level of intensity get brain-fade and do something stupid, like drive off the track at the end of a straight. This resulted from a tenth-of-a-second distraction. We've seen few activities as attention-sensitive—aside from most projects.

This is complicated by the fact that once you get through the science of driving, apexing the curves, hitting braking points, and managing momentum, the actual race is *a test of strategies and willpower*. You see, at this level of competition, everyone has the "fundamentals" down pat. So winning is an intellectual exercise. Imagine a ballet performance, with exquisite moves across the stage in front of an appreciative audience—that is auto racing.

Great Racing Fiat at Sears Point Raceway, California

The difference is that the continuously-changing strategies and evolving strengths of each competitor causes each to re-think their own. That can occur dozens of times, with each parry and thrust; out-braking to the inside at the end of a straight, positioning to exit ahead at the end of a series of curves, or allowing two of your greatest competitors to wear each other down before you *just drive on by*.

Managing Expectations and Measuring Success

Racing and projects have much in common; from the timelines to the importance of managing expectations. The success measures, on the surface, are clear. Winning the race is the goal; and if not winning, then placing well. In projects, there are key

differences, and these differences are not always so clear. As mentioned in our Levers and Gauges article[5], the most effective Project Managers succeed first by agreeing on the measures of success, then by managing the leading indicators, and monitoring the trailing ones.

When it was clear that million-dollar professional racing teams could sweep first, second and third places in amateur sports car events, it was pretty important to let Sponsors know that placing in the top-half would be a superior accomplishment. That notice *always* occurred before the race, not afterwards. In projects, some Managers and Sponsors expect their Project Managers will work miracles, unless informed otherwise. Starve you of resources, give you an unrealistic deadline, and you will still thrive; how would they know? *It worked last time!* Thus we perpetuate PM heroics, rather than PM competence.

Lasting Insights

There are many things we learned in Sports Car Racing that play out in project after project today. Primary among them: any intense, committed effort, whether sports or leisure, intellectual or physical, can offer new learning. That learning helps you to improve your time performance, and all your other success measures. The key is to apply that learning, and continue to perfect it.

Most people can't work *significantly harder* to improve their Project Time Management, or the other performance measures. But with smarter practices, well-applied, we can *move our own edge* to produce 2x, 4x, 8x the project results with less effort.

This is the secret to increased project and program performance, and to improved business performance, through projects.

References

[1] Piero Taruffi, *The Technique of Motor Racing*; Robert Bentley Inc., 1971.

[2] Alan Johnson, *Driving in Competition* (The Need for Speed); CBS Publications, 3rd Ed. 1976. A champion Porsche driver, Alan has the most-accessible insights into driving at speed.

[3] The source of this diagram is kartcity.net, an Irish go-cart website that also shows strategies for apexes.

[4] We evaluate and manage **all** the Vital Signs, including Time, Cost, Scope, Risk, Quality, Talent, and Intended Benefits.

[5] *Levers and Gauges* is also published and available on the ipma-usa.org and StacyGoff.com websites.

Note: We posted this article on the IPMA-USA (asapm) website in 2008. To increase interest, we offered IPMA lapel pins for the first ten comments we received. We received so many comments in the first day that we doubled the number of IPMA pins we awarded. Below are some of those comments.

Comments About This Article

Maria said: I really liked this article. The analogy to auto racing was well articulated. I especially liked the part about 'failing small'. Sometimes, one must resort to trial and error and the best lessons are our stumbling blocks or failures, but if you can work things out at a low expense, then you can apply that on a bigger scale.

From Scotty: I appreciate the analogy to assist others in associative learning. The fact not everyone will understand the dynamics of auto racing, I think the supporting comments taken from Project Management allow for a bridge to understanding "the race." Thanks for the perspective and conversation starter. We've been talking about your article here at the house for 30 minutes or better.

From Erik: This article shows that project management is not the exclusive domain of an organisation that can only be practised if the practitioner has studied a codex of knowledge. It shows that PM is truly daily stuff. Every day, ordinary people manage projects. Be it coaching a minor league sports team, a cub scout troop camping trip or getting a man on the moon. It also shows that it is ALWAYS teamwork.

Alex weighs in: I know a race car driver from a local Toastmasters meeting, and I appreciate the comments on "teamwork". This individual NEVER says "I won a race", he always talks about the victory of the team. The driver has an important role, but without the pit crew, people watching the track, the coach talking in his ear about turns and competition, and all the other people who help out, the driver would never succeed.

One item that was not in the article -- communication. We all know how important it is for project managers to communicate. Racing crews go through incredible lengths to keep good communication. Despite the roar of engines and the chaos of the track, they are always working to communicate by sight, touch, and sound. Without great communication, the team cannot work together, and the team wins the race, not the driver alone.

From Dan McKee, an IPMA-USA founder: Stacy, Excellent article. It was refreshing seeing PM principles applied in an out of the box application. I use PM principles in my financial services business as well and find what I have learned in the PM discipline is applicable in many areas of my life.

I think you have hit upon something here in noting that the application of PM principles is not only applicable to the standard projects, but also in many other phases of business and personal life. thanks,...dan mckee.

From Les: Super good article! I particularly liked the point that the WHOLE TEAM drives the successful car!

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Stacy A. Goff, IPMA Level-D®, *the PM Performance Coach*, is the owner of a USA-based, global Program and Project Management coaching, consulting, methods, tools and learning (not just training) consultancy.

A co-founder and past President of IPMA-USA, Stacy has been an officer in IPMA®, the International Project Management Association. In 2015, he was named an IPMA Honorary Fellow. As well, he has contributed to the success of the Project Management Institute since 1983.

A Project Management practitioner since 1970 and PPM consultant since 1982, he improves Enterprise or project team PM competence, efficiency, and Performance. Mr. Goff speaks at industry events, offers coaching and consulting services, and presents workshops of great interest to Executives, Managers, Project Managers and leaders, technical staff, and individual contributors.

His Project Management tools and methods are used by enterprises and consultancies on six continents. By 2000, his workshops had helped over 45,000 people improve their project success. He combines his PM Process insights with sensitivity for the human aspects of projects.

The result: Measurably increased project performance.

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