





# What is Technology

- Technology is hard to get a handle on, is it gadgets, applications, software, ideas?
- Tech is pervasive, it is everywhere and becoming integrated into almost every object.
- The Big Tech companies are huge and powerful, how powerful should they be?
- There are serious issues with technology and a potential for global catastrophe.

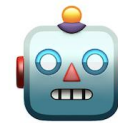


# Apple

## *iPhone X*

iPhone X is an overdue and winning evolution of the iPhone, but you'll need to leave your comfort zone to make a jump into the face-recognizing future.

Also has new Animojis and a glass back for easy wireless charging (the end of the wire)





# Apple

## Apple Watch Series 3

Make phone calls and text from your wrist. Track your health with a step counter and heart rate monitor. And with Apple Pay you don't need a wallet. Track where you are with GPS and listen to music. Plus it keeps time. That's about 8 devices in one.

Of course you'll have to convince people to start wearing watches again.





# Gaming

## Nintendo Switch

The first game console that's truly designed for both at-home and on-the-go entertainment. The Switch consists of a tablet with a 6.2-inch screen with slots for attaching Nintendo's Joy-Con controllers on either side, turning it into a handheld video game machine. But when you're at home, you can slide the slate into a dock that hooks up to your TV and play it like a traditional console. That "play anywhere, anytime" approach, combined with a stellar games roster, from the recently launched *Super Mario Odyssey* to *The Legend of Zelda: Breath of the Wild*, makes the Switch a true knockout.

Nintendo has sold 10 million Switch consoles since March. In comparison, the company sold 3.9 million Wii U systems in that console's first 10 months





# Gaming

## Pokemon NoGo

About 20,000 Pokémon Go players traveled from all corners of the world in July to Chicago's Grant Park for the first-ever Pokémon Go Fest.

The festival promised players the chance to catch rare Pokémon throughout the day. But rampant server outages and poor cell service quickly turned the event into an experience so disappointing that the game's owner, Niantic Labs, issued refunds and \$100 worth of in-game credits for each ticket holder.







# Video Editing Software

## *GoPro Quick*

Newly updated GoPro Quick is available for both mobile and desktop. Easily edit videos, add photos and time lapse sequence. Includes an audio library and auto upload to the cloud. All for the low, low price of Free.

Awarded Videomaker's "Best Introductory Editing Software of 2017"





# Top Videos of the Year



Professor Robert Kelly's Skype interview with BBC News started just like any other video news clip. That is, until a toddler jovially entered the room and began tugging at his arm. With more than 25 million views, it's the news outlet's most popular video yet.





# Tech Failures

Technology this year was one big “fail” after another. And the biggest loser from all of this was you.

## Equifax Security Breach

In September, credit-reporting agency Equifax revealed that the personal details of up to 145.5 million US consumers were potentially accessed by hackers between mid-May and July 2017.

Equifax is now the subject of hundreds of lawsuits and is still being investigated by dozens of government agencies.





# Tech Failures

## Uber

The ride-hailing start-up was a scandal magnet this year. After Uber employees aired complaints about sexual harassment, the company did an internal investigation and fired 20 people. The New York Times also reported that the company had used a secret program, code-named Greyball, to monitor and evade law enforcement officials.

It didn't end there. Waymo, the self-driving car unit of Google's parent company, Alphabet, sued Uber, accusing it of stealing trade secrets. In addition, Uber recently disclosed that hackers stole 57 million driver and rider accounts in October 2016 — after keeping the breach secret for more than a year.

Travis Kalanick resigned as the company's chief executive amid a shareholder revolt. Uber's new chief, Dara Khosrowshahi, now faces the tall order of repairing the company's reputation.





# Tech Failures

## *Snap Spectacles*

Glasses with a built in camera that lets wearers send photos directly to Snapchat.

Snap Inc's jump into hardware didn't impress. Initially only available via vending machines in New York.

