Contents

- Introduction
- Reality Check
- Hassle Free
- Digital Dieting
- Connected Me
- Tunnel Vision
Introduction

Here at Mindshare, our purpose is to create valuable experiences for people in media.

As technology reshapes the ways in which brands can reach consumers, all too often the human at the receiving end of is neglected. We aim to change that by focusing on creating valuable experiences for people and brands.

Mindshare Futures is the research programme that underpins our purpose. It runs throughout the year, constantly monitoring and testing emerging tech innovations and the wider cultural changes going on in the world. It all culminates in our five trends to watch report for 2017. These are the technology and cultural trends we expect to see accelerate in the next 12 months and continue to resonate for the years ahead. Some are brand new, and some have developed out of trends we have highlighted in previous reports.

People remain firmly at the heart of all of our trends; and we view talking to them as the most important part of our entire Futures programme. After all, it’s not a trend unless there is actually some kind of consumer motivation behind it. Innovations are all well and good, but if no one knows about them or wants to use them, their value is limited. It is all too easy to become immersed in our own media environment, believing that everyone views daily life as we do; our very own agency form of ‘Tunnel Vision’. For this annual report we surveyed over 3,000 people, held focus groups, ran online qualitative and diary style exercises with over 100 people, and carried out social and search analysis.

Over the coming pages we discuss these trends and how they will impact consumers, brands and media in the future. We will provide examples of these trends in action and give a unique consumer view in our ‘back in the real world’ sections. Throughout 2017 Mindshare Futures will continue to investigate these trends in even greater detail, via a variety of set-piece studies, always putting real people at the heart of what we do. Exciting times ahead. Watch this space and we hope you enjoy the read.
What is it?

A raft of virtual, mixed and augmented reality experiences are coming our way, but will they be successful? It’s time to cut through the hype and get real about reality.
The origins of these technologies date back to the 60’s, although the experiences were not necessarily those in name or exact format back then. Their roots lie in NASA projects, flight simulators for military training and early gaming experiences. So really these experiences are not as new as we think. What’s different? Why is there so much buzz about them now?

We flagged the growth of these experiences in our 2015 report as part of our trend ‘Extra Sensory Dimensions’. A lot of progress and investment has happened since but realistically it is still early days and these experiences have not yet made their way to the masses. Many remain convinced they are still set to take off in a huge way, based on the belief that technology is finally available that will deliver compelling experiences for people in an accessible way.

Over $1.1 billion was invested in 2016 alone and the majority of big players such as Apple, Google, Facebook, Microsoft, Samsung and HTC are all involved.

But what do we mean by Virtual Reality (VR), Mixed Reality (MR) and Augmented Reality (AR)? There is much debate around what constitutes each of these technologies. In a nutshell, Virtual Reality provides an experience in a computer generated world whereas both AR and MR overlay computer generated things into your real world environment. Not everything you view in a headset is necessarily VR. Things like 360 videos aren’t strictly VR as the content is real footage and you are more of a spectator. MR is a newer term (some call ‘real’ AR) where those overlaid virtual objects will hold their position, getting closer or further away as they would in the real world. When you look outside of the industry, these terminologies are not fully appreciated as the technology is still so new to people. They fail to know or care about the difference and for them, the experience takes precedence. What experience am I having? How good is it? And most importantly, how does it make me feel?
How is it developing?

Mass adoption of these types of experiences depends on three things.

Accessibility and affordability – So far, most people’s experiences of VR, AR or MR will have been relatively basic and primarily smartphone based, using filters on Snapchat, playing Pokemon Go, or via 360 video in a low cost phone based headset such as Google Cardboard or Samsung Gear. These kinds of experiences are set to grow rapidly in the short term as they use accessible technology and do not require any expensive hardware. However, the quality of the experience is limited. More expensive VR headsets such as the HTC Vive, Oculus Rift and Sony Playstation VR offer a far superior experience, but come with a price tag of £450 upwards and that’s only if you have the processing power to run them. Particularly advanced AR headsets such as Microsoft’s Hololens start at around £2000. Maybe acceptable for enthusiasts but for a broader audience, this cost is hard to justify at this early stage. These advanced VR headsets are packed with sensors that track eye and head movements and are becoming more advanced by the day, providing more impressive, interactive and immersive experiences. However, most people have simply not been exposed to them yet and are unaware of what they are missing. More attainable options are on the horizon, such as Google’s Daydream. Sony are making their VR headset compatible with the PS4 and brands like Snapchat (now Snap Inc) are also developing AR hardware, which will all increase exposure. Fundamentally though, irrespective of cost, there is huge barrier when it comes to headsets - people are simply not accustomed to wearing them.

Acceptance of the experience itself as a concept – VR experiences themselves do not blend seamlessly into our lives either. Tim Cook, CEO of Apple believes that AR might have more commercial longevity, as it allows users to be more ‘present’ and can even facilitate shared experiences. We can be interactive in a VR environment but it can feel quite solitary and detached from the real world. For some, this is the whole attraction. The whole concept of gaming is based around escapism and now VR promises a different kind of escapism altogether — a chance to fully immerse ourselves in experiences we could only ever dream about, such as having magical powers or superhuman strength. Some believe that too much of this could leave us too far removed from the real world. Often these people are the same people that struggle to see any applications for the technology beyond gaming.

Application and content – VR is definitely not limited to gaming and fantasy worlds. It can be rooted in the real world and could give us a whole new perspective on holidays, sporting events, concerts, theatre and transform the way we shop. VR could also enable us to learn and absorb news and information in a totally different way. When it comes to AR, current applications are quite fleeting and frivolous and we need to demonstrate that it is not just a gimmick. It is likely that more all-encompassing examples of AR/MR, such as Microsoft’s Hololens or the Google backed Magic Leap will convince people about its broader applications. This technology could be used for pretty much anything, from providing step-by-step interactive DIY instructions through to a whole new screen-less entertainment experience.

It is early days for brand involvement in VR, AR and MR and people are waiting for more of their favourite brands to create content, although many are holding out until the technology has become more popular — a bit of a chicken and egg situation. VR, AR and MR all have a variety of different strengths and could be usable for very different need states and applications. It is matching these need states with the right application and content that will make all the difference to its success. When the experience is done well, there will be absolutely nothing to match it.
Reality Check

In This Space

1. **Google Daydream Headset**
   - Android phone based virtual reality headset covered in soft material and coming in at an affordable price tag of under £100.

2. **Lowes’s Hologram Experience**
   - Lowes has partnered with Microsoft to bring customers an augmented reality home improvement visualisation tool that allows people to interact with their kitchen renovation designs.

3. **Ebay VR Department Store**
   - In Australia, Ebay and retailer Myer gave away 20,000 VR viewing devices to launch the world’s first virtual reality department store, in which ‘sight search’ is used for navigation within the experience.

4. **Samsung VR Bedtime Stories**
   - Samsung has launched a live storytelling app to bring parents and children who are apart in the physical world together inside an interactive VR experience.

5. **Inkhunter**
   - An app that uses augmented reality to let you see what any tattoo would look like on your body.

6. **The Guardian**
   - The Guardian have set up a new virtual reality content team to offer an extra dimension to storytelling in their journalism.

7. **Google Cardboard Camera**
   - A new camera app allows iOS users to create 3D panorama photos that can be captured with sound, and then brought to life in VR.

8. **TUI**
   - The travel agent is planning to scrap brochures in favour of VR headsets to inspire customers and deliver a holiday experience in-store.

9. **Abba Virtual Experience**
   - The band announced the launch of a ‘virtual and live’ experience in 2018 that will give fans a way to experience their music in a previously unimaginable way.

10. **CBS Digital**
    - CBS Digital have developed a system called Parallax which recreates digital locations and helps TV directors view sets in a virtual space.

11. **ThyssenKrupp**
    - An elevator manufacturer, ThyssenKrupp uses Microsoft’s HoloLens to visualise an elevator repair before a technician reaches the site. Once there, they can use AR to view digital overlays or manuals and guides.

12. **Audi**
    - Audi’s TT brochures become AR-compatible smart surfaces, with interactive previews of the car’s features.

13. **Star Chart**
    - This AR astronomy app overlays graphical representations of planets and constellations over the night sky and gives users information about those in their field of view.
Reality Check

Expert Opinion

ADAM FOLEY
Commercial Strategy Director
Guardian News & Media

With 2016’s release of new headsets, virtual reality started its move away from being an emerging platform to one that offers media owners and advertisers a new way to tell stories. Whilst we should be mindful of its current limitations and avoid the temptation to do something new for something new’s sake, we should also grasp its potential. Virtual reality offers the chance to completely change the way that people think. As the old saying goes, don’t judge someone until you walk a mile in their shoes – when VR is done well, it’s impossible to see the world in the same way.

Advertising is fundamentally about persuasion, moving someone from thinking one thing to something that changes their behaviour. This technology offers the chance to do that as never before. The main challenge at the moment is scale. Although headset ownership and usage is growing, VR is not yet at the stage where it can act as the lead platform in any campaign. Having said that, advances in 360 video distribution through YouTube and Facebook mean that light versions of VR stories can get wider reach.

At the Guardian we’ve invested in our own virtual reality team and already set the bar with our award-winning 6x9 – an experience of solitary confinement – and our latest release, Underworld – a subterranean journey in London’s sewer system, which we launched with Google for the launch of Daydream. Each project breaks new ground and we’re looking forward to building on these successes and working on a wide range of topics. As we do this we’ll be interested in greater collaboration with brands and partners to make virtual reality stories that are relevant, impactful and most importantly, persuade people to change their behaviour.

SAM GREEN
Mobile Strategy Director
Mindshare

The mobile phone that already sits in our pocket is the key to scaling this exciting new world that will fundamentally change the way we communicate and consume content. Pokemon Go and Snapchat Lenses have already proven you don’t need expensive new hardware to scale valuable and entertaining AR experiences, whilst Google Cardboard is unlocking VR for anyone with a smartphone and a 99p piece of cardboard. It is these products that have fuelled the excitement and mass trial of AR and VR experiences, which in turn has driven billions of pounds worth of investment into new platforms and content. There is no doubting the high end premium VR products from HTC VIVE and PlayStation are exciting game changers for the 5% who can afford them, but for me the imminent future will be dominated by players like Gear VR who combine a new piece of low cost hardware with the £700 mobile devices we already own, to create stunning experiences at a fraction of the cost.

Until we can be convinced that wearable glasses are cool (Snapchat Spectacles are a start but still don’t do real time augmentation) or that AR contact lenses are imminent (surely a while off yet), I think the world of AR will be dominated by the world’s most popular camera – the mobile phone.

TIM ELKINGTON
CSO
IAB UK

I’m 45 and have worked in media for 23 years. I’ve seen most things happen, at least once, and because of that not much gets me excited these days. The exception to this is Virtual Reality. Everyone has their own ‘first time’ story about VR. I’d had a few go’s before, but hadn’t really got into it. The phrase ‘I tried it, but didn’t inhale’ springs to mind. What really blew me away was standing in my own kitchen, clapping some Google cardboard to my face and being taken to New York Times’ Man on Spire film. The feeling in my stomach, the vertigo and fear of falling was unmistakable, my lizard brain had taken over.

It’s this sheer level of reaction and excitement that convinces me that VR isn’t just hype but will deliver for brands in a way that few other media can. Judging by some predictions, I’m not the only one getting excited about VR. Deloitte described VR as a billion dollar niche when they forecast that 2016 would be the year VR broke $1 billion in revenue with $700 million spent on hardware and $300 million spent on content.

But what about VR and advertising? While it’s clear that the strengths VR offers brands are around immersive storytelling, the ability to stir emotions and the chance to showcase and test otherwise inaccessible products and services, it’s less clear how advertising might work on the platform. This is especially true in an age where the advertising industry is embracing more natural and less interruptive ad formats. It’s unlikely that shouty, interruptive formats will work in an immersive VR environment. What’s more likely is that brands will invest in creating content for VR environments and use above-the-line advertising to promote these experiences.
Imagine that you’re standing on the roof of one of the tallest buildings in Manhattan. You’re in your socks, and the wind is whistling in your ears. All you have to do is step on the high wire in front of you and take a walk 400 meters above the busy streets below—without a safety harness. Can you do it?

This is the challenge in PlayStation VR’s “The Walk” and as Dr. Richard Marks of PlayStation Magic Lab showed us, many people can’t take that step, even though they know their feet are very firmly on the ground.

It’s easy to think that locking yourself away in a headset whilst entertaining, will always be an isolating experience—one that perhaps we shouldn’t encourage in a world that’s crying out for more human interaction. But at Cannes this year, almost every speaker contradicted this view, suggesting new directions for us to explore in the future.

While the ability of VR to scare you is certainly impressive, the power it has to make you believe that someone else is there sitting right beside you, has even more possibility. That simply doesn’t happen with a screen on the other side of your living room and is why Richard Marks believes that VR will become a very social place to be in the future. For example, according to Chris Brewin Professor of Clinical Psychology at UCL, patients struggling with anxiety and depression can be helped by interacting with avatars within a virtual environment. The promising results of his study showed an increased capacity for compassion and a reduction in self-criticism. And it turns out that the avatars don’t need to be especially realistic either—as long as they behave like real humans the results will be the same. Just think what you could do with that?

I love this new immersive world, and like a lot of creative directors, have found myself on a steep learning curve to see what works, and what doesn’t. For me now, it’s all about thinking beyond the tech, to try and use the virtual world to create new levels of empathy in the real one.

In an era of increasing focus on experiences that take us out of our current reality, it is important to remember that we are still physical beings. We thrive on connections with other people: we chat, we laugh; we hug. Virtual and augmented reality might deliver us experiences that take us into new and different spheres, but we still need and want physical experiences.

Touch affects our behaviour—whether we are aware of it or not. People who are incidentally touched are more likely to increase their compliance or civic behaviour, such as returning a coin left in a phone booth by the preceding caller. This effect, now known as the ‘Midas touch effect’, occurs whether the person touched remembers it or not. Touch is the physical extension of our emotions so it’s no surprise that the word we use to describe our emotions is a touch word—we talk about feelings, because our sense of touch is directly linked to our emotional responses. Our emotions affect how we experience pleasure and pain—and vice versa.

So in an increasingly digital world, let’s not forget that we are still physical beings, made of flesh and blood and not holograms!

In contrast to the above, VR tech is here and now, and aside from the downside of tangling yourself up in wires, at present offers a level of immersion unparalleled with anything else. Having a couple of clear market leaders in the field allows 3rd party companies and brands to have a clear strategy, control of experience and development path to plan experiences and content. However, sampling and trialing is much harder and more time consuming, as the set-up is more expensive and this does make hitting large numbers of users difficult.

