



## Technology news

**Updated:** 11-22  
[Update this newspaper](#)

## Guardian Technology news

### **High-end audio maker Linn declares death of the CD player**

The British maker of stuff for audiophiles says digital streaming is the way forward for its music products

The CD player is dead. So says Linn Products, the high-end audio specialist based in Glasgow which for 20 years has been making .. CD players.

The reason: its audiophile customers have moved, with alacrity, to hard drive-based systems - its DS "streaming players" - that allow them to encode their entire CD collection in order to play any track at will.

"We introduced our streaming players two years ago, and thought they would be slow to take off," says Gilad Tiefenbrun, Linn's managing director who is the son of the original founder, Ivan. "But sales of CD players have declined 40% year-on-year, while streaming players now make up 30% of our total business. It's unprecedented growth." The growth in those sales has come while overall revenues have remained stable, he added.

Similar effects are being seen at Linn Records, the part of the company that sells music: CD sales are down 17%, while its uncompressed downloads - which include original studio mixes of recordings, rather than the mixed-down versions sold on CD - have grown by 24% in the same time; 70% of those are now those "Studio Master" versions, each costing £18.

Is part of that due to the technology of CD players having reached an endpoint, I asked? That they can't get any better, so nobody's buying them? "Yes, there's some of that," said Tiefenbrun. "But the point is that you can get more by ripping a CD to a hard drive and then streaming it from a Linn DS. And the streaming player doesn't have the moving parts, the lasers and gubbins that a CD player does." For Linn's audiophile audience, moving parts are noisy and have limited lives, and so are anathema.

Aren't hard drives also limited in lifespan? "The hard drive isn't in the listening chain" - the series of devices that actually generate the sound - "and you can get a stand-alone backup hard drive that can store all your

tracks uncompressed for a couple of hundred quid which can hold 10 to 20,000 tracks." Songs can be streamed to any number of rooms.

Linn uses FLAC - the open source lossless codec - for its storage: it uses exactly the same algorithm as everyone else, says Tieferbrun; the secret sauce lies in how it converts the digitised signal into an analogue one - the DAC (digital to analogue converter). For that it takes off-the-shelf DACs, strips out the filters, and then writes its own converters which are programmed into FPGAs (field programmable gate arrays), as used by most companies that want to program their own stuff.

The move to streaming sounds a lot like Sonos, I suggested. "Ah, but Sonos is very affordable," he replied - which made me choke a bit: Sonos kit is hardly what you'd call cheap. But then as the Majik DS player, launched in November last year, costs £1,750 - many times more than you'd pay for a comparable Sonos system - you can see that Linn really is aiming at the big spenders.

The question is always, of course, whether you really *can* hear the difference. And that, of course is subjective. When you've spent nearly £2,000 on a piece of kit, you're probably going to be predisposed to think it sounds better. The reality, though, is that the majority of music these days is still listened to in compressed form, using headphones that are barely doing the job - yes, Apple's iPod. But Linn, still going strong after 27 years (and saying there are no job cuts to come from dropping CD manufacture), does seem to demonstrate that you can always make money at the top end.

- Digital music and audio

Charles Arthur

[guardian.co.uk](http://guardian.co.uk) © Guardian News & Media Limited 2009 | Use of this content is subject to our [Terms & Conditions](#) | [More Feeds](#)

## **Mobile workers of the world unite? With Worksnug there is an app for that!**

Mobile workers of the world can finally unite, as the neat augmented reality application Worksnug has just been approved by Apple for the iPhone. And you know what? Two days after its approval it is already a hit. Not only has Stephen Fry twittered about it, but it went straight in at number five in the iPhone application business charts. So what is it about the application that people seem to want so badly?

Worksnug allows you to find wifi locations available nearby, from Starbucks to independent cafes, to libraries and shared offices, complete with reviews describing the atmosphere, power situation and coffee quality. Just what you might have dreamed about as a mobile worker.

Indeed, for Richard Leyland, the man behind the application, Worksnug is not just about finding the next free wifi hotspot, or being able to boast about the potential of your iPhone in front of your colleagues and friends. While both might be appealing, the London-based technology entrepreneur envisaged worksnug as a tool to solve some of the problems of the worker of the 21st century – often isolated, occasionally lonely and highly mobile.

And Leyland knows what he is talking about: "As a mobile worker I spent two years commuting from my kitchen table to Starbucks or the next best library. It worked, but it felt lonely. There is an atomisation of work. We are not employed in big companies anymore, we work for ourselves."

For him, developing Worksnug came directly out of this this experience and was designed as a solution to the challenges of modern working practices. "Over the last 15 or 20 years the way we work has changed tremendously. Work was always an ordered thing, and it's not anymore. In the past, there was a hierarchy, there were certain rules and an office, and we also had a very clear sense of what the job was. All of that has changed. Now, we have the mobile phone, the laptop, the internet.", he says.

"The knowledge-based economy confronts us with a style of work that is new and different. The working situation is a bit like the wild west – there's no guide to tell you when to start or when to stop or where you should work. Worksnug is a small attempt to bring back some order. We want Worksnug users to feel part of a community again."

To produce that feeling of community, the application sets priorities for the sort of locations it identifies. Independent coffee chains, art galleries and libraries are more important than Starbucks, for example. "In Starbucks you are a mobile island," Leyland says. "I wanted to help Worksnug users to be able to meet other people who do what they do."

Users can share their experiences by leaving comments both in the application itself or on the website from early next year. To point them in the right direction a team of reviewers was recruited to assess 700 places in London, where the application has rolled out first. San Francisco is next, with New York, Berlin and Madrid to follow soon.

Success seems likely as more than 40,000 people viewed the video on the website already, and the project is light as a feather. It had no conventional investment funding, but secured Plantronics as a commercial sponsor.

