Some ‘smart’ advice for coaches: The pros and cons of wearable technology

Published 26/11/15 by Anonymous

Wearable

- **More than 25 million smart watches and smart bands will be sold this year.**
- **Interpreting and using the mass of data is a big obstacle for consumers.**
- **Sharing statistics with a coach by connecting online can maximise the benefits of wearable technology.**
- **It is easy to lose sight of what it is you want to measure.**

Christmas is fast approaching and, as sure as Santa Claus sporting an unruly white beard this yuletide, so you can bank on the billion-pound wearable technology industry making a killing.

People are obsessed with hi tech innovation, fanatical about keeping fit and, more than ever before, desperate to measure everything they do.

This ‘Holy Trinity’ of crazes will result in an already saturated consumer market being flooded with a seemingly infinite choice of smart watches, smart glasses, fitness trackers and heart-rate monitoring devices.

This year’s must-have gizmos will be snapped up faster than half-price Marks & Spencer turkeys as active Brits, from fitness fanatics to New Year’s resolution joggers, feed their hunger.

But be careful what you wish for, boys and girls, and before you write your Christmas list, just ask yourself one question: What are you planning on doing with your device’s data when it lands in your lap?

(Or should that be laptop?)

What may be invaluable information for an athlete and coach working as a team may, for the most part, be complete gobbledygook to your average fun runner.

Coaches need to be well versed in the benefits that wearable technology can have when it comes to fostering an effective two-way relationship with the athlete.

Equally, coaches need to know the pitfalls of relying too heavily on the cute little 'digital personal trainer' members wear on their wrists so that they can advise them accordingly.

Number crunching

But before we delve into the topic in more detail, here are a few mind-boggling statistics:

- More than 25 million smart watches and smart bands will be sold this year.
- By 2018, there will be an estimated 250 million smart wearables being used globally.
- There will be an estimated 14 times more sold in 2018 than in 2013.
- Cumulative sales of wearables will be 370 million from 2014 to 2018.
- The smart glasses industry alone is predicted to be worth £4billion by 2018.

As an avid cyclist and runner, I am the target audience for big brand advertising departments.

I own a Garmin Edge 500 bike computer, and the data it provides me with after each training ride is profoundly detailed.

A 'dashboard' shows me my heart rate, distance travelled, average and maximum speed, cadence, elevation gain, calorie count, GPS route (marked by a bright red line on a map), and even the maximum and minimum temperature during my ride. If I splashed a bit more cash, I could add power meter data to that list.

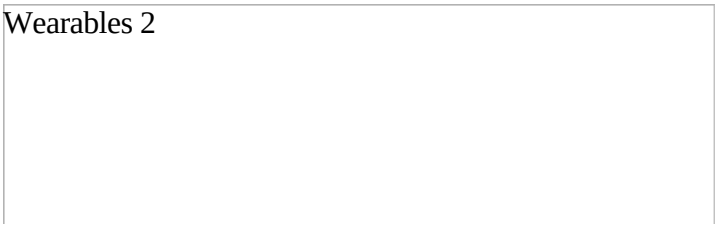
All the figures are presented in colourful graphs and charts, and I can share this information with the rest of the world if I choose. I can connect with other cyclists or runners, assess my times on specific 'segments' of road to see how I compare with others and generally wile away the hours on the computer, devising training strategies and staring at an overload of data.

> My point: that's all fantastic but, as I remember saying out loud when I first read newspaper allegations surrounding 16-year-old Wayne Rooney and his massage parlour liaisons with a 48-year-old grandmother: 'That's way too much information!'

At the Sports Performance and Technology Summit I attended in Manchester, representatives from Polar, TomTom, Sony and Plantronics spoke about the latest wearable technology to hit the market.

It was all fascinating stuff, but the questions I kept coming back to in my mind were: 'What am I supposed to do with all the information?' and 'Will the role of the club coach become redundant over time?'

Any qualms you have tend to dissolve in front of your very eyes when confronted by pictures of the latest sexy smart watch while browsing the Internet.



It is easy to be taken in by the sales spiel and marketing slogans like ‘Endurance Design is Excellence in Exercise’ and ‘Each Sprint is a Marathon’.

The consumer feels that, by owning the same ‘multi-sport triathlon smart watch’ model as Alistair Brownlee, equipped with integrated GPS, 24-hour activity tracking, altimeter, race pace, stride length, lactose level monitor, three-setting running, cycling and swimming triathlon mode (with transition times, no less), they will somehow be able to mimic their hero’s levels of performance.

