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This year, we've gone number crazy. There's a look back at the 10 key trends of 2014, 10 significant predictions for mobile, 10 for journalism, 6 for the digital election + many more on social media, television, radio and advertising. Finally there are 7 emerging technologies and 10 start-ups to watch. But before all that, the key points:

Wearables, hearables, nearables and payables will be some of the buzzwords of 2015 as the mobile revolution takes the next great leap. Mobile and social trends will continue to drive technical, product and content innovation with subscription and rental models increasingly driving digital revenues.

In other news ...

- Smartphones cement their place as the single most important place for delivering digital journalism and become hubs for other devices
- Messaging apps continue to drive the next phase of the social revolution
- Visual personal media explodes fuelled by selfie sticks and selfie videos
- Chinese and Indian companies begin to threaten Silicon Valley dominance of global tech
- Television disruption hits its stride with over the top players (OTT) gaining ground
- We're going to worry even more about our privacy and online security in 2015
- Ad blocking goes mainstream. Court cases ensue. Native advertising grows
- Media becomes more driven by context (location, history, preferences) less by platform
- Rebirth of audio driven by internet driven delivery to mobile devices
- Digital and social media will be one of the defining factors of the UK election
- UK goes code crazy with schools embracing computing and new cheap kits

Companies or technologies you'll have heard of this time next year include Thunderclap, Slack, Vessel, Plague, Reported.ly, Moment and Maker studios

With thanks to; Jasper Jackson (Media Briefing), Andrew Betts (FT Labs), Madhav Chinnappa (Google), Jon Block (ITV), Richard Sambrook (Cardiff University), Paul Bradshaw (Academic, Help Me Investigate), Kevin Anderson (Gannett publishing), Steve Herrmann, Robin Pembroke, Richard Cooper, Dmitry Shishkin, Amanda Farnsworth (BBC), James Haycock (Adaptive Labs), Mark Coyle (BT Sport), Jason Mills (ITN), Max Gadney (After the Flood), Steve Schifferes, George Brock (City University), Peter Bale (Center for Public Integrity in Washington), Claire Wardle (Eyewitness Media Hub), Stephen Pinches (Pearson), Me Investigate, Jonathan Marks (Critical Distance), Kevin Hinde, Jonathan Austin (Macmillan Publishing)

Seven things we learnt in 2014

1. Levels of smartphone addiction and distraction have reached new heights. We spent more and more time with our extended social networks, less and less quality time with our real friends and families. People will look back and laugh at the way we walked down the street with our heads in our phones, at how we attached them to sticks and also at how large these devices have become.



How many people did you bump into in 2014? Better selfies via the so called Narcistick but will people still be laughing at large smartphones in 2015?

We can expect something of a backlash to all this in 2015 but the truth is that there is no stopping the mobile and social revolution. Over half of the global adult population will own smartphones by the end of this year and will increasingly rely on them for communication, information, entertainment and commerce. Almost all the most important media developments of 2014 happened at the intersection of mobile and social.

2. Messaging has become the new social media: As we predicted last year, messaging apps like WhatsApp (600m users), WeChat, Line, Snapchat are starting to threaten 'traditional' social media players and have become the new focus for digital innovation (see more in 2015 predictions below).

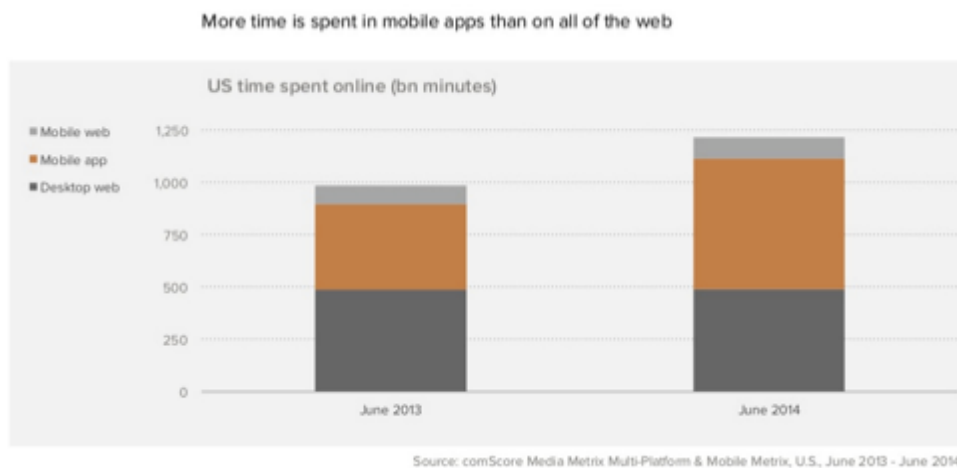


These networks are all growing at a quarterly rate of 15% or more as they aim to become hubs for everything smartphone audiences do on mobile. As Venture Capitalist Fred Wilson points out Facebook's acquisition of WhatsApp in February was the transaction that defined this trend¹.

3. Mobile apps are eating the web: Mobile apps now dominate the proportion of time spent online in the US - according to this chart from analyst Benedict Evans.

¹ <http://avc.com/2014/12/what-just-happened/>

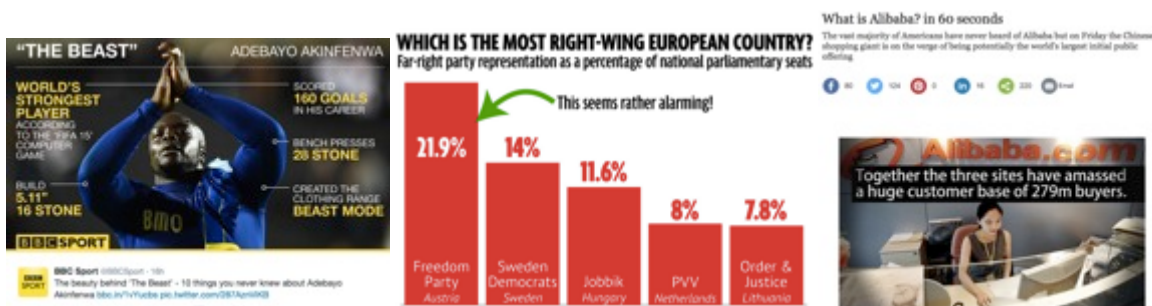
² Paul Bradshaw says this adoption of these techniques partly because news organisations are hiring more specialists in



This extraordinary growth has huge significance for the open web and the companies that depend on it (Google etc). The immersive experiences that are created in apps partly explains our growing addiction (#1) and is driven by popularity of social networks and messaging apps (#2) as well as streaming video and games.

In news, media companies have been investing more heavily in apps that do not simply replicate the web experience. The New York Times Now, Economist Espresso and Yahoo News Digest are part of a new wave of offerings trying to create a new loyal relationship with smartphone audiences. The Guardian launched its new apps in 2014 and the BBC is overhauling its smartphone and tablet offerings early in 2015.

4. We've seen explosion of visual, sharable formats like number driven graphics, data visualisations, graphically treated pictures, and short videos. The popularity of these has been partly driven by the algorithms of Facebook (which favour visual hooks) and changes to Twitter and partly by the growth of easy tools to edit and upload multimedia content².



Linked to this, in journalism we've seen a rash of new **data rich and visual explainer sites** led by Vox, and FiveThirtyEight, all of which play into and generate traffic from our increasingly powerful social ecosystems. These new formats were also how UK **newspapers finally embraced the experimental possibilities of the web** - Trinity Mirror's various spin offs UsVsTh3m and Amp3d, the Telegraph's Project Babb and Independent's i100. Perhaps even more surprising, some of them,

² Paul Bradshaw says this adoption of these techniques partly because news organisations are hiring more specialists in social media optimisation

particularly UsVsTh3m, have been successful. Whether these projects can turn into significant revenue is the big question for 2015³.

5. Media companies just got hot: Investors have been pumping millions of dollars into digitally native media companies like BuzzFeed, Upworthy Vox, Vice and Mic.com not to mention myriad smaller start-ups⁴. Vox raised more than \$46 million from a private equity firm this year while Vice raised \$500 million for a valuation of \$2.5bn. Buzzfeed earned \$100m dollars in revenue in 2014 and has been able to raise a further \$50m for international expansion⁵. While traditional media remains short of money and confidence, we are seeing a wave of new companies with the ambition to topple the likes of CNN, the BBC and the New York Times. Success is not guaranteed and many will fall by the wayside. So far the emphasis has been on format innovation and traffic growth but 2015 will see that switch to revenue⁶. Most will discover that making money from content is hard and not for the fainthearted.

6. Good things come around: We've seen a **revival of podcasting** driven by new in-car on-demand technologies and innovation around format (see more on the success of *Serial* below). And we've seen a **rebirth of email**, which has delivered hugely to the growth and stickiness of Quartz off the back of frictionless signup, mobile optimisation and a superb **editorially-curated** experience. Fast followers included *FirstFT* and *RedBox* from The Times – recognition that the No1 app on the smartphone is a key channel for news delivery once again.

7. Facebook and the power of algorithms: 2014 was the year when publishers realised quite how important Facebook was as a source of traffic. For many, it outranked Google as a driver of inbound traffic, following tweaks to its algorithm to make high quality news more prominent in the feed. This is a huge opportunity for media organisations but carries risks around increased dependence on a company with its own powerful commercial interests and a questionable record on transparency.⁷



Facebook's algorithms came under fire for a Year in Review app that relived personal 'highlights' including moments of intense grief and loss under the tag line: "It's been a great year! Thanks for being a part of it." It was quickly forced to apologise for "inadvertent algorithmic cruelty". And that hard on the heels of criticism for taking part in a psychology experiment where the news feeds of 750,000 people were 'manipulated' without their knowledge.

Meanwhile it was reported that 25% of millennials had left Facebook in 2014⁸, but given the company already owns WhatsApp and Instagram this may just be part of the strategy. In other developments the company launched a stream of its own apps aimed at the younger generation:

³ Thou3s from Media Briefing's Jasper Jackson

⁴ Via Kevin Anderson who adds:

⁵ <http://fusion.net/story/33932/2014-the-year-digital-media-got-big-and-optimistic/>

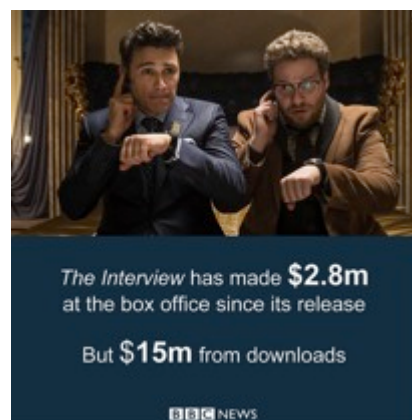
⁶ <http://digiday.com/publishers/digital-media-carnage/>

⁷ Peter Bale suggests that Facebook are likely to get news companies dependent on this and then tweak the algorithm further to promote more spending on paid links.

⁸ <http://www.prweek.com/article/1327613/one-four-generation-z-left-facebook-2014-says-global-messaging-research>

Paper, Slingshot, Mentions, Messenger, Rooms. Many of these are product of its new Creative Labs initiative to grab people's attention on their smartphones and part of the unbundling trend.

8. The rise of streaming movies: The 'House of Cards' moment for the movie industry was the internet release of *The Interview* at the end of 2014. Sony's hand may have been forced but the figures speak for themselves. Streaming generated more than \$15m in revenue from download purchases, compared with less \$3m in revenue from cinemas⁹. The genie is out of the bottle and these arrangements will soon become the norm with cinema attendances already falling as larger televisions at home connect to popular streaming services like Netflix and YouTube.



The rise of legal/illegal streaming sites like Porcorn.io is a further reminder that the Hollywood needs to take the digital initiative or risk repeating the mistakes of the music industry.

The Interview was also a huge moment for YouTube and its ambitions to be taken seriously as an entertainment destination. It already is for the younger generation but there's far more to come.

9. The new rental economy: Technology has made it as easy to rent things as to buy them (as in #8). In the era of instant access and infinite shelf space in the cloud there is little reason to own anything. Music subscriptions were up more than 60% in 2014 with Spotify at the head of the pack with 12.5m paying customers. In 2014 Amazon launched Kindle Unlimited, a subscription service that gives users access to more than 600,000 ebooks and audiobooks for \$10 a month.

Spotify, Uber and Airbnb are some of the early winners of the new rental economy but there'll be many others – some of which will go public this year.