Its technical development was done by two London-based programmers and took three months and a five-figure sum so far. Once it was ready, Leyland had to wait seven weeks for Apple to approve the application, which happened shortly before his 33rd birthday. Nice birthday present.

- Digital media
- Augmented reality
- iPhone
- Apple

Mercedes Bunz

[guardian.co.uk](http://guardian.co.uk) © Guardian News & Media Limited 2009 | Use of this content is subject to our [Terms & Conditions](#) | [More Feeds](#)

## Stephen Fry attacks 'malevolent' comments following Twitter spat

'I would not say that I lost faith in Twitter, I would say that I lost faith in my ability to negotiate it,' says Stephen Fry

Stephen Fry, technophile and a "twillionaire" having amassed more than a million followers on Twitter, yesterday explained what almost led him to commit "twitticide" last month and consider leaving the micro-blogging service.

"I would not say that I lost faith in Twitter, I would say that I lost faith in my ability to negotiate it," Fry said at a social networking conference in London yesterday.

"I don't know about you but whenever I read a blog I do not let my eye drop below half the screen in case I accidentally hit the bit where the comments reside. Of all the stinking, sliding, scuttling, weird, entomological creatures that inhabit the floor of the internet those comments on blogs are the most unbearable, almost beyond imagining," he added, getting into his stride and echoing comments made by fellow comedian David Mitchell earlier this year about the standard of online commentary.

"Their resentment, their desire to be heard at the most vituperative level, at the most unpleasant and malevolent, genuinely ill-willed malevolent, level is terrifying and I am very often simply not able to cope with that," Fry said. "Twitter is usually not like that... [but] I found that the @ mentions were just getting... I could see these comments that would just make me upset."

"I have no excuse for getting upset. I am a public figure and should be strong enough and thick-skinned enough to take it but sometimes when I am a bit low I just could not take it and I kind of lost it for a while and thought, shall I commit twitticide? I have slowly eased my way back and it is great, but I just have to be aware of that issue."

His "hiccup" came at the end of a month that saw Twitter hit the headlines after the Guardian was gagged from reporting a question in parliament about the actions of oil company Trafigura and the "twitterverse" rose up in protest at an article by Daily Mail columnist Jan Moir about the death of Boyzone singer Stephen Gately. Fry himself used Twitter to voice his own fury at Moir's column saying, "I gather a repulsive nobody writing in a paper no one of any decency would be seen dead with has written something loathsome and inhumane".

Fry was speaking yesterday in a panel discussion about social networking, alongside Twitter co-founder Biz Stone and LinkedIn founder Reid Hoffman, organised by the National Endowment for Science, Technology and the Arts (Nesta). During the debate he was asked by Tom Loosemore, who heads up Channel 4's 4IP innovation fund, whether there was a danger with the micro-blogging site that people would merely use it as a way of speaking to like-minded followers rather than engaging in real debate.

"It's a very British question: this idea that somehow we have a duty to put ourselves in the position where our enemies are allowed to speak to us and we have to hear them," Fry retorted. "There is something faintly disgusting in someone who merely wants to have sycophantic voices cooing in his ear and licking his inner thigh... but on the other hand it is a bit much that somehow people almost feel they have a right to be heard in their insulting of me. If I don't want to hear people being unpleasant about me I should have the right to turn it off."

"It's not like a cold shower: you must have a certain percentage of people telling you you are nothing and it's damn good for you."

Twitter co-founder Stone, meanwhile, was called upon to defend his company against the charge that tweets are pointless musing while social networking sites are making people more isolated as they turn to their computer screens rather than meeting people in real life.

"I may send out a tweet that is seemingly of little value to most people like, 'I am enjoying a beer at Logan International Airport in Boston' and someone may say, 'who cares?'," Stone said. "But someone else who is walking through the airport and receives that tweet on their mobile in real time could join me for a beer, and we could come up with an idea for a company that is wildly successful and we will have turned that lead into gold."

"That is happening a million times a second because people are communicating publicly. It is untrue that we are becoming more isolated because of these tools, I think we are connecting more and we are finding new ways to do good."

"A friend of mine asked me, 'what do you hope people will say about Twitter in five or 10 years?' and my answer to him, which I was surprised to hear myself say, was that I hope people will not consider Twitter a triumph of technology, instead that they will consider it a triumph of humanity."

"The idea that the open exchange of information can have a positive global impact. If people are more informed then they become more engaged and if they are more engaged then they can become more empathetic."

- [Social networking](#)
- [Stephen Fry](#)
- [Blogging](#)
- [Twitter](#)
- [Digital media](#)

[Richard Wray](#)

[guardian.co.uk](http://guardian.co.uk) © Guardian News & Media Limited 2009 | Use of this content is subject to our [Terms & Conditions](#) | [More Feeds](#)

## Twitter premium accounts for business users due by end of the year

So how's Twitter going to make any money? One of its biggest fans, British actor and polymath Stephen Fry, gave co-founder Biz Stone *one* idea when the pair shared a Nesta panel in London on Thursday...

"Supposing I was to say to someone: 'you can have my Twitter identity for an hour on Wednesday if you pay me x pounds and you can speak to a million people direct,'" said Fry, whose follower count just passed seven figures.

But Fry wasn't being deadly serious, and Stone is content persevering with Twitter's cautious, softly-softly monetisation plans. He said plans to start selling corporate accounts, first hinted at in August, are on-course. A pay-for package offering verified streams and an analytics package will be available by year's end, he said.

"This takes advantage of some of the commercial use of Twitter we've seen from businesses like airlines and big box stores... we want to present to them a layer of features that allows them to become better at Twitter, show them some of the analytics."

Fry, whose own popularity has skyrocketed still further on the back of his tweets, is now closely associated with the service. With that, comes an appreciation for Stone's monetisation issue. Fry added: "He knows that, if Twitter became annoying to users with flashing banners and there was a sense it was being guided by a big corporate brother, (users) would go off and found their own."