Tied exclusively to SnapChat, and Instagram started taking over many of the features available on SnapChat.



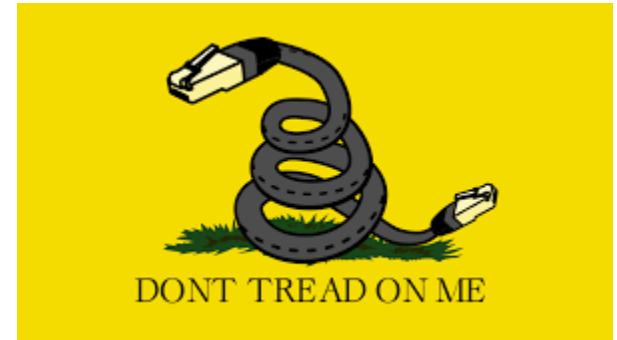


## *Net Neutrality*

The 2015 rules, which regulated the internet as a utility and ensured all traffic was treated as equal, were killed by the Federal Communication Commission's 3-2 vote early in December.

While the dust hasn't settled yet, the decision clears the way for internet service providers to engage in behavior such as blocking, paid prioritization and slowing down certain websites.

Those celebrating the end of net neutrality, including Chairman Ajit Pai, the architect of the plan to overthrow the Obama-era rules. He claims a "light tough" approach will lead to more innovation and investment, ultimately benefiting consumers



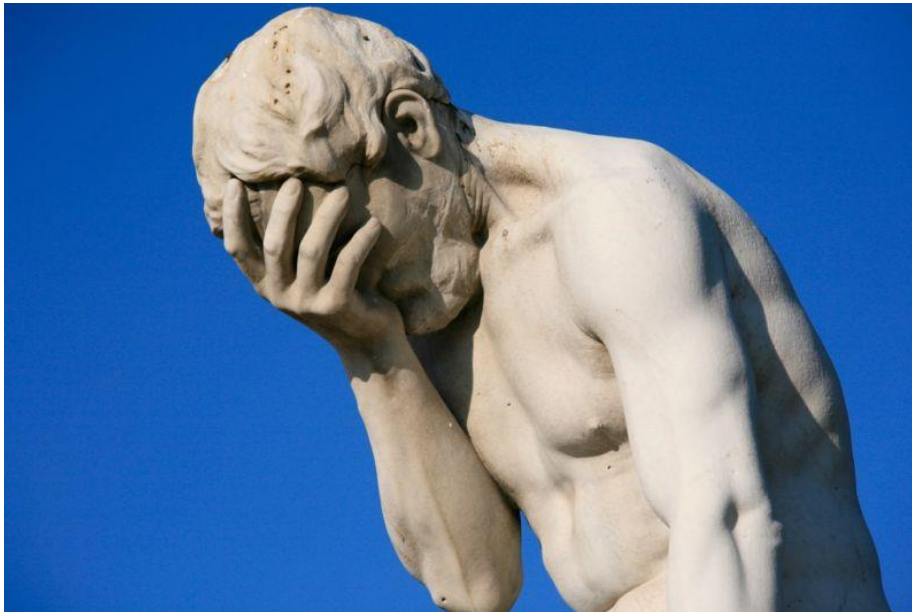


## *Data Leakages*

Equifax exposed sensitive data of almost half of all adult Americans (143 million people). Their tech people failed to apply a security patch to their website.

Verizon exposed 14 million subscriber records

The NSA left 100 gigabytes of data unprotected





# Fake News

## *Backlash Against Facebook*

Senate hearings dragged Facebook, Google & Twitter representatives to testify concerning “Fake News.” Facebook has been scrambling to put new policies, moderators & algorithms in place to fix the problems. Zuckerberg created a new manifesto to “Bring the world closer together”







## *Russians Bought Facebook Ads*

In September, Facebook said it had found evidence that fake accounts "likely operated out of Russia" purchased thousands of ads during the 2016 US presidential election.

