

# 30 BIG TECH PREDICTIONS FOR 2017

THIRTY PREDICTIONS ACROSS MOBILE, DIGITAL MEDIA,  
PAYMENTS, E-COMMERCE, INTERNET OF THINGS, AND  
FINTECH FOR 2017

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January 2017

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The BI Intelligence Research Team

# INTRODUCTION

Almost every industry has been disrupted by digital technologies over the past decade. And, in 2017 we expect to see more revolutionary developments impacting our businesses, careers and lives. Among the groundbreaking moves, will be:

- Autonomous car road tests
- Snapchat and Amazon rattling the digital ad space
- VR hardware competing with popular gaming consoles
- The grocery industry making the move online
- Mobile wallets adding value to users
- Insurtech ascending with investments from legacy players and tech giants
- Social video taking 2017 by storm
- And many more

Here are 30 of our big predictions for 2017 in the IoT, digital media, apps and platforms, e-commerce, payments and fintech industries.

# OUR TOP 5 IOT PREDICTIONS

The Internet of Things made headlines and migrated toward the mainstream in 2016. While there were huge advancements in historically important manufacturing and industrial sectors, one major development of the past year has been the increasing prominence of consumer IoT devices. This likely contributed to a surprising increase in buzz around connected devices and how they might affect our lives. Heading into 2017, look for this trend to continue, with further steady, incremental improvements in behind-the-scenes operations at companies using the IoT routinely eclipsed in everyday conversations by splashy stories and developments in the consumer space.

Below are our top predictions for the IoT in 2017. These predictions are based on our ongoing tracking, analysis, and forecasting of the IoT market, and conversations with industry executives.

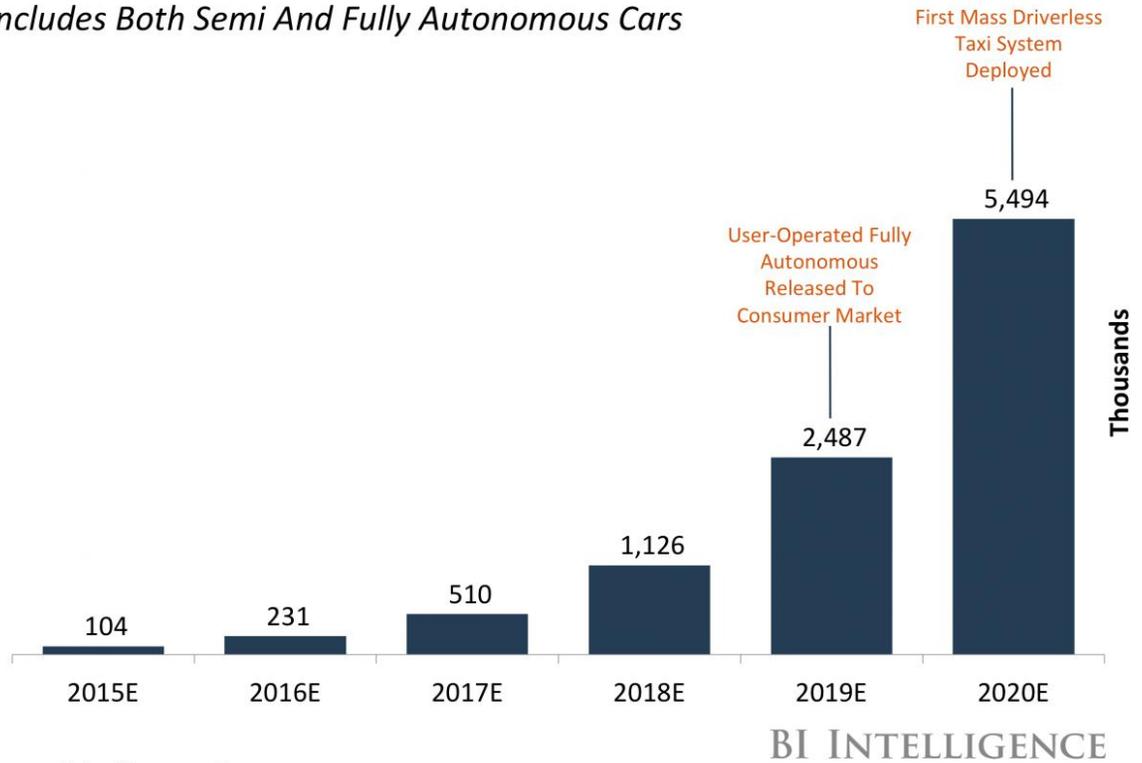
## 1. Look for an approved test of self-driving cars on public roads without a driver behind the wheel.