—**Competition for Twitter?:** "There are other companies inspired by what Twitter is doing and I think that's great... We're seeking to release our data and form partnerships." Quoting Google CEO Eric Schmidt speaking about search competitors at an in-house Google meeting years ago, he says: "We should look in the rear view mirror, but if we stare in the rear view mirror we're going to drive right off the road."

—**What future direction?:** His colleagues have said it before, but he'll say it again: Stone very much sees Twitter's future in mobile: "When we look at where we can grow we look to the more than four billion active mobile phone accounts in the world, opposed to the 1.65 million active web accounts."

—**The future of media?:** As Twitter grows its users, reader and viewers are straying from TV news and newspapers—can Stone help

their plight? He says he can: "As we begin to add thing such as **the ability to geo-tag an individual tweet** and recognise which users have higher reputations than others, that will feed into the culture of news organisations."

—**Grand ambitions?:** When Stone says Twitter's changing the world through mass social interaction, he *really* means it: asked how he wants the service to be remembered, he says hopefully it will be "**not as a triumph of technology but a triumph of humanity**".

### **Related Stories**

- [Twitter To Charge For Premium Accounts Later This Year](#)
- [Twitter](#)
- [Digital media](#)
- [Biz Stone](#)

[Patrick Smith](#)

[guardian.co.uk](http://guardian.co.uk) © Guardian News & Media Limited 2009 | Use of this content is subject to our [Terms & Conditions](#) | [More Feeds](#)

## Stephen Timms explains (a bit) why the government wants to change the copyright act

Following on from the story earlier today about Lord Mandelson's plans to get an amendment made to the Copyright, Designs and Patents Act (CDPA) of 1988 that would allow him - or any future secretary of state for industry - to amend it over copyright enforcement issues, I spoke to Stephen Timms, the financial secretary to the Treasury, who is also involved in the Digital Economy bill, being published on Friday at 7.30am. (The quotes that follow are from contemporaneous shorthand notes, though they may contain errors.)

He revealed that the bill "has a clause which gives the secretary of state power to amend the CDPA to prevent or reduce copyright infringement. The reason for including this in the bill is to enable government to respond to technological changes if the CDPA isn't sufficient. We think we've now got an effective way of tackling peer-to-peer but reckon that isn't all of the problem."

So the logic behind giving Mandelson - and any incoming secretary of state for business, don't forget - this power to determine any sort of change to the CDPA in the future is because there *might* be copyright problems in the future that the present act doesn't catch.

Is that likely, I asked? "Maybe other forms of illegality are going to be a significantly larger share of the problem. We need flexibility to keep pace with new illegal forms [of piracy/copying/filessharing]."

But isn't it dangerous to give secretaries of state powers to amend the act at will like this? "The way that this clause is formed there would be a clear requirement for full public consultation [before any change] followed by a vote in favour by both houses of Parliament."

Surely, though, public consultation doesn't necessarily mean listening to the public, and any government in power will by definition have a majority, and the Parliament Act means that votes in the Commons must eventually to be approved by the Lords. So what and where is the safeguard? "It will be very public and significant," Timms said. As to the clause itself, he emphasised that "it wouldn't amend the act itself, but will give us the power to amend it if it becomes clear in the future that it's needed."

[This alteration of the CDPA is known as a statutory instrument: read up about it at the Wikipedia article, specifically on Parliamentary (lack of) control over them - Parliament can either accept or reject such an

instrument, but cannot amend it. SIs are a very common method of getting things done in Parliament because it's quick and easy. But it's not usual to do it to something as fundamental as the copyright act. **Update:** Phazer points out in the comments that the CDPA has been altered a number of times to bring it into line with European law and change copyright terms. True, though that's not quite the same as giving the Secretary of State arbitrary powers.]

Why might that change be needed? What's not working about the CDPA at present? Surely, the provisions of the act cover illicit peer-to-peer file sharing, so what's not functioning? Record companies have sued people successfully in the courts. So what doesn't work?

"It's reflecting the fact that technology is changing very fast," said Timms. "The existing [method] is quite cumbersome. We might need something else in the future."

And what about the 'Murdoch question' - the possibility that an incoming government might change copyright law to favour, say, a big newspaper proprietor that had backed them and made angry noises about copyright?

"The best safeguard against actions of that kind is the requirement in the clause that there has to be full public consultation and there has to be a positive vote in Parliament. This would be a very, very open and public process."

But why is the government taking on powers now for which it does not have an immediate use? "We have been consulting on these problems. The fact that it's not just peer-to-peer is a point that has been raised in the consultation. That's where we took the view that we needed the ability if it becomes clear this is a big problem."

Ah, the "cyberlocker" problem referred to by Mandelson in his letter to Harriet Harman (who would have to approve the SI). This is where people upload stuff to online storage, which can only be found by giving out the URL - the storage is effectively invisible to search engines. Are they really such a problem? "It's about what could be a problem. Note that this is about civil infringement - we're not creating new offences. We won't be able to change the existing criminal offences on copyright. It's a simpler way of dealing with the problem."

What about the clause which will let the secretary of state "impose such duties, powers ...on any person as may be specified with or for the purposes of facilitating prevention of reduction of online infringement of copyright"? That's a huge power to give someone, surely? How do we

know that won't get abused to create what some have called a 'militia'? "I'd draw your attention to the public consultation. It would be a very, very public process. This would be a very public process indeed. It wouldn't be possible to slip something through clandestinely. That's the biggest safeguard. People will obviously want to look at what the clause says. But it simply gives us the ability to tackle what's likely to be a growing problem."

(Clearly, the emphasis that Timms wants to give is that this isn't being done secretly. But the concern is that it's not being done *accountably* - that there's no way of seeing who the government is actually paying attention to.)

