



THE HUMAN CLOUD AT WORK

A STUDY INTO THE IMPACT OF
WEARABLE TECHNOLOGIES IN THE
WORKPLACE*

2014

*This report comprises three studies; the Human Cloud At Work (HCAW) study by the Institute of Management Studies at Goldsmiths, University London, a quantitative survey of 300 UK and US IT decision makers undertaken by Vanson Bourne to better understand the potential challenges around the wider adoption of wearable technology across UK businesses and a quantitative study of 2000 UK consumers by Vision Critical to look at consumer adoption of wearable devices.

DOCUMENT DATE: APR2014 REF:Wearable Tech



rackspace
the open cloud company

Contents

item	page
Introduction	3
KEY FINDING ONE: Wearable Technology Can Boost Employees' Productivity - And Lift Job Satisfaction	4
KEY FINDING TWO: Five Approaches To Using The Devices And The Data They Produce	10
KEY FINDING THREE: Companies Will Need To Be Flexible In Their Use Of The Cloud When Collecting And Analysing The Data	13
CONCLUSION: Plan for their arrival and put the necessary technology in place to maximise the data	16
APPENDIX	17

Introduction

In a really short space of time, wearable technology has moved from the realm of science fiction to commonplace. Something that just a few months ago was seen as limited largely to the entertainment and health and fitness markets, has captured the imagination of businesses seeing the potential to make substantial savings through such means as increased productivity, enhanced employee well-being and reduced work-related injuries.

Research led by Dr Chris Brauer at the Institute of Management Studies at Goldsmiths, University of London indicates that these hopes could soon become a reality. The Human Cloud At Work (HCAW) study – the second part of a two-year collaboration between Rackspace and Goldsmiths – found that wearable technology can have significant benefits for both productivity and job satisfaction. However, it is also clear that if organisations are to make the most of these advances they will need to embrace cloud computing for the simple reason that there will be too much data for many existing information technology systems to handle.

Another important finding - in line with other reports in this area - is that there are great opportunities for organisations outside the creative industries and technology sectors. The likes of utility repair teams, construction workers and even those in the emergency services can and do use wearable technologies and other devices to obtain assistance more quickly and so work more effectively. The findings suggest this uptake will continue.

Moreover, while the quantitative study conducted by Vanson Bourne among 300 IT decision makers in the UK and US, suggests there are concerns about the infrastructure required to handle all the data produced by these devices, they are less worried about privacy and security issues than might have been thought.

The report describes how:

- Wearable technology has an increasing role to play in improving productivity and job satisfaction, potentially changing how we work
- With so much data being produced, there is a major IT challenge for companies that in many cases will be best overcome by using some form of the cloud
- Because individual workers have grown used to sharing data via the smartphones and other devices they use in their leisure time they are relatively relaxed about the “Big Brother” aspects of the adoption of wearable technology in the workplace

**KEY FINDING ONE:
Wearable Technology
Can Boost Employees’
Productivity – And Lift
Job Satisfaction**

Wearing devices such as brain activity sensors, motion monitors and posture coaches can significantly increase employees’ productivity while also improving their job satisfaction, according to this innovative research. The Human Cloud At Work study led by Dr Chris Brauer of the Institute of Management Studies at Goldsmiths, University of London found that productivity for people using wearable technology increased 8.5 per cent, while their job satisfaction levels were up 3.5 per cent.