Convergence and take up of this technology will continue apace, whereby virtual or semi virtual worlds using visual displays, will eventually be as common a place as the TV or mobile phone are in our lives now. The benefits of this technology in medical science, engineering and entertainment are already well documented, but the future possibilities and opportunities are limited only by our imaginations. So maybe you have to ask yourself: ‘are you ready player one?’

**Reality Check**

**Expert Opinion**

**BECKY POWER**  
Creative Director  
Mindshare

Touch is being embraced by marketers—at the heart of every Apple store is a low kitchen like table which invites customers to try out and touch all their desirable gadgets. Apparently one trick by the sales people is to leave some of the products off centre or slightly sticking off the table—the consumers will see this and push it gently back on getting their first important touch or contact with the gadget.

AR and MR-tech at present has novelty factor in spades, but after a brief period (mostly flinging balls at Pokemon who have showed up in unusual places) I’ve yet to see a genuine existing use for it other than draining you mobile battery too quickly. That said, it’s obvious that its future is in HUD’s in things such as cars, or wearables such as sunglasses, headsets and bike helmets. At present it’s held back from truly exploding as it doesn’t have a universal platform. Instead it’s predominantly smartphone based, meaning the actual user base is split across multiple devices, each with their own specs.

**DENISE TURNER**  
Insights Director  
Newsworks

AR and MR-tech at present has novelty factor in spades, but after a brief period (mostly flinging balls at Pokemon who have showed up in unusual places) I’ve yet to see a genuine existing use for it other than draining you mobile battery too quickly. That said, it’s obvious that its future is in HUD’s in things such as cars, or wearables such as sunglasses, headsets and bike helmets. At present it’s held back from truly exploding as it doesn’t have a universal platform. Instead it’s predominantly smartphone based, meaning the actual user base is split across multiple devices, each with their own specs.
We talk a lot about an increasingly commoditised attention economy, where it is difficult for brands to get noticed, and even harder to get people to actually spend enough time engaging with the brand for it to have any long lasting effect on their attitudes and behaviours. It’s ironic that in a world that has never been more connected, it’s now increasingly hard to connect with people.

VR is becoming an increasingly credible and effective way for brands to overcome this. There is no doubt that it can create a quality level of sustained engagement, and when executed well it can create powerful brand experiences that people will remember, and importantly make a clear statement as to what a brand stands for.

Not many people will be able to tell you the last time they saw an advert for a brand or mention a product, but for those people who were immersed into the shocking reality of life under the ocean, or were able to practise complex operations, able to ‘in the same room’ with your business partners. As Confucius said: “Tell me, and I will forget. Show me, and I may remember. Involve me, and I will understand.”

The technology will open up amazing new ways to connect with consumers for a whole host of different verticals - I am envisaging applications from entertainment to retail, from automotive to travel and many more. It’s hugely exciting to be getting in on it at this early stage. Let’s see where this new world takes us.
Virtual Reality vs. Augmented Reality

Volume of social conversations in the UK, 2013-2016

There has been a clear increase in VR and AR conversations over the past years (see below). VR conversations have been mostly fueled by technology improvements within the gaming industry, whilst conversations around AR seem to only rise when a possible new need for the technology is found.

Over the past 4 years VR has accounted for over 80% of all conversations and AR 20%.
Goldman Sachs predict that virtual and augmented reality will grow to be an $80 billion market by 2025, around the size of the desktop PC market today. Initially gaming will be the driver but as economies of scale allow prices of the hardware to come down, usability increases and the type of experiences improve, these technologies will be used for many things. VR, MR and AR could be the future of content and brand experiences. A large majority of the experiences we have in the future could be completely transformed, from how we buy products to how we learn. The experience economy could take on a whole new dimension with people striving for the latest experiences that reflect who they are, using them as a form of social currency.

VR, MR and AR are set to become even more all-encompassing, creative and in some cases even more social. We will progress from basic interaction in VR to room scale experiences with motion trackers allowing us to move around and truly be part of the action. We have already started to see this and it will start to become more standard. We may start to enhance our virtual experiences by factoring in other senses, such as smell, taste and feel. People will also be able to create their own virtual environments, using applications such as Google Tiltbrush.

MR and AR will likely scale more successfully than VR, allowing a different level of creativity and interaction – the difference between transporting yourself into another world or creating your own world in your back garden. AR and MR will also become much more of a social activity/shared experience. It is very likely that people still won’t care about the nuances of what is VR, MR or AR, and will label it all as virtual reality and it is possible that even further in the future, these technologies could essentially change how we understand and identify what is real.

Virtual and augmented reality will grow to be an $80 billion market by 2025.

What this means for Brands

VR, MR and AR open up huge opportunities for brands when it comes to connecting with and engaging their customers. As attention spans and time spent with brands gets shorter, these technologies offer the opportunity to capture attention and re-engage people, creating memorability and share-ability. Brands can offer personalised experiences that could not only offer utility for people but could fuel the imagination and turn aspirations into reality.

Brands will need to identify what content will resonate most with their customers and create a VR, MR or AR experience with this in mind. Are there any current barriers to dealing with your brand or category? Is there a way to make customer service better? Could people experience the product differently? Is there something people wish they could do with your product? Think about what people will find a compelling experience that they will want to talk about and share. Work out where you want people to have this experience – is it at home, in store or out and about? Once you know what you want the experience to be and where you want people to experience it, then chose whether it is VR, MR or AR that will best deliver that application. It will be important to choose the application first, then the platform. Play to the strengths of each platform and consider that these strengths might well change rapidly as the technology progresses. Innovations in this space will happen fast and need to be quickly but fully comprehended and actioned on, but the rewards could be great for brands that are willing to embrace these new technologies and do it well.
Reality Check

Back in the real world

For the majority of people, VR and AR technology still feel very new. As an industry, we have heard lots of buzz around this space for a while now, but our research shows that this is not necessarily translating to the masses just yet. It is easy to be tricked into thinking that awareness and trial of the technology is much further down the line than it actually is at this point in time.

There is a slight disconnect between awareness and experience with VR and AR technology. Two thirds of people (66%) are aware of VR technology, however only a quarter (26%) have tried a VR experience. On the other hand, while awareness of AR technology is significantly lower than VR (32%), when prompted 35% have actually been exposed to an AR experience (this is driven by Pokémon Go and Snapchat, especially for 18-34 year olds). Most have limited knowledge of the technologies and were not aware of the differences, nor frankly did they care for this detail. In their minds, pretty much everything fell under the umbrella term ‘virtual reality’, which would explain the low unprompted awareness of AR as a term and they were certainly not aware of MR!

This general lack of exposure to VR and AR technology drives relatively low expectations of what it can deliver.

“I imagine VR is fun, but I can’t see it getting close to the real thing, let alone being able to surpass it.”

How do you feel about where Reality Check could go in the future?

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<th>How do you feel about where Reality Check could go in the future?</th>
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“I don’t believe it is as realistic as people make it out to be... but then again I haven’t actually tried it.”

With a lack of faith in what current technology can do comes a concern about value for money. When it comes to hardware, although 35% are interested in purchasing a headset, many people are holding out for a drop in price before they purchase a product they are still a little wary of.

“I really hope the prices drop for the headsets because I’m also going to have to upgrade my computer specs to make this work.”

Amongst those who have tried the technology, many feel that the physical headset is uncomfortable and isolating, which proves a significant barrier to regular usage.

“I’m not sure it is a technology I will use that much. I find the physical wearing of the gear very uncomfortable and the isolation of viewing something that you can’t share is really quite odd.”

Another issue is that, even if people are aware of the technology and have tried it, they do not necessarily see the relevance of it in their lives - only half (65%) feel that this trend has relevance to them.

“I have no doubt that some of these technologies will be life enhancing, but they have yet to really touch my life – even though I’m open to them.”

“I struggle to see where it will be an advantage in day to day life. I don’t see it becoming something people use everyday.”

Most struggle to dissociate these technologies with gaming and cannot imagine the broader applications. When pushed to think of applications beyond gaming, they turn to industry applications such as medical training, education or scientific uses. There is a real gap here for brands to show people how these technologies can play a part in their everyday lives.

“I can’t wait to see the ways that these technologies could be used. I just don’t think we are there yet and I’m not great at thinking them up myself.”

There are clear groups of people (18-34 year olds and parents in particular) who are very excited about the immersive experiences that VR and AR can offer and the future of where this technology can take us.

“I feel like I’ve been waiting my whole life for really realistic VR technology to be available.”
“Honestly, I’m so excited and fascinated by VR. I expect gamers will embrace this technology first and then it will spread onto others.”

However, for others there are some real concerns about the social impact of a technology that is so solitary in nature and so far removed from the real world.

“There is a danger of us distancing ourselves from real life into some matrix-like reality where it doesn’t matter what’s real and what’s not anymore.”

As it currently stands, VR and AR technology are potentially in danger of falling into the territory of being gimmicky, a fad or only relevant for gaming.

“I feel VR and AR are going to be a big step forward for technology. There is the potential to engage humans by increasing their knowledge and interactions with others.”

“There are a danger of us distancing ourselves from real life into some matrix-like reality where it doesn’t matter what’s real and what’s not anymore.”

As it currently stands, VR and AR technology are potentially in danger of falling into the territory of being gimmicky, a fad or only relevant for gaming.

“These ideas are fun but they just don’t replace real interaction. I think people will get bored of these gimmicks once they are no longer new.”

Despite these challenges, people are eager to be shown the true potential of these technologies – 43% like the idea of these kinds of experiences and 48% believe there is a big future for VR and AR (rising higher for both men, younger age groups and parents). There is also potential for word to spread, with almost half (49%) believing they would share a good VR or AR experience with friends (62% amongst young males). As more and more relevant content is rolled out, trial and advocacy will be key to this trend really taking off.

So where does this leave us? The feeling is that it is early days. The true height of VR and AR technology still feels like it is a good few years away for most people. Of all of our trends this one feels the furthest away with 91% agreeing that it will peak in the next few years or further in the future.

“I think VR and AR will become mainstream in the next few years. We will see its popularity growing, there are exciting times ahead!”

When do you feel this trend will be at its peak?

- At its peak now: 9%
- At its peak in a few years time: 42%
- It’s only in its very beginnings and will be at its peak much further in the future: 49%

How relevant to you is Reality Check?

- 65% of all adults find Reality Check relevant.
- 83% of age 18-34s find it relevant.
- 64% of age 35-54s find it relevant.
- 40% of age 55+ find it relevant.
What is it?

The increasing use of technology to iron out the inconveniences and irritations of everyday life.
The rise of Hassle Free has been brought about by the twin drivers of fundamental human needs and the rapid pace of technological developments.

From a human perspective, convenience has always proved a powerful source of value in the modern consumer age. As the general pace of life and pressures on everyday living have increased, so has the desire to do things more quickly, more easily or more simply. In this regard technology is a double-edged sword, both demanding an instant response from our attention and presenting the means for managing those demands. It is through the fundamental desire to minimise inconvenience, exacerbated by the growing demands placed on our attention by technology, that the demand side drivers of Hassle Free can be found.

On the supply side, it has been rapid technological advancements in areas such as AI, IoT, big data analytics and ecommerce that have helped create services that take some of the hassle out of everyday life. By introducing greater automation and intelligence to software and connectivity to hardware, the technology is now in place to minimise hassle across vast swathes of day to day living.

In this regard technology is a double-edged sword, both demanding an instant response from our attention and presenting the means for managing those demands.
People are already starting to relinquish control to technology, effectively allowing it to act on their behalf, in ways that help minimise inconvenience or save us time or money. Smart meters are managing energy usage, coffee machines are automatically ordering fresh supplies and virtual assistants are alerting us to problems on our commute to work. Hassle Free is not typically about getting enhanced performance from products or services, but is focused primarily on efficiency and productivity – achieving the same ends with less effort (time, mental effort, energy) from us.

We can see this trend developing in a number of areas of everyday life:

**Hardware & the Connected Home** – The fundamental premise of adding connectivity to hardware around the home, whether that be thermostats, lighting or security systems, is to make life flow more smoothly. Next year we can expect big growth in this area through Amazon Echo, the launch of Google Home and the integration of Viv, Samsung’s recently acquired AI system, into household appliances.

**Task specific applications** – We are starting to see innovations applying AI to specific everyday tasks in order to alleviate discrete pain points. X.ai has gone into beta in late 2016 as an AI service that schedules meetings on your behalf. The standout example perhaps this year was DoNotPay the chatbot lawyer designed to contest parking fines.

**Integration into everyday services** – Pre-existing services are increasingly applying AI to improve the customer experience by ironing out bumps along the consumer journey. While we have come to expect this in ecommerce through product recommendations, automated shopping lists and suggested delivery times, it is becoming more and more prominent in our core mobile services; the automated responses in gmail or messaging platforms to save us the hassle of typing our own messages or the suggestions from our calendar of when to depart to make a meeting are both examples of the types of low level hassle saving innovation we’re starting to expect from brands.

**Programmatic Commerce** – The automated re-ordering of physical products is the Hassle Free application that is currently least developed but has the greatest potential impact. There is certainly demand for the automated reordering of low interest household products (eg toilet paper or cleaning products). We are starting to see the infrastructure for this come in to place with Amazon Dash Replacement Services integrated into appliances and objects around the home. The challenge will be whether people are emotionally prepared to give up control to the algorithm to enable full programmatic commerce to gain traction.
Hassle Free
In This Space

1. SNOO
Smart crib that has microphones, speakers and sensors embedded into its structure and will rock babies back to sleep with a ‘womb-like motion’ whenever it hears them cry.

2. GOOGLE HOME
A voice activated speaker that hosts the AI Google Assistant and works as the control hub for connected home devices.

3. EAT WITH AWA
Using a combination of image recognition, AI and nutritionists, AWA seeks to help people eat more healthily by analysing photos of users’ foods and sending them nutritional information and meal suggestions.

4. WEMO SWITCH
Using Wi-Fi, the switch lets you control any device from the accompanying app on your phone.

5. ZENBO
A smart home robot operated via voice that can act as a home manager, security guard, and family photographer.

6. SAMSUNG FAMILY HUB FRIDGE
This smart fridge links to ordering services, plays films and lets you remotely see inside it.

7. X.AI
A personal assistant who schedules meetings for you.

8. APPLE HOME KIT
Smart home ecosystem bringing all your smartphone devices into one place. Can be remotely controlled from your phone.