10. Cyberwarfare, cyberhacking and cybercrime: Ongoing security breaches continued to undermine public trust in 2014. Whether it is a fear of companies monitoring of web browsing, attacks by a rogue state or concern about security of our online transactions there is more concern than ever about the security of our data. There is hardly a company or sector that has been unaffected by passwords leaks, network penetration or other breaches. Sony, Dropbox and Snapchat were some of the high profile casualties in 2014 putting online security right at the top of the agenda for most CIOs (see predictions below for more).

Last year's predictions

This time last year we said **Apple would kickstart the wearables revolution** by announcing its much-anticipated watch¹⁰. We'll get our hands on it very soon. We called out **Medium**, which has developed into beautiful platform for reading long and thoughtful stories online – and a centre for creativity. We predicted the **rise of drones in TV news coverage** and they were indeed deployed to

⁹ <http://qz.com/319387/everything-we-know-about-how-people-watched-the-interview-and-what-it-means-for-the-future-of-internet-video/>

¹⁰ Apple Watch announced BBC News, September 2015 <http://www.bbc.co.uk/news/technology-29128083>

cover political protests from Hong Kong to Pakistan¹¹ and to provide new perspectives from the **New Year fireworks display** (right) in Sydney.

We correctly suggested that Amazon would launch its first smartphone (the **Amazon Fire**) but failed to predict its five cameras offering 'dynamic perspective' allowing your app icons to move along with your head.

More successfully, we called out revolutionary virtual reality headset maker **Oculus Rift**. A few weeks later it was sold to Facebook for an incredible \$2bn with Mark Zuckerberg saying his ambition was to take it beyond games to create a whole new communications platform¹².

We highlighted Chinese smartphone manufacturer **Xiaomi** – now the most successful tech start-up in the world after being valued at \$45 billion (£29 billion). Expect to hear much more in 2015 as it brings its stylish Mi branded handsets to European and American customers at rock bottom prices¹³.



© MIUI6

The Miui 6 Looks a lot like the iPhone 5S – but a lot cheaper

There was much that we got right - more that we didn't.

¹¹ <http://www.dawn.com/news/1125822>

¹² <https://www.facebook.com/zuck/posts/10101319050523971>

¹³ <http://www.dailymail.co.uk/sciencetech/article-2891532/Xiaomi-worlds-valuable-tech-start-Chinese-smartphone-manufacturer-valued-45-BILLION.html>

Predictions for 2015

Mobile, wearables, nearables and payables

Mobile phones are now outselling TVs four times over and the majority of these are smartphones. Prices are falling, networks are becoming faster and more reliable and the platforms have matured into a stable duopoly (iOS and Android¹⁴).

The conditions are set in 2015 for an unprecedented amount of innovation around hardware, software, services and content. Here are ten mobile related predictions for the year ahead.

1. Tablet sales take a dive as smartphones continue to get bigger: People who already own tablets are happy with them but generally aren't planning to upgrade. Growth has already slowed - only 11% global growth compared with 55% in 2013 - and will remain flat in 2015. With the industry focus on game changing large-screen smartphones¹⁵ - as well as wearable extensions and multimode laptops - the tablet is in for a hard time.

2. Smartwatch wars: Google and Apple will go head to head in the emerging wearables market in 2015 with Vogue magazine putting the Apple Watch on its front cover as the most anticipated new device of the year. Given the level of hype, it will be almost impossible to meet expectations. The Apple Watch will NOT repeat the monster success of the iPod, iPhone and iPad – certainly not overnight. Not everyone will want or need a computer on their wrist though the early adopters – and fashionistas - will inevitably rush out and buy¹⁶.



We're predicting 20m Apple watch units sold in 2015 which is in the mid to low range of current estimates not least because the price tag estimated to be between £300 and £3000 (for the 18ct gold version). Battery life remains a problem too with Tim Cook conceding you'll need to 'juice it up every night'.

¹⁴ <http://techcrunch.com/2014/10/15/tablet-sales-growth-plummets-in-2014-as-android-smartphones-continue-to-soar-gartner/>

¹⁵ The 6-inch plus screen smartphone, which looks set to become the standard as 2015

¹⁶ Expect the Apple watch in early spring in the US with a European release to follow

But the overall direction of the smartwatch market is uncertain with many different visions of the future. The Moto 360 and Pebble Steel are aiming for a jewellery-like aesthetic, without necessarily looking like tech products while Samsung with its Gear S is more of a curved smartphone that you strap to your wrist. Either way, killer apps look like being messaging, email, health and fitness and GPS maps – though breaking news may get a look in too.



See also smart glasses and virtual-reality headsets, once reserved for sci-fi fantasies, trickling into the market as consumer products in 2015.¹⁷

The watch, the glasses, even the clothes will take off eventually but this will take a considerable time as technologies mature and consumers come to terms with the new form factor and how different personal devices can work together. It is a big shift in thinking. Do customers want to buy one device that can do almost everything? Or do they want a bunch of connected products -- like wristbands, shirts and glasses -- that work together toward a common goal? We won't know the answer this year but we'll pick up a few clues along the way.

3. Health and fitness applications hit the mainstream: Apple and Google launched health initiatives built on iOS (Apple Healthkit) and Android (Google Fit), in 2014. Samsung has also introduced a healthcare platform.

These platforms can track your sleep, and movements as well as integrate with the external sensors and applications provided by the likes of Nike, Jawbone, Adidas, RunKeeper etc. Although wearable devices come with their own apps and specialist interfaces, Apple, Google are working to aggregate that data from multiple sources – to provide their own dashboards for life. But there are still many barriers to usage including cost, lack of simplicity and more clarity around privacy (see #4).

4. Sensors and passive location tracking leads to new privacy concerns: Location sensors built into wristbands, watches and mobile phones are helping build a more and more complete picture of what we do and where we go. Accelerometers, gyroscopes, and light sensors are becoming standard. Newer Apple devices contain a M7 chip that can tell the difference between walking or driving, logging habitual journeys and regular hangouts. Linked with GPS data this can spit out a

¹⁷ By 2018, wearable shipments are expected to jump to 112 million units, more than five times last year's figure, according to market researcher IDC

visual map of your activity – a storyline of your life. And all of this happens passively, in the background.



This information is gold dust for the likes of Facebook Apple and Google who are all in their own ways trying to build a digital profile of who you are to feed their advertising business and drive better services. Start-ups like Highlight, Banjo and FourSquare are also trying to play in this space. Facebook bought *Moves*, a fitness app, almost certainly for the sensing technology. If integrated into their core mobile apps, which now have 1bn active users, this would enable them to know even more about what we do, what we like and where we go.

All this passive tracking will lead to more ethical questions in 2015 about who can be tracked and how the information can be used. 'Anonymous' social media app Whisper was just one company that got into trouble recently for allegedly identifying leads about people worth investigating – including a 'sex obsessed' lobbyist based on his location data¹⁸.

5. Growth of anticipatory media and smart assistants: While Facebook has been focussing on location, Google is looking to leverage information it already has in calendars and emails to get to know our habits and interests. A key component is semantic and natural language processing technologies that can bring all this data together with other sensor driven information.

This can be used to provide context aware messages - not just advertising – but useful information like when you might need to leave for the airport or what the weather will be at your destination.



Google Now, the market leader has

¹⁸ <http://www.theguardian.com/us-news/2014/oct/23/10-questions-whisper-senate-hearing-privacy>

been improving its algorithms over the past year but Apple is also in this space having bought the digital assistant Cue in 2013 and Yahoo snapped up Donna from Incredible Labs. Expect these companies to integrate this technology into their wider eco-systems and to be a key driver of *card based* notifications delivered on wearable devices too.

Anticipatory media is finding its way into more and more handsets, and could spread to cars, wearable devices and smart homes, as long as enough people find it useful, rather than spooky.

6. Hearables: Smart virtual assistants are increasingly driven by voice. This is not new in itself – Siri and equivalents have been around for a few years - but we are starting to see a new manifestation of these ‘hearable’ assistants that allow us to interact with the web through voice. With *Amazon Echo* you can ask your assistant a question or get it to play music - or the latest news bulletin from the BBC or NPR - with a simple voice command.

The Echo is currently in restricted release but those who have tried it¹⁹ are deeply impressed with the ability to handle multiple voices through its 7-microphone array. The main problem is that this innovation comes from Amazon. If it could link to the information in my Google calendar and email via anticipatory services like Google Now, this could be a game-changer.

In general expect more Bluetooth speakers/smart assistants – linking to smartphones and tablets in the home.



With basic speech recognition now built into every mobile OS and browser, it will become more and more necessary to optimise for voice. *Mindmeld* is just one tool that allows creator of an app or website make their own pages respond to voice commands in a bespoke way or to crawl different areas of the web to create aggregated voice services.

¹⁹ <http://www.zdnet.com/pictures/amazon-echo-review-a-perfect-10/>

7. Unresolved battery issues leads to an explosion of charging stations: The lack of new battery tech and the increased demands on old hardware suggests that we'll see an explosion of charge points in public places. McDonalds is adding wireless charging to 600 fast food outlets in the UK using Qi technology, which requires a device to be placed on a charging plate for up to 30 minutes. Wireless charging is also coming to railway stations and airports – JFK will be one of the first. John Lewis has fixed charging points and we're expecting the growth of outdoor solar charging stations like the one illustrated below in New York.



The only way to be sure of longer life, though, is to opt for a larger battery and this will be one the drivers of larger and chunkier phones in 2015

8. 2015 will be the year of mobile video: Mobile data traffic was up 81% in 2014, driven in large part by of explosion of video viewing²⁰. Half of all BBC iPlayer viewing is now via smartphones or tablets – that represents around 120m programmes a month with the percentage coming from connected TVs falling below 25%²¹. But user generated video has also been a big driver of mobile video. The *Icebucket challenge* videos, raising money for motor neurone disease, were watched more than 1bn times on YouTube and more than half of those views were from mobile devices.



Lady Gaga, Tom Hiddleston and Britney Spears taking the ice bucket challenge.

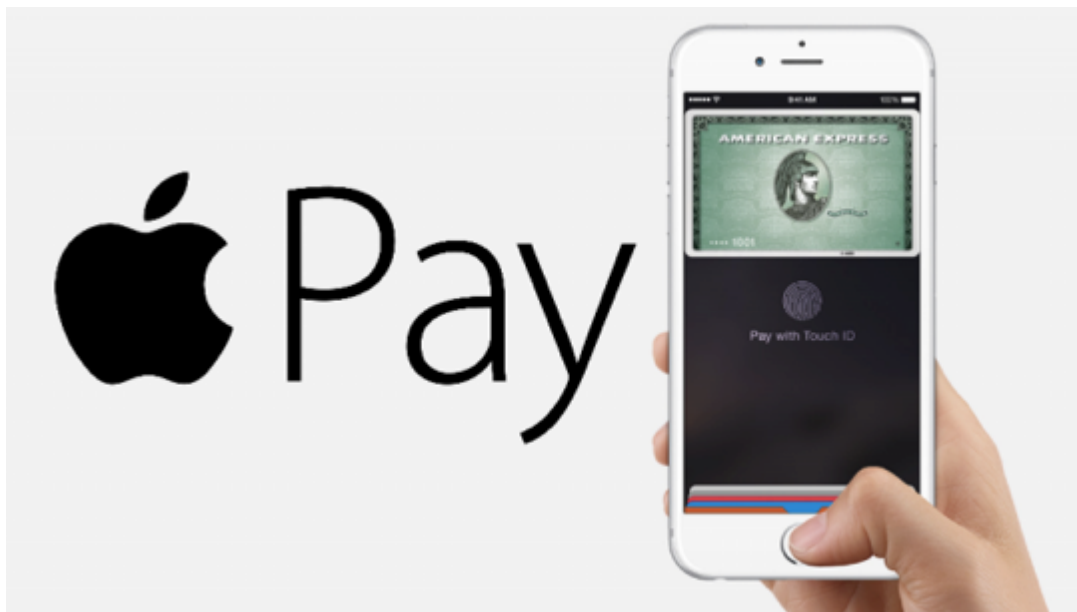
²⁰ Mary Meeker State of the internet report 2014

²¹ <http://downloads.bbc.co.uk/mediacentre/iplayer/iplayer-performance-oct14.pdf>

Mobile video ads are already the fastest growing digital ad format. More publishers like Channel 4 will support advertising new video formats across all mobile devices.

9. Mobile and frictionless payment takes off but watch your security: This market has taken time to develop partly due to security fears and partly the catch-22 of availability. Customers don't use mobile payments because shops don't have terminals; shops don't have terminals because customers don't use them.