Self-driving vehicle tests began to pop up all across the globe in 2016, from [buses in Finland](#) to [campus shuttles](#) in Cambridge, Massachusetts, to taxis in [Singapore](#). Those tests, however, had drivers behind the wheel at all times, ready to take control should something go awry. In Uber's tests in [Pittsburgh](#), for example, human drivers were still needed drive the autonomous vehicles across bridges or through certain dangerous intersections.

What we'll see in 2017, however, is the next stage in the development and testing of self-driving cars, with some governmental organization granting permission for a company to test fully autonomous vehicles on public roads without that backup driver. This will move autonomous vehicles a step further along the path to full autonomy and the future where vehicles will not have manual driving equipment at all. A recent [report](#) profiled how car ownership and mobility might change given these developments. It's not clear where these tests will happen or who will be involved, but some locality will want to take the leap to become a hotbed for autonomous development moving forward.

# Global Self-Driving Car Shipment Forecast

*Includes Both Semi And Fully Autonomous Cars*



Source: BI Intelligence estimates

## The Automotive Revolution Report Bundle from BI Intelligence

BI Intelligence spent hundreds of hours following the latest trends in the car industry and developed a report bundle which will shed light on the current state of the automotive revolution, including features already in use, what's coming next, key players, forecasts, main challenges, and strides automakers and tech companies made to overcome them. This industry is changing with the speed of light and those who stay informed will charge ahead of the competition.



Get it now here:

<http://read.bi/autos-2017>

## 2. Apple and Samsung will release their own AI-powered smart home speakers, and 10 million of the devices will be sold in 2017 in the US.

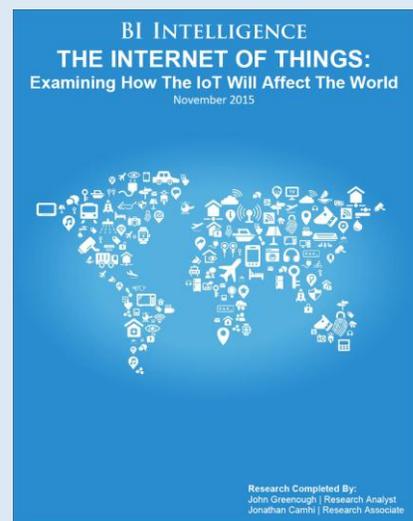
The Amazon Echo was one of the hottest devices throughout 2016, and Google's competitor, the Google Home, is already on the market. There have already been rumblings that [Apple](#) and [Samsung](#) are developing their own AI-powered speaker hubs. In 2017, we'll see the world's leading smartphone manufacturers join in offering digital assistants to run the smart home from speakers. The addition of these two major parties to the market will drive the hype and excitement around AI smart home speakers, causing increased adoption rates and leading to sales and other special offers, which we predict will lead to 10 million devices sold in 2017.

### The Internet of Things Report from BI Intelligence

In this report from BI Intelligence, we discuss all of the components of the IoT ecosystem, including its devices, analytics, networks, and security. We also provide estimates and forecasts on the burgeoning IoT market, including device growth, amount invested, and potential return on investment.

Get it now here:

<http://read.bi/iot-2017>



### 3. Unsecured IoT devices will be used in another massive hack that continues to generate bad press.

In [October 2016](#), hackers carried out a major DDoS attack against DNS provider Dyn by using thousands of infected connected devices to overwhelm and cripple the company's servers. In subsequent weeks, we saw numerous articles and statements regarding the state of the IoT, with reactions ranging from [measured](#) to [histrionic](#).