9. GOOGLE
AI powers many of Google’s consumer offerings – for example, it organises your pictures in Google Photos and offers you suggestions for email responses in Gmail.

10. NOTION
Notion is a start-up app that learns from user’s interactions with different emails and highlights importance depending on your previous interactions with the sender.

11. AMAZON ECHO
Hands-free smart speaker controlled by voice. ‘Alexa’ plays music, provides information, news, sports scores and weather.

12. EBAY SHOPBOT
eBay is testing a personal shopping assistant chat bot that will use AI to learn more about shopper preferences and help tailor ebay searches.

13. VIV
Recently acquired by Samsung, Viv Labs have created an artificial intelligence platform that enables developers to create an intelligent, conversational interface to anything.

14. AMAZON DASH REPLENISHMENT SERVICE
Code that enables connected devices to order physical goods from Amazon when supplies are running low.
Hassle Free

Expert Opinion

RUTH ZOHNER
Head of Programmatic Marketing
Mindshare

Simply put, programmatic marketing is based on the application of technology and data to create opportunities for automation, remove points of friction in the media buying process, and collect data to further understand the people behind audiences and segments. Whilst we still haven’t achieved 100% ‘hassle free’ marketing through this, we have significantly diversified the amount of data points about people, found even more creative formats to convey a message, and increased the number of media buying transactions to facilitate those touch points on any given day. With this level of complexity, the opportunities to create more personal experiences through marketing demands daily use of algorithms to speed up the decision making process and application of machine learning to evolve a marketing approach, among other things.

The growth in AI, and more importantly, the Internet of Things represents an exciting evolution of what we do through programmatic media today because it opens the door to an even more diverse data set we can apply to understand people. Any interaction with the IoT can become a data point on that person, and any technology a potential media touch point – marketing will not only be reserved to the addressable channels we immediately associate with programmatic marketing today (like display, search, and even some elements of radio and TV), as anything and everything becomes ‘media’.

Brands, hence, will need to find new avenues to connect with people at the right time and – most importantly – in the right mind-set. Efficiencies in doing the weekly shop or in researching holidays, to cite some examples, will take place alongside two opposing dynamics: an increase in hours spent online juxtaposed to an also increasing blindness for marketing content. So let’s be clear, more is not always better in this context.

Receiving a discount from a brand deploying a strategy to conquest buyers away from competitors as they ask Alexa for a specific product or service is not far in our future. Yet emphasis on a differentiated experience to connect a brand with its people will be just as important as it is today – perhaps even more. Brands, hence, should be focusing on laying the technical infrastructure and business partnerships to harvest this new type of data, and be in the best position to apply it smartly to regain people’s attention when the time comes.

For consumers ‘hassle free’ tech can make help us make better decisions and save us time, but at what cost?

The fitness organisation monitoring each beat of my heart and every calorie I consume, the entertainment system recording every second of video I watch and the location tracking on my phone logging my every move. I give this data away freely in exchange for a hassle free life, but what happens if these organisations decide to use my own data against me in the future? I could be giving up the choices I want to make for myself, or paying to access information that I provided in the first place. So longer term we need to consider the true meaning of hassle free.”

POLLY CHANDLER
Digital Strategy
Mindshare

I’ve run out of milk, so Amazon orders more. Great! But who decides which brand to order? Does the paradigm of choice through brand familiarity suddenly become redundant when the decision of which product to buy is made for me? If not faced with a shelf (physical or virtual) full of choice, those impulse decisions to buy more, or buy a different brand vanish. Loyalists and our ability to create lots of them will be one of our greatest assets. VFPs could very quickly become gate keepers to consumer choice and therefore our brand’s successes, so more than ever we will want our customers to order ‘Cravendale’ not ‘milk’. Those less salient brands must learn to become as accessible to the AI algorithm as possible and compete on a level playing field with competitors for visibility.

For consumers ‘hassle free’ tech can make help us make better decisions and save us time, but at what cost?
Way back in 1905, Nobel Prize-winning bacteriologist Robert Koch presciently warned: “the day will come when man will have to fight noise as inexorably as cholera and the plague.” Little could he imagine the sheer volume of noise today’s world-weary citizens encounter every day – everything from the roar of passing jumbo jets to the sonic plague of Justin Bieber.

This noise comes in all shapes and forms, a veritable tsunami of daily sounds from that first ‘ping’ from your mobile phone when you wake up to the last notification before you go to bed.

No wonder people are looking for ways to reduce the daily noise, to filter and block anything intrusive, unwelcome, and irrelevant...including advertising. In the US, Americans are bombarded with an estimated 4,000 to 10,000 ads a day. In a desperate attempt to cut through all the noise, advertisers have conjured up every imaginable way…pop-ups, take-overs, non-skippables…to stop you in your tracks, whether you like it or not. Which is why it should be no surprise that ad blocking is growing by an estimated 41% year-on-year. So how should the industry respond? There are some simple and pragmatic measures, most notably embracing the IAB’s LEAN (Light, Encrypted, Ad choice supported and Non-invasive) principles, which attempts to address the four deadly sins of online advertising. However, increasingly the answer may be less noise. In fact, it may be silence.

The third wave of digital disruption, the Internet of Things, is upon us and like previous disruptions it will bring new opportunities and challenges. One such opportunity comes from the flow of data that will emerge from the over 50 billion objects that will get connected to the Internet. Everything from houses and cars to your body. Many of these connected objects will be products such as Nike sneakers, Nespresso machines and Hellman’s mayonnaise jars. For the first time these products will be able to talk or send messages either explicitly or implicitly. The key question is what these products say and whether you even need to know they are saying it?

There are multiple use cases of silent data exchanges from products that will reduce your daily noise intake while still making your life easier. For example, if your Hellman’s mayonnaise is about to expire, the physical product in your fridge could send a message to your Amazon shopping basket to re-order. Your Nespresso machine could count daily capsule usage and send caffeine consumption data to your fitness and diet application. Your Jaguar vehicle could turn off the house alarm once the car enters the driveway.

In each of these scenarios, there is no overt communication to the consumer, rather a silent value exchange between things. No noise, lots of value.

The most valued brands may be the ones that do the most for you without you even having to see or hear anything. The best advertising in the future may be silent, and people wouldn’t want to block it given the invisible and uninterrupted value it provides. As Gordon Hempton, the founder of One Square Inch of Silence (the quietest place in the United States) once said: “silence is not the absence of something, but the presence of everything.”

The importance of using media to drive awareness and prompt trial of something different will be crucial when the final purchase decision is programmatically determined. Otherwise we have no incentive to intervene.
The Internet of Things has been a hot topic for several years now, yet despite continued funding (an estimated $3.7bn venture capital raised in 2016) and an increase in the number of ‘connected’ products coming to market, it remains something of a quandary to marketers. While on one hand, it offers possibly the greatest potential to automate the mundane processes that make our lives increasingly arduous, the bulk of funding (and predicted IoT growth) is in the business-to-business and manufacturing sectors, and therefore intangible to consumers.

While consumer-facing objects are still being launched at an increased pace, there still exists a lack of built infrastructure to control the diverse array of use cases these objects fulfill – and operating systems they utilize – which means that the opportunities for brand experiences in this space are still limited. Added to this is the issue of personal security. Connected objects in the home are often targeted by hackers as a means of bypassing more sophisticated network systems. All too often, we hear stories about hackers talking to children via connected baby monitors and Rob Joyce, who runs the Tailored Access group at the NSA has freely admitted that their preferred route into people’s networks is via ‘things’.

So, the bulk of investment in the IoT going to the business and manufacturing sectors, a lack of homogenizing infrastructure of consumer facing IoT tech and security concerns throughout the whole process. The prospects look bleak for brand building in the IoT space right?

Not quite. The steps that both Amazon and Google have taken in the connected home space over the last couple of months in the UK (with the launches of the ‘Echo’ and ‘Home’ devices respectively) have opened up the connected home market somewhat. Amazon has shifted 5 million echo devices in the United States since 2014 – with an estimated 3 million of these sales being in the first 9 months of 2016. While no UK sales figures for the Echo have been released yet (and no on sale date in the UK for the Google Home yet), all indicators point to a high consumer demand.

One way to benchmark the uptake of these devices is to monitor their smartphone companion Apps. Both the Alexa and Google Home Apps showed significant uptake in usage over the Black Friday/Cyber Monday events in 2016. The Alexa App now sits in the top 10 of all Music Apps in the UK, and Google Home (which also controls Chromecasts) sits in the top 15 of the Entertainment category. For context, this means that more users have installed the Google Home App over the last week than the Sky Go App. Certainly this spike has been driven by generous holiday promotions, but are a clear indicator that consumer demand for home-hub devices is growing.

With the growth of Amazon Echo and Google Home, a new voice-controlled App economy will take shape. “Skills” (As Amazon calls them) will provide brands with the opportunity to engage with consumers in a highly personalized way – whether that is recipe advice for a food brand, trip advice for automotive or sports content for brands like Nike.

This will be the main use case for the IoT over the next couple of years, however as IoT technology becomes cheaper there will be scope for brands to create connected products to engage with consumers. This could be anything from products designed to provide an element of surprise and delight, for example: Netflix’ connected socks (that switch off your show when you fall asleep) to solutions for CPG brands, who can use NFC technology or image recognition to add an element of connectivity to their packaging.
Where Next?

The natural evolution of this trend will be the gradual growth in our comfort levels around interacting with ‘machines’ and allowing them to make decisions on our behalf. There will be an inevitable sequence of progress and setbacks, as people trial new innovations in this area and judge each on their own merits.

IoT lies in issues of inter-operability and competing standards. The launch of the home assistants, Amazon Echo and Google Home, will help create platforms for developers, brands and other hardware to build upon. If these devices are the success that we expect them to be, this will prove a huge catalyst to the increasing automation of everyday life.

If innovations offer significant value through the effective minimisation of hassle, then we can expect peoples’ appetite for automation to grow rapidly. Issues around the giving up of control are likely to recede, if people find genuine utility through automation. But this will all depend on the current challenges of inter-operability, UX design and, in the case of IoT, security standards being resolved.

Perhaps the most tangible next steps to look out for in the coming year in the rise of Hassle Free will be the rise of platforms that help tie many of these automated experiences together. Much of the current consumer frustration around IoT lies in issues of inter-operability and competing standards.

What this means for Brands

Technology is a double-edged sword. While it can make us feel overwhelmed, it can also help us manage choice and take over some responsibility for our decision making. Brands need to recognize this paradox and identify how they can use technology to relieve some of the burden of choice.

Critical in the successful harnessing of this trend will be the way in which brands present the solution. Communicating the benefits of convenience is clearly key but also being conscious of the emotional issues of giving up control will be critical. Good UX design will be particularly important in overcoming this challenge.

Perhaps only the most trusted brands will be able to credibly offer solutions of automation to consumers.

Ultimately, in designing for Hassle Free experiences brands have to deliver simplicity and convenience. If through the implementation of their service, people end up adding greater complexity to their lives then the whole purpose is defeated.
The majority of people found Hassle Free appealing, as they will always find convenience in any shape or form valuable. It was also one of our most relatable trends – 75% of people felt that this trend was relevant to them, driven by younger generations and households with kids.

“Many things are now more hassle free than in the past. I’m sure I’d cope without it but it has made my life a whole lot easier as a busy mum.”

Initially people struggled to visualise our interpretation of hassle free technology, as this phrase for them instantly translated into things such as online shopping, banking, cashless payment and instant access to information such as train times. While there have been rapid technological advances in this space, people are still very much excited by hassle free technology that has been around for quite some time and that we take for granted.

Once we talked through the trend, using some IoT and AI examples, people were on the same page, but they did have some reservations however. Given the speed of innovations and advancements in hassle free technology, they were struggling to feel comfortable with the rapid changes that are taking place in front of them. There was a tension between people wanting to embrace technology that makes their life easier and a reluctance to give up control to technology and allow companies to make decisions on their behalf. Half of those we surveyed said that they welcome any technology that will make life easier, however 55% don’t trust technology companies to make decisions for them and 62% don’t want to give up control of their life to technology (rising to 76% amongst those aged 55+ years).

“How do you feel about where Hassle Free could go in the future?”

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The word control is the key here. People were much more positive and receptive to technology that they feel they have control over. Smart heating, connected cars making route recommendations and connected packing with food expiration alerts were all more popular hassle free applications. Other applications that require us to relinquish a bit of control were less popular, such as smart shelves/appliances that reorder or even algorithms that recommend what we should wear that day.
Two key contributing factors to this reluctance to give up control are concerns that we are becoming too reliant on technology and data security and privacy issues – particularly in relation to hardware and the Connected Home.

Older people in particular were more likely to see Hassle Free technology as unnecessary and an indication of how lazy we are becoming. They saw the growing dependency on technology as a real danger to society (see Digital Dieting).

Data privacy and security were very top of mind when it came to anything hassle free (and indeed technology related) – 45% of adults were worried about hacking, and this concern is even higher amongst the over 55’s (54%) and those who were less confident with technology (50%).

“In many ways IOT and AI will make our lives a lot easier but at the same time these technologies could make us lazier and less able to handle simple tasks in the event of a technology failure.”

“In a society and indeed a world that suffers from debt, homelessness and poverty I can’t help thinking that it seems ludicrous to encourage people to think and do less for themselves whilst paying for the privilege.”

“I really like the idea of having devices that can make essential tasks easier but I really worry about the level of access these devices have to our data and our lives.”
MINDSHARE TRENDS 2017

“How do we know our data is secure? If they can access one device, how do we know they can’t tap into all of them?”

Despite these concerns, people generally anticipate a big future for this trend but their struggle to conceptualise it makes it feel further away in their minds than it actually could be. There was quite a marked difference between age groups on this point. Older people were not only more wary of technology that can assist with everyday tasks, they also had less foresight. Younger people were more likely to conceptualise current technology innovations at the moment and therefore could imagine where these could go. These younger people are key to the Hassle Free trend truly taking off as they are also the least likely to be concerned about data security and the most likely to be open and receptive.

Surprisingly, overall excitement about the future of this trend was lukewarm, with less than a quarter (20%) of people expressing excitement about where this topic could go in the future. But this was certainly not a reflection of their enthusiasm to embrace this technology. People started to see the impact it would have on their lives and were much more enthusiastic. Those that were familiar with IOT and other hassle free technologies could see the current limitations of the technology but could also visualise a better future once these isolated applications were all brought together.