Apple thinks it has cracked the security worries, by combining its fingerprint-scanning technology Touch ID with a new secure chip located within its handset that stores users' credit card data. That pays the retailer with proxy data so that sensitive information is never exchanged through the air.



To make the system simple users don't need to press any buttons to make a transaction using Apple Pay. They just hold a compatible device up to a contactless payment point, put a recognised digit on the Touch ID button and payment will be made.

On the availability front, Apple has made significant inroads in the US, launching with an impressive array of retail partners (McDonalds, Staples, Whole Foods) and also with support of some of the largest credit cards and banks. Currently 200,000 stores accept Apple Pay, which only works with iPhone 6, iPhone 6 Plus and the forthcoming Apple Watch. Google Wallet, which is also NFC based, could benefit from the deals already made. The main alternative in the US looks like being a system called MCX (Merchant Customer Exchange) due for release in 2015 and being backed by retail giants Walmart and Best Buy. It uses a mix of QR codes and verification numbers.

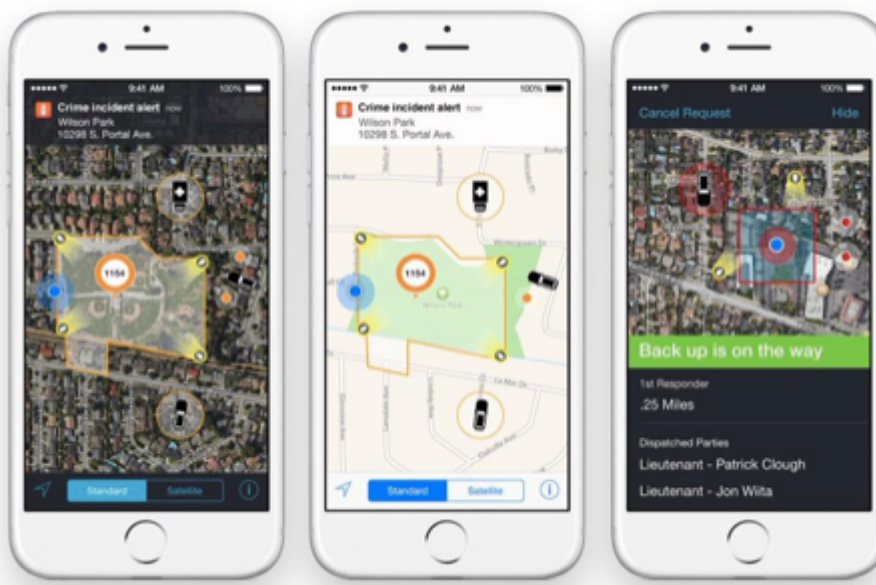
The UK may be a different story and a tough sell for Apple when it launches in 2015. Contactless payments are already up and running in fast food restaurants and on the London transport network, while EE has its own contactless payment app for NFC phones. Most major banks in the UK already issue contactless cards and stores are starting to accept payments.

10. Mobile in the enterprise: Apple and IBM took aim at the enterprise with an unexpected collaboration at the end of 2014 to develop apps and sell iPhones and iPads to businesses and other organisations²².

Among the 10 apps that Apple and IBM showed at the launch were: an airline in-flight customer service and engagement app, one aimed at telecommunications firms for field repair calls and a third for police incident response. They are also targeting banking and insurance, retail and government services with apps designed to surface data and increase productivity.



Passenger+, one of the first 10 apps in the Apple-IBM partnership, lets flight crews rebook passenger flights when they miss a connection.



Incident Aware helps police with maps, information about victim status, escalation risk, and crime history.

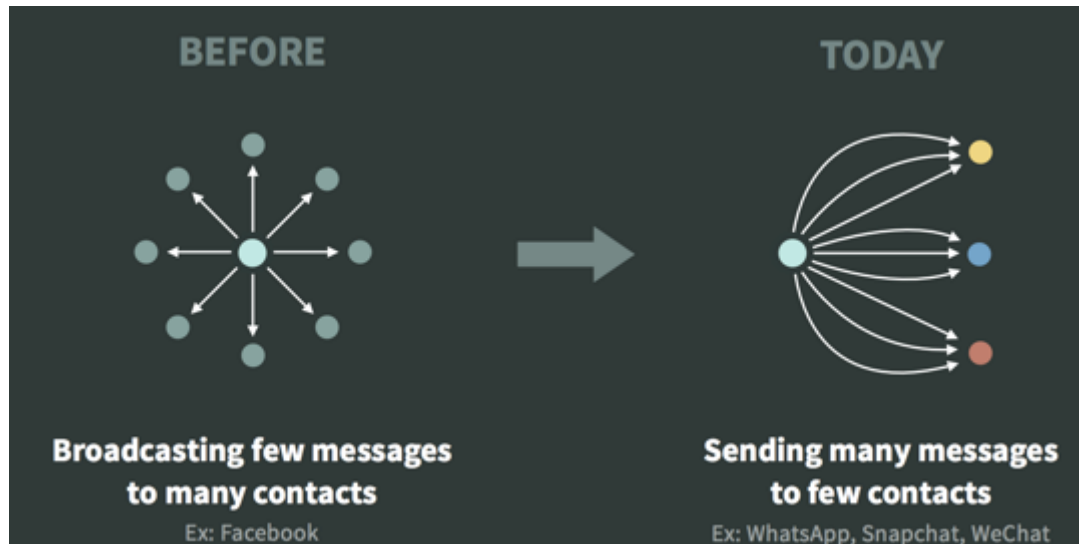
Mobile apps in the enterprise are going to be a big deal as businesses transition to a mobile world. IBM's connections with enterprise make it an ideal partner – and it will also give Apple a stronger foothold in a sector previously dominated by Microsoft based vendors.

²² <http://www.computerworld.com/article/2859480/apple-ibm-partnership-off-to-impressive-start.html>

Social media and messaging

Social networks and messaging are changing fast, with image/video sharing on the rise and people engaging more with groups and close contacts (WhatsApp, Snapchat, etc.) and less with large audiences (via Facebook, Twitter, etc.). See chart below for the move from nodes to edges.²³

From nodes to edges



As Facebook, Twitter and YouTube move into comfortable middle age are *they* losing their edge? Here are six predictions for the year ahead:

1. Asian messaging companies move into the US market: Both *Line* and *WeChat* will make headway in the lucrative US market in 2105, challenging Silicon Valley's dominance of social communication. Messaging apps have attracted customers by offering free cross platform services such as group chat, voice calls, video and photo sharing – but there is also a considerable revenue to be had from in app game purchases, digital goods such as stickers and even retail sales of toys based on popular digital characters. *Line* is celebrity orientated (Taylor Swift has an account) and offers voice calls over IP and a Facebook Wall type feature. Users can connect to each other by simultaneously shaking their smartphones. *WeChat* has a great range of filters for photos and even a machine translation service built in. Like social networks before them, these apps are becoming the hubs for everything smartphone audiences do on mobile – and increasingly that means news.

WhatsApp proved to be hugely influential in the 2014 Indian elections – the biggest market in the world for the app so far with 70m users. The BBC has experimented with *WhatsApp*, *WeChat*, *BBM*, and *Mxit* during the South African elections for reporting and distributing news²⁴. Working out how to scale chat apps up from one-to-one to one-to-many won't be always be easy - but will be a priority for many news organisations in 2015.



²³ Chart adapted by presentation designer Emiland De Cubber from Mary Meeker 2014 State of the Internet presentation

WhatsApp, as market leader, will continue to strengthen its position heading toward 1bn users in 2015²⁵. *WeChat* is aiming for similar numbers but has ambitions to be a 'mobile platform for everything' including news and commerce. *Facebook messenger* will ensure that older demographics do not miss out on the messaging revolution while teenagers and Syrian jihadis will value the privacy afforded by *Kik*. As an antidote to messaging you can download *Ethan* an app that lets you do one thing; message a guy named Ethan - who may or may not reply!

2. Social media video wars: Twitter will launch its own native video platform and player for consumers in 2015. This won't replace Vine, which delivers 6 second looping video but will offer a fuller YouTube like service and build on the existing Amplify/Promoted Video services for business.

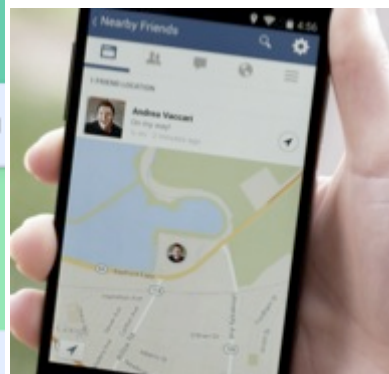
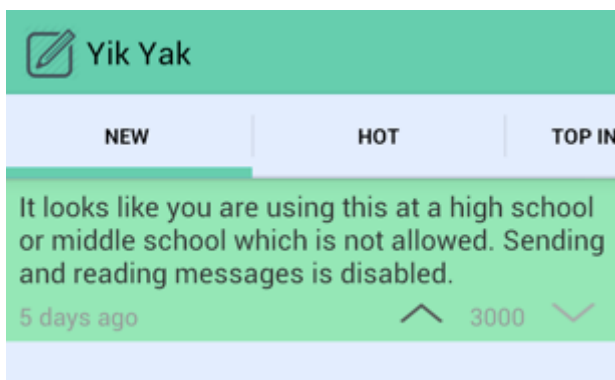


Twitter's efforts will be dwarfed by Facebook, which will surpass YouTube as the most important video platform, partly off the back of allowing auto-playing of videos (with sound).

Facebook will offer publishers new ways of monetising publisher content taking YouTube head on. Instagram will surpass Twitter as the second most-important social media platform partly because its focus on video and other visual content.

3. Many more commercials: Like it or loathe it our social feeds will be filling up with more brand and advertising messages in 2015. The change to Facebook algorithms last year made it harder to inject organic brand messages into social feeds so marketers will need to pay for reach. Increased brand investment in video will also need to be seeded and paid for.

4. Location based social networking: YikYak is an app that allows people to anonymously create and view "Yaks" within a 10-mile radius. The network has shown exponential growth on college campuses in the US despite running into controversy over cyber bullying issues. YikYak developers have hit back by deploying geofencing to make sure the service can't be used in middle schools and high schools.

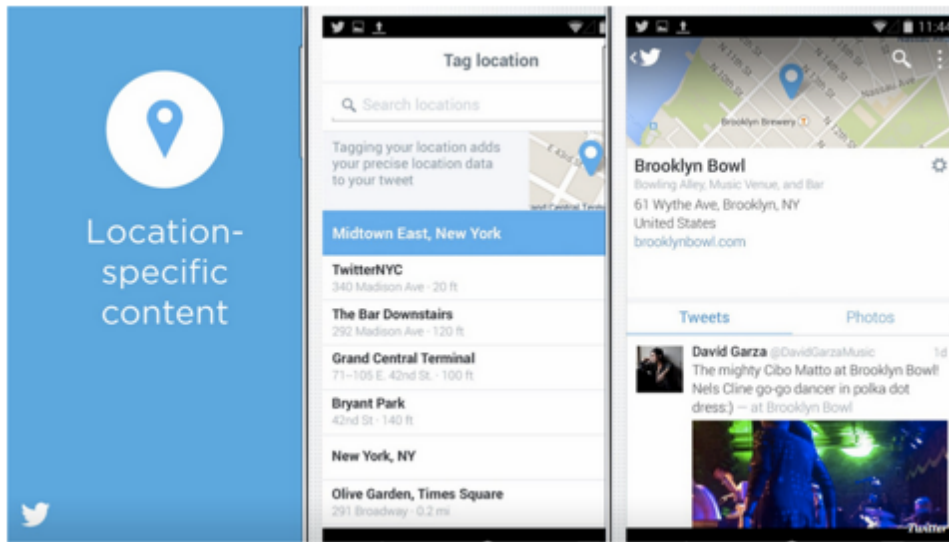


²⁴ <http://www.niemanlab.org/2014/06/around-the-world-media-outlets-and-journalists-are-using-chat-apps-to-spread-the-news/>

²⁵ Jonathan Marks points out that WhatsApp feels more immediate than Facebook and Twitter because it is. The system actually sends the message as you're typing. When you press return, the recipient is told it's arrived

Meanwhile Facebook has introduced a 'nearby friends' feature of its own. If you opt-in you can see which of your friends is around for a physical meet up and you can share your exact location for a limited time.