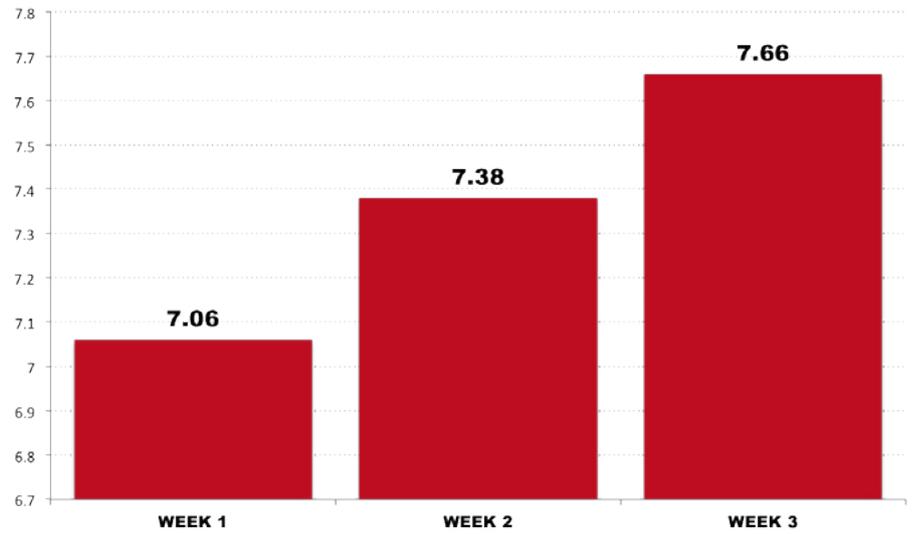


FIG 1: **PRODUCTIVITY OF THOSE USING WEARABLES**
SOURCE: **DR BRAUER**

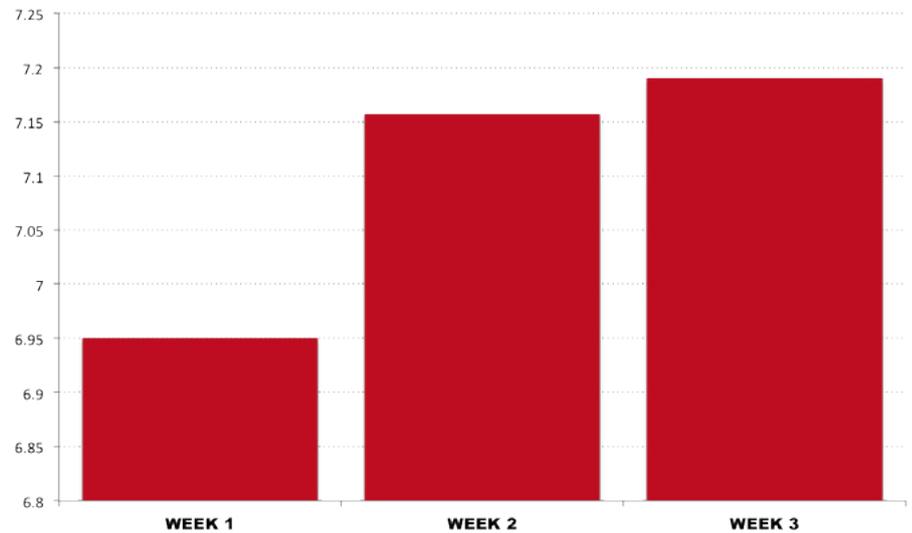


FIG 2: **SATISFACTION OF THOSE USING WEARABLES**
SOURCE: **DR BRAUER**

KEY FINDING ONE: Wearable Technology Can Boost Employees’ Productivity – And Lift Job Satisfaction

Continued

The findings add to the growing belief that wearable technology has a prime role to play in the increasingly competitive business environment by helping employees become more effective. Eric Openshaw and Harry Greenspun of the international consultancy firm Deloitte recently wrote (“The digitised employee – can wearable technology help create a healthier, more productive workforce?” Financial Times, 20 February 2014) that consumer technologies used by runners and others interested in their personal fitness were being rapidly adopted by businesses. This is expected to contribute to the market for smart glasses, activity monitors, smart watches and other devices being worth as much as \$3bn this year.

WORKPLACE MEASUREMENT REVOLUTION

Harikesh Nair, associate professor of marketing at Stanford University’s business school, was quoted in another article (in Fast Company, 3 January 2014) as saying: “It’s definitely an incredible revolution that is going to happen in workplace measurement.” He added that it was a positive step because companies already collected transaction data to boost sales and customer loyalty but have until now had little insight into how employees interact with one another and into what makes them successful.

Unsurprisingly, US companies have shown themselves particularly receptive to the new technology. But as Vanson Bourne indicates, UK companies have not entirely ignored the trend. The reasons cited for adopting the technology are improving employee well-being, instant access to important information and improved customer service as well as increasing employee productivity.

