Zero to 90 in 166,440 hours

It's what happens off stage that counts

By John Murray Product Marketing Manager, Mentor Graphics



n 1994 a young PhD candidate loaded up a transit van, pointed it east and set off for Altenberg. His intention was to meet up with the British skeleton team at one of the most notorious and demanding tracks in the world. In the back of the van was a rudimentary skeleton sled liberally covered with sensors and data acquisition equipment.

Having one of the experienced sliders from the team pilot it down the mountain at Altenberg over a series of runs would fill up the hard disk drives with information on various aspects of sled performance and handling. It was a methodical and scientific approach that would provide crucial and objective information on how a sled performs over the course of a real run. In conjunction with sector and overall times, it afforded the opportunity for real insight into performance.

The cold logic of methodical product development was about to crash headlong in to the extremely focused, tense and introverted environment of a squad of

athletes battling for a limited number of team places. "No one would ride it", remembers Professor Kristan Bromley. "At that time, the team was almost uniformly military, so the prospect of jeopardising their chance of making the team in order to help a young engineer who'd just landed up with a fairly unpromising looking sled appealed to no one." None of the athletes would ride the sled, so Kristan did.

Over the next two years, Kristan would be an intermittent and amusing distraction at practice sessions around Europe. Britain didn't make sleds and post-graduate students didn't compete on them, full stop. Except that in 1996 Kristan won the British championships on a sled he designed. The sport had just received the opening salvo from an approach that would upset the established equipment supply chain and lead to the formation of a company that, at the time of writing, supplies the skeleton teams of 23 nations.

Meeting the Bromley brothers, the cofounders of that company, supplies



Sports Engineering



individual anecdotes that taken together offer some explanation as to how it was that a Sheffield based company went on to dominate skeleton bob sled design and produce two world champions from within their stable: the Bromleys are restless. By itself, this might well have left a legacy of half-finished projects constantly superseded by the next big idea. Yet couple it with a grounding in, and respect, for the scientific method and the result is demonstrablu a success.

"Our ethos is simple," says Kristan "we need to bring added value through the application of the best technologies." Actually delivering on such a mission statement in a meaningful sense requires focused and intensive effort: computationally, in the wind tunnel and on the track. Asking what was missed, what question wasn't asked, what could be done better. Being restless.

Ask the brothers who they admire from the commercial world and it's interesting that they mention Oakley, Burton, Scott: strong brands with a heritage in their respective sports, each now developed beyond those same sports. Indications of future ambitions perhaps? Kristan relays a quote that has stuck with him "The best advice anyone can get about staying ahead of the copy houses is to build a kick-ass Brand; wear the fastest running shoes in the product development arena; and always be one step ahead. By the time your competitors are copying you; you should have the next product in the market. That is why Apple comes out with so many

new models and is so successful - they run faster."

I'm initially surprised to hear the word 'brand' from that side of the table, it feels like too corporate a word from a company founded on putting itself in the full glare of the winter sports media spotlight and 'eating its own dog food' at 140kmh in front of local partisan crowds. But as Richard went on to explain, having a strong Bromley brand isn't about being able to sell their t-shirts for inflated prices; it's about defining what they do better than everyone else. As much to keep their eye on the ball as the company grows, as it is for outside consumption. The best indication of what their brand means within skeleton and what it will come to mean more broadly can be found both in their first foray outside of an elite competitive product.

This winter will see the launch of the Bromley Baseboard at a few select skiresorts. Under development for the last four years, it's fascinating just how methodical, considered and patient the development and launch process has been. What it isn't is at all surprising. Consider the skeleton event itself; what the public sees is 90 seconds or so of action per run. What they don't see is the four years of preparation on the track, in the gym, the hours on the road, the time developing the equipment and in general the devotion to a way of life alien to most people. Teams and athletes used to living and working on those terms are more than capable of taking the



long view and ensuring that everything is engineered such that it comes together at the right time for the main event. If you're successful all you've done is make yourself a target for the competition. Complacency is as much of a foe as injury.

I would suspect that most of us have attended at least one professional training course delivered by a tutor with an armory of sporting analogies at their disposal, most, if not all, of which revolve around the event itself. Perhaps we look in the wrong place for inspiration, maybe the real lessons to be learnt are well away from the field, ring or track.

Is your business ensuring that all your customers see are the 90 seconds of the winning run?

For more information on Bromley Technologies: www.bromleytechnologies.com













The Road to Sochi 2014

...Continues to be a demanding one. Since Lillehammer, Bromley Technologies has lost no opportunity to continue to test and develop the sled. This is an arduous undertaking which means making sacrifices in a number of areas, but not in athlete preparation. Kristan and Shelley are currently at the wrong end of a long strength and conditioning program which is, to quote Kristan, "horrible!" I'll let the reader reflect on how bad a training program has to be to get that reaction from a man who's been a competitive athlete for as long as Kristan has.