Twitter will also make a big push around location in 2015 and we're predicting a partnership with FourSquare. The company is hiring geo-specialists including former FourSquare employees. Features could include Foursquare-like venue check in tweets local recommendations, and organising content around a user's current whereabouts. See slide (below) from a recent analyst presentation



5. Social communication takes off in the enterprise: While consumers enjoy better and more intuitive ways of frictionless communication, people at work continue to drown in email. Though secure social networks for business have existed for some time (e.g. Yammer), they have never taken off because they do not provide integrated communication features. *Slack* is one innovative application trying to change that. It brings everything together - messaging, group chat, sharing, search - and integrates with a huge range of other applications like Dropbox, Soundcloud and Twitter.

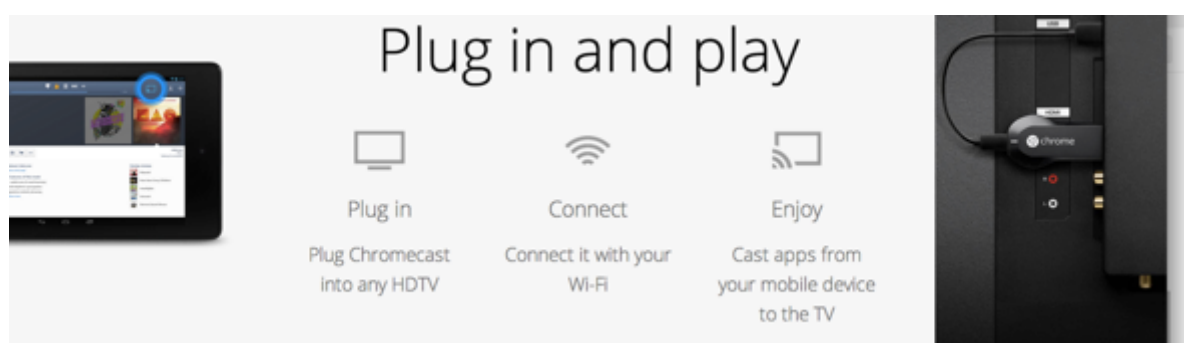


Slack will be just one of a number of emerging companies taking advantage of the cloud and mobile to redefine what work and workflow should look like for modern teams.

Disruption to Television

We continue our love affair with the content (Broadchurch, Strictly etc) but not with the technology. No matter how much we dream about simplicity, television distribution and consumption gets more complex and expensive every year. Multiple standards around broadcast (SD, HD and now UltraHD) and then myriad ways to catch up on programmes you may have missed (+1s, PVRs, internet connected boxes and HDMI connectors). So will anything give in 2015?

1. Video on demand content migrates back to the TV: Until now, the majority of professionally produced VOD content has been consumed on laptops, tablets and smartphones but both BBC and Decipher data shows a small but significant move back to the big screen²⁶. There are two reasons for this. a) Big providers Virgin, Sky and BT have improved the interfaces speed and visibility of VOD content and b) New smart adapters like Apple TV, Now TV, Fire TV and Chromecast (below) have enabled content to be played via smartphones or tablets but watched on the TV.



Given the low cost of the smart adapters we're predicting a step change in tablet and smartphone 'casting' in 2015.

Of course the implications for this is that *any* internet video content is available for the big screen opening up the TV industry to over the top (OTT) content. We'll also see the smartphone increasingly becoming the focus for discovery and playback - the new remote control.

2. The great unbundling: In 2014 we saw this trend begin in the US with HBO, Netflix, Starz, and NFL and CBS as the first major network²⁷ to offer stand alone web/mobile subscriptions for their content. The US is particularly vulnerable to 'cord cutting' because it has a very high penetration of cable subscribers but there is a very different landscape elsewhere.

In the UK, existing pay TV customers are well locked in with broadband and telephony services – and the rest are happy with a diet of free channels plus free video on demand from all the main broadcasters via any connected device for up to 30 days²⁸. Less scope for 'cord cutting' but more opportunity to sell reasonably priced unbundled sport and entertainment content. Sky will ramp up its promotion of Now TV amid first year evidence that unbundling is additive rather than

²⁶ <https://decipherconsultancy.wordpress.com/2014/12/12/video-on-demand-finds-its-home-on-tv-sets/>

²⁷ <http://www.theverge.com/2014/10/16/6987543/cbs-all-access-streaming-service-no-cable-required-launches>

²⁸ BBC increased shelf life of free programming to 30 days in October 2014 following a BBC Trust review

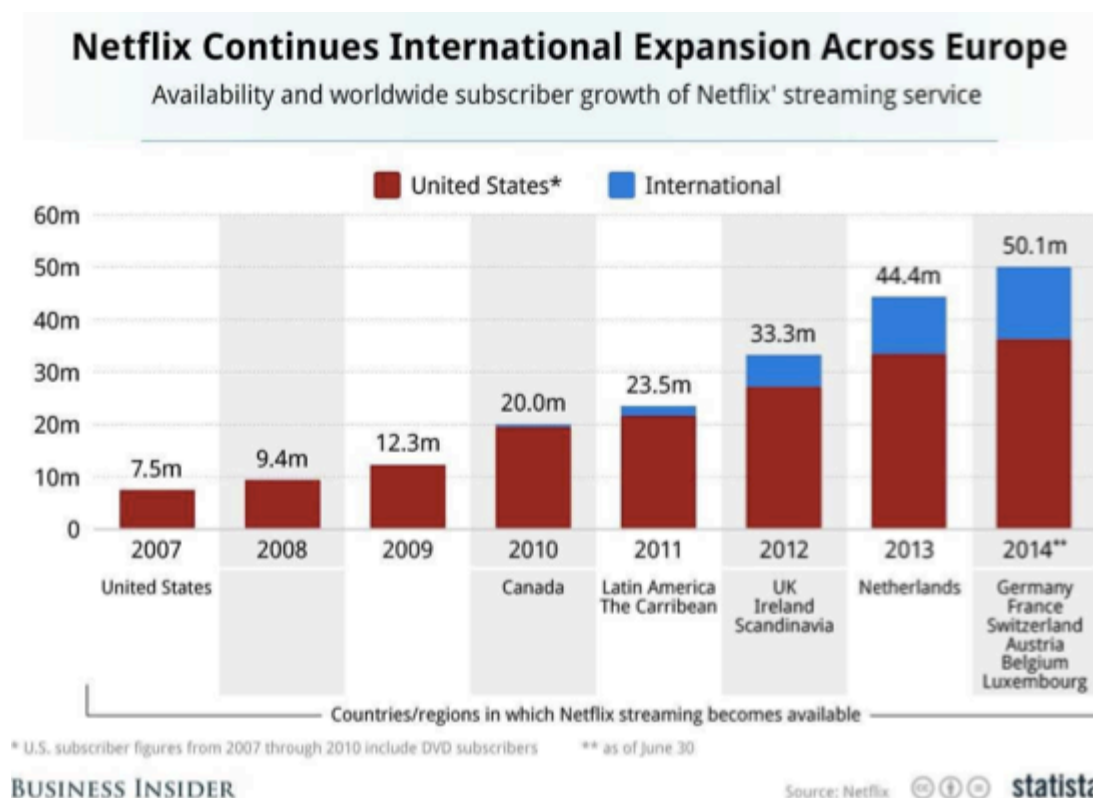
cannibalistic. 88pc of Now TV subscribers say they would not consider a wider Sky subscription anyway.

Over time where do trends #1 and #2 lead? We're heading to a world where linear channels increasingly look like apps and where programmes are also increasingly discovered through search and social recommendation.



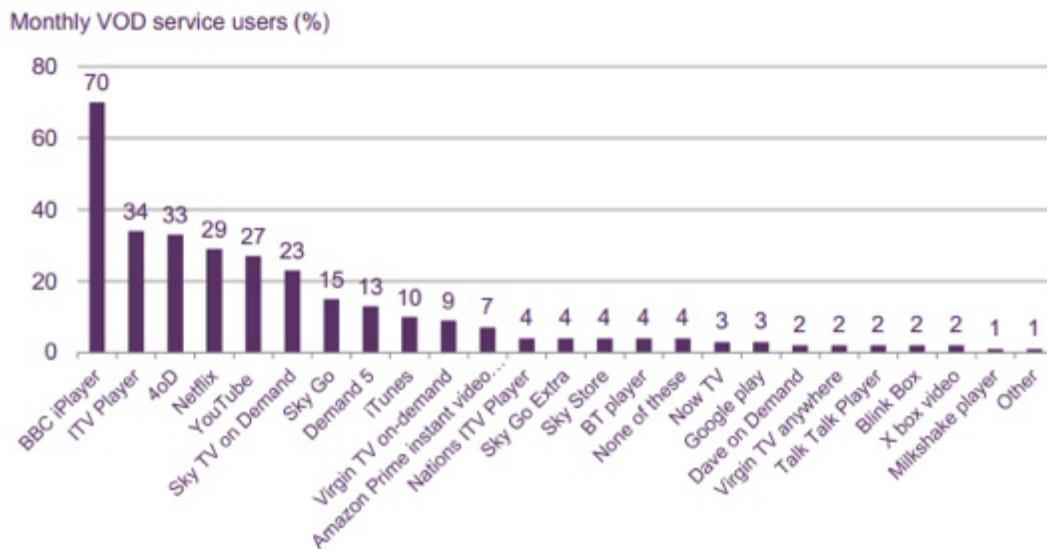
3. The rise and rise of Netflix

Scale really matters in the TV industry and Netflix has more than most - available in 40 countries already with more on the way.



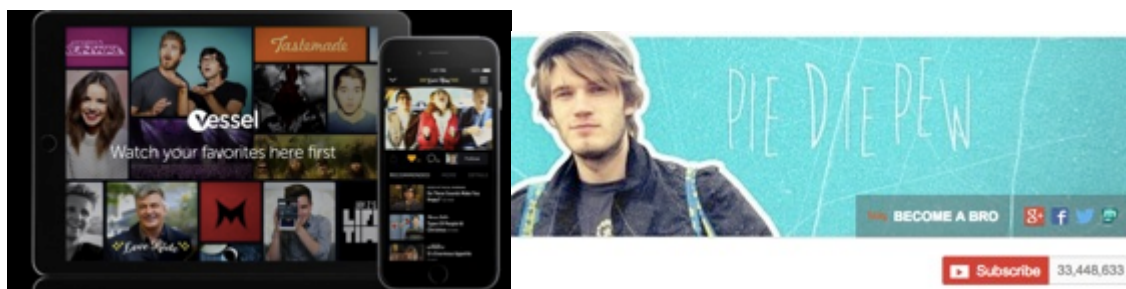
Overall television viewing remains pretty resilient, but it is not always the content of UK based PSBs that people are choosing to watch. As the following graph makes clear, about a third are regularly turning to web-based services such as YouTube and Netflix. This is particularly the case for younger viewers. The traditional relationship we've had with the BBC and ITV will inevitably change as a result and it's the end of the line for old school aggregators like Dave.

Figure 11: VoD service used at least monthly



4. Video stars bidding wars: Forget Jonathan Ross, it's now YouTube stars that are pulling in the big bucks off the back of advertising revenues and endorsements. Video game commentator PewDiePie has 29 million subscribers to his YouTube channel and allegedly earns around \$4m a year. Now there's a bidding war to sign up these video pioneers and manage their careers.

2015 will see the launch of a new video platform, Vessel where subscribers can pay \$3 a month and get early access to "the best of the Web from both new and traditional media". The site founded by Hulu's Jason Kilar has paid to sign-up top YouTubers including \$500,000 for musical comedy duo Rhett and Link. Vessel is hoping content creators will provide exclusive content first and in return will get \$50 for every thousand views and a share of ad revenues. Facebook is also looking to sign video stars to post public content with them and expect crossover with some selling out to become mainstream tv and radio presenters.



5. BBC comes under intense political and media pressure: The funding model will be up for intense debate again once the election is out of the way. The Tories are already set on decriminalising non-payment ahead of the charter review, which would significantly change the game, driving the

argument for new voluntary subscription models. Given the rapid move to new devices predicted in this document and the growing disconnect with younger audiences (see #3), it is hard to see the licence fee remaining in its current form²⁹ or any settlement matching current levels of funding. Even a full funding freeze will mean full services will go or move online like BBC3.

In the run up, The Sun, Daily Mail, the Telegraph and others with a clear commercial and political agenda have already started their assault on fat cats, bureaucracy and pretty much anything else they can get their hands on. This looks like a co-ordinated campaign. Political parties are complaining about bias as in the George Osborne attack on Norman Smith.³⁰ Staff will need to avoid self-inflicted wounds and the BBC press office will need to use all means at its disposal including social media (below) to rebut these stories and keep on the front foot in 2015.