“This is a really exciting time in technology as the tech we use moves away from being a set of tools and becomes a part of our lives. At the moment technology isn’t smart enough to fully integrate; you can’t say to your phone ‘I’m not feeling well, I think I’ll stay in bed’ and expect it to call in sick for you, cancel your meetings and get you a cup of tea. We’re on the verge of some really exciting developments, but we aren’t there yet.”

When do you feel this trend will be at its peak?

- At its peak now: 6%
- At its peak in a few years time: 42%
- It’s only in its very beginnings and will be at its peak much further in the future: 51%

This initially lukewarm reaction can be explained by two things. Firstly the lack of foresight we have already mentioned, but secondly the nature of the trend itself. Hassle free technology is there to get rid of the smaller more mundane, tasks in life – to achieve the same ends with less effort rather than enhancing the performance of products and services we already use. Potentially not as exciting when you first contemplate it and think about the impact that each individual application will have in isolation. However, when you look beyond this and visualise a combination of hassle free applications...

“I think we’re only just touching the surface of what AI and IOT can do for us. Currently you need to know what to ask and what to look for. True AI will be revolutionary, where we can interact on a similar level to how we do with humans”
Digital Dieting

What is it?
There is more concern about the impact technology is having on our lives and as a result we are rethinking and adjusting our use of technology.
Where has it come from?

As a concept, technology exists to help us achieve things, in turn making our lives easier and more improved. Well, that’s the theory. As we are seeing so many new forms of technology emerge and spending more time with them, people are becoming concerned that this is not the case. History shows us that backlashes against technology are clearly nothing new. What we are seeing now is nothing quite as extreme as a 19th century Luddite rebellion.

Our total dependency on these new forms of technology makes protest or complete exclusion appear ludicrous to most. People are not necessarily ‘anti-technology’, they are just looking for the right balance of technology in their lives and as a result, we are putting ourselves on a digital diet.

The difference now is the type of technology that is taking a hold and the sheer exponential growth of it. In the space of 25 years we have gone from the first internet browser through to the majority of us owning a smartphone and checking them over 200 times a day (studies show, a conservative estimate!). Attention spans are getting shorter. We are losing focus. Mobile means we are constantly switched on and available 24/7 and dominates both our work and home lives. Mobile plus email and now arguably the combination of mobile and social media are really having an impact. People are starting to recognise many downsides to being so constantly connected. Increased stress levels, distraction, worries about social interaction, unease about privacy and general fear that we are not experiencing ‘real life’ are all concerns.

A new study from Deloitte suggests that a third of Brits wake up in the night to check their phones. We’ve got to a tipping point where we are not sleeping as well, not interacting with our loved ones enough and are constantly checking for that next email, text, notification or social media fix. This is acting as a trigger for people to change their mind-set and behaviour.

In the space of 25 years we have gone from the first internet browser through to the majority of us owning a smartphone and checking them over 200 times a day.
How is it developing?

Mindset and behaviour are changing in the following ways:

**Time out of the loop.**
People feel their time is not being best spent and are looking to reduce their device time by turning off notifications, activating airplane mode or switching off altogether at key periods of time. A good night’s sleep is important and we are seeing various tactics to avoid tech usage at night-time. There is also a small but lucrative market for the ‘dumb phone’; old fashioned handsets that just make calls and texts. Some are using them in the evenings to counteract their daytime smartphone use and parents are using them to help control their children’s technology use. More and more parents are putting their children on some form of digital diet, whether it’s no phones at bedtime or rewards for breaks from screen-time. This comes as no surprise when six in ten say that they have neglected schoolwork due to being online and a sizable amount of teenagers believe they have nomophobia; smartphone separation anxiety. Switching off entirely seems even more alien to this generation that have never lived without this kind of technology and digital dieting is the compromise for parents; although usually difficult to enforce! Having said that, there are a number of teenagers that do question the impact technology is having on their lives and are setting their own limits or changing behaviour.

**Changing social media behaviour.**
Social media is a huge point of contention for this younger generation and increasingly the older generation too. We only often showcase the positive aspects of our lives on social media, creating anxiety, unrealistic comparisons, jaded expectations and a distorted sense of reality. Many teenagers are feeling the pressure and are taking a break from Facebook and Twitter, or giving up these kind of platforms entirely, as are many adults. A recent report from the Danish Happiness Research institute showed that those that had given up Facebook for even just a week, were happier, less stressed and felt less lonely. However, often where teenagers differ from adults, is that they are migrating their use of public social forums for more private networks such as Snapchat and WhatsApp, which merely alters the type of communications they are engaging in. Arguably these platforms enable responses to feel less curated and more transient but the constant need to check phones and fear of missing out (FOMO) is still there. We are all trying to wean ourselves away from that small dopamine hit we get every time we pick up our phones for a new notification or message.

**Real world, real people.**
The growth of the experience economy is no surprise. A large proportion of our leisure time is spent with technology and people want to re-engage with the world around them, making the most of every moment. They are turning to other more traditional forms of relaxing such reading a book or spending time outdoors. We are increasingly looking to take care of ourselves in both mind and body. Fitness and wellbeing activities such as yoga, meditation, pilates, running and walking are all seeing consistent growth. We are craving simplicity and uncomplicated things. People strive for holidays where they can switch off from technology and are now deliberately choosing destinations with no internet access or mobile signal. We have become more consciously aware of our relationships with others. We recognise that things like phubbing (snubbing someone while you are on the phone) are damaging the quality of our face to face relationships and we are now more inclined to do something about it. There has been a growth in bars and public spaces that have phone amnesties or nights out with friends where you relinquish your phone to the middle of the table for the night.

**Seeking privacy and anonymity.**
Along with our increased technology use, we are leaving a trail of digital behaviour and personal information (big data) about ourselves. We are ever more aware of companies analysing and utilising this data to communicate with us and as a result are increasingly taking up ad blockers and opting out of giving our information unless the rewards are worthwhile. We do not like to feel like our every moment is being tracked and are seeking more privacy and anonymity in life.
Digital Dieting
In This Space

1. **OFFTIME**
   Blocks and filters communications on smartphone, with modes such as work, family or ‘me time’ to eliminate distractions and ensure you only have access to the information you need.

2. **THE GIN TUB**
   This bar in Sussex blocked all mobile signals inside the venue so people could actually “socialise with the people they are with, rather than the people they are not with.”

3. **C BY GE**
   Smart lightbulbs designed to get in touch with the body’s natural rhythm, which allow you to schedule and toggle between three colour temperatures, one for each time of the day, via an app.

4. **TIME TO LOG OFF**
   Digital detox travel company which offers retreats in places such as Hawaii, Italy and Cornwall.

5. **UNPLUGGED WEEKEND**
   Provide group experiences, such as workshops, team building and festivals, to help people manage their digital habits and lead balanced healthy lifestyles.

6. **FLIPD**
   Flipd locks your phone for a set period of time which can’t be reset once enabled. It can also lock others’ devices which is good if teams want to keep everyone focused.

7. **PHONELESS FRIDAY**
   Save the Children challenges people to go phone-free for 24 hours to raise money. Participants donate £5 to take part and if they fail they have to pay an extra £5 penalty.

8. **DOLMIO PEPPER HACKER**
   What looks like an ordinary pepper grinder from the outside, is in fact a device with hidden technology that lets parents turn off Wi-Fi routers, mobile phones and TV’s to bring their families closer together when having a meal.

9. **HEADSPACE**
   Popular mindfulness app Headspace aims to mobilise people to switch off and look after their minds by sitting to meditate for a few minutes a day, every day.

10. **MOMENT**
    Moment tracks a user’s device usage and allows daily limits to be set.

11. **FREEDOM**
    Freedom is a browser tool that works across multiple devices, allowing users to disable internet connection for a set time period.

12. **THE LIGHT PHONE**
    A credit card sized dummy phone that connects to your smartphone that can only make and receive calls and tell the time.

13. **MAKE TIME FOR IT**
    Britain’s smallest Craft beer bar from brewery Meantime that aims to get people to switch off and connect with others whilst they are there.

14. **OFFTIME**
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Digital Dieting

Expert Opinion

RUTH ZOHRER
Head of Programmatic Marketing Mindshare

Undeniably, digital dieting has a knock-on effect on any practice that requires people to be online to establish a communication touch point, as programmatic marketing is not the exception. In some instances, programmatic marketing practitioners are partly to blame for people making the decision to ‘detox’ from digital; many a time the tools of the trade have become the focus of marketers thereby resulting in poor, intrusive and even creepy advertising experiences for people at the end of those tools. And we wonder why anyone would put the phone down and take a break?

Yet simultaneously, programmatic marketing tools can be applied for good to create a better advertising experience, and address part of the challenge that digital dieting poses for brands and marketers. Establishing the new technologies, and the difficult eligibility requirements is another great way to improve the overall user experience (not many people would welcome being presented with a product or service, and spending several minutes filling out a form to obtain it, only to find out they are not eligible).

Most of us would think of these applications of data as ‘duh moments’; they are relatively straightforward so anyone with common sense could and would think about it. In practice, however, it is less easy to stay away from the shiny objects; the complex data sets, the new technologies, and the difficult creative executions. If, as marketers, we find ourselves falling into that trap too regularly, it is worth pausing to ask ourselves, whom are we trying to impress? People at the end of our tools all want simple, thoughtful solutions to their day-to-day problems.

And it doesn’t have to be incredibly difficult to start. For example, combining already existing data sets such as location, dwell time and keyword searches can enable a marketer to be much more thoughtful about when to encourage a dealership or store visit. Taking into account credit score data prior to promoting applications to products or services that have specific eligibility requirements is another great way to improve the overall user experience (not many people would welcome being presented with a product or service, and spending several minutes filling out a form to obtain it, only to find out they are not eligible).

ALICE BRADY
Strategy Director Mindshare

It’s pretty undeniable that omnipresent technology, and the ubiquitous mobile especially, is getting in the way of real life experiences; if you’ve never spent an evening on the sofa next to your partner face-down-in-your-phones I salute you!

It’s no wonder so many of us are making a conscious effort to kick our addiction to technology. The ever growing popularity of mindfulness - mindful eating, walking, parenting, dating, colouring, birthing, leadership, knitting, gardening and many more – can often be as much about technology, and the ubiquitous mobile, as it is about anything else.

It’s important though that not all technology is demonised as distracting and damaging.

It’s slightly more subtle than simply cutting down the time spent with tech. To paraphrase an old adage, we should be questioning whether we believe every interaction to be enjoyable or know it to be useful.

At the same time, as advertisers, we should challenge ourselves to make more of our technology experiences “good”. Can we challenge ourselves to always add value in the digital experiences we create for consumers? Like an alarm app that donates a pound to charity every time you “snooze”, or solving a shopping dilemma, or using the power of VR as an escapist medium to create guided meditations, advertising and technology can be good.

DENISE TURNER
Insight Director Newsworks

Digital dieting is perhaps too mild a word to describe the reaction to technology in some quarters of the population. It seems that for some people the usefulness of digital has tipped over into the realms of a noose or a ball and chain. We are all plugged in, yet we are wrestling with the consequences of a digital overload. There is a tension between the desire to connect and keep up to date with the wider world and a growing dependency on phones that blocks out the rest of the world. It’s almost as if we are surgically attached to our phones.

This attachment is having far-reaching consequences and is in some cases putting us in physical danger. There was an exhibition of large sculptures recently in the grounds of Salisbury Cathedral. One sculpture of a pair of clasped hands was placed over a path. Very quickly however, it had to be moved as people were walking into it while glued to their phones.

So perhaps it is not dieting we need but radical surgery!
Digital Dieting

Expert Opinion

LIZZIE RANKIN
Insight Executive
Magnetic

People are starting to seek a reprieve from all the noise and clutter and there are now even apps that seek to control and restrict our online consumption.

However, the developing trend of Digital Dieting isn’t just about the amount of content we consume but the way it makes us feel and the increasing sense of anxiety it is causing us.

Earlier this year, Magnetic undertook a study, ‘Moments that Matter’, that looked at the role various content experiences play in driving pleasure and purpose (key elements of a person’s happiness), and what this greater emotional engagement means for consumers and advertisers.

Magazine media and its welcoming environments were proven to increase subjective well-being at the point of consumption, and this affects consumers’ receptivity to advertising. In this context the seemingly soft metric of well-being turns out to have some significant associations, which can in turn affect behaviour. As humans we are hardwired to engage more deeply with positive experiences.

GEORGE HOPKINSON
Senior Research Manager
IAB UK

Technology’s role in our lives is usually to make things easier, our food for an efficient, stress-free and prosperous existence. If it were truly that simple for digital technology, then we would all be far from going on a digital diet. So why are many of us feeling over-stuffed with digital tech?

In part because access to “free” digital products and services leads to more people, using more tech, more often. This phenomenon of offering things for “free” has only been made possible by digital, so we are seeing more of it as digital continues to grow. Of course, these products and services are not actually free; money is made through advertising, predominantly via one of two different models. Firstly, by placing advertising directly around the product or service or alternatively, by collecting audience data that can be sold to someone else. Crucially both models rely on a suitable value exchange and we generally see people welcoming this. For example, 74% of UK adults prefer “to use a free website and have adverts than having to pay a subscription” (Source: IAB Ad Blocking Research, July 2016).

To further understand why people are trying to reduce their use of tech, it’s worth thinking about what problems technology is, and isn’t, good at solving. Tech is brilliant at solving practical problems that are grounded, tangibly in the real world. For example, shortening the space between A and B, getting more of X from less of Y and so on. Conversely, tech is less good at solving more abstract or social problems. A good example is the internet itself, a piece of technology that has shrunk the world and brought us all closer together. We can communicate around the world in an instant but we haven’t necessarily got any better at communicating our thoughts, feelings and ideas with other people.

If indeed it is increasingly easy to access digital technology that can amplify, rather than solve, human social problems is it any wonder some of us are getting down from the table and going on the digital diet?
Where Next?

Ironically, in the short term, we will likely see more people turning to technology to manage their technology use. A whole host of apps already exist to track screen time and set restrictions, such as Moment and RealizD. Mindfulness and wellbeing apps are also growing in number. We will see tech companies try to do their bit, whether it’s changing the light exposure on screens for more peaceful sleep or developing products that help us monitor or notice the time we spend with their technologies. Tech brands could help people find that balance they’re seeking.