The ads covered a wide range of hot-button political issues, including the Black Lives Matter movement, LGBT rights, immigration, and gun rights. Some were designed to stir support for then-presidential-candidate Donald Trump.

Facebook said the ads were designed to deceive the public and distort political sentiment ahead of the election, and estimated that 10 million of its users saw the ads.





# Disappearing Tech

## Yahoo

While Yahoo is still alive and kicking, the former golden child of Silicon Valley closed the end of a storied chapter in 2017 with a sale.

Despite suffering through financial issues and two high profile hacks, the company's core business was sold to Verizon, which has placed it under a new parent company called Oath.





# Disappearing Tech

## *Goodbye iPod Shuffle & Nano*

The last of the traditional iPods that lacked internet connectivity are gone. Apple has long maintained that the iPhone, iPad, and iPod touch would ultimately cannibalize its traditional music player hardware.





# Disappearing Tech (Reappears)

## *The Mighty*

Looks like the iPod Shuffle but more advanced. Stores Spotify playlists so you can leave your phone at home. Built-in WiFi lets you transfer music before leaving home and Bluetooth lets you use wireless headphones. \$86 retail





# Disappearing Tech

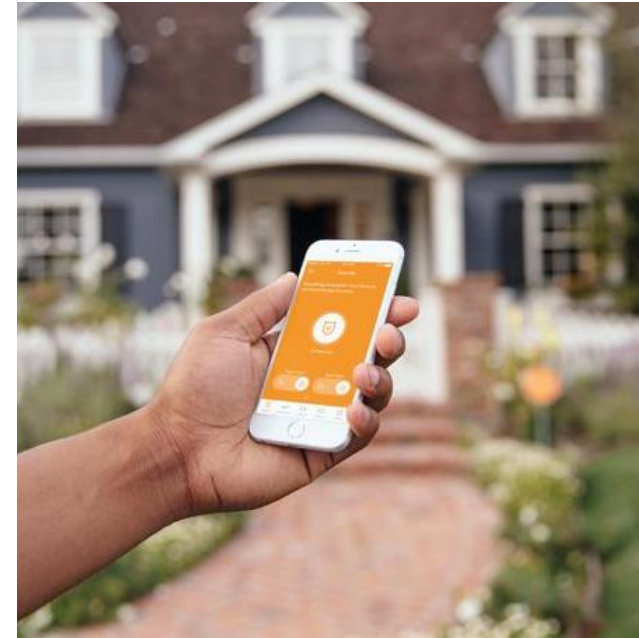




# Smart Homes

These days, you can buy high-quality internet-connected home accessories, like light bulbs, thermostats and security cameras, that work well together and can easily be controlled with voice-powered virtual assistants including Amazon's Alexa, Google's Assistant and Apple's Siri.

The young smart home market is growing quickly, 15 percent of American households with an internet connection now own a home automation device, up from 10 percent in April 2016.







# Smart Home

## *Alexa*

Alexa became the dominant voice assistant in 2017. It may not be the smartest voice interface but it is on it's way to becoming dominant.





