

Technology overload: Should we be looking forward to the future?

Published 13/04/16 by [Blake Richardson](#)

New google glass



LOOKING INTO THE FUTURE: Smart glasses are set to become the must-have sporting accessory (© Michael Praetorius, [Flickr](#))

Our addiction to technology is changing our behaviour – and this is only just the beginning. Here are some innovations we can expect to see in the future that will continue to transform people’s lifestyles. But will they be for better or for worse?

- **Runners and cyclists are buying into the wearables revolution in their tens of millions**
- **Athletes will do everything humanly possible to get that winning edge, hence the addiction to products which claim to help boost athletic development.**
- **Manufacturers want users to form a 24-7 emotional attachment to their gizmos, so they become key lifestyle objects rather than simply an essential bit of workout kit.**
- **Coaches feel duty-bound to become fully conversant with how to use the technology and analyse the data provided for the benefit of their athletes.**
- **The latest innovations include smart glasses that provide performance measurements in real time in your field of view, ‘spider web’ skin that reduces stress by alleviating muscle tension, and implantable biosensors that are ‘worn’ under the skin and measure such things as oxygen saturation and muscle fatigue levels.**

Peeking into my crystal ball, I can see a future where humans have lost the power of speech, when the so-called art of conversation has become a lost art, with texting having usurped talking as the main means of communication among the masses.

The onset of this crazy new world is upon us already. It manifests itself in cinemas, if you care to look. Glance around and you will see row upon row of mobile phone users, heads drooped, expressions blank, glued to their digital keypads, their thumbs twitching vigorously as they impart some random snippet of information to their friends.

Clearly not those sitting next to them who they have chosen to spend the evening with, but other friends, who may well be sitting in a restaurant many miles away, likewise ignoring the group of people **they** are out with, continuing the sorry cycle.

I fear things are only going to get worse, and that every sphere of human life will suffer – including the sports sector.

My mind was made up after listening to a panel of experts as they discussed the future of wearable technology at a sports performance and technology conference in Manchester.

The general consensus was that technology could soon be hounding us every second of our lives – and that we’ve only ourselves to blame.

The advent of 24-hour tracking devices is just the start. So long as the latest breakthroughs in wearable technology continue to be sought-after products that provide a competitive advantage to users, then you can be sure manufacturers will continue to plough money into refinements and advancements.

Runners and cyclists are buying into the wearables revolution in their tens of millions, and sports coaches have to adapt to the times – with athletes expecting them to be fully conversant with all the latest gizmos.

It is not just the elite athletes who are obsessed with shaving an extra few hundredths of a second off their personal bests. Club athletes and enthusiastic beginners crave performance improvement too, fixated therefore on the myriad functions and features of their smart watch, bike computer or fitness tracker, which promise (or your money back) to do just that.

If you are one of the few remaining people who think a Pebble is something you skim across a pond and a Fitbit is a compliment paid to the opposite sex, I envy your naivety. But rest assured you will soon be waving the white flag and be forced to surrender to progress.

The magic number

'It is the goal of the industry to try to make wearable technology as important to people's lives as their mobile phones,' says TomTom's Lead Designer David Morgan.

'It is not a key lifestyle object at the moment. It is an essential bit of kit, but only when you are training. If you had to charge one gizmo, it would always be your mobile phone. That is the challenge facing bosses.'

The key to an even brighter future for these companies, then, is to think of ways to get users to form emotional attachments to their devices.

One idea was to enlist the help of celebrities. Imagine, for example, that David Beckham owned a certain brand of smart watch, and the data from his heart rate, miles covered in a week and overall time gave him a hypothetical fitness level score of 94. Sales would rocket as every Tom, Dick and Harriet clamoured to get hold of one to see if they could 'get fitter than Becks'. There's your advertising headline right there. Devices would fly off the shelves faster than the blink of an eye.

Providing a 'magic number' that individuals can use to set their own goals could be big business. Sunday football league wannabes up and down the country would be bringing their smart watches into the changing rooms so they could boast, 'Hey, I'm in better shape than Jamie Vardy.'

A lot of people are already addicted to their GPS device. As Morgan says, a common saying among runners and cyclists nowadays is: 'If it's not on Strava, that training session never happened.'

