

Your tech resolutions for 2012

There's never been a more important time to harness technology to help your business. We asked the experts for five technology trends directors should embrace in 2012. From cloud computing and social networking to what the office of the future will look like, here's what they said...

A quick glance out of the nearest window right now is likely to reveal an army of joggers, as people welcome the new year in the traditional way – aiming to become healthier, break bad habits and embrace new things. It's an approach that should also be adopted in business, say experts, as 2012 promises to be a crucial year when taking maximum advantage of rapidly developing technology trends could mean the difference between success and failure. A proactive attitude towards technology from directors themselves, they say, will be key to saving time and money, boosting productivity and unlocking new opportunity.

That's the opinion of William Higham, founder of future trends consultancy The Next Big Thing. "It's such a volatile world that the first resolution for any business leader coming into 2012 must be to become change-friendly," he says. "I can't think of any sector that could not change massively within the next year. So before you even start thinking about what those changes might be, you must ensure that you as an individual and your company as a whole is open to change and has the structure in place to allow it. There needs to be a place within any strategic discussion for technology and what it can offer."

And Higham believes a tendency to leave technology considerations to IT departments impedes progress: "If you leave it to them you're hampering your own abilities to move the company forward," he says. "In the same way, you wouldn't be a good business leader without knowing about financial issues – if you had to rely on your finance department for any knowledge of finance, you wouldn't have got very far. So you need to get up to speed, we're in a period of constant learning."

Higham and other experts gave Director five key tech resolutions for 2012...

1. Get your head in the cloud

Cloud computing – the access of services and the storage of data via platforms on the internet – is undoubtedly the trend to watch in 2012,

predicts entrepreneur and former Dragons' Den panellist James Caan. "The cloud is going to play a significant part in the UK's recovery," he says. "Businesses are being started up in bedrooms using cloud computing. It will be the gateway to explode entrepreneurship."

Anne Boden, former head of Global Transaction Services for RBS in Europe, agrees. "Today even the smallest companies can benefit from the best technology in the marketplace," she says. "What cloud will do is connect the vision with the capability."

But it's not just start-ups that can benefit by accessing everything from accountancy software to real-time analytical tools online. Established companies can cut costs by switching to cloud-based infrastructure as Caan himself discovered. "Recently we moved offices and typically when that happens you can end up spending anything up to £250,000 upgrading your IT infrastructure," he says. "But we looked at going for cloud over hardware and it was more like £1,500 a month. To think we can have a smarter system that costs substantially less, there's no question that will have an impact."

With major companies including Google, Amazon and IBM competing to provide businesses with the platform to operate in the cloud, apps and services range from the free, to the pay-as-you-use, to the full-blown contract models. But even with that degree of scalable flexibility, it seems some companies are reluctant to use the cloud. Recent research by global risk consultancy Protiviti found that only three in 10 UK firms are planning to use cloud computing over the next three years. Concerns over the security of data stored in the cloud are cited as a major reason for the hesitation.

But from those who put faith in the cloud, tales of improved efficiency abound. Richard Alvin, group managing director of Capital Business Media, moved the company from an office server-based system to the cloud. "We have four dashboards that look after every aspect of our company," he says. "Using these we've reduced overhead cost by 27 per cent and headcount as well."

But, if this all-out approach is too much for some, Eric Van Der Kleij, chief executive of London's Tech City hub, suggests using the cloud to test new ideas is a good way to start. "A great advantage of cloud is agile development tools," he says. "Entrepreneurs can throw an idea together, throw it up into the cloud in a couple of weeks and just see if it works."

2. Escape the information overload

While the combination of internet, email and mobile devices keeps us in contact with our colleagues and the wider world ever more comprehensively, experts warn that a failure to embrace ways of dealing with the resulting information barrage could seriously hamper efficiency.

"We're now talking in zettabytes," says Higham. "If you took the entire amount of information that was available across the whole internet in 2009 and multiplied it by two, that's a zettabyte [the equivalent of one sextillion bytes]. In 2011, we've created two zettabytes, and by 2015 it will be eight zettabytes. That's just crazy, we can't organise ourselves in the same way we used to. It's like moving from a village to a city."

It seems it's not just the internet that's turning into a virtual jungle. Research released in October by NationalField, the business social network operator, claimed that 20 per cent of UK office workers receive an average of 50 emails a day from colleagues alone. "Finding ways to quickly organise, analyse and present the data we receive ought to be a major focus for 2012," says Higham. "The business leader needs to really focus on finding what will work best with their types of data – things like infographics and the next generation of analytics tools will be essential."

Just one of the many companies looking to cash in on data overload by providing such tools is Mindjet, which has launched a new version of its information visualisation software MindManager 2012. Based on the idea that the human brain doesn't efficiently absorb data presented in a linear way, the program allows users to quickly create spider diagram-style representations of received information called mind maps. "It's been designed to meet the needs of today's professionals, who are barraged with new opportunities," explains Mindjet's chief projects officer Blaine Mathieu.

A cloud-based version of the software also allows colleagues in different locations to work collaboratively on projects at the same time – while giving the director the added advantage of being able to remotely check on work in development, in real time, from brainstorm to completion. "The new Directed Brainstorm feature organises an outpouring of ideas that can quickly be honed into real solutions for real business needs," says Mathieu.