# Smart Home





# Alexa



# Smart Home Devices

## *SimpliSafe Home Security System*



# Smart Home Devices

## *Anova Culinary Precision Cooker Wi-Fi*



# Smart Home Devices

## *Neato XV Signature Pro*





# Smart Home Devices

## *iRobot Braava Jet 240*

**Braava**<sup>®</sup>  
Mopping Robot 



# Smart Home Devices

## *Rachio Smart Sprinkler Controller*



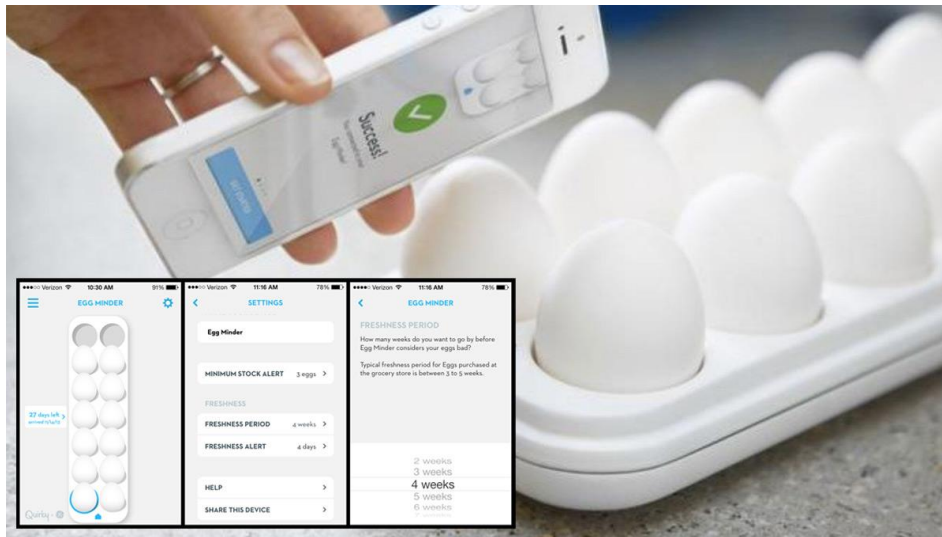
# Smart Home Devices

## *Robomow RS622*



# Smart Home Devices

## Quirky Egg Minder



You know when you're just not quite sure if the eggs in your fridge are still in good shape to eat? The Quirky Egg Minder will solve your morning grind. Not only will it keep count of your eggs, it will tell you which ones are the oldest and which ones are going bad.

# Smart Home Devices

## *Jawbone UP3 Fitness Band*



**How is this a smart home device?** You can link it to your house, and that's where it gets interesting. You can integrate with your house so that when you wake up it will turn on the downstairs lights, and start brewing coffee.

# Smart Home Devices

## *HAPIfork Bluetooth-Enabled Smart Fork*



Tracks what, how much and how quickly you eat



# Smart Home - Danger

## *Botnets of Things*

Botnets are a collection of devices taken over by hackers to be used for nefarious purposes. The relentless push to add connectivity to home gadgets is creating dangerous side effects that figure to get even worse.

Thanks to a flood of cheap webcams, digital video recorders, and other gadgets in the “Internet of things.” Because these devices typically have little or no security, hackers can take them over with little effort. And that makes it easier than ever to build huge botnets that take down much more than one site at a time.





# Missing Drivers

Tesla unveiled a new semi truck some time in November. The electric semi truck was equipped with Tesla's semi-autonomous Autopilot driving system, which provides automatic steering, braking, and lane changes on highway roads. This could be an initial step toward autonomous semi trucks.





## Driverless cars will include health sensors

Parallel with striving for the introduction of driverless cars as soon as possible, companies are equipping cars with tons of sensors. As we will spend more passive time in 2017 in these vehicles, Uber, Volvo or Tesla will start implementing health sensors into the driver's seat. The car itself will operate as a point-of-care in the future.





## *3D printed casts a reality*

Imagine a scenario where you have broken or twisted a limb, and need a cast. Previously, a messy process of fitting plaster to your body part, followed by doctor visits to refit the cast. Instead, the doctor just scans your arm, prints out a waterproof, lightweight cast in seconds using a software approved by traumatologists, and you're free to go home. At the next visit, your caregiver simply pops it open to examine the injury. Cheaper, faster, more convenient for both patient and doctor.





# Medical Technology / The Giants

## *Apple*

Stanford University (financed by Apple) used a smart phone app to recruit individuals for new heart study. An Apple watch to try and identify people with irregular heart rhythms. Quickly enrolled 54,000 patients.