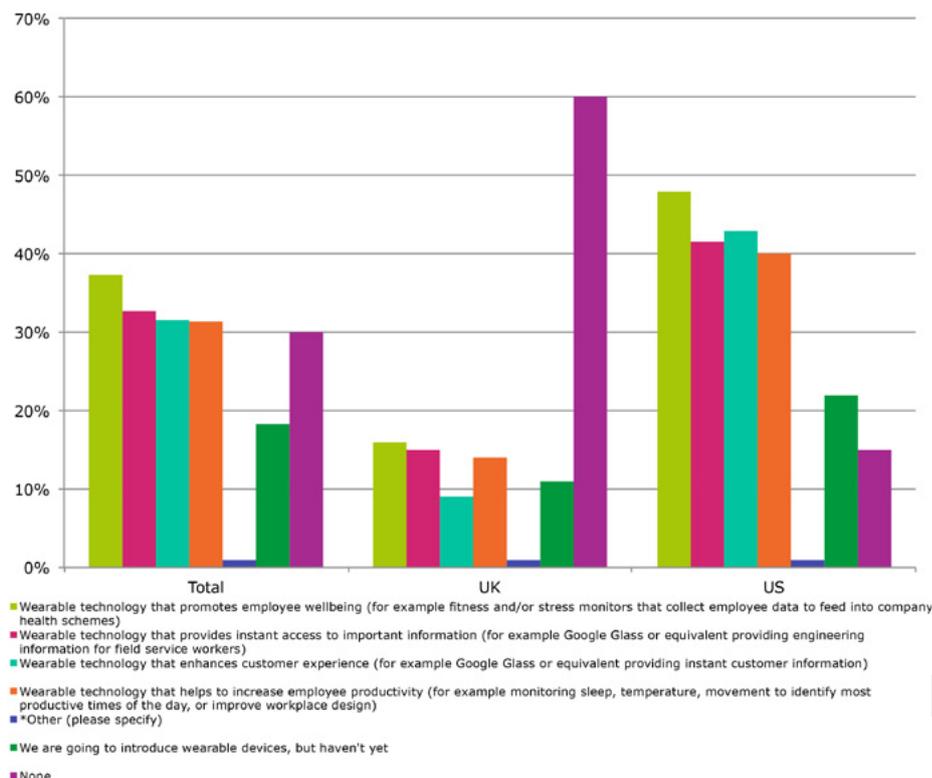


FIG 3: “Has your organisation implemented any of the following wearable technologies (a device worn directly on the body which is connected to the internet to either collect information about an individual or provide instant information)?”

SOURCE: VANSON BOURNE



KEY FINDING ONE: Wearable Technology Can Boost Employees’ Productivity – And Lift Job Satisfaction

Continued

Analysis of the size and types of organisation adopting wearable technologies shows that, generally, smaller companies are more interested than their larger counterparts, while retailers and manufacturers have tended to be ahead of other sectors.

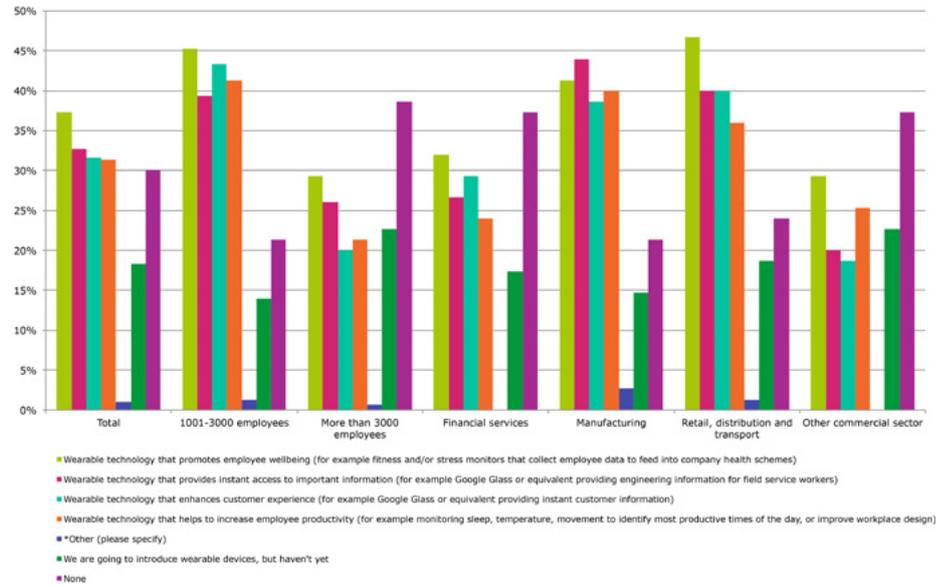


FIG 4: “Has your organisation implemented any of the following wearable technologies (a device worn directly on the body which is connected to the internet to either collect information about an individual or provide instant information)?”

SOURCE: VANSON BOURNE

In the UK, in particular, financial services have previously been especially reluctant to adopt the technology.

Financial services also stands out from the crowd when it comes to the reasons cited for not introducing wearable devices.

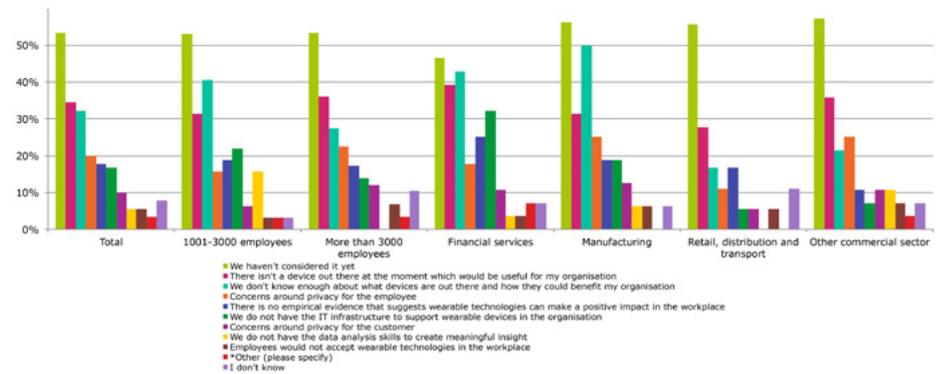


FIG 5: “What are the main reasons why your organisation has not implemented wearable devices?”