Perhaps I'm being dim, I said, but I can't see how these 'cyberlockers', which were cited by Mandelson in the letter to Harman, aren't already covered by the legislation. In what way aren't they already covered? "There's an analogy with peer-to-peer. Yes, there are existing laws because the approach in the bill we believe will be effective. There are systems other than peer-to-peer which are also a problem [for copyright holders]. By analogy, we want to be able to do comparable things to stop them."

But you can with cyberlockers. Or is it a problem of jurisdiction - that they're often located in other countries? "No, it's not that. The answer is the same as peer-to-peer, we need an effective way to deal with it. It's an effective answer to do this so we don't have to work out a proposal [to control copyright infringement in some new way] where we would need to develop and go through the whole process [of enacting legislation]. But we need this to be able to address parts of the problem other than peer-to-peer."

And that was the end of the conversation. If I'm honest, I still do not understand what elements of copyright law don't already include everything you can do with a computer. If you store a file onto your computer and you don't have the rights holder's permission to do so, that's infringement. If you store a file online and don't have the rights holder's permission to do so, that's infringement too, though it falls into the problem of jurisdiction - what if the servers are in the US or China or Korea? Sure, copyright is useful (necessary, in fact, for lots of businesses to function). In fact, it works very well. Music companies are seeing illicit file-sharing fall - but it's not because of the distant threat of "three strikes" or past lawsuits, it's because of services such as Spotify or We7.

We'd also like to know who is so concerned about these "cyberlockers", apart from Mandelson of course. Let us know.

- [File sharing](#)
- [Digital Britain](#)

[Charles Arthur](#)

[guardian.co.uk](#) © Guardian News & Media Limited 2009 | Use of this content is subject to our [Terms & Conditions](#) | [More Feeds](#)

## **Google aims to take over the netbook market with its Chrome operating system**

Chrome OS won't be on sale on hardware for a year, but Google aims to introduce a new and better model of computing with specified netbook hardware, and then... Tomorrow, the World!

Google dominates the web and is already making a big impact in the smartphone business with its Android operating system. The netbook computer is next in line, and Google is targeting this fast-growing market with Chrome OS, a stripped down operating system designed to do everything inside its own Chrome web browser.

Chrome OS is a year away from launch, but Google said it was talking to leading manufacturers and hoped to have systems on the market for the Christmas selling season. Today, however, it released an early version of the code to the open source development community.

At a press conference webcast from Mountain View, California, Google staff said their aim with Chrome OS was to make the computer work like a TV set, so the user turns it on and within a few seconds is on the web. Also, all the computer's applications and data are on the web, and users cannot install programs themselves. As with Android, it seems likely that Chrome OS will effectively feed traffic to Google's search engine, Gmail, mapping services, online applications, social network and other properties, where Google makes its money by showing advertisements.

Netbooks that run Chrome OS will not work if there is no internet connection, though they will be able to access data on USB memory sticks, if it can be viewed in a browser. "Everything that works in Chrome works in Chrome OS," said Sundar Pichai, a Google vice president of product management.

"There are some applications that are not available on the web. There are some things that this machine will not be able to do," said Sundar. "It's a companion device. Most users we expect to have another machine at home."

Chrome OS is based on open source software components, including the Linux kernel and the WebKit browser engine. Google says it plans to be a good open source citizen and feed its developments back to the development community.

However, Sundar said Chrome OS was not designed to run on existing hardware, though geeks handy with a screwdriver should be able to

convert a netbook to run it. Google was "specifying reference hardware that it would support" with Chrome OS, including "specific wireless cards" for use with Wi-Fi internet connections, he said. Hard drives will not be supported, but cameras and other gadgets would be handled as storage devices. The company is still working on ways to offer printing.

Desktop operating systems that run Microsoft Windows and Linux can be built using tens of thousands of different components, and they can connect to tens of thousands of devices. Google is planning to simplify all of that by stripping down the operating system to work only with a browser and a defined number of hardware components.

Although Google won't manufacture hardware, it will have a very large degree of control over what hardware manufacturers can offer -- less than Apple, perhaps, but much more than Microsoft.

Against that, Google points out that other companies can take the open source Chrome OS code and use it to develop a similar system that uses a different browser. They could also support different chips and hardware devices.

The idea of a browser-based operating system was floated by Netscape, when it dominated the browser software business in the 1990s. At the time it wasn't practicable because there were very few web applications, and users didn't have permanent broadband internet connections. Today, Google believes that web is powerful and available enough to support netbooks. In the future, it could become powerful and available enough for most users of portable and desktop computers.

At that point, there could be a rapidly diminishing need for traditional computer operating systems such as Microsoft Windows and Mac OS X, and for desktop applications such as Microsoft Office.

As Google recognises, there's nothing much that's new about Chrome OS, since it only does what users can already do with Chrome on their current computer. But as Sundar says: "We're trying to offer a different model of computing."

- [Google](#)
- [Software](#)
- [Web 2.0](#)

[Jack Schofield](#)

[guardian.co.uk](http://guardian.co.uk) © Guardian News & Media Limited 2009 | Use of this content is subject to our [Terms & Conditions](#) | [More Feeds](#)



## Judge closes site that sold 'psycho-acoustic' digital Beatles downloads

And so it ends: the site that was selling digital downloads of Beatles songs - the only ones doing so anywhere in the world - have been shut down at the order of a US judge, reports the NME.

We reported before on the legal travails that two interlinked sites, Bluebeat and Basebeat (though Bluebeat was the principal entry point), and their backer Hank Risan - who as that linked article points out, has intriguing ideas about what constitutes "infringement" (not buying his software = infringement, in one court case he filed in the US in 2007) - had run into after selling the Beatles songs earlier this month.

Risan claimed in a court filing that the digital downloads used "psycho-acoustic simulation" and therefore were exempt from copyright provisions that would normally apply to the songs.

US District Judge John F Walter heard that and didn't agree. To quote NME, he

prohibited both sites and their owner, Hank Risan, from streaming or selling songs by the Fab Four and other artists, including Lily Allen and Coldplay, for good.