BBC Press Office @bbcpress

.@TheSunNewspaper have shown a lot of interest in the BBC recently – here's what we think: bbc.in/15OWq2R

facts behind Tuesday's Sun edition

- the BBC had lost its licence fee and capped its pay. He is paid 48% more than his predecessor was in 2005.
- saved £1.1bn a year from the licence fee and the public love it.
- week per BBC provides for money.
- NOTHING** has changed at the BBC despite repeated scandals over its top executives' staggering pay deals. Quite the reverse.
- Boss Tony Hall admitted last year the Corporation "lost the plot" over salaries. He said this without irony despite being on £150,000 himself.
- Now, under him, the number of senior managers earning more than the Prime Minister is rising.
- Hall's finance chief says it's "vital as much of the licence fee as possible goes straight to the programmes and services audiences love". Quite so.
- Except she really means "as much of the licence fee as possible goes straight to the programmes and services audiences love". Quite so.
- It is handed nearly £1 billion a year from the compulsory tax on your telly. That could end when its charter comes up for review in 2016. Especially if it cannot show licence payers get value for their money.
- Slashing the number of fat cats on absurd salary deals would be a good start.
- In fact since 2009 we've downed the number of senior managers and the BBC's Manager payroll by 30%.
- Senior Manager numbers down again last year from 1,000 to 700.
- Because we're not a company our salaries are less than in the commercial sector. The Director's salary is half that of executives of ITV and also earn seven figure bonuses.
- Since 2009 the number of senior managers has been cut by 30%, reducing the pay over £20m per year.
- the best ever they had and just like airlines where they are no need for costly processes.
- people from a different spectrum including from across the spectrum.

facts behind Wednesday's Sun edition

- IT'S not what you know, it's who you know. Never was that more apt than at the BBC.
- Top bosses hand other top jobs to friends, or friends of friends, all on salaries beyond the dreams of the mere mortals forced to fund them.
- The left-wing prejudices of this Guardian-reading elite inform the inherent bias of the BBC's output.
- The case for this clique retaining their funding by taxing the masses for owning a TV needs forensic examination before it is signed off again in another two years.
- Our salaries are higher than in the commercial sector.
- We're happy to debate around the clock. However, remembering the licence fee has risen 22% since 2004, the most popular funding the BBC, ages and socio-backgrounds.

Also in TV

- ITV bought (by Liberty media or Vodafone)
- BBC loses rights to Premier League soccer to ITV which has cash in hand after losing European football to BT
- Something gives in Saturday night TV (end of the line for X Factor)
- More brands go direct to market with their own online content on YouTube

²⁹ Steve Schifferes predicts a cut from the current £145

³⁰ <http://www.express.co.uk/news/politics/543716/George-Osborne-attack-on-BBC-over-coverage-of-Autumn-Statement>

Rebirth of audio

New Wi-Fi-enabled speakers popping up across the home - combined with Bluetooth connected car radios and better speakers in phones and tablets - seem to be encouraging a rebirth of audio. Audio is a remarkably durable and flexible form of media that's ideal for multitasking.

1. Podcasting revival: Combining the drama of television-style episodic storytelling and the portability of podcasts, *Serial* was the '*Snowfall of the audio world*'. Produced by the team behind *This American Life*,³¹ this was a season-long exploration of a single story, unfolding over a series of episodes. It was the most popular podcast of the year and the fastest ever to reach 5 million downloads/streams. It was number one in the US, Canada, the UK and Australia, and in the top 10 in Germany, South Africa and India. Expect a spate of copycat attempts to repeat the formula and renewed interest investment in audio as a medium.



A bulletin board at Lakes Community High School – Emily Cody

In the US, where people spend twice as much time in their cars, there is a revival in podcasting. New cars are coming with increasingly sophisticated in-car infotainment systems - linked to mobile apps such as Aha Radio and Stitcher. Aha for instance comes as part of the in-car infotainment packages for Acura, Chrysler, Honda, Hyundai, Mazda, Porsche and Scion³². These apps add location-based services and also podcast audio discovery. A collective of independent audio producers, Radiotopia, has raised over \$600,000 on Kickstarter with 20,000 backers demonstrating how public support can be backed by hard cash. Commercialising podcasts is not an easy task in the UK where we expect our audio to be free³³ but crowdfunding combined with sponsorship may work for some. The Media Podcast is making a go of it after the Guardian pulled out in early 2014.

³¹ *This American Life* is a weekly public radio show broadcast on more than 500 stations to about 2.2 million listeners. It is often the most popular podcast in the US, with around one million people downloading each week

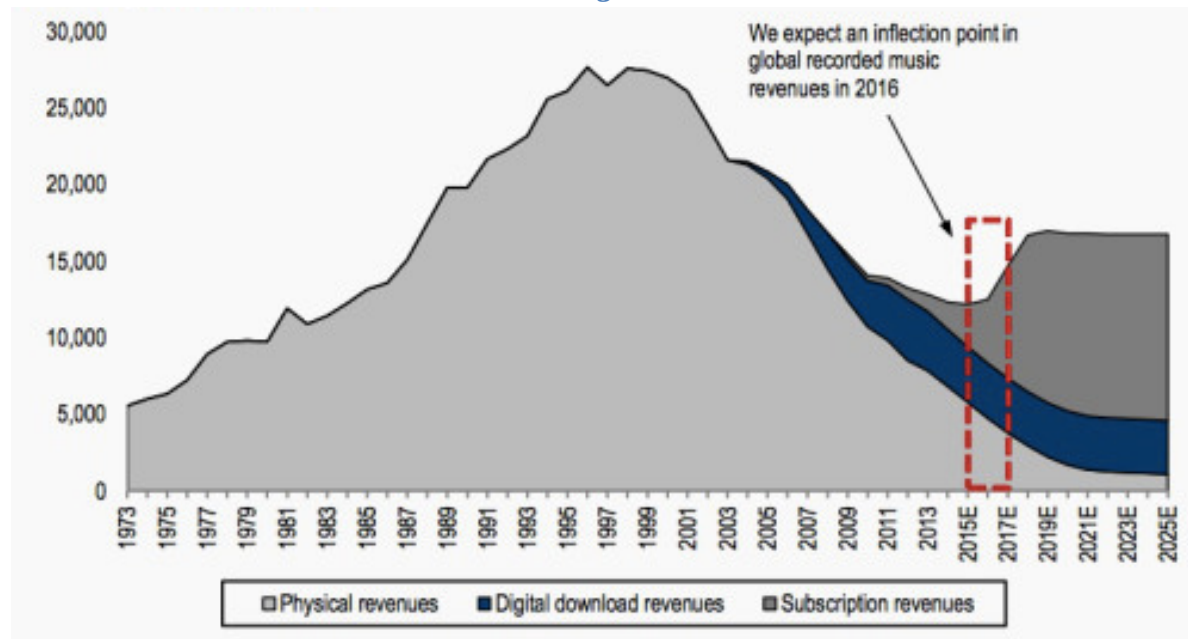
³² hat tip Kevin Anderson

³³ <http://www.adambowie.com/blog/2014/11/podcasts-a-rebirth/>

2. Streaming music services overtake downloads but artists remain unhappy: People increasingly want to access their music seamlessly from any device from any location and more and more people are taking out streaming music subscriptions with cloud services like Spotify and Pandora.

Credit Suisse suggest that music subscription revenues will grow 63% in 2015 overtaking downloads for the first time (see below)

Global recorded music revenues on the rise again – Rental will dominate



This chart helps explain why Apple paid so much for Beats Music. Expect its streaming service to be integrated into the Apple eco-system in 2015, perhaps using the iTunes name. But artists are unhappy because they don't make nearly as much money putting their music on Spotify as they do selling digital albums and songs on services like iTunes. Spotify has come in for particular criticism because so much of the content is available for free with prominent artists like Taylor Swift withdrawing their music.

"People should feel that there is a value to what musicians have created, and that's that"

Taylor Swift

2015 looks set to be a crucial year for the future of music as everyone tries to work out a fair deal between the creators of content and the music platforms of the future.

The outcome will be closely watched by those in the news industry arguing that the producers of content are not getting a fair deal.

Also in radio

- Bauer or Global buy UTV radio to create biggest commercial broadcaster
- Radio 1 steps up original video content via YouTube and iPlayer

Predictions on the future of journalism

As competition intensifies so does the battle for attention in a digital world. The traditional news package is under pressure as never before - as are the institutions that produce that package.

Distribution is becoming more complex, formats are exploding and new business models remain fragile at best. Publishers will be worrying about how to invest in the future – which means mobile, social and video in 2015 - at the same time as protecting legacy businesses that still deliver much of the revenue.

And then there is the need – highlighted by the ground breaking New York Times Innovation Report³⁴ - for traditional news organisations to become more customer-focussed, responsive and data driven. That's both a technical challenge and a cultural one that will involve new skills, more upheaval and a measure of re-education. Here a bunch of themes and specific predictions to watch.

1. Digital born media grows up, gets serious and goes global: BuzzFeed now operates in 8 markets including India where it launched in 2014 and opening dozens of foreign bureaus (including advertising for post in Nigeria). Mexico and Japan are next on the list.

"We are shifting mindset from just being a new upstart in the game to thinking about how we can build a large, sustainable media brand, a global media company that's going to be around for a long time,"

BuzzFeed VP International Scott Lamb

BuzzFeed is looking to move beyond quizzes and lists to building a reputation around serious news in 2015. Increased international coverage will be part of that but expect scoops too from a beefed up investigative team.

BuzzFeed joins the Huffington Post, already in 11 countries and is also launching in India as well as an Arabic edition in 2015. It too has a new focus on more heavyweight journalism as it seeks to distance itself from the 'viral producer label' and will be experimenting with more 'long reads' and distinctive coverage around the UK election.

In one of the most interesting developments of the year, Politico will launch a European edition in the spring with a team of 70, as a joint venture with Axel Springer. Based in Berlin but with offices in Paris and Brussels it is looking to lock up top talent as it aims to create the most influential political and policy publication in Europe for a mix of free and subscription based content. History suggests³⁵ it may be hard to grow a European media brand as opposed to country specific versions. On the other hand Politico's proven ability to turn dry policy into narratives that are passionately followed by core readers might just provide a fresh alternative to current players the FT and Euractiv. It is worth noting that Quartz and Business Insider are also ramping up their efforts in Europe.

³⁴ <http://www.niemanlab.org/2014/05/the-leaked-new-york-times-innovation-report-is-one-of-the-key-documents-of-this-media-age/>

³⁵ The European Newspaper closed in 1998 along with other failed ventures

Finally Vice News is also planning significant expansion to seven countries with the help of millions of dollars of further investment secured in September. It already has around 100 reporters operating in 34 countries around the world with a fresh tone aimed at young audiences that the likes of BBC, CNN and even Al-Jazeera will struggle to match.

All this creates significant extra competition for audiences, talent and advertising revenue – creating one more headache for hard pressed traditional news organisations.

2. Growth of native advertising and sponsored content: New players like BuzzFeed are at the forefront of a major shift in the advertising industry away from traditional banner ads towards "social advertising" that engages consumers and inspires sharing. This is partly because faith in traditional digital display advertising is decreasing. 60% of consumers do not remember the last display ad they saw and on mobile 50% of click-throughs are accidental. So one key trend is to make ads look more like content.

This is controversial because it means slipping advertising content into the same templates and formats used by the news brand itself. BuzzFeed, Vox and others have employed teams who create content and 'moments' for brands - articles, lists, infographics, videos or full blown web documentaries. The New York Times (T Brand studio), the Guardian (Guardian Labs³⁶) and the Wall Street Journal joined them in 2014 in a tacit endorsement of the emerging practice.

In one of the most successful examples to date, the New York Times published a 1500 word native ad³⁷ for the Netflix series "Orange is the New Black" using video, charts and audio to supplement text about female incarceration in the U.S. It was one of the first pieces of sponsored content generated by a new Brand Studio, a nine-person team dedicated to the task.



³⁶ <http://guardianlabs.theguardian.com/>

³⁷ <http://paidpost.nytimes.com/netflix/women-inmates-separate-but-not-equal.html?smid=tw-share&r=0#.VKvhTNz-1uY>

Definitions and approaches are varied and still emerging, labelling is still a problem and there'll be plenty of wrong notes and misjudgements as there were last year when the Atlantic admitted to screwing up over a Church of Scientology sponsored post³⁸.

We can expect a big native ad/sponsored content conflict of interest story in 2015 but overall it will become a much bigger chunk of how publishers make money online. The trend to *infinite scrolling* pages, as in Quartz, also combines well with this model³⁹ - which is more like flipping through a magazine - so you don't ignore the ad content

3. Full steam ahead for online news video: News organisations have been experimenting more with short and long form video as mobile devices in particular encourage consumption of different types of content.