## *Microsoft*

Microsoft developing virtual assistants to help patients choose medical specialists and make appointments





# Medical Technology / The Giants

## Google

*For diabetes care Google has patented a digital contact lens that can measure blood glucose levels from tears as an added benefit.*



## Facebook

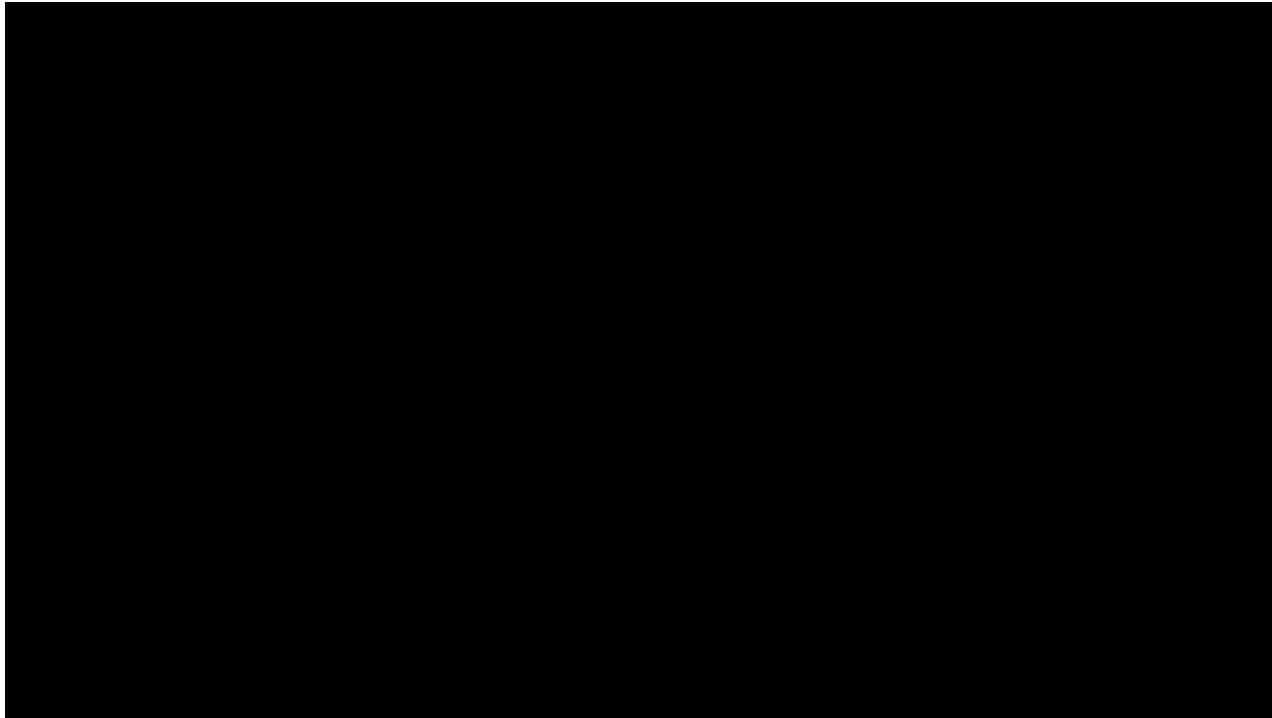
*Occulus the virtual gear maker owned by Facebook is developing Virtual Reality simulations for doctors to practice high-risk pediatric emergencies.*



facebook



# Medical Technology







# Virtual Reality

Consumer VR (virtual reality) starting to take off.

Drastic price cuts over holiday season for Sony's PSVR, Oculus Rift, and the HTC Vive system. Over 1 million units sold in a single quarter.





# Virtual Reality

And if that's not enough





# BitCoin

Bitcoin the cryptocurrency had a wild ride this year. It's future became in doubt when transactions slowed down in the virtual currency and rival plans were attempted to deal with this problem.

A compromise deal was eventually struck to make the underlying technology, the blockchain, more efficient. But the plan fell apart before it had a chance to be fully enacted in November.