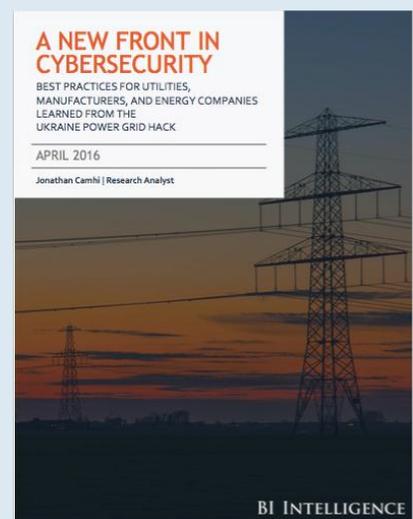
While many are expressing concern and some companies are [taking action](#), there are still tens of thousands of devices around the world that are connected to the internet but are potentially compromised and vulnerable to use in an attack like the one in October. We predict that the world will see another major hack perpetrated using these unsecured IoT devices. There's no way to know who will be targeted or whether the potential damage will be more lasting than that resulting from the Dyn hack, but in 2017 we'll see another attack that brings continued bad press to the IoT and prompts more discussion of wide-ranging security regulation.

#### A New Front in Cybersecurity Report from BI Intelligence

In this report, BI Intelligence details the current cybersecurity landscape for companies in critical infrastructure sectors, as well as how companies can protect their control systems from hackers.

Get it now here:

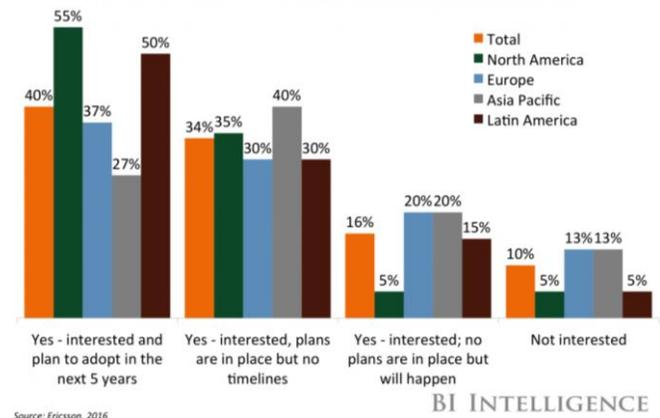
<http://read.bi/cybersecurity-2017>



## 4. 5G will actually start rolling out in 2017 – without major delays.

Past rollouts of new cellular network technologies, including [LTE](#), [HSPA](#), and [3G](#), have occurred in fits and starts, plagued by delays and setbacks over technical specifications as well as political disputes over the wireless spectrum. With 5G, though, such delays are unlikely, and all signs point to an on-time, low hassle network deployment starting in 2017. Qualcomm, the world's largest mobile chip manufacturer, has already [announced](#) a modem that supports 5G networks. Expect the initial 5G network rollouts occur in [South Korea](#) and parts of the US, most likely in Texas and California. While full consumer availability will take some time, it's remarkable that the network infrastructure is coming into existence, even in its infancy, in 2017.

Mobile Operators' Plans To Adopt 5G

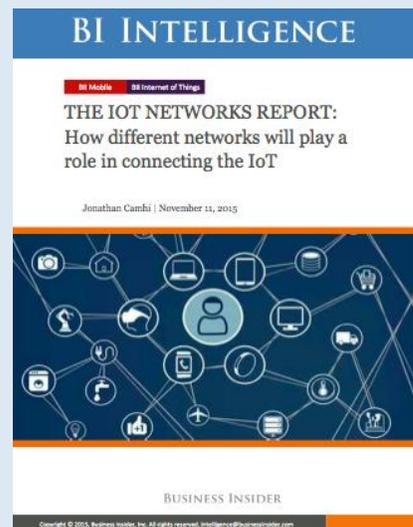


### The IoT Networks Report from BI Intelligence

BI Intelligence's IoT Networks Report examines these different networking technologies, their pros and cons, and how well they are positioned for future growth in the IoT market. We also outline how different networks are best suited for connecting specific types of IoT devices, including connected cars, drones, smart home devices, and wearables.

Get it now here:

<http://read.bi/iotnetworks-2017>



## 5. The IoT and automation will prove a convenient bogeyman for populist politicians.

From Donald Trump to Nigel Farage, populist politicians tapped into anxiety about the disappearance of many once-lucrative careers to help secure important victories around the world in 2016. Much of their focus has been on trade and immigration, but it's likely their attention will turn to the IoT and automation in the year ahead.

Developments like the [opening](#) of a new Adidas factory in Atlanta, for instance, illustrate the risk. The plant is designed to shorten the apparel makers' supply chain by moving manufacturing closer to consumers of its products — but rather than employing local workers on the assembly line, Adidas will rely on robots instead.