As a society, technology has enabled us to be more knowledgeable, productive, safer, sociable; the list goes on. The majority that digital diet also see the good that technology brings and there are limits to digital dieting for most of us. We are social, inquisitive, interactive beings and like being able to talk to people when we want to, shop when and where we want to or find facts at the tip of our fingers. In the longer term, it is difficult to tell what will become of digital dieting as we are surrounded by even more life changing technology. Likely it will change in format altogether. There will be an increasing demand for tech that encourages human contact and communication, tech that educates and enlightens, and tech that makes the most of the outside ‘offline’ world around us. Eventually we will struggle to see ‘on’ and ‘offline’ experiences as separate entities as they will seamlessly integrate. This may be how digital dieting manifests itself, not by cutting down on its use but by using it for more constructive purposes such as outdoor education, fitness or to enhance real world experiences.

The pace of change will continue to happen at an exponential rate and there will likely be a further reaction against certain types of technology, while we struggle to make sense of it all. AI may trigger even stronger sentiment and take this trend to another dimension. However, history has shown that when it comes to technology, despite our best efforts of protest or actions, progress stops for no-one. Likely we will adapt, as in the past, to make technology work for us as individuals and society.

What this means for Brands

Similar to how people are looking for that right balance when it comes to technology, brands also need to get that balance right in their communications. Avoid barraging people with too much or rely upon them being constantly connected which will only make them more aware of their desire for disconnection.

Equally, avoid ousting the digital space altogether or portraying technology as too negative. Focus on helping people achieve the right balance of technology in their lives. Provide ways to enhance real world experiences with technology and provide people with experiences away from their normal routine. This could be a series of one off memorable experiences or lots of little things that add up.

Be a brand that facilitates digital diets. Provide people with the chance to take a break, do something different, revisit the art of face-to-face conversation or grab a moment of peace and quiet away from the connected world. Get involved in real world physical activities, such as sport and cooking and make use of physical spaces. It could be about making people more aware of the world around them through the senses of touch and smell.

For campaigns in this space, the approach needs to be natural, light hearted and fun to avoid coming across as too preachy or worthy. Brands that become known for providing these kinds of experiences will be viewed as facilitators of human connection, making them real, open-minded, empathetic and relatable.

Brands that become known for providing these kinds of experiences will be viewed as facilitators of human connection, making them real, open-minded, empathetic and relatable.
We found that we really needed to dig a bit deeper with people around the subject of technology and digital dieting as often what they were telling us was quite contradictory! When given the ultimatum of choosing whether technology was having a positive or negative impact on their lives, the majority (3/4s of those surveyed) chose positive. However, absolutely everyone had concerns around things like online privacy, online bullying or abuse, reduced attention spans and diminishing social skills. There was total agreement that there were downsides to our reliance on technology and all had an everyday example that they could relate to, either in the context of themselves or others.

“The first thing I do in the morning is check my phone and it’s pretty much the last thing I do at night. I can be sat on my laptop on Facebook and instinctively pick up my phone and check it on that at the same time, this happened again this morning and it is a little bit worrying!”

There was a real consensus of feeling here from a large number of people. However, 60% said they did not see the amount of tech they use as a problem and equally this was the trend people felt most ‘indifferent’ about (34%). A bit of disconnect. What we found was that despite these anxieties, the benefits of technology more often than not outweighed their concerns and these were put to the back of the mind. Plus we also found that often these worries were applied to society as a whole rather than them as individuals. Friends and children (even if they weren’t parents) were high on the concern list and were often people’s first thought, with their own tech usage an after-thought! This was not surprisingly exacerbated when it came to parents. As an example 46% said they limit their children’s screen-time whilst only 27% said that they limited their own screen-time. Most were doing something to regulate their children’s tech use, but the actual activities varied greatly by household. Some parents thought that digital dieting should be something they took part in together with their kids whereas with others it was about monitoring tech use.

“Using technology is taking over our lives. Parents video every moment and miss the live event because they’re looking at a screen. People walk around unable to converse because they have ear phones in, you go out for lunch and someone can’t leave their phone alone.”

There appear to be two camps regarding the tech or no tech rules within families. Some are totally fine with it and think its ok for TV, mobiles and laptops to be on or up at the table. Others have started a tech free time or area where they are getting time together and talking. It is whatever fits I suppose.”
“As a mum, I feel that cutting technology down to a certain amount of time a day is important to both my son and myself. It gives us more time to interact with each other without the distraction of social media or the TV.”

For most it was about finding the right balance of technology in both their own and their families’ lives (76% agreed this was important) and they were making efforts to achieve this.

“I am not someone who thinks we need less tech in our lives, I am very much a believer that more is better however that said, I am able to modify my behaviour and tech use to suit the situation.”

Most were taking small steps to address the areas they were concerned about but did not initially consider what they were doing radical enough to be a ‘digital diet’ as such. These small changes like only buying a certain amount of data, switching off at certain times of day or reducing their time spent on social media, were not considered a big thing and were just a normal part of how they managed their day. Most had not thought about the term ‘digital diet’ before. When we asked them outright if they are doing any kind of digital dieting (with an explanation) most said no, however when we spoke to them about how they were regulating their tech use, most were doing something that constitutes a digital diet, they just don’t think about it in that way. They don’t really ‘police’ themselves when it comes to these things and have other worries that are higher up the agenda. Once discussed ‘digital dieting’ did feel like a fitting description. Many agreed that it is one of those things like going to the gym or eating healthy which we always talk about, but in reality most of us only take small measures to change and feel guilty about it when we don’t do it!

“In this context, I think I am quite technologically overweight and could do with a digital diet.”

“I think it’s about finding a balance and remembering that technology should be used to enhance your real life rather than becoming your whole life.”

When do you feel this trend will be at its peak?

- At its peak now: 13%
- At its peak in a few years time: 46%
- It’s only in its very beginnings and will be at its peak much further in the future: 41%
For those that were taking these steps to regulate their tech use, often there was a trigger that made them consciously kick start a new behaviour. This may be a particularly bad night’s sleep, a disastrous experience on social media, loss of their phone etc. that made it all too apparent the effect technology was having on them personally.

“A while ago I was having trouble sleeping, and I read an article about the impact that screens can have on us late at night. With this in mind, I cut out all screens for at least an hour before bed every day, and it really did make a difference.”

“I lost my phone for a few days, and had no alarm clock, the address I needed to send a birthday card was on the phone, and the Dr’s appointment details for later in the week were saved there and nowhere else. It definitely made me realise I’m too reliant!”

Whether people keep up this behaviour after that trigger point is another story; often we need a succession of trigger points in our lives to keep the subject top of mind. Again pretty akin to dieting itself!

How much people regulate their tech use was closely related to how much tech they consumed on a daily basis. The higher levels of concern were coming from those that were less reliant on tech themselves, suggesting it is concern about others rather than themselves.

Not surprisingly the actual digital dieting is coming from those that rely on using a lot of tech in their lives; mainly younger people, men, parents and those using tech for work. For example 18-34s were the ones most likely to have reduced their time on social media or come off social media altogether. They were also the ones that had the most pronounced relationships with their smartphones.

“I kind of wish smart phones hadn’t been invented. I kind of both love and hate mine. Long live the nokia 3310.”

Younger people do have concerns around social pressures when it came to the act of digital dieting and felt that they might be missing out if it was not something that their friends were doing at the same time. Fairly ironic when it comes down to the subject matter. Overall there were so many varied barriers to digital dieting in practice that explained why digital dieting is happening in the format of smaller more bite sized efforts or changes in behaviour.

There is divided opinion on whether we will do more digital dieting in the future or not and what format it will take. In a climate where we will be even more reliant on technology, our concerns around the subject are likely to increase. Just over half (53%) feel like our reliance on tech will become a big problem in the future. However, whether we would actually be able to modify our tech behaviour in this new environment was a matter for debate.

“I think we’ll probably do less digital dieting – as technology becomes more a part of our lives, rather than a set of tools we use, it will be more and more difficult to remove it from our lives. If it’s tricky enough at the moment to work without an iPhone calendar, how difficult will it be once our AI assistant has booked the meeting, location, and told your self-driving car when and where you’re going?”

“Digital dieting is going to become an absolute must if we want one-to-one, face-to-face communication to continue otherwise we’re all going to get sucked into a fully digital life. How sad would that be?”

“I say quite often that I’m going to stop using social media like Facebook. I see something either useless or something that makes me mad and say I am going to restrict my usage but it never lasts more than a few days as I am simply too nosey not to see what people are up to.”

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**I am concerned about the impact tech has on the following:**

- **Privacy** 71%
- **Online bullying or abuse** 67%
- **Distraction and attention spans** 56%
- **Social and interaction skills** 55%
- **Self-esteem issues** 48%
- **Stress levels** 43%
- **Living in the moment** 41%
What is it?
The growing number of ways in which we interact with the web using the human body.
How we connect to the internet is changing. No longer will we be beholden to typing and swiping on our laptops, phones, tablets or wearables. The future is all about more intuitive interaction with the web via the human body. Basic interactions with everyday objects, information, and more generally the world around us will be rendered more physical, simple and intuitive.

All of these interactions are ultimately being enabled by a series of macro trends; exponentially increasing processing power and miniaturisation (fuelled by Moore’s Law), cloud computing capacity and AI advances such as NLP (natural language processing).

Since the dawn of computing, when human operators looked to control computers with physical switches and punch cards, the increasing processing power available to interface designers has been applied to making computers work harder to speak our language; first with typed words, then with icons (the GUI) and, now, through the voice user interface (VUI), conversation.

While the push towards more human interactions with technology is led by voice (talking is surely more human than tapping or typing), we are also seeing developments that will make our interactions ever more closely integrated with the human body. We are moving on a trajectory from technology being something that is clearly distinct from us (a physical object or tool such as a PC) to something we wear, and going forward something we implant, embed or even ingest.

Technology is getting closer to us, attaching itself to us and in some senses actually becoming part of us.

Where has it come from?

The future is all about more intuitive interaction with the web via the human body.
How is it developing?

There are a number of distinct areas where we can see advances in the Connected Me trend:

**Voice** —
Interacting with technology via voice has developed significantly over the past few years largely because machine learning advances have meant that voice recognition and NLP are now much more reliable. Uptake of Siri, Cortana, and the various Google features driven by voice, had historically been slow because the experience was often a let-down. Now we’re at the point where the basic capabilities (understanding us) are in place and take up is beginning to grow substantially. Sundar Pichai announced at I/O in 2016 that 20% of Google searches in the US are now carried out by voice. In China, Baidu says their customers’ use of search has tripled in the past 18 months.

**Biometric** —
We are seeing strong growth in the use of our unique physical identifiers being used to interact with the world around us and carry out tasks. Biometric identification techniques, already introduced on passports, are increasing in importance in banking and finance, promising more secure payments and accounts. The use of TouchID on iPhones has greatly increased the awareness of and trust in fingerprint authentication.

**Gesture** —
Another important in way in which we are starting to engage directly with machines is via gestures. We have become increasingly familiar and even comfortable with gesture technology, whether we realise it or not. From smartphone screens (pinch to shrink and sweep to scroll) to gaming consoles, to infrared sensors under washroom taps, we have been trained to use gesture to interact with objects in particular ways.

**Hearables, Implantables and Embeddables** —
Technology has been growing closer to the body and we can expect to see greater use of hearables and even implantables in the years to come. As voice becomes more established we can expect headphones to evolve to relay information to us and to carry out voice commands. Apple’s recently released Airpods which integrate Siri for command and conversations are the first manifestation. Thinking of medical applications such as pacemakers, makes implantables in many ways a well-established technology. We are now starting to see applications based on lifestyle (eg NFC chips as security passes) and well-being (eg Proteus, a digital pill sensor which is swallowed to measure various vital signs).
**Connected Me**

**In This Space**

### 1. SAMSUNG SMART CONTACT LENS
The company patented a connected contact lens that is equipped with a camera and can also project images straight into the user’s eye.

### 2. AMAZON ECHO
Hands free smart speaker controlled by voice. ‘Alexa’ plays music, provides information, news, sports scores and weather.

### 3. HSBC
The bank is planning to let people use fingerprints and voice to access their money instead of passwords, using special voice biometric technology to analyse customers’ voices.

### 4. BAIDU TALKTYPE
A new keyboard app that prioritizes voice input over typing, displaying a large microphone front-and-center in the application.

### 5. BRITISH AIRWAYS
The company is considering serving passengers a ‘digital pill’ to monitor their stomach acidity levels and change dining options accordingly, to help improve their travel experience.

### 6. SAMSUNG SMART CONTACT LENS
The company patented a connected contact lens that is equipped with a camera and can also project images straight into the user’s eye.

### 7. GOOGLE HOME
A voice activated speaker that hosts the AI Google Assistant and works as the control hub for connected home devices.

### 8. GESTURE CONTROLLED DASHBOARDS
Both BMW and Volkswagen have recently built gesture-driven info-tainment systems into the dashboards of some of their prototype cars.

### 9. MIT INGESTIBLE SENSOR
An ingestible electronic device invented at MIT that can allow doctors to measure patients’ heart rate and respiratory rate from inside the gastrointestinal tract.

### 10. DUOSKIN
DuoSkin devices that look like temporary tattoos can enable users to control their mobile devices, display information and store information on their skin while expressing their personal style.
Connected Me  
Expert Opinion

CRAIG STEAD  
Digital Strategy Director  
Mindshare

Sarah?  
Are you Sarah Connor? I’ve come to Terminate you....

That’s what we all think of right?  
Cyborgs, Androids, Terminator. Red-eyed human/machine hybrids that will take over the world.

Or maybe it’s Channel4’s Humans. Or HBO’s Westworld. All pertinent analogies. But just dial back your crazy-theatrical, imaginative think-tanks for a second. It’s not that scary.

Connected Me. You and the digital world. Connected to everything without the need for a mobile, laptop or smart-watch. You’ve got to admit, it sounds kinda cool.

So the infrastructure is there. The access to information is as well thanks to Sir Berners Lee. All it needs is you to take the leap. Be bold, be brave.

But the question remains. Does it make you any less human?

David Roth  
CEO  
The Store WPP

Connectivity – I love it. I’ve invested more time and money in interconnected devices than I want to recall or would admit to my wife (if you see her, don’t mention it). I’m a fully paid-up member of the “Internet of Things” world, scouring extremes, with icons such as Vice’s Grace Neutral re-colouring their eyes. Imagine a contact-lens type implant that could overlay information on your reality, AR-style. Not a huge step away really.

Or gesture control. We already simulate it on-device in order to magnify pictures, to move onto the next piece of content, or to swipe to the next potential romantic-match. What about finger-tip implants that translate and interpret your natural gestures into digital action, retrieving information or actions from requests at your command. We saw it in Minority Report. Yup, sci-fi movies once again signal a not-too-distant future.