Vice News⁴⁰ has been the poster boy for this trend. Via YouTube its content has hit 150 million video views and more than 1 million subscribers by the end of 2014. What seems to be working is a free-flowing, behind the scenes approach presented by the young people they are trying to reach. It's a reaction to the heavily stylised and packaged TV news bulletins read by a 'man or women behind desk' which makes up most of TV news output.



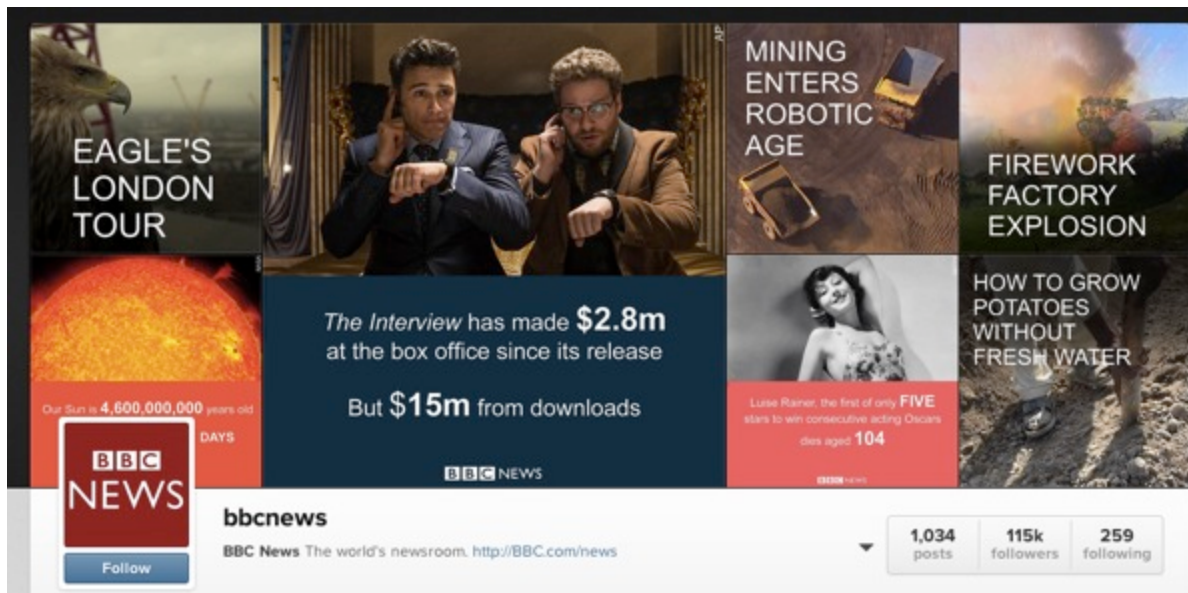
The New York Times has doubled the size of its video team over the past year or so to nearly 60 staff. It has also rolled out a monster new video player – four times the size of its predecessor in a symbolic commitment to video. Bloomberg too is betting on video and has seen a tripling of usage in the last year partly driven by increased embedding within text stories and the creation of more 'digital original' content with a 20-person team.

³⁸ <http://www.forbes.com/sites/jeffbercovici/2013/01/15/the-atlantic-on-that-scientology-advertorial-we-screwed-up/>

³⁹ So says MacMillan's Kevin Hinde

⁴⁰ <http://www.themediabriefing.com/article/economics-news-vice-empire-online-video>

Traditional broadcasters like the BBC have been experimenting with short form video as a way of reaching young people on smartphones. Distribution is via platforms like Instagram and films are often silent with animated text animating the moving video – recognition that access at work and on the move has a different requirement.



4. Explainer journalism: A number of new sites including Vox and FiveThirtyEight in the US are looking to build a business based on the idea of explaining rather than reporting the news. As facts become commoditised, analysis and context become somehow more valuable. To that end the *New York Times* launched its Upshot blog in April, while Trinity Mirror's Amp3d set the trend in the UK. Meanwhile other news organisations have been playing with explainer formats. The Telegraph answers questions such as "What is Alibaba?" in a sixty second blog while the Wall Street journal choses a web documentary explainer.

The Telegraph



The Economist runs an explainer each day, and the BBC is also finding that 'explainer journalism' has helped fuel mobile growth, both in the form of snappy and visual text-based Q&As and via short videos on subjects like Ebola. New formats editor Nathalie Malinarich says that "it's about answering the question that people are asking themselves, it's the same with video".

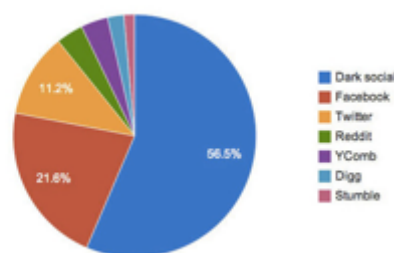
5. The rise of data informed publishing: There are so many formats - and so many new platforms - news organisations need better ways of working out what they *should* do. More newsrooms are bringing data into the newsroom to help identify which stories to cover and how to distribute them. The FT has introduced Betsy and the Guardian has Ophan. Others are using sophisticated tools like Chartbeat or Parse.ly which allow real time feedback on how story changes improve engagement. In the coming year some organisations will go much further in bringing together audience teams with those driving new formats. At the Guardian Executive Editor for Digital Aron Pilhofer has established a central team to handle data, visuals, video and interactive storytelling, and brought it together with social and audience teams to help understand who is interested in different topics and how best to reach them.

“The goal is to find ways of being a lot smarter about how we publish, when we publish, what we publish, the formats we publish, what tools we use”

Aron Pilhofer, The Guardian

Elsewhere expect data scientists and **new audience engagement teams** to play a more central role in many newsrooms accompanied by new tools and dashboards to guide journalists. Jaspar Jackson suggests that we'll see established publishers follow in the footsteps of Fusion and BuzzFeed in hiring people to focus on publishing and seeding content exclusively on third party platforms.

6. More heat over the role and influence of Facebook: 2014 was the year when we realised the full extent of Facebook's importance to the news industry. Much of the dark (unassigned) traffic was revealed to be generated by its mobile app⁴¹ meaning most publishers have been heavily undercounting Facebook traffic for some time.



“It should be even more clear now: Facebook owns web media distribution”

Alexis Madrigal, Fusion

In a New York Times piece on how Facebook is changing the way people consume journalism, writer Ravi Somaiya says that it is "increasingly becoming to the news business what Amazon is to book publishing - a behemoth that provides access to hundreds of millions of us"⁴². The future of journalism, he argues, is increasingly at the whim of the legendary EdgeRank algorithm.

It is this algorithm that determines which posts we see in our news feeds, and it was this that was tweaked in the last year to 'supposedly' favour high quality articles. Some publishers (Upworthy

⁴¹ <http://fusion.net/story/31450/dark-social-traffic-in-the-mobile-app-era/>

⁴² <http://www.nytimes.com/2014/10/27/business/media/how-facebook-is-changing-the-way-its-users-consume-journalism.html>

etc) lost significant traffic but others benefitted significantly. The Atlantic reported double digital percentage rises; Hearst referrals increased from 4% to 42%.⁴³

So what does all this add up to? News publishers will undoubtedly focus far more on Facebook in 2015 and far less on Twitter but they find themselves in a Catch 22. You can't ignore Facebook. It can drive huge levels of engagement if you can tap into it, but the more you do with it the more value you are transferring to Facebook.

And for 2015 Facebook is planning to supercharge its trending feature in a challenge to Twitter and a further move into the real time news business. Trending will feature on mobile as well as desktop and introduces a richer set of features beyond just links to top news organisations such as 'near the scene', 'live feed' and reactions from your groups and networks. Currently only available in the US, expect this to roll out in the UK in time for the spring election .

In other prediction news

- **Vice launches a 24 TV channel** – Providing confirmation that though new audiences can be reached online, the money is still to be found on TV. The channel won't just be about news but it will provide rolling capability to mass audiences when the occasion demands.
- **Google announces another major new initiative to help the news industry** – probably around monetisation but maybe not?
- **More publishers close down their comments sections** – Recognition that most consumers want to have conversations on the platforms they feel comfortable with but, as Jasper Jackson points out, ceding that part of your relationship with your audience to the social media firms that are already eating into revenues seems short-sighted at best.
- **Apps continue to divide the crowd** – New apps for BuzzFeed and the BBC but some other publications will abandon apps as an expensive waste of money for a small audience
- **Backlash against 'responsive design'** - Just being on a different screen is not good enough. (via Max Gadney).
- **Changes at the top** –The first female editor at the Guardian and potentially more leadership changes at the Telegraph
- **More real time events:** The Guardian's bold move into membership is part of an open journalism strategy and a focus on community but in 2015 we'll see more news organisations offering opportunities to interact with staff on top news. See the Guardian's flash event for #charliehebd⁴⁴
- **Micro (journalist run) news brands:** Barriers to entry are now almost non-existent, so we'll see more and more frustrated journalists from the big brands setting up their own camps (Steve Pinches). Some could launch UK ventures using new platforms like Medium following a growing US model for reader funded niche publications (via James Haycock).
- **Mobile notifications become key focus for news companies:** As smartphones cement their place as the single most important place for delivering digital journalism, news publishers will need to develop sophisticated strategies for push notifications, both in terms of when and how frequently to use them, and which devices to push them to (Jaspar Jackson). For

⁴³ <http://digiday.com/publishers/hearst-gets-one-fourth-traffic-facebook/>

⁴⁴ <http://www.theguardian.com/membership/2015/jan/08/-sp-guardian-live-we-are-charlie-live-stream>

the strategic dilemmas of this see also Alf Hermida on why ‘the lock screen is the new bundle’⁴⁵.

- **Buzzfeed becomes more of a platform** with an Amazon like Publishing as a Service (PaaS) offer to make it easier for bands and agencies to create content using the BuzzFeed formats and technology (James Haycock)
- **News companies experiment with VR:** Platforms like Oculus Rift won't be a breakthrough with consumers in 2015, but forward thinking news organisations will start experimenting with ways of using VR tech for storytelling. (via Jaspar Jackson). See Des Moines Register's first Oculus Rift experiment⁴⁶. It cost \$20,000 to film and only a handful have the headset (\$350) so this may take some time
- **Safety of journalists will become more pressing** – This was written before the Charlie Hebdo shootings but journalists are increasingly in the firing line in dangerous conflicts but now also in their offices. There'll also be more ethical issues around the dangers to free-lances and citizen journalists (via Madhav Chinnappa)
- **The increasing importance of editors and traditional values** (via George Brock and Richard Sambrook): People realise that even online-pure-play sites are shaped, given pitch and tone, branded by people other than writers and contributors. The rows and resignations at the New Republic and Pierre Omidyar's First Look group should remind people that how journalists are organised, motivated and led in teams really matters. Editing in the digital era will be different, perhaps more in the background, perhaps more felt than seen. But intermediaries still matter. (see also rebirth of curated emails and tech companies hiring editors). Richard Sambrook at Cardiff University sees some rebalancing in favour of mainstream and old fashioned editorial values: "I wouldn't want to overstate it ... but a continuation of good journalism creates value shock at least".
- **Better metrics for news** (via Jason Mills): Existing measures of unique browsers and time spent are broken in an increasingly complex multi-device world. 2015 will see a huge push for sign-in to enable more joined up and personal experiences. Media companies and advertisers are moving towards 'engaged time' or 'viewability' as two key new metrics – supported by improved time based measurement from analytics companies like Chartbeat. The FT and Economist are leading the charge for a new attention-based CPM alternative to page views – 'time spent in view'⁴⁷.
- **Rise of political satire online** (via Jonathan Marks)– Some TV satire segments are now getting far more traffic online than via the original broadcasts⁴⁸. The work of John Oliver (the Bugle and HBO's Last Week Tonight) now leads to a weekly feeding frenzy from online parasites (see article).⁴⁹ Satire and comedy is particularly suited to social media distribution and James Corden's new incarnation as a chat show host will be judged partly by his ability to generate online viral hits.