SOURCE: VANSON BOURNE

KEY FINDING ONE: Wearable Technology Can Boost Employees’ Productivity – And Lift Job Satisfaction

Continued

The sector is less likely to have not considered the technology but much more likely than other industries to take the view that it lacks the IT infrastructure to support implementation. Concerns about privacy and employees’ resistance to the idea are generally well down the list of reasons not to adopt.

LIMITED RESISTANCE

Some question whether the knowledge work that is increasingly a major part of many companies’ activities can be measured in ways traditionally associated with manual work, while others worry that the devices could lead to employers knowing too much, including medical information, about their employees. But the HCAW report offers clear evidence that office workers can not only see their performance at work improve dramatically through using the devices but also enjoy the experience.

Dr Brauer says: “These results show organisations and employees need now to be developing and implementing strategies for introducing and harnessing the power of wearables in the workplace. Wearable technology is arguably the biggest trend since tablet computing so it’s natural that employees and businesses will look to use these devices in the workplace. Our initial findings suggest that there is benefit to be gained from doing so alongside risks and opportunities that need to be proactively addressed.”

The research follows on from work done by the same team at Goldsmiths, University of London last year, which was described in the report *The Human Cloud: Wearable Technology From Novelty To Production*. The new Human Cloud at Work study was carried out in March 2014 and involved 120 employees (40 participants and 80 peers) at the global media agency Mindshare UK’s offices in London. The participants were equipped with one of the three devices – the GENEActiv high-velocity accelerometer wristband, which measures movement and activity; the NeuroSky Mindwave portable biosensor EEG, which monitors brain activity; and the LUMObac posture and activity coach, which issues a pulse to remind its wearer to sit up straight. Readings from the devices contributed to the employees’ Performance At Work (PAW) scores.

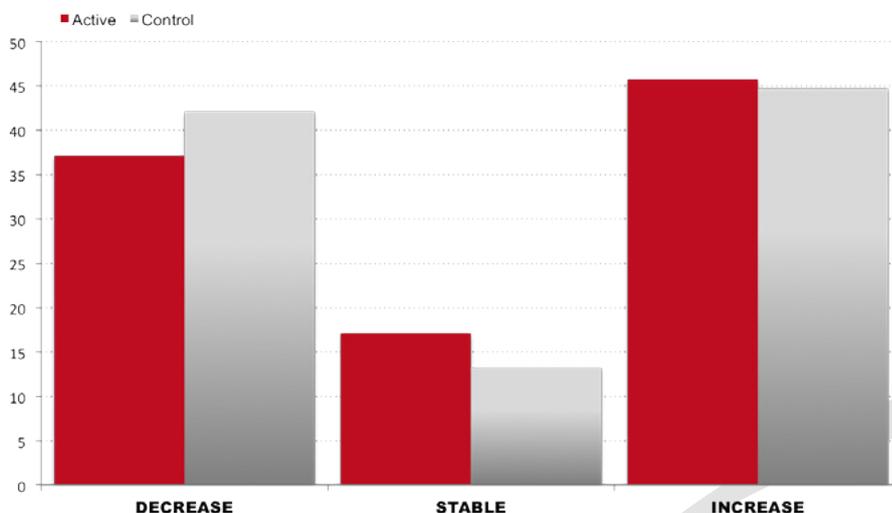


FIG 2: PERFORMANCE AT WORK IN RELATION TO BASELINE
SOURCE: DR BRAUER



KEY FINDING ONE: Wearable Technology Can Boost Employees' Productivity – And Lift Job Satisfaction

Continued

In addition to the headline findings, the researchers found that, overall, more active participants reported an increased PAW, compared with the controls. In particular, 50 per cent of those wearing the GENEActiv and 46 per cent of those using the NeuroSky reported improved PAW. The proportion reporting decreased PAW was 36 per cent for both. By contrast, only 36 per cent of participants wearing the LUMObac reported improved PAW. The discrepancy has been attributed to the fact that, while both the GENEActiv and the NeuroSky provided data that could be acted upon, the Lumo Back was a direct intervention which some participants found disruptive at first.

DISTINCT PROFILES

Further insights were gained through blogs posted by 10 of the active participants. Their comments were used to identify five dominant behavioural trends in workforce engagement with wearable technology. These trends are described in the final part of this report.