That failure didn't prevent Bitcoin's value from bubbling higher. Earlier in the year bitcoin was worth about \$2,400 per coin. By December, it was close to \$20,000.

Slow processing times, however, remain a headache. Earlier this month, the average time taken to confirm a Bitcoin transaction was close to 24 hours.





# Gadgets

## 360 Degree Selfie

Inexpensive cameras that make spherical images are opening a new era in photography and changing the way people share stories.





# Gadgets

## *360 Degree Cameras*





## *The Old Returns*

Polaroid Snap Touch Instant-Print Digital Camera

This modern-day polaroid camera may be digital, but the photos it prints (which don't require ink or shaking) still have that great nostalgic feel.





# Gadgets – the Simple

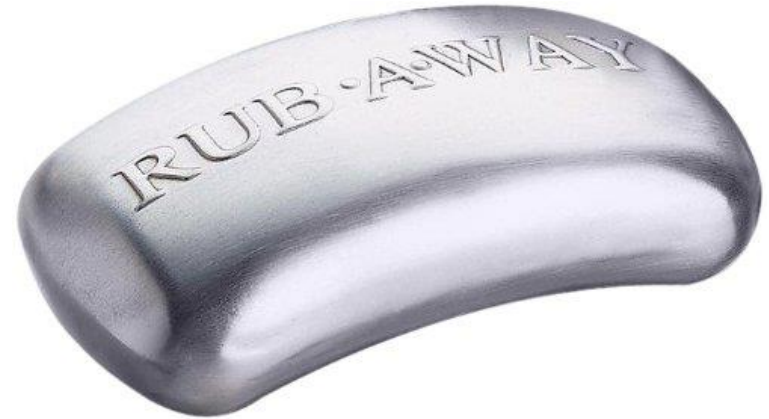
## *RubAway Bar*

Rubbing the bar removes any odor from your hands. Great for use after working with onions, fish, or garlic

To use, simply rub between your hand as you would with a real bar of soap; for use with or without water

### **It's not magic, it's science**

The Rub-a-Way Bar is made from light-weight, stainless steel - the molecules in the steel bind with the sulfur molecules on your hands, thus transferring the molecules, along with the smell, to the metal and off from your hands.

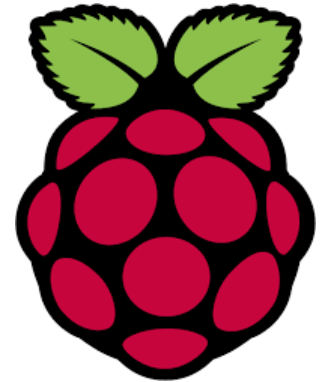






# Raspberry Pi

Sales of this mini computer hit 15 million in 2017. The makers only expected to sell 1000. Tinkerers rejoiced, creating all sorts of devices.





## *Amazon Kindle Oasis*

Is it time to get rid of paper?

Pricey, but you can drop it in the bath without disrupting your reading experience. Amazon boasts the screen resolution is so good it “reads like printed paper” – which is a relief.



# Apps : Mobile Passport

The Mobile Passport app speeds you through U.S. Customs when entering the USA at 1 cruise port and 24 airports! Officially authorized by U.S. Customs and Border Protection, MOBILE PASSPORT allows U.S. and Canadian passport holders to submit their passport control and customs declaration information via their Android device and bypass the regular line to enter the United States.

The graphic features a dark blue background with a white circular icon at the top center containing a stylized passport and an airplane. Below the icon, the text 'Mobile Passport' is written in white. Further down, the phrase 'BREEZE THROUGH CUSTOMS' is displayed in large, white, all-caps letters. Underneath, a smaller line of text states 'This app is officially authorized by U.S. Customs and Border Protection'. The bottom section contains logos for ACT (North America Airports Council International), Airside, Boeing, and Port Everglades Broward County Florida. At the very bottom, there are five white dots and the text 'GET STARTED'.