Which means that the wait must go on for digital downloads of Beatles tracks. If indeed you are waiting, and haven't simply bought the CDs cheaply from Amazon and ripped them long ago, if that's your musical taste.

And Risan? We suspect we'll hear from him again, but with this track record we aren't encouraged that we'll hear him being on the winning side of a court judgement. The long and winding road awaits.

Charles Arthur

[guardian.co.uk](http://guardian.co.uk) © Guardian News & Media Limited 2009 | Use of this content is subject to our [Terms & Conditions](#) | [More Feeds](#)

## **Apple iPad reportedly delayed until the second half of next year**

DigiTimes in Taiwan reckons that the launch of Apple's putative tablet PC will be delayed so that it can launch a model with an OLED screen

Bear in mind that Apple's touch-screen tablet-style computer has not been announced, and stories about it may be mostly speculation. Still, you can't make a computer without buying components, and the companies that make and/or assemble components may sometimes leak information -- though this still doesn't mean the information is accurate. With those caveats in mind, DigiTimes in Taiwan is reporting that:

Apple reportedly plans to postpone the launch of its tablet PC from an original March launch schedule to the second half of 2010, as the vendor has decided to switch some components and plans to launch a model using a 9.7-inch OLED panel from LG Display, according to sources from component makers.

OLED panels are very wonderful but expensive at the moment. However, prices will fall as production ramps up, and they're expected to appear in laptops in 2011. If Apple delays the iPad launch, its OLED costs should go down while its retail price stays the same, with the profit margin getting healthier by the week. DigiTimes says:

The sources estimate that Apple's [OLED] tablet PC cost will drop to around US\$1,200-1,500 by the second half of 2010 with the retail price reaching about US\$2,000. The price could be more flexible if bundled with telecom providers' 3G services. Meanwhile, the 10.6-inch LCD panel-based Apple tablet PC is expected to [be] priced in the US\$800-1,000 range.

It's assumed that each version will be made by a different Taiwanese supplier, with Foxconn Electronics (Hon Hai Precision Industry), Quanta Computer and Pegatron Technology being tipped by DigiTimes's source. Hon Hai makes iPhones and Xbox 360s, among other things, while Quanta makes MacBooks, OLPCs and laptops for Acer, Dell and other PC suppliers. Pegatron is an Asus spin-off and Asus also makes or used to make MacBooks. It's not unknown for large PC manufacturers to have

half a dozen contract manufacturers in Taiwan, with the main ones being Compal, Foxconn, Inventec, Pegatron, Quanta and Wistron.

- Apple

Jack Schofield

guardian.co.uk © Guardian News & Media Limited 2009 | Use of this content is subject to our Terms & Conditions | More Feeds

## Is local the new social now?

A rash of reports from the US suggests that, after 'social', 'local' may be the web's next buzzword

Several reports from the US make the point: local is the new buzzword in the land of web entrepreneurship. No wonder. As more and more smart mobile phones are used to check in online, the demand for local information online rises. However, listings magazines have been slow to adapt to the online world, so there is room for new hype, and maybe even a chance to make money.

**AOL sees revenues in local:** Its CEO, Tim Armstrong, announced yesterday in New York that it plans to digitize entire towns with the help of Patch, the hyperlocal network it bought last year. Armstrong clearly sees a hole in the market here and plans to cover every aspect of community life from school boards to restaurants and shops. "We're hiring reporters," Armstrong said according to the business journal Portfolio.com. "Can you imagine that?"

Patch just switched to OpenStreetMap and appears to be busy with building its own map infrastructure, including designing, rendering and hosting its own tiles, according to zdnet. But that is not all. "Patch will go into stores, photograph everything and even tell consumers how many parking spaces there are," Armstrong said. "Even though it will have only 30 local communities outside New York City initially, it will scale substantially." While AOL invests in local it sheds global, so their new market strategy is to dig deep instead of spreading out wide. The company operates in about 40 countries now but plans for 2010 to be in less markets directly.

(via paidContent, zdnet, Portfolio)

**eBay believes in local:** A local news project in Hawaii is nothing special, except when the project is done by the billionaire and eBay founder Pierre Omidyar. Together with former eBay vice president Randy Ching he started Peer News Inc last year, which is now about to launch its local news service for Hawaii and is looking for an editor. Writing surfers out there, this is your chance!

Omidyar announced yesterday to create the "Honolulu-based local news service that will produce original, in-depth reporting and analysis of local issues in Hawaii". It will launch 2010 and focus on "public affairs and civic matters that impact communities across Hawaii", he said in a blogpost.

As the adviser of the project Howard Weaver made it clear that the project is to be as accountable as profitable and "intends to demonstrate that a digitally native, technologically fluent web organization can profitably serve targeted readers who want sophisticated journalism focused on local civic affairs."

There is an opportunity here: paidContent reports that Hawaii's largest newspaper, the Advertiser, has cut more than 130 jobs over the last two years and its rival Honolulu Star-Bulletin has also had a series of cutbacks.

(via paidContent)

**Even the new social platform hype is local:** As a tool for finding friends, a city guide and a weird competitive bar or shop game which crowns you as a mayor of a place if you have been there more often than other participants, the social platform Foursquare is the latest hot thing among early adopters of digital trends. It is available in 31 cities in the United States, including New York, Chicago, San Francisco, Boston and Washington, but also operating in London and Amsterdam.

- Hyperlocal media
- Digital media
- AOL
- Social networking

Mercedes Bunz

[guardian.co.uk](http://guardian.co.uk) © Guardian News & Media Limited 2009 | Use of this content is subject to our [Terms & Conditions](#) | [More Feeds](#)

## Microsoft Office 2010 arrives in a free public beta test version

Microsoft Office 2010 is continuing and completing the transition that started with Office 2007, and should be an attractive upgrade for companies finally moving on from Windows XP and Office XP or 2003. And with the free beta, anyone can try it

During this week's Professional Developers Conference PDC09 in the Los Angeles Convention Center, Microsoft released a free public beta of the next version of its popular Office suite, Office 2010. This will enable programmers to develop add-ons for the new version, and for companies and interested parties to test it, before it goes on sale some time next year.