So (run with me here), take that further for a second. Rather than an in-ear ‘bud’, how about an (in-ear) implant...

We’ve seen sub-cultures of tattooing, scarification and body modification go to extremes, with icons such as Neil Harbisson, the female artist whom can detect the smallest of earthquakes through online sensors in her arms, translating them into artistic performance. There are others, current innovators (or outliers, pending your view). But you get the picture. We’re on the cusp of something here. And they don’t have glowing red eyes or machine guns.

The sticking point for the mass consumer is the phone. When you think about it, it’s a bit of a pain. It’s expensive. It’s prone to breaking, theft or general loss.

And it’s taken over your life, quietly taking centre-stage. It lives in your pocket or in your bag, cared for like a newborn. That tiny supercomputer is glued to your hand, commanding your attention. Your partner, children and friends are now vying for inclusion. Remember them? But there’s just too much information for you to miss out on, right?

So, in that context, smartphones becomes less of a help, and more a hindrance.

Getting past the mildly intrusive element of ‘true connection’, you can see the benefits. Take the film ‘Her’, Joaquin Phoenix, seemingly connected to his ‘AI on acid’ personal assistant, scheduling, prioritising, and basically managing his life and all of its necessary inputs, simply via voice command. A conversation. That’s all. One of the most basic forms of communication.

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My conclusion surprised me: I said no. ‘No’ to the ultimate in connectivity. But a big ‘yes’ to what ultimately defines us as being human, not a machine. So it’s a new year for me and another application to complete for a replacement security pass.

stopped and thought about it. Would I ever be able to get through airport security without triggering a lockdown? And there was not-insignificant issue of whether my body might reject this tiny intruder and half kill me. How would I explain this to my doctor, who already thinks my exercise-free lifestyle is dicing with death?

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But the question remains. Does it make you any less human?
The reputation of bots has had a rough couple of years. The industry has gone on a massive bot-cull, primarily to root out fraudulent online advertising and non-human bot traffic is at an all-time high. The Association of National Advertisers (ANA) estimates that over $7bn in advertising is wasted in the US by ads being served to bots rather than real people. These are bad bots.

2016 has been a lot kinder to bots. Facebook successfully launched its Bots for Messenger product whilst millions have fallen in love with Amazon’s Alexa. Even Microsoft’s messy Tay experiment hasn’t dampened the recent enthusiasm for bots. Step forward the good bots, the ones marketers may be desperate to get their brands in front of versus blocking them.

Bots are becoming not only smarter but also predictive and personal. Predictive, in their ability to proactively identify the right information most relevant to your particular need states and all based on a deeper understanding of you, your location and your past and future needs, and so on. Machine learning constantly improves the bots’ algorithms and so the output specifically for you, producing a better outcome each time.

And personal, in that increasingly bots talk to you with a voice. In the US, over 40% of smartphone owners regularly talk to their phone, a trend significantly higher amongst teens and Millennials. People have fallen in love with Siri, Alexa and Cortana. Look at Echo’s Amazon reviews and you’ll find references to the ‘perfect spouse’. These are not only good bots, they are actually becoming part of the family.

Marketers wishing to get their products and content into the machines’ algorithms will need to advertise to these bots. Bots will go through the choices, filter the ads and rank the content all based on how good your advertising is in convincing them that it’s the best choice for the people they represent.

Bots have undergone a makeover from bad bots to good bots and they could just be your new best friend…or even partner. Wii. But now developments in facial recognition, biometrics and wearables are creating an ability to analyse, react and respond to our very physicality.

This creates an opportunity for brands to offer a level of personalisation only hinted of up to now. Where your intonation or gait could offer a totally different brand experience to another customer.
Growth of Connected Me Search Terms

Top 5 Google Voice Search Terms UK

- **What is / Definition**: 36%
- **Show me / Find Geolocation**: 15%
- **How to / Explanation**: 11%
- **Open another program**: 7%
- **Call someone**: 5%

Source: Google Search, Aggregated %

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Source: Google Trends

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### Growth of Connected Me Search Terms

- **Siri**
- **Microsoft Cortana**
- **Amazon Echo**
- **OK Google**
Where Next?

The key developments in the coming years will most likely be in relation to voice. The launch of Amazon Echo this year will swiftly be followed by Google Home next year, as in the home voice assistant becomes a new battle ground for the tech giants. Samsung’s acquisition of Viv (the general purpose AI built by the original Siri team) , put together with their SmartHub, indicates they are looking to be a central player in the smart home of the future and will likely aim to incorporate voice commands to all of their domestic appliances (from TVs to fridges and washing machines). Voice is likely to be well suited to use in car and Amazon are looking to licence Alexa Voice Services to car manufacturers.

One of the key questions is to what extent will people become more comfortable issuing voice commands to their phones in public. While there was once significant social embarrassment from the use of Bluetooth or hands free headsets, this has diminished considerably, and we think this is no longer a major issue. Expect to see growing numbers of people seemingly talking to themselves (or their hearable) in the coming months and years.

The use of biometric technology by consumers will continue to grow but will essentially be driven by the security demands of the retail banking sector. We can expect slow and steady growth. Implantables are likely to be a slower burn over the next 5-10 years, led by health services trying to deal with the challenges of aging populations and spiraling costs by applying technology for more preventative healthcare.

What this means for Brands

If voice takes off as a significant form of interaction there will potentially be some quite profound implications for brands. The limitations of voice in terms of its lack of suitability for presenting long menus of information mean that it is unlikely to be a great means of brand discovery. Instead we expect it to be best suited to task focused activities; finding specific information, carrying out tasks or buying products. Without the ability to view alternatives or browse through options, we suspect that voice interaction will have a big impact around the consumer journey. In particular, we think it will heavily favour repeat purchase of existing brand preferences making it much harder for new or smaller brands to break in. As Amazon grows into the grocery sector there is a significant threat that voice commands via Amazon Echo will favour ‘own brand’ (effectively Amazon) choices over brands. When you ask Alexa to buy more washing powder, what does it choose?

Other dimensions of Connected Me present less significant implications for brands. As these technologies and modes of interaction develop there will be both opportunities and threats for brands depending on their sector, but nothing as potentially challenging as the impact of voice.
When it came to Connected Me, people struggled to find examples of how this trend was playing out in their everyday lives at the moment and for many it still felt a little ‘Sci-Fi’. We will need to keep this in mind as we work with this trend, so we do not get too far ahead of our audience and miss the mark.

This trend provoked quite a lot of mixed feeling, which differed markedly by age group. It is no surprise that it was younger people that were more aware of developments in this space and were more open to this trend; 18-34s found this trend more relevant (82% relevant versus 70% all adults). Another cause of pretty varied opinion was the wide range of different concepts this trend contains, which people were comfortable with to varying degrees.

As people had experienced voice activated services in various forms already, they were much more comfortable with the idea of them versus some of the other aspects of this trend. Having said that, the number of people that said they actually use voice activated technology is perhaps lower than you would expect; just over a quarter. While uptake is increasing, voice is yet to be fully integrated into our lives as most people reported only using these services occasionally (e.g. when driving) rather than as a regular way to interact with technology.

The barriers to more significant growth in this area are threefold. Firstly, voice services have failed to meet people’s expectations in the past. The first few iterations of Siri have disappointed people and prevented further trial, as a result 50% of people were sceptical about how good voice services can actually be.

“I’m aware of voice technology which I've tried unsuccessfully. It becomes so frustrating to repeat the same word or phrase over and over again and still have my commands misunderstood.”

Secondly, people feel quite uncomfortable using voice activated technology in public or in front of other people (half of those we surveyed). A marked behaviour change will need to take place around this area for voice to be successful. The Amazon Echo could be the accelerator for this behaviour change, as people become more confident using voice to interact in their home environments.

The final barrier to greater uptake of voice is that people struggle to visualise the vast world of services and tasks that it could assist them with. Over half of people (51%) agreed that voice activated technology is good if you have a specific task in mind – they just need a better idea of what these tasks could be. There is a real need for further education about the capabilities of this technology.

“Siri is forever offering to help me but I haven’t yet found a good use for her.”

Despite these barriers to current uptake, people are optimistic about the future of voice activated technology; almost half (45%) can envisage a time where we rely heavily on voice activated services and over a third (38%) believe that having an Amazon Echo would be useful for them.

“Siri seemed like a good idea at the time but honestly I gave up using it after it struggled with my Scottish accent – technology isn’t always as good as it is made out to be.”

How do you feel about where Connected Me could go in the future?

<table>
<thead>
<tr>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worried</td>
<td>26</td>
</tr>
<tr>
<td>Uncomfortable</td>
<td>24</td>
</tr>
<tr>
<td>Nervous</td>
<td>19</td>
</tr>
<tr>
<td>Excited</td>
<td>18</td>
</tr>
<tr>
<td>Apprehensive</td>
<td>18</td>
</tr>
</tbody>
</table>

“I have access to Siri on my phone but I hardly ever use it because I don’t want to be speaking out loud when accessing the internet if I'm around other people. I’d rather just type.”
“I’ve used voice activation for many years. I recently purchased the Amazon Echo and although I’m still getting used to it, I do believe it is very much the way forward.”

Similar to voice technologies, developments in biometric identification do not feel too far-fetched either, as people are already familiar with biometric security via things like airport security and Apple Touch ID. Again relatively low numbers say they currently use forms of biometric security; the highest number was 27% for fingerprint security. However much larger numbers would consider using biometric security going forwards with 18-34s leading the charge. When it came to biometric security, the benefits of convenience, additional security and protection from identity theft were initially what occurred to people. Despite the fact that this is perhaps the most personal kind of data people can provide, at first, most did not necessarily consider this. It did not instantly occur to them who the gate-holders of that data would be, although this became imperative when discussed further.

“I love the idea of biometric identification to counter fraud and identity theft.”

Implantables, embeddables and ingestibles are going to require the biggest shift in mindset if they are to be embraced by the general public. Instinctively people feel that this type of technology is too invasive with almost two thirds of people (61%) reporting that they are not comfortable with the idea of implantables or ingestibles; this is predominantly driven by women (67%) and over 55’s (76%). Despite people understanding the practical benefits of this type of technology, there will need to be a big attitudinal and behavioural shift over the next 5-10 years for implantables to truly take off.

“I’d need more information before embracing this technology. At the moment the limit to what I’m willing to embrace in order to connect to the internet is voice and motion activation.”

“Embeddables I’m still unsure of. I don’t like the idea of actually putting something in my body. I do like what the technology could do for us, but it’s just not something I’m open to. I hate the idea of inserting something into my skin.”

People are definitely curious about this trend, and many believe that it will be future generations who fully embrace this trend and bring it to the mainstream. But as it currently stands, the risks around hacking and data privacy are too big of a barrier to overcome.
“I just don’t want to feel like my every move is recorded by Google. Does that make me a bit paranoid?”

There is a massive fear of the unknown around these types of connectedness. For some, they started to feel too far removed from what it means to be a human and became quite polarising.

“I feel that on the one side it’s great new technology and will be for security but it also makes me concerned that big brother will always be watching you and know what you’re doing.”

“I fear these interactive technologies in fact make us interact with machines and not the physical world around us. This connection to the internet makes us disconnect from being human. There is no personal information or secrets anymore.”

Even though there were parts of Connected Me that people were more comfortable with, overall there was an apprehensive reaction to this trend (which was even more pronounced for older generations). This is likely because people tended to focus in on the things that were furthest away from what they were familiar with. Generally voice-activated devices and biometrics were a bit closer to home and generated more positive feeling and excitement. Connected Me was also the trend people viewed as being the furthest away (almost 6 in 10 thought it was only in its beginnings and will be at its peak much further in the future). Many cannot imagine use cases for this type of connectedness and find it hard to imagine it in action in their own lives. Although it feels further down the line, many saw the potential for growth of this trend. Interestingly in the language they use, they believe it will be others rather than themselves initially taking up innovations in this space. There is a sense of inevitability about the development of this technology; whether they like it or not.

“I think these technologies will take off at some point. Once people see other people benefiting from them, I am sure they will follow suit.”

“The future of this kind of technology is changing so much that it’s going to change our lives whether we like it or not. It’s going to go crazy and we’re just going to have to try and keep up with it.”

Do you use or would you consider using any of the following forms of biometric identification?

<table>
<thead>
<tr>
<th>Biometric Identification</th>
<th>Use now</th>
<th>Would consider</th>
<th>Neither</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fingerprint Security</td>
<td>27%</td>
<td>54%</td>
<td>19%</td>
</tr>
<tr>
<td>Facial Recognition</td>
<td>5%</td>
<td>64%</td>
<td>31%</td>
</tr>
<tr>
<td>Voice Recognition</td>
<td>8%</td>
<td>60%</td>
<td>32%</td>
</tr>
</tbody>
</table>
Tunnel Vision

What is it?

Our view of the world is becoming ever more personalised through digital – whether it’s news, information, entertainment and music or the items recommended to us. More of the stuff we like; a good thing, surely? In 2017, the jury is definitely out.
We now live in a world of customised search results, personalised recommendations, algorithm selected newsfeeds and curated groups of like-minded friends on social media. Much of what we access in the digital world is now personally filtered to our preferences, interests and past behaviours, whether we have requested this or not.

Back in the dim and distant past of 2009, the technology that would make this filtering possible was just starting to get into its stride, and Mindshare and the Futures Company were exploring the implications of these developments in their “Future of Media” report. Using a scenario-based planning approach, we hypothesised around what the misty horizons of 2015 might look like. The scenario of “Portal of Me” was bang on the money.

Portal of Me is a scenario in which media access remains always on but in which consumer attention has been narrowed and focused to a number of trusted partners. Media is a constant companion for consumers but it is customized and filtered by these trusted third parties who tailor information and entertainment based on user preferences, both stated and learned. Consumers may be very active in this scenario, but only within the parameters they choose. Trust is strong, and loyalty runs deep, as long as the service provider is honest and open and continues to provide value.

Good to see that occasionally trends predictions do get it right!

A couple of years later in 2011, Eli Pariser, in The Filter Bubble, explored the implications surrounding the growth in personalised information and content. Concerns were starting to emerge for him, particularly around that openness of the experience, and the users’ awareness and understanding of the information selection process that was happening on their devices.

“What’s troubling about this shift toward personalization is that it's largely invisible to users and, as a result, out of our control. We are not even aware that we’re seeing increasingly divergent images of the Internet. The Internet may know who we are, but we don’t know who it thinks we are or how it’s using that information. Technology designed to give us more control over our lives is actually taking control away.”