## Mobile Passport

BREEZE  
THROUGH  
CUSTOMS

This app is officially authorized by  
U.S. Customs and Border Protection

Sponsored by

• • • • •

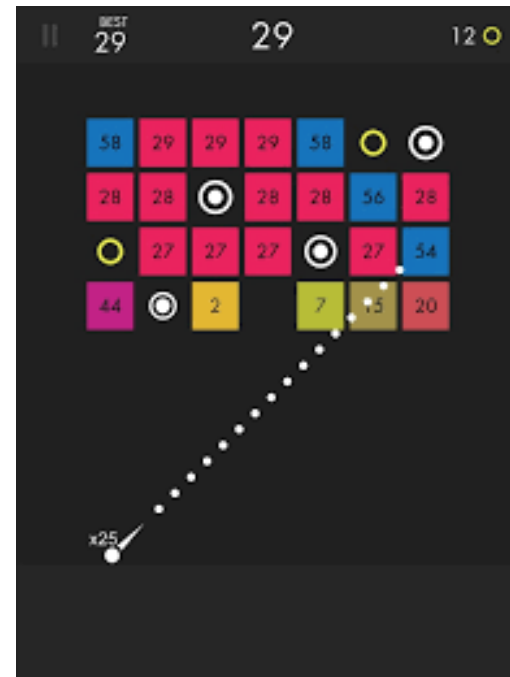
GET STARTED



# Apps of the Year - Games

## Ballz

A simple addicting game; hit the bricks with ball but with just enough strategy to make it hard to put down.  
Spent weeks at the top of the app store & Google play earning a near perfect rating





# Apps of the Year – Games/Nintendo

## *Animal Crossing: Pocket Camp*

Nintendo reboots the popular Animal Crossing Series



## *Super Mario Run*

Launched in 2016 but became one of the most popular apps of 2017. Nintendo is back

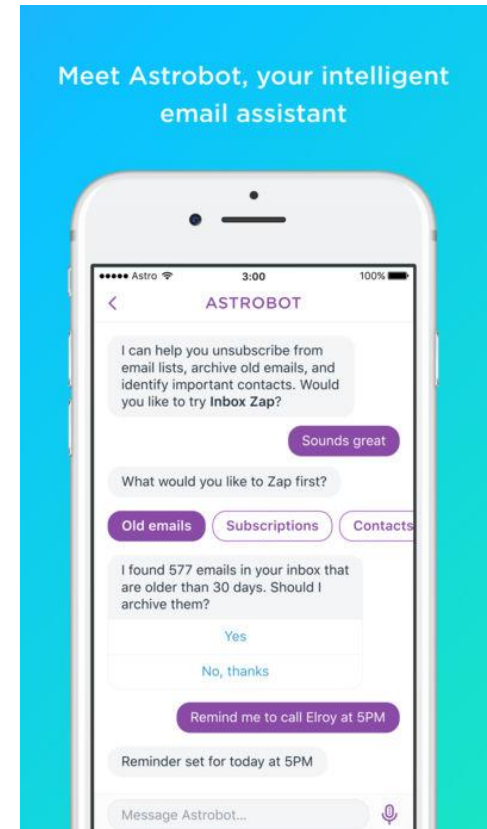




# Apps of the Year

## Astro

An email app that adds to the full features of an email client but also contains a built-in assistant that learns your habits and helps you stay on top of your messages





# Apps of the Year

## Google Assistant

Helps with standard Google searches but also lets you check your calendar, send messages and control your music







# Apps of the Year

## HQ

A trivia app that adds to the experience of a game show. Combines live video, cash prizes and a charismatic host where thousands of players tune in the answer trivia questions at the same time each day.