Microsoft Office is the major revenue generator for Microsoft's Business Division, which had revenues of \$4.4bn and profits of \$2.8bn in the company's latest quarterly results, declared on 23 October. In the last financial year, the Business Division made operating profits of \$12.1bn on revenues of \$18.9bn, with both being larger than those for the Windows Client software division.

On Twitter, the official @Office account announced it somewhat humorously -- for a division making roughly \$1bn per month -- with tweets such as "@Office Beta watch out, beta not cry, beta is coming to town. Get the Office 2010 beta <http://bit.ly/1hKHq2>" and "Nobody does it beta".

Office 2010 does not represent a dramatic break with the past, like Office System 2007, but builds on it. In particular, it extends the new ribbon-style interface to all the applications, making them significantly easier for beginners to use.

The beta release includes 2010 versions of the Exchange email server, the hosted SharePoint collaboration platform, Visio, and Microsoft Project. Microsoft is also working on Silverlight 4 and Internet Explorer 9.

Although there are not many eye-catching new features in Office 2010, Microsoft is making its email and personal organiser program, Outlook, work with social networking sites. For example, at PDC09, Microsoft showed how its new Outlook Social Connector could connect with Linked In -- a site for business users -- and synchronise contact data. Connections with other social networks are planned. Also, it's an open

platform, so third parties will be able to create connectors for other services.

Another new feature is the Backstage view, which pulls together the features for creating, saving, printing, and sharing documents and displays them in one place. Backstage is slightly different in each application. Again, however, third-party developers can add their own functions to Backstage.

Microsoft's Office Web Apps suite -- web-based versions of Word, Excel, PowerPoint, and OneNote -- have also reached the beta test stage. These have limited functionality at the moment, but will compete with online office-style applications from Google and others. And presumably they will do a better job of rendering Office files correctly. The Office Mobile 7 suite, for mobile phones, is not expected until next year.

Office 2010 thus represents the further development of Microsoft's software strategy, summed up as "three screens and a cloud". The aim, Microsoft says, is to "create a connected experience across multiple environments and devices" including the PC, TV, and mobile phone. "The cloud" includes Microsoft's web-based applications such as Windows Live Mail, Live Mesh and SkyDrive, and its Azure cloud-based version of Windows Server.

Office 2010 should be very successful, because Office 2007 was very successful, and it continues and completes the transition that Office 2007 started. There's no point in sticking with a version where not all the apps have moved to a ribbon interface once you can get one where they have. Although the cost could discourage many small businesses from making the upgrade from 2007 to 2010, the large companies on Microsoft's Software Assurance scheme get the new version free anyway.

However, companies that are still stuck with very old versions of Windows XP and Office could now decide that it's time to embrace the future, and upgrade to Office 2010 and Windows 7 together.

Jack Schofield

[guardian.co.uk](http://guardian.co.uk) © Guardian News & Media Limited 2009 | Use of this content is subject to our [Terms & Conditions](#) | [More Feeds](#)

## Breakfast briefing: will Chrome shine, will IE reach 9, and a farewell...

Get your coffee ready: reading ahead.

- Got your netbook ready for Google's Chrome OS? The expectation is that it's going to be released (most likely in that rarest of forms for Google, a beta) sometime late on Thursday.

That's because there's a presentation at Google's HQ on Thursday afternoon (Pacific time; early evening UK time) where

Google will finally take the wrapper off its highly-anticipated Chrome operating system during a presentation at Google HQ on Thursday. The event will include a complete overview of the product featuring a Chrome OS demonstration and Q&A session.

according to PC World.

What's the point of Google Chrome OS? To chop Microsoft's legs off. As netbooks become more popular, they've already done some harm to it by forcing it to allow Windows XP to live far longer than it wished (because netbooks' tiny drives and memories couldn't run Vista). That had substantial effects on its Windows licensing revenues.

Chrome, though, being a Linux variant, wouldn't be that attractive on the surface to netbook makers: they know that people have in the past tended to just return machines running Linux in favour of Windows, because they usually know and understand Windows. But give a netbook that "Google sheen" - it's a hell of a pitch for any sales staff trying to get a customer to consider a machine, isn't it? "This one runs on Google's operating system" - and you may have something of a hit. At the very least, it may force Microsoft to concede something on licence prices.

- Speaking of Microsoft, it's working on Internet Explorer 9. There's a blogpost which proclaims

The IE team is busy working on the next version of the world's most popular browser. IE 8 is the most widely used browser on Windows.

My understanding is that every metric shows this is not true: IE6 is the most widely used by pretty much every metric. Wikipedia (which of course already has included IE9) concurs.

On with the show:

IE 9 is currently in the oven and the IE team is ready to talk about what they're working on. Here, IE GM Dean Hachamovitch introduces some of the key advances his team is making and leads us through the halls of IE (literally) to learn from the engineers who are building the future of IE. John Hrvatin and Kris Krueger talk to us about where they are with improvements in IE 9's interoperability and standards support.

Though John Gruber claims you are prompted to install Microsoft's Silverlight (Flash-like) system to view it... well, there isn't a standard video system, is there?

- It's the weekly technology section as well. If you like it in print, then run to the newstands: the print editions are collectors' items, because December 17 will be the last one; from that point, our print presence will be in all the other parts of the paper, but there won't be a separate Technology section. (We will continue to update the Technology site, including this blog, and we'll aim to expand it as well).

We'd like to know how the section has affected your life over the past two decades. Has it helped you find a job? Start a company? Shaped your life in some important way? We'd like to know: email us at [tech@guardian.co.uk](mailto:tech@guardian.co.uk) with the subject line "Guardian Technology memories". We'll try to use the best in one of the last issues that we produce.