In reality, you may not be able to interpret half the data that will be heading your way, and you would have been better off plumping for the model that only had a fraction of the functions at a fraction of the price.

Fad or functional

Director of Product Management for Polar Marco Suvilaakso admits that ‘fitness actives’, as he refers to his target audience, crave owning the same range of products as the pros do.

But he argues that amateur enthusiasts can still use their smart watches to achieve performance gain, as well as kudos in the fashion stakes.

‘In simple terms, when your heart rate is above a certain point, you are improving your aerobic fitness. Wearables will show this easily,’ he says.

He explains how your Running Index is calculated every time you exercise based on your heart rate, speed, distance travelled and elevation gain data. With regular use over time, these workout scores will enable you to measure your efficiency.

‘You can even estimate your VO2 max to show what your capability is and to help you set targets for marathon training,’ adds Marco.

If you have the time, inclination and intelligence to translate all this data then wearable technology will certainly help you accelerate performance improvement.

And for those athletes who take things a little more seriously, and collaborate with a coach when it comes to training plans and schedules, the benefits are even more obvious.

As Marco explains: ‘Chest sensors that measure heart rate, a high resolution accelerometer, gyroscopic data and GPS, heat data – they are all built into our devices. Coaches are able to get instant analysis by viewing data and macro-level reports at the training session or at a base station via the Polar Flow App.’

Simply by sharing a password, a coach can access their athlete’s training plan or training calendar.

> ‘Every time an athlete syncs his device to the website, a coach will get a notification,’ adds Marco. ‘You can respond and comment through the service to give immediate feedback and encourage mentor analysis,’ says Marcus.

24-hour tracking

David Morgan is the lead designer at TomTom and admits that interpreting the device's data is a key concern for tech companies.

In time, the unique selling points that are currently driving sales could come to be seen as gimmicks.

Likewise, make the data too complex and you risk people becoming bored with the product.

The 'in thing' at the moment in wearable technology is 24-hour sleep tracking. But who wants to wear a product overnight?

> 'You have to have sleep tracking in your product nowadays in order to be competitive in the marketplace,' says David.

Clearly then, there are millions of people who have become as emotionally attached to their smart watches as their smartphones. But, again, what benefits are there to knowing your sleep profile? Marcus gives his verdict:

'The device shows sleep patterns through graphs so you can see the variation of time to bed and quickly compare trends day over day, and month by month. We wanted people to know how their feelings change depending on how much sleep they are getting so they can work out what they can do differently in their life to make it better.'

It is easy to see how coaches can work with athletes to translate the data their wearables provides them with but knowledge of sleep phases, heart data through sleep, quality and depth of sleep, sleep patterns, periods of interruption, fluctuations of heart rate? I'll leave it up to you to decide if there is something meaningful about the sleep metric that individuals or coaches can use to their advantage.

I understand the principle that you can monitor your warm-up heart rate, measure different intensity zones during training – alongside more traditional time, distance and elevation gain data – to devise a training target to increase aerobic fitness. But of the 25 million people who bought smart watches and smart bands this year, how many have used the abstract and technical data available to them to actually do this?

> Director of Research and Development at GlaxoSmithKline Ken van Someren said: 'You can have exciting, novel technology that loses sight of what it is we want to measure – the point of it. In medicine, the same pill will not work for everyone. In sport too, we need a personalised approach.'

He also warns of the 'consumer and profit' danger, where sales become the driving force behind the manufacturing and design process.

And speaking at the conference, the Head of Performance Nutrition at the English Institute of Sport, Kevin Currell, questioned the accuracy of some of the data, labelling calorie count monitors as 'random number generators'.

Twist or stick

Personally, speaking as a lifetime fitness enthusiast of modest ability, I measure improved performance week by week and month by month by how I feel, or by checking out my vital statistics from every angle while posing vainly in front of a mirror.

I use the gadgets I own to give me a general overview of my training, and enjoy pushing myself over certain routes or sections of road to beat my own, or other people's, times. I have no specific training plan.

That said, I want more than just a watch that shows me my daily step count, in the form of a ring that

lights up throughout the course of the day as you approach your goal.

My advice then, as a consumer and interested observer (and I would love to get the views of coaches on this topic), would be to play the wearable technology market like a game of pontoon. Know when to stick with the model that is the perfect fit for you. Don't be tempted to gamble and twist, opting for the all-singing, all-dancing 'platinum' model. You could bust... your bank account and your mind as the myriad data could be beyond both your understanding and your needs as an athlete.

What is your view on wearable technology? Leave a comment below.