3. Be more sociable

As if dealing with the bombardment of correspondence wasn't enough, the signs are that the immediacy of social networks such as Facebook and Twitter is creating a consumer who expects a faster response time than ever

before from companies hoping for their custom. Peter Kelly, enterprise director of Vodafone UK, explains that failure to engage quickly is becoming costly for businesses. "Younger people, particularly, will make purchase decisions rapidly based on your response rate. A third of 16- to 24-year-olds expect a response to an email within an hour.

"We also found that in 2010 the average piece of lost business to a small or medium company due to not responding to communication was £30,000," says Kelly. "That's a rise of £10,000 on the previous year –in 2012 it's going to be fundamental."

Higham agrees: "While the trend in hardware technology has been for miniaturisation and mobility, in software it has been about community and communication and yet there are still companies out there who are not fully embracing social media. Research I did with OnePoll found that only 49 per cent of middle and senior managers thought social media could be of any use within a business. That's a shocking statistic.

"The other aspect is that there are now three times as many smartphones in the world as there are PCs. Anybody who's thinking 'I just need to have an internet site' is being short-sighted – you have to make sure everything is also geared towards mobile technology, be that smartphones or tablets. Most brands have yet to create a mobile website for their company, but it's becoming essential. Be mobile, and be sociable, and try to adapt your structure to be able to respond quickly. A day is definitely too late."

4. Mobilise your troops

Growth in the use of smartphones, tablets and laptops is having another effect on the workplace. "We call it consumerisation," says Kelly. "As Generation Y joins the workforce, they're increasingly used to having smart IT and communications technology at home, and the expectation is they're going to get that at work." A survey by the Six Degrees managed data service also found that 78 per cent of employees believed their own devices to be superior to those supplied by their employer.

But although experts agree there are security issues for directors to consider before allowing employees to use their own devices for work, they believe Generation Y's knowledge of emerging technologies could provide useful insights to directors on their future use by the business.

"You may have a lot of individuals within your company who are trying to do things with new technology and you probably have systems in place that are not letting them do that," says Higham. "Talk to people within your

organisation, open yourself up to ideas they might have. The staff can often be seen as a representation of the customer, who is often more knowledgeable about technology than businesses themselves."

Generation Y's tech knowledge and flexible attitude is also set to define where we work, and this may help businesses, says Kelly: "At Vodafone we talk about 'new ways of working'. It's about becoming more agile, cost effective and better serving your customers. One way to do this could be to move your operation away from a traditional desk-based, bricks and mortar, nine-to-five operation. Increasingly Generation Y want a company that allows them to work from home if they need to, or from a coffee shop or on a Saturday evening if that's what they choose to do."

Higham agrees: "You've got to slim down. Approaches like remote working can ensure overheads are lower and you're quicker. The famous story of the tortoise and the hare, and the concept that slow and steady wins the race – we've been brought up to believe that it's a good idea to be the tortoise. But right now you don't want to be a tortoise, in 2012 the hare is going to win the race." His theory is backed by the 2020 Vision report from Bibby Financial Services, which predicts that the number of small and nimble mobile businesses in the UK will increase by 20 per cent by 2020.

5. Don't let security fears hold you back

While there are advantages to be gained from using the cloud and embracing mobile working, the concern felt by many regarding the security of these technologies is understandable. Statistics released at the information security conference Hacker Halted in Miami in October pointed to a 400 per cent rise in Android mobile malware in 2011, and put the number of new malicious websites detected every month at two million. "I don't think it's a case of allowing a free-for-all of all people bringing any device into the work environment and then just crossing your fingers," says Kelly.

"But I think security solutions have come a long way in the last 18 months in that they're much more agile and user-friendly. A couple of years ago security was very complex and to have deep security invariably slowed you down, now there are a lot of solutions that are phenomenally secure but also more manageable. For smartphones and tablets the trend you'll see in future is almost what you might call a split device – there'll be the element of the device which has your personal email, websites, social media and so on and then the element that is linked securely to the corporate network."

Anne Boden, meanwhile, is backing security in the cloud. "Security breaches are often when somebody gives someone their password or hasn't followed procedure," she says. "I use cloud because I can trust someone else to operate the software properly and I can't trust me."

Higham believes that in the future protecting data may not be the priority at all for many businesses. "It's not going to be about how much information you have or the innovation of the data – it's about how quickly you can analyse and exploit it," he says.

3D printing... the next big thing?

Though it's not yet entirely economically viable, 3D printing is a technology to keep an eye on, says William Higham of The Next Big Thing. It allows the creation of, in theory, any object of any size in 3D on a computer – which can then be printed in a chosen material by the laying down of successive layers. "I think the idea of 3D prototyping will grow hugely," says Higham. "The idea that you can create things and test them much more quickly will have a huge impact. It's something that business leaders will need to look at in future."

The office of the future

"If my grandfather was alive today and walked into my home, he'd have some real issues – if I showed him a mobile phone, he wouldn't know what to do," says William Higham. "But if he walked into an office, he'd be fine – there's the meeting room, the partitions, the boss's office. The structure hasn't moved on. We've got a Victorian office. Would we accept a Victorian home? In the future we're going to see a massive shift away from a fixed office – whether this is remote working, hot desking or flexible hours, technology will enable us to do that."

For more information visit

www.next-big-thing.net

www.vodafone.co.uk/corporate

www.aheadclouds.co.uk/media.html

www.techcityuk.com

www.nationalfield.com