⁴⁵ <http://www.niemanlab.org/2014/12/the-fall-and-rise-of-the-news-bundle/>

⁴⁶ <http://www.fastcompany.com/3035851/world-changing-ideas/how-an-iowa-newspaper-is-using-oculus-rift-for-big-ambitious-journalism>

⁴⁷ <http://contently.com/strategist/2014/10/01/with-the-economist-and-the-financial-times-now-selling-ads-based-on-time-spent-whos-next/>

⁴⁸ See John Oliver on native advertising with 3m views for an 11 minute slot
https://www.youtube.com/watch?v=E_F5GxCwizc&feature=youtu.be

⁴⁹ <http://www.theawl.com/2014/10/the-john-oliver-video-sweepstakes>

The digital election

In terms of the result, we're predicting a hung parliament with the Conservatives the largest party and possibilities of coalition with Lib Dems, UKIP or the Scottish Nationalists.

What that prediction masks is a campaign with high levels of political interest and engagement – much of it driven by digital platforms and technology. In particular:

1. Big digital moments– These will be slices of authenticity, political gaffes and satirical videos that go viral and properly change minds. We'll see short form video services like Snapchat and Vine come into their own following breakthrough moments last year with the Ferguson and Ebola stories⁵⁰. There'll be more of them in 2015 and they'll matter more especially in engaging the young – as social media will be the MAIN way young people find out what's happening.

2. Twitter will be where most of the news is broken. Facebook will be where it will be read – David Cameron once spoke out against the dangers of using Twitter - declaring 'too many twits might make a tw**', but now the majority of MPs are on it (461) – up 80% since last time. This time round all political journalists will be using social media and the general public is also more digitally engaged. One in ten of us (9%) now actively follows a politician or party on social media according to our Reuters Institute Digital News Report⁵¹. MPs will want to use these digital channels to bypass traditional media and engage directly with voters. Those that do that authentically and regularly like [Stella Creasy](#), [Sarah Wollaston](#) and [Julian Huppert](#) should reap political dividends.

3. Political parties deploy US inspired digital campaigning techniques: The Labour party will be using *Thunderclap*, a new technology that allows supporters to mass-tweet the same message simultaneously, creating an online echo chamber that reaches vast numbers of voters. Parties will also use *NationBuilder*, US software that brings together email databases with social media, maps and electoral data to help activists target marginal voters and face-to-face visits. A number of US experts are helping UK political parties including Jim Messina former campaign manager for President Barack Obama in 2012



⁵⁰ Paul Bradshaw says "I suspect Vine may end up hosting a similar unique piece of news footage in 2015 that brings it to wider attention". More at <http://www.theguardian.com/media/2014/nov/23/vine-comedy-clips-journalistic-tool-alex-thomson>

⁵¹ <http://www.digitalnewsreport.org/>

Political parties will also continue to work in broadcast mode, spending big bucks on Facebook and YouTube advertisements - and in trying to create their own 'viral moments' through slick online videos and social campaigns.

4. Young people will re-engage through social and digital media Less than a quarter of people aged 18-24 turned-out to vote at the 2010 General Election and currently half of 16-17 year olds are missing from the electoral register. A big voter registration campaign in early February will make a difference and will heavily use all forms of digital communications including chat apps to get the message across. We're predicting 32% of 18-24s will vote this time round.

5. Digital activists keep politicians and the media honest: Full Fact, Democracy Club, mySociety, 38 Degrees and change.org are just some of the digitally savvy, people-powered groups hoping to make a difference.

- [Full Fact](#) is preparing to operate an 18-hour a day election centre, to rapidly react to false and inaccurate claims
- [Democracy Club](#) is building a network of election volunteers to help improve transparency. They'll be uploading campaign leaflets to [ElectionLeaflets.org](#) and running a database of 2015 election candidates at [YourNextMP](#)
- [Change.org's](#) petition calling for the broadcasters to include the Green Party in the TV Leaders' Debates attracted more than 270,000 signatures and influenced events. [38 Degrees](#) is running a public consultation on how to make an impact with its 60,000 active members.

6. Many will argue that you can't have a 'digital' election: Fair enough. This won't be the internet election, the smartphone election or the television election. But we've come a long way since 2010 and we'll be surprised how different it feels. If they happen, long repetitive debates on television with the main party leaders may just feel a bit stale this time round. So too, extended bulletins with the 'day in full', more from 'our man on the bus' and all the graphical tricks TV can play. I suspect many of us will be looking for something more authentic, more truthful and more human. Much of that will be found online.

And in the aftermath of the election, when everybody realised that they got the same result as before, we may see a **new party in the UK** whose success is driven by crowdsourced policies and digital communication. Five Star in Italy prides itself on its Internet-based decision making structure, as do the Pirate Parties in Iceland, Germany and Sweden. Podemos in Spain and Democracy OS in Argentina have both taken a radical approach to involving and engaging supporters online.

Focus on emerging markets

In many markets, digital patterns are largely set and it's becoming harder to make inroads in a crowded landscape. Not surprising that tech and media companies are looking further afield for growth in 2015. Half of the top online properties in the world now come from China, Russia and India.

For the next billion coming on line mobile will be the primary (or only way) of accessing the internet. In countries like China and India social media is often the starting point, the portal for everything including news and commerce.

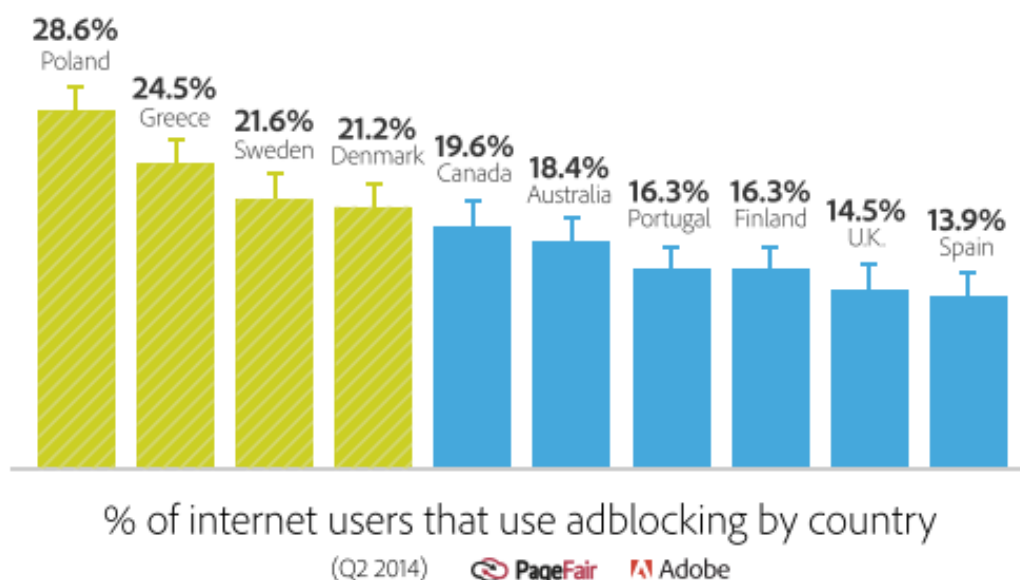


Virtual wallets, mobile payment and alternative finance systems are also proving popular in emerging economies like Indonesia and sub-Saharan Africa because they address particular local challenges. Widespread adoption in countries like Kenya is oiling the wheels of business and communication.

In that light - and with some major backers like Facebook and Samsung - Internet.org will make even more of a difference in 2014. The internet.org app provides free basic internet service in underserved parts of the world. It's already rolled out in Zambia, Kenya and Tanzania⁵². Expect a much wider footprint + new deals with telcos and bigger content brands, like the BBC and Wikipedia⁵³.

Adblockers signal death knell for intrusive banners and takeovers

According to a recent survey⁵⁴ 144m people now use ad-blocking around the world – about 5% of all Internet users. Users in Poland, Sweden, Denmark, and Greece are leading the way with an average of a quarter of their online populations using it. Software like Adblock Plus is reaching critical mass, a reaction to the growing invasiveness of digital advertising⁵⁵.



French and German publishers are threatening to sue the company behind Adblock Plus because its success is beginning to affect revenue but things are set to get worse in 2015.

⁵² <http://techcrunch.com/2014/07/31/internet-org-app/>

⁵³ Dmitry Shishkin sees big opportunities in emerging markets as access opens up in 2015

⁵⁴ http://downloads.pagefair.com/reports/adblocking_goes_mainstream_2014_report.pdf

⁵⁵ <http://qz.com/308175/the-rise-of-adblock-reveals-a-serious-problem-in-the-advertising-world/>

Currently adblocking is relatively low on smartphones because it requires the user to install a new browser (e.g., Firefox for Android), but solutions are on the way in 2015 and many will take up the offer to help reduce battery and bandwidth usage.

But it's not just publishers that may suffer. Adblock Plus lets you block up to 21 different Facebook "annoyances."⁵⁶ These include promoted posts, sponsored stories, sidebar targeted ads, upcoming events, requests to rate media, and "people you may know."

Publishers and advertisers need to do a better job of educating consumers about the costs of content creation to ensure that consumers think twice before blocking ads. They also need to address consumer concerns about advertising that affects user experience and privacy.

Elsewhere in advertising

- **Canvas fingerprinting:** is a controversial new technique for uniquely identifying a computer or mobile device from its unique mix of attributes, such as fonts, browsers etc. They are hard to block and can't easily be prevented by using standard web browser privacy settings or using anti-tracking tools such as AdBlockPlus⁵⁷ and are not covered by EU cookie regulations.
- **Offline/Online data merging:** This is another controversial new area on the rise.⁵⁸ Data brokers aim to match data about people's *offline* habits—such as recent purchases, where you live, how many kids you have, and what kind of car you drive with *online* cookies or trackers like canvas fingerprinting.
- **Emotion tracking** (both real-time and for data collection purposes) is going to become a more established concept in advertising, there are lots of companies springing up in this space to feed into those giant profiling databases (via Jon Block).
- **Out-of-home advertising** is going to be a hotbed of innovation with geolocation tech, device interactivity (especially with wearables) and camera tracking (for audience demographics as well as emotions) all coinciding at the same time (via Jon Block).

Security and hacking

2013 saw some highly successful and high profile phishing, reflection (high traffic DDoS) and DNS hi-jacking attacks. 2014 has continued the trend, with more phishing, the catastrophic penetration of Sony's network, and the Christmas scrooge DDoS of both PlayStation and Xbox networks. At the same time we discovered that tools that we've come to rely on are not as robust as we might hope. The BBC's Richard Cooper says the *Heartbleed* bug of openssl was "a shocker in the simplicity of exploit and the richness of information that could be retrieved". Half a million sites were affected

⁵⁶ <http://venturebeat.com/2013/10/22/this-tool-will-let-you-block-all-sponsored-stories-and-ads-on-facebook/>

⁵⁷ <http://www.propublica.org/article/meet-the-online-tracking-device-that-is-virtually-impossible-to-block>

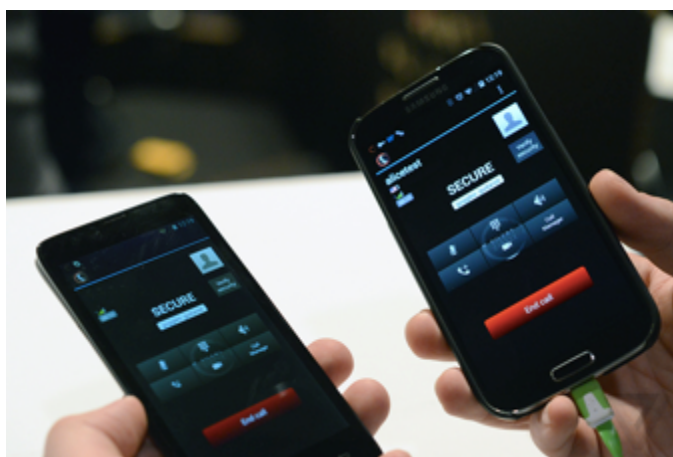
causing many of us to have to reset our passwords on popular services like Google, Facebook and Yahoo.

The trouble is we're all used to the convenience of the internet. Everyone seems to enjoy giving away their personal data to social media sites anyway, giving the attackers that much greater a surface to harvest. Two-factor authentication is tedious, but single factor is easy to phish so there are changes on the way:

- **Rise of password managers.** Because we can no longer use the same password everywhere, we need something else to remember the complex array that we have. There are a number of new tools and apps to help you do that and browsers are also getting better at safely remembering our multiple and increasingly complex passwords
- **More companies will offer password alternatives.** Mobile firms including Apple and Samsung are integrating **fingerprint-readers** allowing access to the phone and its services just by swiping a finger on the screen. Twitter is rolling out **Digits**, a stand alone service to manage access to other applications which replaces the password and user name with a mobile phone number (that has to be confirmed quickly via text).