Eli Pariser, The Filter Bubble

Fast forward a few more years and the issue of who we trust (or not, in this case) has become an important reinforcement in this trend’s development. The Edelman Trust Barometer measures society’s trust in the four institutions of government, business, media and NGO’s. It shows how we are beginning to question these figures of traditional authority, leaving the field wide open for these more personalised sources to grow in trust and importance in our lives.

The 2016 results have highlighted in particular the growing disparity in trust levels between those who Edelman define as “The informed Public” versus the mass population, with the trust gap between these two groups accelerating significantly in the UK. Out of the 28 markets that Edelman survey, the UK now comes second only to the US in this trust polarisation. As a society, we just don’t trust the establishment anymore.

Corresponding with this demise has been the rising trust in more peer-to-peer based sources of information. “People like me” and the platforms where we can access their thoughts, opinions and familiar, comfortable perspectives on the world, now hold trusted status for many of us. Couple this with too little time, and too many demands on our attention, and the result is a lack of effective scrutiny for the content that we are exposed to by these sources.

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**Different Dimensions**

**NEWS**

With the Oxford Dictionary naming “post-truth” as their word of the year at the end of 2016, numerous commentators queuing up to write about the dangers of filter bubbles and echo chambers, and even President Obama weighing into the debate, it’s clear that the trend of Tunnel Vision is having a significant impact on how we discover and consume news.

It all started to come to the fore around the time of Brexit, then ramped up significantly with the US election. It’s worth noting that the US population tend to discover their news in quite a different way from the UK, with a 2016 Pew Research Center study finding that nearly two thirds (62%) of US adults come across their news on social media, and 44% of the general US population use Facebook for this task. These differences in behaviour have amplified the trend considerably the other side of the Atlantic.

Early on in the election Facebook in particular had been criticized for bias around its “trending topics” selection. The editorial team who had curated it were replaced with an algorithm, to try and reduce human bias, but mounting criticism then followed around the inability of this new approach to distinguish between fake stories and factual news. President Obama has been vociferous in his concerns about the impact of fake news, bemoaning an emerging news ecosystem where “everything is true and nothing is true”. The problem is fake stories and outrageous headlines grab our attention and get shared more, and this in turn fuels the algorithm promoting them even higher. Stories such as the Pope endorsing Donald Trump for example, were found to have performed better than real news on Facebook with more shares, reactions and comments, according to a recent Buzzfeed News analysis.

“everything is true and nothing is true”.

The impact of this exposure to fake news stories is then compounded by the filtered, highly personalised content stream that we see taking over our news feeds, skewing perceptions through a reinforced mix of endlessly corroborating material. Like Obama, German Chancellor Angela Merkel has also warned of the dangers: “These algorithms – when they are not transparent – can lead to a distortion of our perception. They narrow our breadth of information.”

So, how does the UK compare with the US on this issue? Well, some elements are different. Only 28% of the UK population use Facebook for news for example, versus the much higher numbers in the US. And the presence of the BBC still has massive influence as a source of news, even amongst younger age groups.

A recent Reuters study into the state of digital news across 26 markets, for example, found that BBC online had the highest online weekly reach for 18-24s at 59% when compared with the public service broadcasters in other countries. Whilst this does offer some reassurance, there are other factors that are less positive. In particular, the balance curation and fact checking provided by more traditional news companies is now under threat according to organisations like the News Media Association, who are urging the government to intervene. They argue the current digital news value chain just isn’t working, and that “significant value is being captured by companies who do not invest in original journalism at the expense of those who do”, ultimately threatening the “demographic conversation” of the country.
Concerns around digital filtering are currently focused around news content, but similar algorithmic techniques also influence what we are exposed to across much broader swathes of the internet – working to personalise the information we see, the content we watch and the stuff we buy.

Eli Pariser in The Filter Bubble, writes: “If I search for something, and you search for something, even right now at the very same time, we may get very different search results. Even if you’re logged out, one engineer told me, there are 57 signals that Google looks at – everything from what kind of computer you’re on to what kind of browser you’re using to where you’re located – that it uses to personally tailor your query results. Think about it for a second: there is no standard Google anymore.”

Awareness that a level of personalisation occurs when we search is still relatively low amongst UK consumers, with less than 4 in 10 claiming they know it takes place. For the most part the output of this information filtering is currently viewed in a relatively beneficial light by users, unlike news content. This may be due to a different end need. Information output will often benefit from being more tailored and focused to a particular user’s requirements, whereas news, ideally requires more of a balanced perspective.

However, we do expect this current state of benign indifference to be challenged over the next few years, as the concerns that have started to emerge around our filtered news content, begin to raise questions around other digital behaviours. Articles are now appearing for example, which question the content of some Google autocomplete suggestions in relation to different minority groups. Whilst consumers don’t exactly understand how Google works currently when they are searching, they do recognise that the GAFA four are already hugely influential in their lives. And this influence is set to grow even wider and deeper given the many development plans that Google now have around multiple aspects of our lives.

The impact of Tunnel Vision is also likely to spread in a similar way into the world of online retail – driven in particular by one ever expanding retailer – Amazon. Amazon dominates the online retail market, accounting for around 20% of all general merchandise sales in the UK. And it’s becoming increasingly influential around how we behave online as well. Recently published research indicates that Amazon is now the first place that people go to when they are researching what to buy, rather than Google, with 55% of Americans making that first search on Amazon, not on a search engine.

Like Google, the brand’s footprint has expanded into many areas and it is now a very different beast from the original books and CDs retailer it once was. Whilst the various elements of the organisation can at first seem somewhat disparate, they actually work in a very complimentary way to each other, particularly if Prime membership is involved in the mix. Amazon uses these different elements to capture more of our attention and time, and to give us a reason to return to the brand with increasing frequency. We are all no doubt personally familiar with the strength of Amazon’s recommendation engine; over the next few years this will only grow even more personalised and influential as Amazon captures deeper knowledge around multiple aspects of our lives. And we can expect to see increasingly powerful connectivity between its services as a result.

The likelihood is high that our attention will get even more filtered and focused in Amazon’s favour. Remember those handy reminders you get on Prime Video, of who an actor is in a particular scene? Well just think about how that technology could equally be used to suggest the products you might want to buy off Amazon instead?
Tunnel Vision
In This Space

1. ESCAPEYOURBUBBLE
Developed immediately after the result of the US Election, EscapetheYourBubble is a Chrome extension that overlays a news article from the opposing party’s viewpoint into users’ Facebook News Feed.

2. GOOGLE & FACEBOOK BAN FAKE NEWS
Google will ban websites that push fake news from using its online advertising service. Facebook has updated its network policy which states it will not display ads in sites that show misleading or illegal content.

3. INSTAGRAM
Instagram have started creating feeds based on algorithms built from pictures liked, interests and behaviours, as opposed to showing pictures chronologically.

4. BLUE FEED, RED FEED
In an attempt to demonstrate how reality of the US election may differ for different Facebook users, The Wall Street Journal created two feeds, one “blue” and the other “red”, representing the liberal and the conservative points of view.

5. AMAZON SEARCH RESULTS
Amazon algorithm puts its own products into the highlighted ‘buy box’, so when customer searches for something, the results will show Amazon-sold products as a suggested purchase.

6. FULLFACT
Funded by Google, FullFact aims to build the first fully automated end-to-end fact checking system.

7. GOOGLE DIGITAL NEWS INITIATIVE
This initiative aims to support high quality journalism through technology and innovation, encouraging a more sustainable news ecosystem, so far offering £20.6m to fund 124 projects across European countries.

8. HIFROMTHEOTHERSIDE
HiFromTheOtherSide is a website that aims to match people with someone with an opposing point of view. Users can share and discuss their opinions on various topics and even arrange to meet up.

9. STRANDS
Strands license their personalisation engines to clients; major banks, retailers, music sites and advertising companies.

10. DUCKDUCKGO
An alternative browser that is private and does not track your search history.

11. TORPROJECT
Tor is free software that helps people defend against traffic analysis by bouncing communications around a distributed network of relays, thus preventing anyone from learning about users’ location or browsing batters.

12. NEWS MEDIA ASSOCIATION
The NMA delivered a briefing to the Government regarding concerns around digital news provision in the UK and the impact of search engines and social media websites on media plurality and the functioning of democracy.
Tunnel Vision

Expert Opinion

JED HALLAM
Head of Digital Strategy
Mindshare

There were two huge moments in 2016, the EU referendum, and the American Election. Both of these events evaded the prediction of the polls, commentators, and to a large extent the population. Much has been written about the role media played in these two moments (and specifically in the lead up to these two moments), but ironically all sides agree that news and commentary has become polarised beyond what we’ve experienced before. Many pointed at Facebook, and at search results for showing people increasingly one-sided news – the filter bubble, as it’s commonly termed.

Personalisation of content not only effects the channels that use algorithms though, it has started to effect all news. Facebook and Google are the new media darlings of the Internet have brought as many benefits as risks. It has provided increased opportunities for different means; telling people what they already believe (confirmation bias) and telling people things that are shocking (clickbait).

RUTH ZOHNER
Head of Programmatic Marketing
Mindshare

In 1949, when George Orwell wrote Nineteen Eighty-Four, the term ‘social media’ would have raised questions on the appropriate use of English or given room for some creative interpretations of its meaning. GAFA was not a common acronym (in fact, it didn’t even exist), and print journalism – the professional kind, not the commercial one we now often hear about – was still the most common way to stay informed. Yet the Ministry of Truth employing Winston, the main character, has an uncanny resemblance to how content is produced by some of the leading media and entertainment companies today.

A quick search online would raise multiple ‘How to Guides’ to help distinguish real from fake news. Who thought one would ever need one? Lower barriers to entry into the world of content that came with the advent of the Internet have brought as many benefits as risks. It has provided the appropriate use of English or given room for some creative interpretations of its meaning. GAFA was not a common acronym (in fact, it didn’t even exist), and print journalism – the professional kind, not the commercial one we now often hear about – was still the most common way to stay informed. Yet the Ministry of Truth employing Winston, the main character, has an uncanny resemblance to how content is produced by some of the leading media and entertainment companies today. A quick search online would raise multiple ‘How to Guides’ to help distinguish real from fake news. Who thought one would ever need one? Lower barriers to entry into the world of content that came with the advent of the Internet have brought as many benefits as risks. It has provided increased opportunities for different points of view to be represented, and democrated access and production of content. It has likewise given a platform to misinformation, and at its worst the dark web. Anyone today can nurture an audience, and in some cases, do so profitably thanks to advertising, regardless of intention.

Programmatic marketing technology has played an important role in this process by enabling the advertising that partly funds the Internet to grow beyond search and simple banner display into rich media, video and native advertising, blurring the lines between content and advert. It has also given opportunities to tailor creative execution based on specific data points about the person on the other side of the screen thereby supporting personalisation and, one could argue, contributing to the tunnel vision.

The combination of data and technology that powers programmatic marketing is powerful and should definitely inform how we create, distribute and optimise content for different groups of people. But it is also a double edge sword. The blunt application of either or both can not only lead to poor marketing execution, it can violate privacy and seriously offend. And in the worst of cases, it can be used as an excuse to oversimplify ‘target audiences’ and perpetuate stereotypes. After all, only men buy cars, right?

As programmatic marketing becomes more prevalent, we need to apply data and technology responsibly: question whether our first interpretation is right; search for the outliers and always ask why, not just what. Accepting the status quo, in marketing as in life, is all too easy. Redefining it takes a little more effort.

DAVID ROTH
CEO
The Store WPP

A while back, in the analogue age, I worked on the first magazine to adapt its content depending on what we knew about your interests. It was a technological triumph.

So, imagine my surprise when the idea was savaged in print by the renowned journalist the now-late Auberon Waugh (son of author Evelyn Waugh, of Brideshead Revisited fame). His point was that a magazine by its very nature must include articles that you never thought you’d be interested in. A clever headline and sharp writing seduce you into reading something surprising - then realising that you were interested all along.

Well, roll on the years and our technologically driven, algorithmic, cookie-embedded content-management systems know far more about each of us than we did back in those days. The result? Throughout your digital journey, you’re served with an increasingly focussed diet of content that leads you down an ever-narrower tunnel.

Serendipity is what makes the world go round. It makes us human; it makes our day, and long may it live. I now get what Auberon was on about all those years ago.
Tunnel Vision
Expert Opinion

MARTIN RASMUSSEN
CEO Denmark and Nordics
Mindshare

Recent research by Mindshare Denmark, on behalf of the Ministry of Culture, suggests that social media seems to be making the Danes dumber. The study explored which news sources the Danes typically used, and then analysed this against their understanding of a wide range of news and current affairs topics.

Our study discovered that respondents tended to know far less about news and current affairs if they relied primarily on social media for news, with 60% of social media news users falling into the “less informed” band versus only 10% of newspaper readers. It is simply not possible to become as well-informed from using social media, as it simply is not possible to become as well-informed using social media.

STEVE RAY
Client Director
Mindshare

If the Brexit vote and Mr Trump’s success in the US Presidential elections taught me anything, it’s that I definitely exist in an echo chamber of self-perpetuating truth. I didn’t see either result coming. Not many people did. Because my Twitter timeline, my Facebook feed, my newsbrands all supported my own perspective and beliefs and didn’t give me a balanced view of society.

This technology fuelled filter bubble has the potential to extend beyond society’s big questions and impact the way we market and advertising can influence. Data and technology are positive forces in our industry, but the extent to which we deploy them has to be managed with caution.

We have so much insight into our audiences that we can tailor the message to them to the nth degree. We retarget people who viewed that pair of Nike Air Max, we prioritise people who visited our website.

On the other side of the coin, people are increasingly blocking ads. They don’t want something irrelevant to them. So we try and make our ads more relevant. By retargeting them, or using all our programmatic capabilities to define them and what we think they want to see, until all they see is what we assume they want.

Whatever happened to serendipity? We can be so enamoured by the power of data to speak to an individual we risk losing the opportunity for discovery.

To paraphrase Dr Ian Malcolm from Jurassic Park, “we were so preoccupied with whether or not we could that we didn’t stop to think if we should”. Data; it’s not how big it is, it’s what you do with it that counts.

DENISE TURNER
Insight Director
Newsworks

In today’s world we are never more than a click or a flick away from news. Saturation has led to expectation – somewhere something is always happening and we need to know about it. We can find out what’s happening almost immediately after it has happened; a bit of a contrast to the Battle of Waterloo when it took 2 weeks for the news of Wellington’s victory over Napoleon to reach London. In theory this thirst for news should mean that the role of newsbrands is more important than ever before, as they provide a trusted lens on the world. People hate the thought of missing out on what is happening, yet the sources they are using to alleviate FOMO are increasingly narrow and shallow, based only on what they looked at or read before. There is no room for accidental discovery of news or in-depth analysis of events.