*You can follow our links and commentary each day through Twitter ([@guardiantech](#), or our personal accounts) or by watching our Delicious feed.*

- Google
- Microsoft

Charles Arthur

[guardian.co.uk](http://guardian.co.uk) © Guardian News & Media Limited 2009 | Use of this content is subject to our Terms & Conditions | More Feeds

## Get that tweet off your chest, and onto your vest

Manchester-based [clothes2order.com](http://clothes2order.com) is running a competition on Twitter, where it will print the best tweet on a T-shirt. It's not offering a print-to-order service, yet, but at least it has found a cheap way to get people's attention

If you're proud of a particularly brilliant tweet, you might be able to wear it on your chest, thanks to [clothes2order.com](http://clothes2order.com). The company, based in Manchester, is offering to print a tweet on a T-shirt in a competition it's running on Twitter: it will pick the best tweet submitted before 2.30pm every Friday and print it free.

Otherwise, having a single TweekShirt (sic) printed probably isn't economical. The set-up costs would be much higher than the cost of an unadorned shirt, so you'd need to order a few to bring the average price down. This might work for a party, a small company, or as a promotional device (somebody has probably tried business card T-shirts already), but your funny 140-character aside probably wouldn't be the most suitable text.

A clothes2order spokesperson says the company has no plans to sell TweekShirts at the moment, but if it added the option to its site, the estimated cost will be £12.99. It would presumably make sense to offer the same kind of feature on Facebook.

The [@clothes2order](https://twitter.com/clothes2order) Twitter account only has 26 followers at the time of writing, so there may not be a strong interest in TweekShirts. But I expect that lots of people with an interest in Twitter-based marketing promotions will be watching what happens.

Twitter already appears to have a deal with [Threadless](http://Threadless.com), where users can submit Tweets for T-shirts, but these tend to be slogans rather than personal comments. Also, unlike TweekShirts, Threadless's shirts don't use the Twitter message format.

- [Twitter](#)
- [Marketing & PR](#)

[Jack Schofield](#)

[guardian.co.uk](http://guardian.co.uk) © Guardian News & Media Limited 2009 | Use of this content is subject to our [Terms & Conditions](#) | [More Feeds](#)

## London Nude Tech calendar: unclothed geeks (and ladygeeks) in a good cause

- In pictures: Techy-types strip for charity

Christmas is approaching, and with it the burning need to buy a calendar for next year. But rather than getting dubious calendars entitled "Cheryl Cole's 12 X Factor judging expressions" or "Ashley Cole's 12 Leaving A Nightclub Expressions" from the bloke down at the market, why not support a real charity and show off your geek credentials by buying a London Nude Tech Calendar?

The purpose is to raise funds for Take Heart India, a charity focused on IT education projects for blind and disabled students in India.

You can buy the calendar from Firebox: it costs £10, and is launched on 1 December (so you're getting a head start). There are no administration fees because the production costs were covered by the sponsors (listed here (and it's a long list, so do go and whistle at its length...)). It costs Take Heart just £37 to provide a six-month computer training course which secures a job for life for one of the students, so your money will make a difference.

The calendar is the brainchild of the "technology writer, party planner and all round top banana, Milo Yiannopoulos" (we think he wrote the press release). Obviously, it's inspired by tropes such as Calendar Girls, but that had charity as its aim. And you get pictures for your wall. Plus if you ever happen to meet any of them you can say "oh, you look different with your clothes on". Breaks the ice...

There's a gallery of some of the images, plus this video of how it got put together. You're going to need a bigger bat... aren't you?

- Internet startups

Charles Arthur

[guardian.co.uk](http://guardian.co.uk) © Guardian News & Media Limited 2009 | Use of this content is subject to our [Terms & Conditions](#) | [More Feeds](#)

## Phorm UK chief steps down

Controversial behavioural advertising firm Phorm moves focus overseas

Has much-maligned behavioural ad targeter Phorm finally put its UK ambitions on hiatus? It's saying goodbye to its UK managing director Nick Barnett, we have learned.

According to his bio, Barnett was "responsible for the UK business, working with ISPs on the trial and deployment of Phorm's technology as well as overseeing our commercial relationships with advertisers, publishers and ad networks". But, with none of Phorm's initially-announced three interested UK ISPs having gone ahead with rollout and some publishers having become wary, **there seems little prospect of UK success at this point.**

Asked about Barnett's departure, whether he is being replaced, what it means for UK plans and whether there's any further reorganisation, Phorm declined to comment. It's not known whether Barnett is at a new job.

Phorm in June tried a new pitch, by offering users personalised content along with ads. But **the focus has shifted to international** – having secured a whiff of business through a trial by South Korea's KT, Phorm hired a local CEO there and has continued to say other international ISPs are interested, though none have been named for trial. A spokesperson tells paidContent:UK: "**The trial with KT (Korea Telecom) is ongoing.** We'll update the market (AIM) in due course."

Barnett joined after Phorm's big boardroom and executive clear-out in December 2008, which saw the exit of its UK CEO, CFO, COO and general counsel and four board members be replaced by a more London-based board. Barnett effectively replaced UK CEO Hugo Drayton, the former Telegraph new media director who became InSkin Media's CEO after the exit. At this point, the company has stopped listing its execs' names on its website.

**There's nothing inherently wrong with ad targeting**, of course (Google's doing quite well out of it) – but Phorm's method of profiling a user's every web visit via his/her ISP concerned digital liberties advocates and the clamour grew so loud that the European Commission ruled Britain was wrong to declare Phorm legal, ordering the country change its privacy laws as a result.

One thing's clear, though – institutional investors still see plenty of promise in Phorm. Lloyds Bank has continued to snap up Phorm shares despite the headlines.