Dr Brauer explains: “The depth and distinctiveness of profiles that can be built without any directly-identifying personal information is startling. Using just data gathered from wearable devices, it is possible to develop rich behavioural and lifestyle profiles of individuals and/or employees.” Indeed, he and his colleagues used the findings to describe the story of one participant – whom they called “Chloe” – over the course of the three-week experiment.

According to this profile, “Chloe’s mid-sleep time is 3.45 am, which is in the later quartile and would suggest she is younger as mid-sleep time tends to get earlier with age. She’s an owl rather than a lark but not a party animal. Her sleep time is average (7.5 hours), as is her quality of sleep. She is generally active, but not a gym bunny, although she often has long sedentary periods in the office, which can be interpreted as a longer-term potential health risk. She has regular rise and bed times and has used the devices consistently, so is likely to be a conscientious individual. Given the fact that she is an owl, she is likely to enjoy a lie-in at the weekends. She has a short commute (it takes her less than 90 minutes to be at work from waking) and doesn’t have children.”

That the researchers were able to gain such a detailed picture in such a short period of time indicates that there are potential delicate issues for employers to negotiate. In the United States, none of the data used to profile “Chloe” would be classed as personal, while in Europe the

KEY FINDING ONE: Wearable Technology Can Boost Employees' Productivity – And Lift Job Satisfaction

Continued

situation is less clear, says Dr Brauer. “This work reinforces the need for businesses to work within a social contract to collect and use this type of data sensitively and appropriately,” he adds.

Having said that, findings from consumer study by Vision Critical show that 21 per cent of UK consumers of working age are already using some form of wearable technology – chiefly for health and fitness purposes – indicates that there is a willingness to embrace the concept. Moreover, 65 per cent of the people in this group say that these devices have enhanced their lives.

As Rackspace’s CTO, Nigel Beighton says: “Many employees will already be familiar with well-being and activity monitoring as they’ll have similar applications on their smartphones. Introducing dedicated workplace wearable technology projects should be straightforward provided companies are open and collaborative in what data they will collect and how it will be used.”



One of the studies conducted by Mindshare UK, involving the Neurosky MindWave

KEY FINDING TWO: Five Approaches To Using The Devices And The Data They Produce

As part of the academic Goldsmith's study, 10 participants posted blogs about their experiences of using the wearable technology devices. Each participant wrote two to three times a week about the relationship between the technology and their productivity and performance at work. Productivity and performance were both self-reported in terms of productivity, alertness and satisfaction and reviewed by their peers in terms of productivity, alertness and inspiration.

Dr Brauer's team organised the comments using various codes and a preliminary analysis indicates that participants display five dominant behaviours in relation to wearable technologies and productivity and performance in the workplace.

They are:

AUGMENTATION

This is characterised by the hope of something better, something to achieve and a reliance on the device to steer participants towards that goal. Those in this category effectively partner with the technology to create a new sense of productivity and so achieve higher performance indicators. Dr Brauer says: "Experience is enhanced by the data produced and also just the act of using the device."

In the words of one participant: "I don't really find myself thinking about the technology I am wearing but I have definitely become more productive. The benefits of wearing NeuroSky during my work day is that, on some level, this whole experiment at work made me more aware of my productivity."

Another said: "Both yesterday and today I have been extremely tired in the morning. I definitely feel that, although my concentration probably hasn't been at its peak, focusing for 15 minutes with the NeuroSky each morning has helped my brain to engage."

VISIBILITY

The chief characteristic here is "seeing is believing". Having access to usually invisible data about behaviours allows the user to change his or her actions. In these circumstances, the device is seen as a "TOOL of productivity", says Dr Brauer. Such users are often questioning about their ability at work and the wearable devices help such questions come to life.

This attitude is illustrated by the comment of the participant who said: "Usually, if I don't cycle in I find myself feeling sluggish, so it will be interesting to see if any of the data collected by the GENEActiv shows a difference between days when I do and days when I don't cycle to and from work."

The acknowledgement of the ability to change behaviour is indicated by the comment: "Actually, the technology is a measuring device, as is the exercises metrics/score, and with more data we can act upon it or try to improve."

LUMO[^]
back



Lumo Back monitors your posture and coaches you to improve throughout the day. Worn comfortably underneath or over your clothes, the sensor gently vibrates when you slouch. When synced with your compatible mobile device, Lumo Back will keep track of your daily activities like steps taken, time spent sitting, calories burned, and even your sleep habits.

KEY FINDING TWO: Five Approaches To Using The Devices And The Data They Produce

Continued

GAMIFICATION

Dr Brauer explains that those in this group are typically aware of what others are doing, with the result that this knowledge has an impact on their choices and the way they feel about themselves. In a spirit of “healthy competition”, such individuals are concerned to obtain a sense of what is “normal” and what the data might reveal about themselves to others. Tracking their development affects their confidence in other areas of work, he adds.

