

## **A new sense of identity with Kevin Warwick**

The latest Outsights' Next Revolution<sup>1</sup> event focussed on “[A new sense of identity](#)” – a revolution based on cognitive and physical enhancement. [Professor Kevin Warwick](#) – “the world’s first cyborg” – provided insights into this thought-provoking area, followed by responses from attendees from across the Outsights network, private and public sectors, NGOs and academia.

### **Cyborg 1.0**

Professor Warwick discussed his early experiment, which he refers to as [Cyborg 1.0](#), where a silicon chip transponder was inserted into his forearm, Kevin was then monitored by a computer as he moved through halls and offices of the Department of Cybernetics at the University of Reading, using a unique identifying signal emitted by the implanted chip. He could operate doors, lights, heaters and other computers without physical contact. [Baja Beach clubs](#) in Barcelona and Rotterdam have commercialised microchip implantation offering implants for regular club goers to skip the queue and create drinks tabs. Possibilities in this field are endless with the potential for implants to carry various forms of information from [medical records](#) to [personal identities](#).

### **A cure for disease?**

Potential life enhancing benefits are also emerging. New electrical technologies are being tested as positive alternatives to chemical treatments to help anticipate and treat illnesses as serious as depression and [Parkinson’s disease](#). In another experiment conducted by Professor Warwick, a chip implant linked to ultra sound detectors enabled him to sense things moving even when blindfolded, representing a breakthrough as a potential aid to the [blind community](#).

Professor Warwick and his wife also tested communication via [nervous systems](#), which may have positive benefits for paralysed individuals. Taking it to the extreme, Professor Warwick said he could imagine this providing us with a sixth sense: potentially rendering speech obsolete and revolutionising the way we communicate. Whilst direct communication is in its early stages of development it is predicted that brain-to-brain communication should occur within the next seven years.

### **Geography**

In the future the body may not be limited to one physical geography. An experiment conducted by Professor Warwick which involved an electrode array containing 100 electrodes being surgically implanted into the nerve fibres of his left arm [allowed his nervous system to be connected to the Internet](#), which in turn allowed him to control a robotic arm in Reading University from his location in Columbia University, New York. This has huge potential impact for [warfare](#), enabling soldiers to be safe at home whilst directing drones on the battlefield.

## **Possible problems**

These exciting developments highlight the potential for future applications. However, this advancement does not come without some doubt. Participants talked about ethical values and the fear of the unknown future of what it means to be human. This issue was particularly emphasised through the consideration of a scenario in which instant learning through microchip implants was realised. Whilst such technology does not currently exist, if more immediate learning were possible through cognitive enhancement, then this could come at the loss of the broad skill set we have come to acquire from living life, reducing creativity and the richness of society. Indeed some argued that how we use the Internet to access knowledge today is an early indicator of such a future (although there was no agreement on this issue). Such a development would also mean the issue of software viruses would take on a whole new meaning.

Whilst the majority at participants seemed open to possibilities, all agreed that a strong level of regulation would be required to commercialise these extreme developments in the world of human enhancement.

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<sup>i</sup> Outsights [Next Revolution](#) programme has brought together future leaders in the private, public and Third sectors to spot the Next Revolution. The ongoing programme has so far put forward three possible Next Revolutions: “A new sense of identity”; “The decentralisation of production” and “Mass social action enabled by technology”.