Dr. Nick Southgate likens the way we consume news as like asking our best friend for advice about what to buy. That’s the worst thing you could do because they will just tell you what you want to hear. You should instead go to people who know you a bit, who will be more impartial. Newspapers are like that. They provide arms-length advice on what news is important, and not just what you think you need to know. And they play an important role in helping people discover brands. They frame perceptions, helping people absorb information on the products, brands and retailers out there and worth paying attention to. They create awareness of what’s out there and what’s important. And they inform, delivering a ‘real world’ perspective.

LIZZIE RANKIN
Insight Executive
Magnetic

The debate around the value of the algorithm has been prolific in 2016. Whilst Facebook has replaced their editorial news team with an algorithm, Lad Bible has employed a new wave of young editorial staff to represent their audience, there are clearly two sides to this debate and it is important to acknowledge this. This debate is set to develop further in 2017 as people start to question the impact of the algorithm and whether this increasing filtering and personalisation of content is creating a tunnel vision for consumers. By only serving content to consumers they already like and are comfortable with, this may eventually
This year at Magnetic, we posed the question; can an algorithm match what an editor does and what role do human editors have in an age of data and algorithms? As AI is becoming more mainstream, behavioural economist, Nick Southgate, explored this concept. Here are some of his findings:

AI is great at specific intelligence. Humans are very good at general intelligence. This is important when we understand how algorithms and AI interact with human beings. When AI really struggles is when it needs to interact with human beings.

Editors choose content for human reasons and algorithms choose content for narrower reasons. When AI really struggles is when it needs to interact with human beings.

Algorithms choose content for narrower reasons and this demands the wide and general intelligence human beings are good at.

Amazon only recommends books that it and more purely commercial reasons. Algorithms choose content for narrower intelligence human beings are good at. Editors choose content for human reasons and this demands the wide and general intelligence human beings are good at.

Algorithms choose content for narrower and more purely commercial reasons. Amazon only recommends books that it can sell me, for example.

This is why I, and many others, including a new generation of younger readers fully immersed in digital culture are turning to magazines.

Human editors, know how to make human connections. They know that their magazine brand is not merely a commercial exchange, but a social one. It is an exchange based on the crucial but intangible value of picking stories audiences want and need to read about. Editors know when to stretch readers, when to leap forward, when to move back. Editors know how to make human leaps. And, for the moment; algorithms don’t.

At the Magnetic “Spark” conference in September, Lorraine Candy, former editor-in-chief of ELLIE explained “We are the walking algorithm... As editors we go to the fashion shows, looking six months ahead, meeting consumers constantly, predicting what’s new... we do work with data. It would be insane not to, but combining it with the editor is a powerful and exciting force.”

Algorithms are becoming increasingly more influential in how humans see the world, so we believe it is vital that the value of a human editor is not ignored.

There is a famous old Sanskrit quote that says “The World is as you see it.” It was attempting to draw attention to the belief that reality is a product of one’s own viewpoint. People can be blind to the level of influence their own attitudes and preconceptions bring into shaping this view, rather believing they are looking at an objective reality.

Today, there may not be a Sanskrit word for ‘algorithm’ but these operations are now playing a fundamental role in shaping how we see the world around us. The likes of Facebook, Google and Amazon use algorithms to help make their content more relevant to their audience – stories and news articles based on your previous likes, search results based on your previous searches, history and recommendations based on all your previous purchases. Perhaps there was once a naive promise to these algorithms, designed to give people more of what they think they want.

But in the digital space it is easier than ever to publish fake news and for this to be shared widely, with no account for accuracy. What has it ultimately done is streamlined and coded our biases to create a hermetically-sealed view of the world. As the real world around us is becoming more complicated, our online view, refracted through the filter bubble, is an increasingly biased, unchallenged and reductive version.

Many brands want to be seen as egalitarian and inclusive entities. Connecting people and communities around shared passions has been an effective way to be part of their customers’ lives for years. These brand communities have welcomed diversity and placed a large emphasis on being positive experiences.

But how can brands reconcile that their digital advertising is now simultaneously appearing on platforms where the filter bubble is potentially reinforcing and solidifying people’s inaccurate and divisive biases. Do brands have a duty of care on behalf of their customers? Should they demand more from the platforms where their advertising or content sits when it is potentially mixed with articles that could be making people more extreme or ill-informed?

The recent Stop Funding Hate campaign, was a response to a form of journalism, in some parts of the press, that could be seen to promote “hated, discrimination and demonization” through articles that were often misleading or proved to be outright lies. Started by a group of concerned citizens, brands are being urged to reflect upon their tangential role in the creation of this hate speech, by paying to have their advertising in these publications. Is it only a matter of time before something similar happens if people start to reject the worldview presented to them by the big digital and social platforms as misleading and even manipulative? Brexit and Trump are two recent examples that have brought to the fore a growing awareness that people are not necessarily seeing the whole picture when online. Whether they want to be or not, they are indeed living in an algorithmically-induced digital bubble, completely disconnected from points of view that are not similar to theirs. Brands have to decide if they want to help burst these bubbles or risk public ire if they do nothing.
Where Next?

Tunnel Vision will be an increasingly important part of our lives over the next few years, manifesting itself in different ways across the three dimensions.

The concerns that were raised around news content as a result of Brexit and the US election, have already resulted in some changes. After initially rejecting the idea that fake stories had influenced the outcome of the US election, or that echo chambers were a significant problem for them, Facebook have now shifted their position slightly, and along with Google, have announced plans to kick fake news sites off their ad networks.

Although this only deals with part of the problem and does not directly address the issue of digital filtering, industry coverage suggests that much is going on behind the scenes to tackle this concern. Given the high level nature of some of the criticism it’s a problem that is unlikely to go away any time soon for the technology companies, and they will have to continue to try and address it.

On the information front Google has ambitious designs around many aspects of our lives, with hardware development pillars around phones, watches, cars and the home. Many of the devices in these spaces will be powered and connected together by the highly personalised, bot-centric AI driven conversation of Google Assistant. Whilst these developments may well make our lives better and simpler in the future, we can expect to experience increasing levels of tunnel vision around our information gathering and related decision making activities, as a result.

In the world of online retail, Amazon is developing a plethora of other services that extend its stretch far away from the original “everything store”. Prime membership is a central part of this with its free delivery benefits but the brand now extends much further. There is video streaming, original content production, online TV services and music, credit services, grocery delivery with Amazon Fresh, artisan goods via Handmade, restaurants via Prime Now, Fire TV technology, and of course automatic re-ordering with the Amazon Dash button and connected devices and voice recognition with Amazon Echo and Alexa.

This is one of the key reasons for the brand’s success – you go back to watch the content you can’t get anywhere else, and why not do a little unplanned shopping whilst you’re there, which Amazon monthly payment options can then help you finance? There is less and less reason to leave the brand’s ecosystem, whatever your needs might be, and like Google we can expect to see increasing levels of connectivity and association between the different services.

What this means for Brands

In the short term there are some immediate challenges to be aware of around the virality of fake news. Many of us have become a bit trigger happy when we see a good headline that often has all the appearances of being real, and stories are travelling very fast with facts only emerging after the event. No one wants this to happen to their brand, and good social listening and community management are essential to keep an eye on things.

Brands also need to think about who it is that we trust. We are far less likely to defer to the establishment or to experts than we once were. Currently it’s about “people like me” but even that may narrow further to “people I actually know” given some of the headlines around recent news content.

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People were surprisingly aware of the Tunnel Vision trend, especially when it came to news. 73% of people think that digital filtering has some or a significant effect on their perception. It is not however something people devote much of their time to thinking about and most struggled to think of everyday examples where it may have affected their viewpoint or behaviour. The full magnitude of the trend was only appreciated once people had time to digest it.

“My whole life seems to revolve around the internet now and I know I am less informed than when I was younger. I did think it was because I choose not take an interest, but now I think about it I hardly see much content outside of my interests or of a wider view of the world. I feel so uninformed now, what stuff am I missing out on?”

Interestingly, initial awareness of this trend was not determined by tech usage or even age, to a certain degree. Knowledge in this area was more based around people’s attitude and approach to life, dictating whether this was a topic they were naturally curious about. There were a group of people that thought this level of personalisation was a good thing and they had no concerns about Tunnel Vision. However the majority did have varied concerns. 49% agreed that it doesn’t encourage us to think for ourselves, 37% agreed that it worsens the divisions in society and 48% agreed that having things tailored like this doesn’t give us enough of a balance of information.

“Companies like Google, Apple, Facebook and Amazon are fantastic in my opinion. I use each of them nearly every day for the technology they have to offer. I know that I couldn’t get through my day without using them in one way or another. It is not something I have honestly considered in-depth though, and to realise that they are effecting what we see and do, I don’t know if that is easy to really understand. I feel I have the choice to use the internet, or my phone, but the more I think about it really they have crafted nearly everything I look at or do.”

Despite these concerns, people freely admitted that this is a trend they have their “heads in the sand” about a little. The benefits of this level of personalisation are too good to pass up, especially from a convenience point of view.

“It is the life / time thing and how we now expect everything to be given to us on a plate.”

This conflicting attitude also applied to how they felt about the big digital companies’ involvement in this space. 91% of people believe that the big digital companies have either some or a significant influence when it comes to this topic, although it felt quite subliminal for most. Plus there were concerns around how much data these companies have on us as individuals and what they do with it. However, in reality, it was not something they had thought about to give up using them anytime soon, as they cannot see an alternative, but they do expect these brands to make an effort to help counteract ‘Tunnel Vision’.

“Intellectually, I resent the fact that they direct so much of my activities. But from a practical point of view, however, it makes the internet experience smooth.”

“With you being able to login to different websites using your Facebook or Google account, the amount of information these companies have about me must be immense.”
Although this topic of Tunnel Vision is about the personalisation of content and products, the conversations we had with people did often divert back to personalised advertising. They were linked in people’s minds. Many mentioned their loathing for personalised digital advertising that in their view ‘stalked’ them around the internet; continuation of a viewpoint we found in our 2016 trends (see Adblockalypse Now). Once we were back on track we talked about Tunnel Vision in three areas.

How we access our news became a main area of discussion for Tunnel Vision, as this was the area people were most familiar with, following Brexit and the US election. Almost a quarter thought that digital filtering had affected their view when it came to Brexit. The issue of fake news was also top of mind, having been a topic in the media very recently.

“I find that if people see something on Facebook, they believe it, even if it is clearly not true. There are not the same checks and balances on the internet that other traditional media are subject to. It seems to me that these are necessary.”

Most were conscious of the level of filtering that happens through social media. Some were even taking steps to counteract it.

“I used the settings on Facebook to ensure that it showed all posts by certain people, groups and brands first as well as adding notifications for every time they posted so I knew I wouldn’t miss anything.”

Others were quite pragmatic in the belief that this kind of tunnel vision has always existed in the media in some form or another.

“Although things are filtered to our preferences, we are still responsible for the choices we make or choose. Just because the system has filtered what it wants you to view doesn’t mean you have to do it. You are still able to search for what you want. We need to take or own responsibility for it.”

People like to think they have a balanced view or at least aim to have one. If they have time, they will try to seek out a variety of opinion if it is something they are interested in. In the case of news, many turn to a variety of trusted news brands, both online and in print. The key here was time and more often than not, people would only have time to get their news from one source.

“I do try and read articles from other newspapers or watch news or political programmes. It is difficult to always find the time though so I suppose I do just read from my side of the argument most of the time.”

How relevant to you is Tunnel Vision?

84% ADULTS RELEVANT

90% AGE: 18 – 34

86% AGE: 35 – 54

72% AGE: 55 +
How we access information was another hot topic. Only 38% were aware that Google searches are personalised to the individual and for those new to this concept, it was quite worrying.

“I was aware of Google searches influencing my Facebook and advertising on screen but naively thought it was one-way, not that my searches are tailored. I feel patronised than an algorithm should assume they know me and my interests and have such a control over what I see.”

“The idea that Google whom I trust to tell me the truth can be bought by the highest bidder is disturbing.”

For others this tailoring of information was of real benefit.

“Filtering information according to our interests just means we are exposed to more that we are interested in, rather than wading through huge quantities of data that doesn’t interest us. This is the future!”

Retail was perhaps not people’s first thought when it came to Tunnel Vision, although they were much warmer towards the trend in this context, as the outcome was often convenience.

“You like this, so you may like this” was viewed one of two ways; in some situations amazingly useful but in others, completely infuriating ‘trying to sell me more nonsense’. Brands like Amazon were universally liked and viewed as providing a useful service, although most had never really contemplated the ‘amazon loop’ they were embarking on with Amazon Prime and related Amazon products. If they had, it was perhaps another ‘bury our heads in the sand’ moment. Our findings on automatic re-ordering were similar to those we found last year (in our Everyday Connects), where people were reluctant to give up control to a brand/subscription service for particular products. The fear of ‘product tunnel vision’ was quite apparent here too.

“The sad thing is I can’t see this all getting any better just worse. Think about it, if we have appliances in our house that connect to the internet, our fridge can order food for us when it runs low. We may never need to do a shopping list again and will be stuck buying the same food day in day out and never knowing about anything new unless the powers that be think we might be interested in it based on our preferences.”

Overall, this trend was the most relevant to people with 84% finding it relevant. It felt the most current and the majority thought it was either at its peak now (19%) or will peak in a few years’ time (45%). People felt ‘uncomfortable’ and ‘apprehensive’ about this trend and saw it as an inevitable development of our increasing reliance on the internet, which is only set to grow. For this reason, most believe that the trend of Tunnel Vision will intensify, unless digital companies and individuals do something about it.

“We do not talk about it enough and more could be done to educate people. More could also be done to put the power of preference back into user’s hands.”

“I think people often apply self-filtering anyway in terms of what newspapers, news channels and websites they choose to view and get their news from. Each usually have some sort of lean towards parts of the political spectrum. So it’s really not much different to how these companies choose to digitally filter. I feel we still get to see opposing points of view by online comments and reactions to the other articles anyway.”

Overall this trend was the most relevant to people with 84% finding it relevant.
A special thank you to all our contributors

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and all of Mindshare UK

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Denise Turner (Newsworks)
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Frazer Hurrell (AOL)
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