This attitude is typified by the comment: “It does make you a little self-conscious, though. Is what I’m doing and how I’m reacting to things normal? Do my vital signs drop the longer the meeting?”

Similarly, another participant said: “On the fast maths, I did Grade 5 and was able to do 12 exercises in two minutes. An average of one exercise every 10 seconds – I was happy on days when I got few or no mistakes at all. However, on the last day I was pretty impressed with my colleague sitting beside me who was doing about 80 exercises in two minutes. That is one exercise every 1.5 seconds. She might have been doing Grade 1, which did have some very simple maths problems, and was not getting them all correct at first, but anyway 80 questions is very fast. I was very impressed.”

BALANCE

Participants in this group typically have a sense that certain behaviours and lifestyle variables affect performance at work but they are not really sure how to fix the obvious imbalances. They hope the technology will help with this as well as assisting with motivation. Their interest is “almost more personal than work-related, but inter-connected”, says Dr Brauer. These are “self-reflexive” individuals, i.e. apt to reflect on their image of themselves, who are aware of the potential of wearable technology and keen to test it.

This approach is typified by the comment: “I’m very glad that for the next two weeks I’ll be doing it each morning as part of this study, as I really do feel the benefits of just switching off for 5-10 minutes. Hopefully, after these two weeks, the habit of daily meditation will be installed within me!”

Another said: “What I have found, though, is that taking a few minutes to breathe deeply and collect yourself does help in those times when you feel overwhelmed; it recharges you.”

KEY FINDING TWO: Five Approaches To Using The Devices And The Data They Produce

Continued

MONITORING

Dr Brauer describes this category as one where individuals welcome the opportunity for self-monitoring. “Racing against yourself helps to improve performance,” as he puts it. The improvement made possible by using wearable devices also enhances gratification and productivity. In line with the “Hawthorne Effect”, a human psychology term that refers to the fact that employees are apt to change their behaviour just because they are being studied, the wearing of technological devices may enhance performance simply by creating a feeling of attention, he adds.

This view is supported by the comment: “Today really illustrates how powerful self-monitoring can be ... even when I had little to compare my brain activity to (or a real understanding of it) and no obvious desire to be good at the tests – the very fact I was being monitored enhanced performance.”

Another participant was even more clear-cut. “I love wearable tech and my previous week’s NeuroSky trial highlighted that I really am motivated by the self-feedback.”

KEY FINDING THREE: Companies Will Need To Be Flexible In Their Use Of The Cloud When Collecting And Analysing The Data

Dr Brauer and his team are well aware of the technological challenges that need to be overcome before organisations see the real advantages of wearable technology in the workplace.

“The estimated weekly data volume generated by an individual employee using all three of our devices is 30GB. When this scales to a workforce, and potentially incorporates other wearables, it presents enormous Big Data and Analytics challenges if organisations are to capitalise on the potential productivity and performance benefits, particularly if the processing is near real-time.”

INFRASTRUCTURE ISSUES

Such concerns are also prominent in the survey of IT professionals conducted by Vanson Bourne. A lack of IT infrastructure to support wearable technology was cited by a fifth of UK respondents and a tenth of those in the United States as one of the main reasons for not introducing such devices to the workplace.

Asked for more detail on their IT concerns, UK and US specialists were largely agreed that the key issues were securing employee and customer data and the increased workload for IT support. US respondents – possibly because US organisations are generally far ahead of their UK counterparts in adopting the technology, and so have a better understanding of what is involved – were also especially concerned about such matters as the increased loading on the IT infrastructure, the exponential increase in data collection and the need for investment in skilled personnel to be able to utilise that data.

UNDERSTANDING THE IMPACT AND OPPORTUNITY OF BIG DATA

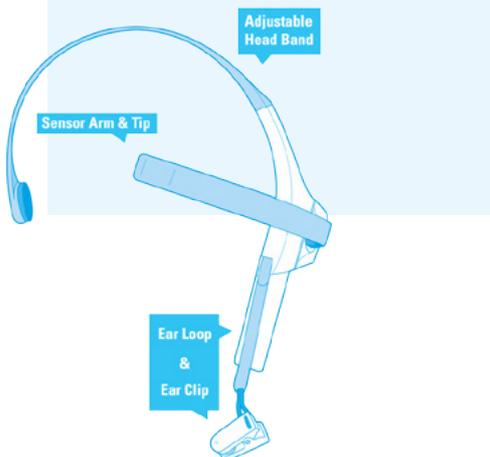
The idea of organisations using “cloud computing” to support their IT operations is well established. But the generation of huge amounts of data through the introduction of performance-monitoring devices is likely to give fresh impetus to the concept. This is because the only way that many organisations will be able to cope with the extra workload will be through outsourcing much of the storage and analysis. The hybrid clouds - a cloud computing environment in which an organisation provides and manages some resources in-house and has others provided externally - are likely to be especially attractive because of the flexibility they offer. In particular, the fact that the wearable devices can be used in any industry means that there is a demand for the open cloud for the storage and analysis of data. At the same time, some companies might want to protect at least some of their data by opting for the hybrid model, which allows users to combine the flexibility of the open network with the performance and security of hardware dedicated to them.