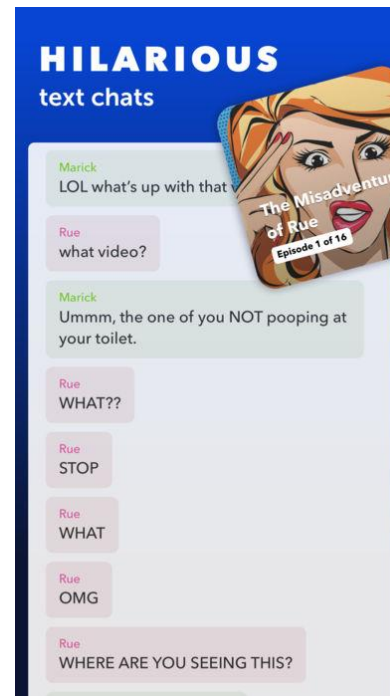
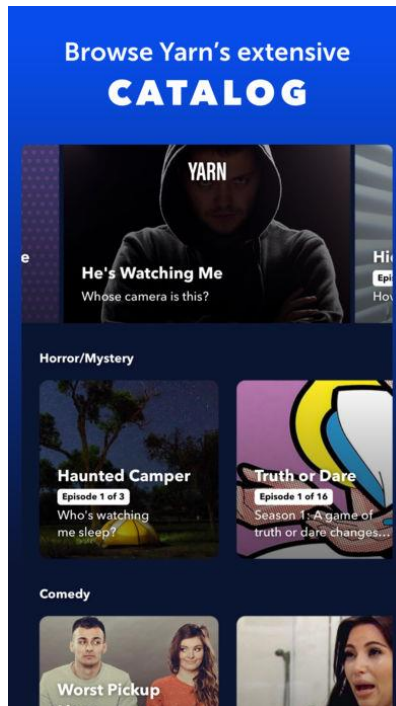




# Apps of the Year

## Yarn

A popular new reading app that reinvents how young people read, in the emerging category of “chat fiction.” Stories are presented as if they are chat exchanges mixing photos and videos into its interactive stories





# Future Trends

## *Intelligent Apps*

Over the next few years every app, application and service will incorporate AI at some level. AI will run unobtrusively in the background of many familiar applications.

Intelligent apps have the potential to transform the nature of work and the structure of the workplace, as seen in virtual customer assistants.



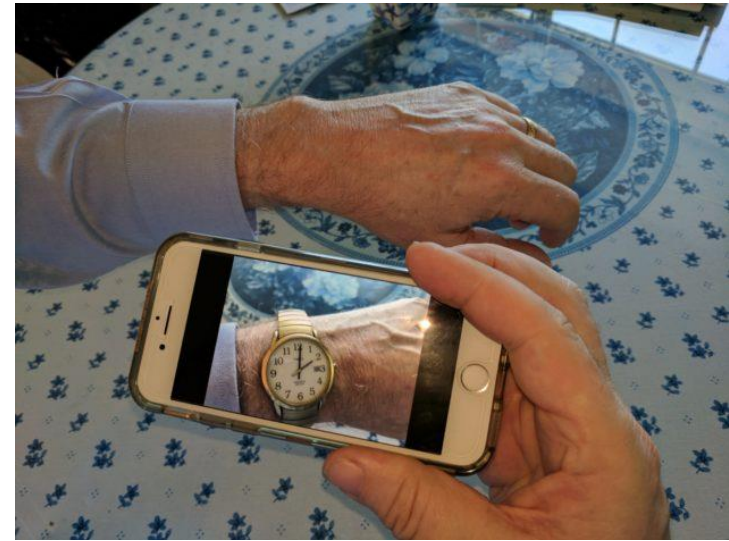


# Future Trends

## *Immersive Experience*

Augmented reality (AR), virtual reality (VR) and mixed reality are changing the way that people perceive and interact with the digital world. A fundamental shift in the user experience to an invisible and immersive experience will emerge.

Over the next five years the focus will be on mixed reality, which is emerging as the immersive experience of choice, where the user interacts with digital and real-world objects while maintaining a presence in the physical world.



Technology  
Year in Review

Thank You

Best Wishes for the  
Coming Year