#### **Related stories**

- [Earnings: Phorm Nearly Halves Its Losses, Still No Income In Sight](#)
  - [Video: Phorm CEO Bets Personalised Content Can Rescue Its Fortunes](#)
  - [BT Goes Cold On Phorm; UK Now Drying Up For Ad Company](#)
  - [Europe Says UK Wrong In Declaring Phorm Legal](#)
  - [Phorm's Revolving Door: UK CEO, CFO, General Counsel Follow Board On Way Out](#)
  - [Updated: Phorm Board And COO Walk Out Over Strategic Differences With CEO](#)
- 
- [Digital media](#)
  - [Phorm](#)
  - [Advertising](#)

[Robert Andrews](#)

[paidContent](#)

[guardian.co.uk](#) © Guardian News & Media Limited 2009 | Use of this content is subject to our [Terms & Conditions](#) | [More Feeds](#)

## paidContent UK: First look at Zune, Twitter, Facebook and Last.fm on the Xbox

Microsoft has added social networking and music radio functionality to its Xbox 360 console. We test it out

Four months after announcing the features, Microsoft (NSDQ: MSFT) added social networking and music radio functionality to its Xbox 360 console on Tuesday, along with the first European foray for its Zune brand (see earlier reports from Tameka and I). Here are my initial explorations with each new service...

Last.fm verdict: Slick player presentation and Last.fm experience, good for parties but no on-demand, may have ads...

Zune verdict: Just an updated Video Marketplace with "Zune" badge...

Twitter verdict: Cute implementation for reading, initial bugs, keypad is a must...

Facebook verdict: Especially nice photo slideshows, typing a real pain...

### Related Stories

- As Last.fm, Facebook And Zune Go Live On Xbox, Sony Preps Social Features For PS3
- Microsoft Risks Zune In Europe With Xbox Video Update

- Digital media
- Facebook
- Twitter
- Xbox
- Microsoft
- Social networking

Robert Andrews

paidContent

guardian.co.uk © Guardian News & Media Limited 2009 | Use of this content is subject to our Terms & Conditions | More Feeds

BBC technology news

### **UK climate unit's e-mails hacked**

The e-mail system of one of the world's leading climate research units has been breached by hackers.

## **YouTube gets automatic subtitles**

Automatic captions for YouTube videos are to roll out across its channels, says parent company Google.

## **Facebook acts on follower trade**

Social networking site Facebook has threatened legal action against a site that sells friends and followers.

## **Dell sees quarterly profits fall**

US computer giant Dell reports another decline in its quarterly profits, sending its shares 7% lower.

## **Google previews operating system**

Internet search giant Google previews its Chrome OS operating system, to be available to users by the end of 2010.

## **CD player production ends at Linn**

A manufacturer of hi-fi systems sounds what it says could be the death knell of the compact disc player.

## **Twitter urges Murdoch to be open**

Newspapers should become "radically open" if they want to make money in the online world, the co-founder of Twitter says.

## **First test for record solar plane**

The prototype of a solar-powered plane destined for a record round-the-world journey makes its first trip across a runway.

## **China military site draws hackers**

A website set up by China's Ministry of National Defense attracts 2.3million hack attempts in its first four weeks online.

## **Tiny chip could diagnose disease**

A simple and cheap approach to diagnosing a wide array of medical conditions has been demonstrated by researchers.

## **Set to stun: scientists test 'phaser' on worms**

Scientists show off an effect not unlike that of "phasers" in Star Trek - but it only works on tiny worms called nematodes.

## **Nasa game lets web users explore Mars for themselves**

Nasa launches a website that allows users to play games while at the same time sorting through its image archive of Mars.

**Get your up-to-date fix of blog posts about all things digital**

## **dot.life**

Do the plans to tackle illegal file-sharers add up?

## **Crime time**

Why the police are turning to Twitter and Facebook

## **Panel power**

Solar power technology comes of age.

## **After the hype**

Once it was huge, but what happened to Second Life?

## **Computer curse**

The man who wrote the first ever computer virus

## **Public humiliation**

Sex, drugs and breakdowns for net pioneer

## **Government lays out digital plans**

The government outlines a bill in the Queen's Speech for the country's digital future including plans to tackle illegal file-sharers.

## **Sony aims to return TVs to profit**

Sony says it aims to make its LCD TV operations profitable in the financial year starting next April as it continues to cut costs.

## **Night vision scopes see daylight**

How British troops are able to see in the dark

## **Ordnance Survey maps to go online**

The government announces plans to make Ordnance Survey mapping data available free of charge online.

## **California to ban power-hungry TVs**

Energy-hungry television sets will soon be banned across California, in a landmark move by state legislators to reduce energy consumption.

## **Two held in global PC fraud probe**

Two suspected hackers are arrested in an investigation into a computer virus designed to steal banking information.

## **Medical debut for smart band aid**

Clinical trials of a smart plaster - a sensor-studded band aid that wirelessly monitors vital signs - begin.

## **Network sites 'need help buttons'**

Social networking websites are criticised for failing to introduce a help button for children being bullied online.

## **T-Mobile staff sold personal data**

Staff at mobile firm T-Mobile sold millions of records from thousands of customers, a spokesman confirms.

## **Worlds apart**

We need atoms as well as bits, says Bill Thompson

## **Social media challenges society**

How social media challenges age-old social rules

## **An internet that speaks to you**

Bill Thompson welcomes moves to make the net multi-lingual.

## **Is e-democracy a good thing?**

Digital Britain requires a pause for thought, writes Bill Thompson

## **Wikipedia's future in Africa**

Net encyclopaedia Wikipedia to expand in Africa

## **Strength in science collaboration**

Scientists use social networking to collaborate

**Europe fights Google's book plans**

Europe fights Google's book plans

## **A 360 degree net experience**

How to make a virtual video tour

# Digital Revolution

## Internet Blog



**[www.feedbooks.com](http://www.feedbooks.com)**  
Food for the mind