Beighton, says: “Many wearable technologies are focused on improving some aspect of an individual’s life – whether it is for health and fitness,

NeuroSky®
Brain Wave Sensors for Every Body



“Measuring Electroencephalogram (EEG) activity has historically required complex, intimidating and immovable equipment costing thousands of dollars. NeuroSky is unlocking a new world of solutions for education and entertainment with research-grade, mobile, embeddable EEG biosensor solutions. Precisely accurate, portable and noise-filtering, EEG biosensors translate brain activity into action.”



KEY FINDING THREE: Companies Will Need To Be Flexible In Their Use Of The Cloud When Collecting And Analysing The Data

Continued

focus and concentration, productivity or job satisfaction. The big step change for both individuals and businesses is being able to analyse the raw data and understand the context surrounding the data, such as the weather, location, posture even temperature and mood of the individual. By focusing on the data as well as the devices, wearable technologies can provide meaningful insights that can be used to improve performance and satisfaction. Essentially wearable tech and big data go hand-in-hand.”

EMPLOYEES RELAXED ABOUT SECURITY

Although employers are concerned about securing employees’ and customers’ data, it appears that the individuals themselves are less worried. Fewer than a tenth of UK consumers questioned by Vision Critical on behalf of Rackspace said they did not trust the provider of the wearable devices to store and process their personal information securely in their IT systems. On the other hand, more than half trusted them in this area, with 13 per cent trusting them completely.

Against this background, it is perhaps not surprising that individuals are not as concerned as might have been thought about the “Big Brother” aspects of the introduction of technology designed to improve performance at work. While just over a third of those questioned said they would not be willing to wear such devices if offered to them by an employer, 45 per cent said they would.

This corresponds with the experience of Ben Waber, co-founder, president and CEO of Sociometric Solutions, a company that uses special badges to measure employees’ movements, their tone of voice, where they are in an office and whom they are talking to. In the projects his company has run in organisations as varied as banks and hospitals, employees are always given the choice of opting out, but the participation rate is about 90 per cent.

With consumers around the world having grown used to sharing personal information through their eager adoption of such innovations as smartphones, retailers’ loyalty cards and wearable fitness aids, they appear unconcerned about extending the practice in the workplace.

OPEN SOURCE IS CRITICAL

As the quantitative Vanson Bourne research shows, there are a wide variety of industries including manufacturing, financial services, telecommunications businesses, all currently running wearable technology projects, there will be no ‘one-size fits all’ approach to a wearable technology project, therefore an open source cloud architecture should be a critical consideration when choosing a platform to support them.

As a nascent technology trend, businesses and organisations need to feel confident in making an investment in an area which is still relatively untried and tested. Open source platforms are, by their very

KEY FINDING THREE: Companies Will Need To Be Flexible In Their Use Of The Cloud When Collecting And Analysing The Data Continued

nature, built with collaboration and cooperation in mind. There is no expensive lock-in to proprietary technologies where development and management costs are prohibitive due to scarcity in the skills pool. Like any emerging technology the pace of innovation and change is likely to be rapid. With a cloud architecture based on open source technology, firms should be assured that they are running the most cost-effective and agile platform that can be adapted to take advantage of the findings the wearable devices are reporting back.

Also, the data generated by wearable devices will have relevance and usage for many parts of a business and organisation; for example in HR, sales and marketing, customer service, supply chain etc. Within each of those areas there will be a myriad of business critical software and systems. The question is, how can they be enhanced by using the data collected? Again, having an open cloud platform that can support different systems quickly and easily without requiring significant technology understanding and investment will be critical in making such deployments cost effective for business.

GENEActiv™



"As a research-grade wearable device, GENEActiv is ideally placed to contribute to our understanding of how the workplace might evolve in the presence of wearable technologies and how they will impact society more widely. Wrist-worn devices, when designed appropriately, can provide significant insight for individuals about many aspects of their daily lives without being a burden to the wearer. It is this easy acceptance of continuous wear that differentiates a wearable from mobile phones apps - supporting the possibilities of new features and benefits."