It is a fact that people change their phones on average around once a year, but they keep their GPS devices for a lot longer, becoming attached to them over time.

What's new?

So what technological advances can we look forward to seeing?

The new and improved Google Glass may be heading our way in 2016.

The original eyewear product was pulled from the shelves – with Google a bit premature in releasing it to market – but a second generation offering is in the pipeline, and its potential is huge.

The idea for the sports version is that a window will appear in your field of view, providing information on your distance, speed and other measurements in real time. There may even be a function that allows you to take pictures and record video.

The fear is that it could divert your gaze throughout the duration of your exercise and be more disruptive than useful.

Other innovations set to hit the marketplace in the next year or two include 'spider web' skin that can reduce stress by alleviating muscle tension. This is already being tested by athletes to see if it does exactly what it says on the tin and, ultimately, provides the wearer with a competitive advantage.

We have all seen leading track and field athletes patched up like badly wrapped Christmas presents in blue tape. This is Kinesio tape, which certain elite coaches believe gives their athletes medical benefits and, as a result, a noticeable performance gain.

Strapping it to their arms, legs or torso is designed to alleviate pain, reduce inflammation and relax muscles. It is claimed it can even prevent injuries.

The ultimate judges, however, are the public. If they don't buy into a prototype or new innovation, the likelihood is that the idea will be scrapped.

Skin deep

The shining example of how a new 'skin' improved sporting performance came in The Beijing 2008 Olympic Games, where the controversial full-body 'rubber suit' worn by swimmers was, according to its manufacturers Speedo, responsible for 98% of the medals won.

Michael Phelps set world records in seven events and won eight golds. Wearing the LZR suit, his winning margin in the 100m butterfly was 00:00:01 sec (one hundredth of a second), with the general consensus being that it was his suit that won him the gold, giving him that extra fingertip advantage he needed.

The suit has since been banned by the International Swimming Federation (FINA).

Michael Phelps

SUITS YOU SIR: Michael Phelps strikes gold again at Beijing wearing the controversial LZR suit

‘In the world of high performance sport, the worlds of industry, academia and medicine come together,’ says Ken van Someren, the Director of Research at GlaxoSmithKline’s Human Performance Laboratory.

He is at the forefront of research into flexible biomechanical technology – in simple terms, the use of body suits to allow precise and sophisticated movement patterns.

But it isn’t just what athletes wear **on** their skin that is occupying the thoughts of some of the cleverest minds in the country. The must-have wearable of the future could be implantable technology that is ‘worn’ **under** the skin.

The idea is for biosensors to be embedded under the surface of the skin where they can take a multitude of measurements. For example, the sensors could gauge oxygen saturation in athletes, or muscle fatigue levels, sending information to computers via Bluetooth.

Pros and cons

So where do manufacturers draw the line? If new cutting edge technology produces performance gain, does that trump ethical concerns?

Clearly, technology can be a force of good. Take David Eagleman’s BrainCheck app that helps high school sports coaches establish whether an athlete is concussed.

It works like a video game and checks 12 aspects of brain function in five minutes to give a result in real time on the touchline.

And what about the increasing popularity of heart rate monitoring devices? They monitor all sorts of cardiac data to minimise a person’s risk of heart disease through increased fitness. Future developments could help devices save the lives of people with a history of cardiac problems.

A big fear of the larger tech companies nowadays is the risk of hackers or rivals pinching their ideas. There is so much information online, just how safe is it?

Coaches are also worried that their athletes’ training data could be stolen by rival teams who, ironically, could use the latest technology to plunder the statistics provided by... the latest technology.

Technology is like a drug, and as with any form of addiction, there can be nasty side effects.

As Marco Suviolaakso, Product Director at Polar, says: ‘Some athletes will be willing to chop off three of their fingers if it means they will win a gold medal.’

We know that athletes will do everything humanly possible to get that winning edge. Striving for inhuman help to boost performance will become standard practice too in the not too distant future.

Let us know what you think about 'technology overload' by leaving a comment.

Login to follow, share, comment and participate. Not a member? [Join for free now.](#)