Health tech goes mainstream

The MedTech trend is still emerging, but in the near future, the niche practice of personal data tracking will become completely mainstream. We will all wear devices that capture detailed and personalized health data, measuring heart rate, blood glucose level, blood pressure, and more. Trusted doctors will have access to that data, giving them more information on which to make solid diagnoses, and we will understand the inner workings of our own bodies more intimately.

With projections from the United Nations estimating that 1 billion of the world's adults will be obese by 2025, the imperative to lead healthier lives has never been greater. The hope is that "MedTech" can help change people's mindset and behaviours, in the same way that other digital technologies have.

The culture of medical trials, academic papers, and government intervention does not sit well with the tech startup culture of rapid prototyping and embracing failure. However, changing legislation in many countries is gradually allowing for innovation from MedTech startups, removing bureaucracy whilst strengthening safety regulations.

There are commercial applications, like the US National Football League using RFID sensors (like those in contactless bank cards) to track the movement and performance of their athletes. Simple applications, like patients presenting FitBit data to their GPs for analysis. Social applications like Doximity, providing a secure and professional social network for MDs in the US. Life saving applications like Glooko, using mobile, cloud, and data analytics to improve diabetes care.

As in all industries, huge amounts of data is not hard to obtain. The challenge is drawing meaningful insights from the data. That will be the issue that the MedTech industry will have to solve in the near future.

From blended to virtual reality

Virtual Reality (VR) as we understand it has been around since the 1970s. An immersive multimedia experience that attempts to simulate physical presence. However, it is only in the last few years that the power and affordability of VR technology has opened it up to smaller developers, and this has kickstarted innovation.

The Internet has already redefined relationships and communication. Imagine what is going to happen when we can all have immersive sensory experiences as easily as we now have video calls. VR will challenge our understanding of reality, and everyone will be able to get involved. Sales of head-mounted displays for VR are predicted to rise from 250,000 to 39 million in the next 3 years. Their growth will be faster than the iPhone.

Their obvious application is in the video game and entertainment industries, and this is where the initial growth will be over the next few years. Oculus Rift, Microsoft Hololens, Valve/HTC Vive, and Sony Morpheus are all launching 2015/16, aiming to compete for the best games and content.

But with Facebook's purchase of Oculus Rift for $2 billion in 2014, the future for VR seems more social. Imagine putting on your VR headset and walking through your sister's wedding photos, or reliving that party from University in terrifying 3D.

As head mounted displays get smaller (and maybe disappear) we will see VR become much more a part of everyday life: collaborating with colleagues across the globe; a fire safety demo at your new job; trying out new clothes online; training to be a surgeon; designing a new car.

Artificial Intelligence and the efficiency movement

Stephen Pratt of IBM said this year:

"Before long, we will look back and wonder how we made important decisions or discovered new opportunities without systematically learning from all available data."

The next decade is going to see widespread application of artificial intelligence (AI) and cognitive computing in the business world. Anyone who doesn't take advantage of this trend will be left behind. The amount of VC funding going into AI startups has leapt from $70 million to $300+ million in the last two years.

When we see the word "AI", it's easy to think about HAL in 2001, or the Steven Spielberg film with that kid from The Sixth Sense. We're not talking about that. We're talking about intelligent algorithms that automate low-level cognitive tasks and execute high-level computational tasks. They do this so that humans are empowered to make smarter decisions and tell more compelling stories.

You might already use Google Now, an intelligent personal assistant that gives you information before you've even requested it. Or Uber, whose intelligent routing system enables you to grab the driver nearest to you, when hundreds of people in the area are trying to do the same.

Over the next few years AI will replace huge areas of human labour. But this has always been the case with new technologies. The labour market will adapt, people will have to learn new skills, and the cycle will continue.

Disappearing Tech

Since the proliferation of smartphones and tablets into our daily lives, our interaction with technology has been dominated by screens. This trend will see those screens disappear, or at least diminish in importance, as our interactions become invisible. Products and services will be seamlessly integrated into normal behavioural patterns. Far ahead of last edition's Wearable Tech trend, in the future we will barely know we're using "technology".

Think about Apple Pay. You hold your phone near a card machine, and a buzz confirms payment. But why can't your phone talk to the cash register as soon as you walk into the cafe, telling the barista what your usual order is. Then you can walk away with your delicious cappuccino and your phone still in your bag.

This trend is all about freeing us from the burden of physical things. Google Docs already allows us to do this. It doesn't matter what device you're using, you log into your Google account and everything is there, just how you like it.

Imagine a world where that was commonplace. Your rental car set up just how you like it; your coworking space in Berlin laid out to your requirements; your in-flight entertainment system showing Game of Thrones on the trip back home. A smart network of devices and services that provide value by delivering useful services grounded in your needs and goals.

Disappearing tech, or invisible design, or frictionless user experiences, are coming. In the future designers and developers will have realised that the best interface is no interface. We are obsessed with screens and digital interfaces, instead of engaging with the world around us in meaningful ways.

Purpose driven tech

The world is still largely driven by commerce and the profit motive. The advertising industry as a key element in the global capitalist machine has trained us to want more and more stuff. Alongside this, the demands that we place on the global technology industry to produce more smartphones, tablets, laptops, and smart devices are increasing. It took 27 years to reach the milestone of 1 billion PCs in the world, in 2007. It only took another 7 to hit 2 billion in 2014. Demand for smartphone production has grown even faster. Hitting 1.2 billion sales in 2014.

With this abundance of communication and tech there has been a shift in the last few years. People want to engage with products and services that serve a greater purpose or meet a specific need. As this trend continues, the brands and companies who live and work according to a clear, positive purpose, as well as providing high quality services, will succeed.

Many current purposeful business solutions focus on solving small problems, but problems nonetheless:

Transferwise saves people money on costly bank fees for money exchange

Dice cuts out the corruption inherent in the music ticketing industry and creates a fair exchange between fans and artists

Patagonia works hard to encourage people not to buy new outdoor gear, but to reuse and recycle instead

Slack aims to bring team communication together in one place, and to kill email because we all hate it

As ordinary consumers we have a choice as to how we spend our money. There is no excuse for not knowing which companies are aiming to make the world a better place, and which aren't. We can choose spend our money purposefully.