Meanwhile, in the wake of the Charlie Hebdo attacks there'll be new debate about how far government intelligence services should be allowed to go in hoovering up our email, phone calls and other transmitted data. Stand by for more attempts to move the line from the new head of M15 and his allies. But all this may just lead to new market opportunities to protect our privacy:

The **Blackphone** is the world's first handset explicitly marketed as a privacy guardian for consumers. Useful for journalists looking to protect their sources, or anyone with a paranoid nature, the Blackphone runs its own version of Android called PrivatOS and comes bundled with a range of secure tools. You can make an untraceable phone call just like the president (see right) or send a 'silent' text.



Mailpile is a crowdfunded start up, based in Iceland that is building a fully-featured webmail system to rival Gmail while also including rock-solid and easy-to-use encryption. Of course one consequence of all this is more hassle for security services battling legitimate terrorist threats.

⁵⁸ <http://www.propublica.org/article/why-online-tracking-is-getting-creepier>

Regulation in 2015

Regulators will continue to struggle to keep up with the seismic changes brought by the internet. Top of the agenda in Europe will continue to be a) the **impact of Google and Facebook** on competition and the wider media landscape, b) a raft of **concerns about privacy** and security of data and c) how to **protect intellectual copyright** at the same time as encouraging digital innovation.

In the UK, there'll also be a range of **ground-breaking mergers and acquisitions** to consider in a world of rapid convergence between broadcast, print and newspapers. It is hard to understand the full implications of the UK tie-up between BT and EE but it is already clear this will shift the media balance in telephony and television. The deals and dilemmas will keep coming in 2015.

Across the pond, **net neutrality** has emerged as a national political debate in the United States as the FCC debates new regulation. Cable companies and ISPs continue to lobby for the right to manage their networks and charge content providers for a better service. Advocates of net neutrality argue that the Internet is an utility, essential for learning, civic participation and free expression, as well as economic competition and innovation – too important to have fast lanes and slow lanes⁵⁹. President Obama's intervention in support of net neutrality was a sign that politicians recognise how strongly the public feel about the benefits a level playing field has brought.

Technologies to watch

1. Drones unleashed: Drones have moved right up the hype curve this year and even had their own Drone Zone at the annual Consumer Electronics Show (CES) in Las Vegas⁶⁰. Apart from providing a new way to take selfies, these unmanned aircraft are already being used to enhance TV news footage⁶¹ and are gradually replacing helicopters in the £600m aerial viewing market. But in the near future, there's a need to licence them for commerce too. Amazon is currently testing the 8th iteration of its delivery drones – the so-called Prime Air unmanned aircraft project.



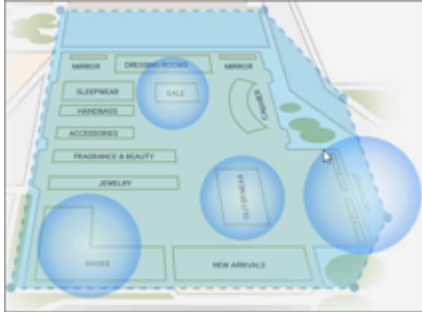
⁵⁹ <http://knightfoundation.org/features/netneutrality/>

⁶⁰ <http://www.bbc.co.uk/news/technology-30721339>

⁶¹ Peter Bale adds: People in the Hong Kong protests made fantastic use of drones in stories like revisiting Tacloban or reporting on the damage in Gaza have been made far more vivid by using drones at a fraction of the cost of helicopters.

Regulators will be struggling in 2015 how to incorporate **drones** into existing air crowded space and FAA is struggling to respond to hundreds of requests.

2. Beacons are coming: Retailers are rushing to deploy beacons in an effort to engage their customers via smartphones as those users walk through the store⁶².



Beacons are low energy bluetooth transmitters designed for indoor use, which can help generate notifications about promotions or provide information about a nearby event.

Virgin Atlantic is currently conducting a Beacon trial at Heathrow Airport to automatically pull up a user's mobile boarding pass for inspection when the passenger moves towards the security checkpoint, while Waitrose and Tesco have been trialling the device in their stores. Beacons are Beacon transmissions are compatible with many modern smartphones. They show particular promise in sporting events, museums and amusement parks.

3. 3D Printing shoots for the stars: 3D printing is beginning to get practical. Astronauts on the International Space Station used their printer to make a wrench from instructions sent up in an email. Previously, if astronauts requested a specific item, it would have taken months for it to arrive on one of the regular supply flights (via Steve Herrmann).



On the same theme the software behind printers is getting more usable – instead of having to learn complex CAD software, new scanners can turn any picture into a 3D design. Soon it won't just be plastic that can be printed either – metal, wood, and stone printing is on the way as early as this year.

⁶² <http://vincenth.net/blog/archive/2014/04/24/building-cross-platform-ibeacon-apps-for-ios-android-and-windows-with-c-and-xamarin.aspx>

4. Computing for all: Many kids (and grown-up kids) got a computer kit for Christmas like the Kano (below), a beautifully packaged and marketed Raspberry Pi computer with speaker and keyboard from \$99. It is a (partly) crowdfunded venture and is one of the devices that could help fuel the 'year of code' in the UK. The government has changed the national curriculum to cover computing not ICT, which means children as young as 5 are already learning to code in schools. The BBC is a core partner supporting with educational and entertainment programming to inspire a new generation.



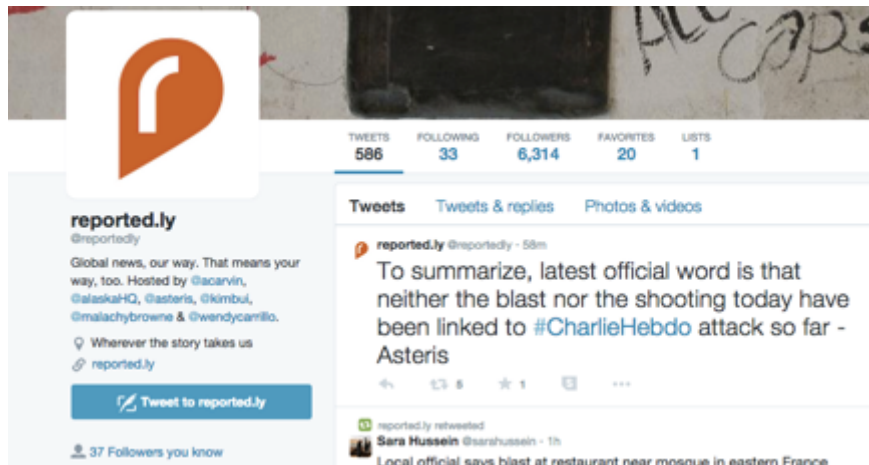
5. Next generation web: The web has been developing in an evolutionary way for the last few years, and there's been a revolution brewing in the form of ES6, ServiceWorker and Web components to make it quicker and easier to make dynamic interactive experiences. 2015 will see a significant increase in websites that only work on the latest generation of browsers, because it will be harder to make them backwards compatible than with the previous evolutionary advances. Google's Inbox app is a good early example of this. (via Andrew Betts)

6. Rise of photonics: 2015 is the international year of light and some see the technical application of light as doing for this century what semiconductors did for the 20th century. Cameras which use just a single pixel to see through smoke, imaging systems which can tame light to see around corners and miniature structures to create earthquake warning systems are just some of the quantum technologies set to be brought to market by a new consortium of universities and businesses (via Jonathan Marks).

7. Deep learning: This is a way of using computers to understanding content, concepts and relationships automatically and with great accuracy. Applications include image detection and matching, text mining, word prediction, and answering questions. So no more: "I didn't quite get that" from Siri. Last year Google acquired Deep Mind for \$400m, Twitter bought Madbits and Yahoo move in for LookFlow. Our phones and webservices will be getting even smarter soon. (via Kevin Hinde).

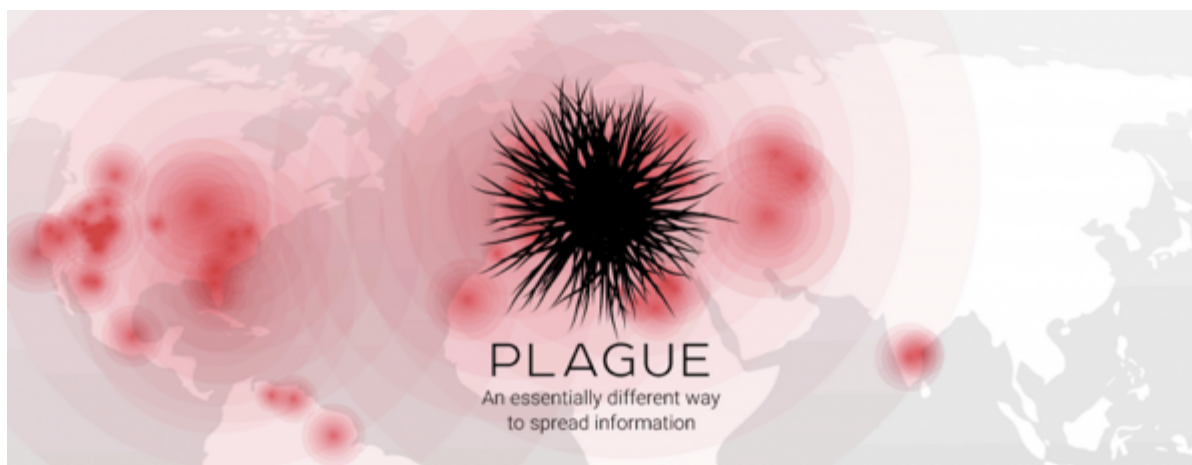
Ten to watch

1. Reported.ly: This new venture from First Look Media is native journalism for social media communities. This is not about using social media to push people back to a website, it's about taking social journalism to the next level for its own sake. Editor in Chief Andy Carvin set the template for this approach on Twitter during the Arab Spring but now he's scaling the idea by adding other well regarded social reporters and verification experts such as Malachy Browne providing coverage 18 hours a day on Twitter and Facebook. The Charlie Hebdo story provided the first test – passed with flying colours⁶³.



2. Slack: Is the communication app that lets workplaces use a group chat room, private messaging features, and file sharing. It's taken the business world by storm, and one of the fastest growing enterprise apps in history. Backed by Marc Andreesson, its founder is Stewart Butterfield (Flickr)

3. Plague: A new social app that sends messages (posts, images, videos) like an 'infection' to those nearby. These users can either infect others or stop the infection. "One of the best content driven apps I've seen in a long time", says Paul Bradshaw. It is growing fast from its beginnings in Lithuania in November.



⁶³ <https://medium.com/reportedly/baptism-by-fire-what-we-learned-covering-charliehebdo-on-our-3rd-day-fc6f479c6235>

4. Headspace: Andy Puddicombe a former monk and circus performer has set up a start up looking at ways to avoid a stressful lifestyle with mobile and web platforms that let you meditate on your own time. It has over a million users in 150 countries.

5. Electric Objects wants to give you a way to display internet art into your home. The company was founded by former Betaworks employee Jake Levine, who helped orchestrate Digg's reinvention. Electric Objects secured \$1.7 million in seed funding back in April then proceeded to raise an additional \$800,000 on Kickstarter this August.

6. Maker studios: Is one of the new companies (Gleam is another) building empires of YouTube stars around gaming and youth culture that still remain below the radar. They are huge, and young people love them. Their parents have almost no idea what they are and how much influence they have. (Jaspar Jackson)

7. Mic.com: Mic is a media company built for millennials. In the three years since founding the company, Chris Altchek and Jake Horowitz have built a modern media brand from the ground up, recruiting top talent on the way. The company has raised \$15 million to date and attracts 19 million readers per month.

8. Super: New social platform from Twitter co-founder Biz Stone. Billed as when social met doctor Seuss. It is fun and visual. The app allows you to create and share short thoughts or opinions overlaid onto photos. Each thought begins with one of the app's built-in prompts, like "The best," "I'm thinking," or "Check Out." Users then add their own text to finish the thought, pick a photo and sign it. (Via Jason Mills)

9. Popcorn Time.io: The original app allowed you to stream movies and TV programmes using BitTorrent files was pulled in 2014 and legal action threatened. Several copycats have developed along with a new PopcornTime.io, which offers an easy interface and now supports those who wish to mask which country they are in to avoid being fined. (via Richard Sambrook)

10. Moment: If your New Year's resolution is to reduce digital addiction and spend more time with your friends then this app will track how much you use your iPhone and iPad each day (no Android version yet). The app will tell you off when you go over your limit. *Moment Family* lets you monitor your whole family's phone use — but you have to look at your phone to do it!

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