*Joss Langford, Technical Director,
GENEActiv*

CONCLUSION: Plan for their arrival and put the necessary technology in place to maximise the data

Statistically, the Human Cloud At Work study found some startling outcomes not least that productivity of those wearing the wearables increased by 8.5% and job satisfaction increased by 3.5% over the initial month of the study. While more research is being done to test these initial findings, it's clear that wearable technology in the work place can deliver real business benefit providing it is introduced correctly and supported by the right technologies.

Indeed, if you look around any office you're likely to see an array of sporting watches and bracelets, fitness monitors and other wearable devices charging from desktop USB ports. The employee mindset is already attuned to using wearable tech and, as the study shows both from the academic and qualitative research reports, there is an eagerness and willingness to embrace them further to understand if they can improve performance both socially and at work.

However, the study found that organisations face dramatic infrastructure and logistical challenges in dealing with either the addition of wearables to the Bring-Your-Own-Device (BYOD) phenomenon in workplaces or organisational rollouts of wearable strategies. Data from the human is the missing piece in the Big Data puzzle but the challenges of gaining competitive advantage from real-time hosting, processing, and analytics are unrelenting and immediate.

PLAN AND DEPLOY

Clearly organisations need to have a strict strategy or plan for their implementation. There are serious considerations around how employees feel about being 'monitored', and - as the data shows - some devices may actually have a negative impact on a workforce. Equally, the amount of data that will be created will require specialist technology to ensure the value of any investment is fully realised. Firms should begin to think about how ready they are for a wearable technology investment and plan accordingly. Key considerations are:

- 1** What do you want to get out of the project? Is a hard business metric such as productivity the overall aim, or is it something softer such as employee well-being? Being upfront here will ensure the correct devices are used and their introduction is properly managed and communicated.
- 2** What is the timescale for measuring success of the project? With the lack of historical data on successful implementations, the 'payback' on the investment could be longer than initially expected. What is the likely impact on the resources required to manage the IT and processes that support a wearable technology implementation?
- 3** Have you got the right skills in the business to get the most out of any investment? Have you got the analysts who can take the big data and turn it into smaller, actionable insights?
- 4** Will your current IT systems support such a project? Are you working with the right partners to help you maximise the time and money it will take to get such a project off the ground? Again, these skills may not currently exist in your organisation.

APPENDIX

CONTRIBUTORS

The research was led by Dr Chris Brauer, director of the Human Cloud at Work research project at Goldsmiths, University of London. He was assisted by colleagues in the Institute of Management Studies at Goldsmiths. In particular, Dr Jennifer Barth in Computing led the qualitative analysis and Luis Costa da Silva, PhD candidate in Psychology, led the quantitative analysis. The research involved 120 employees of the London office of the global media agency Mindshare UK.

METHODOLOGY

The methodology for the academic research was experimental in design and conducted over two rounds at a single field site. Participants were pre-selected by our participating field-site but then randomly assigned to either an intervention group or a control group rotating through three wearable devices. The research employed both qualitative and quantitative methods. Qualitative techniques included experience sampling on blogs and observing participants while quantitative techniques included seeking correlations between the data gathered from wearable technologies, intervening variables (such as focus, light, temperature, sleep, movement, posture) and organisational and individual metrics for productivity and performance gathered from survey. The research team also gathered profiles of participant psychological flexibility at the start, middle, and end of each experiment round to evaluate any personality or behavioural impacts of wearable technologies in the workplace. The organisational field site defined what they meant and interpreted as “productivity and performance” in their workplace and the team co-developed a measure of this that was evaluated through evaluation by themselves and peers.

This research was supported by two quantitative research studies; the first among 300 IT decision makers undertaken by Vanson Bourne using an on-line questionnaire. The second among 2,000 UK consumers, again via an on-line questionnaire, was undertaken by Vision Critical.

ABOUT RACKSPACE

Rackspace (NYSE: RAX) is the global leader in hybrid cloud and founder of OpenStack®, the open-source operating system for the cloud. Hundreds of thousands of customers look to Rackspace to deliver the best-fit infrastructure for their IT needs, leveraging a product portfolio that allows workloads to run where they perform best—whether on the public cloud, private cloud, dedicated servers, or a combination of platforms. The company’s award-winning Fanatical Support® helps customers successfully architect, deploy and run their most critical applications. Headquartered in San Antonio, TX, Rackspace operates data centers on four continents. Rackspace is featured on Fortune’s list of 100 Best Companies to Work For.

For more information, visit www.rackspace.com.



MINDSHARE

Mindshare is a global media agency network and the home of adaptive marketing. Mindshare’s 7,000 employees are driven by the values of speed, teamwork and provocation.

Read more at www.mindshareworld.com