Rather than coming from the top echelons of government, it's likely to be less-established figures looking to make names for themselves by tapping into surging populist sentiment who target the IoT for political gain. While it's unlikely these machinations will have a significant impact on the larger trends propelling the IoT and industrial automation forward, it will bring an unwelcome political cast to these technologies.

### The Enterprise Robotics Report from BI Intelligence

In this report, we examine the rising use of robots across many industries. We examine top use cases, market leaders, growth drivers, potential for workforce automation, the top barriers, and include market forecasts on shipments and investment in robots between 2015-2021.

Get it now here:

<http://read.bi/robotics-2017>



# OUR TOP 5 DIGITAL MEDIA PREDICTIONS

Consumers spent more time, and advertisers more money, on digital media in 2016 than ever before, while traditional formats remained stagnant or even showed signs of deterioration. Google and Facebook have emerged as the clear winners, controlling roughly two-thirds of global ad revenue. In the year ahead, this duopoly will force marketers to develop authentic and innovative methods of reaching their audience, such as the integration of augmented- and virtual-reality campaigns, the use of voice search powered by artificial intelligence, and the implementation of chatbots to reach consumers on the devices with which they're spending the most time. And while consumers increasingly turn to digital media, the contrasts with linear TV will fade. Digital giants like Netflix will expand their household presence, while social platforms like Facebook, Twitter, and Snapchat aggressively invest in video-first strategies.

Below are our top predictions for the digital media industry in 2017. These predictions are based on our ongoing tracking, analysis, and forecasting of the digital media market, and conversations with industry executives.

## **1. Consolidation in the digital media space will accelerate as VC money thins and legacy media companies vie for digital audiences, culminating with an acquisition of Twitter.**

Venture capital investments in digital media companies hit a three-year low in Q2 2016, according to CB Insights data cited by [Bloomberg](#). The slowdown reflects an overcrowded landscape in which investors see limited prospects for niche players to compete for ad dollars with well-established media brands and tech giants like Facebook and Google. This opens the door for more consolidation in 2017, as companies look to diversify content and build larger audiences:

- Large telecommunication and television companies will acquire digital media brands to build out their digital audiences, especially mobile-first ones that skew toward younger generations.
- Smaller digital media targets will be eager to partner with larger, better capitalized companies in order to focus on products that grow audiences. With less pressure to drive revenue growth, digital media companies can build improved products that keep users engaged.
- Twitter will get acquired by a digital-media company. While a potential purchase of Twitter was heavily rumored this year, speculation died down in [October](#). The company's renewed focus on live video will attract a large media company that lacks the technical expertise.

## The Social Engagement Report from BI Intelligence

In this report by BI Intelligence, we take a deeper look at user engagement at Facebook and Facebook-owned sites, including Instagram, WhatsApp, and Messenger, as well as Snapchat and struggling early heavyweights like Twitter and LinkedIn. We also take a look at the functions and content users are engaging with on each platform, and lay out the newest opportunities for brands and advertisers. Finally, we discuss what the future of social might look like with the emergence of new content formats like live streams and virtual reality.

Get it now here:

<http://read.bi/socialengagement-2017>



## 2. Credible threats emerge to Google and Facebook's digital-ad dominance.

Google and Facebook will remain the biggest players in digital advertising. The former's ascendancy in desktop and mobile search is well assured, as well as its video advertising business in YouTube, and not too mention its vast influence over the display ad market through products like DoubleClick and AdX. Facebook, meanwhile, will still be the clear leader in social advertising, but will also compete more closely with YouTube as it reorients itself as a video-first platform.

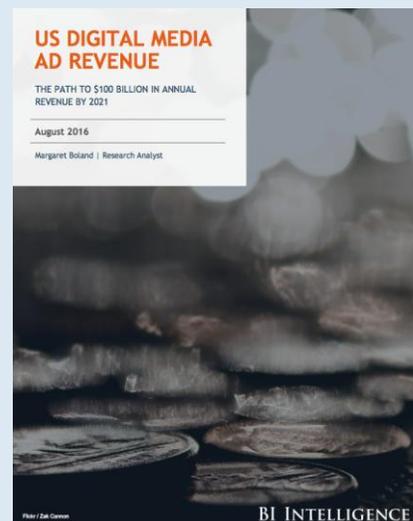
Emerging forces like Snapchat, which will have its IPO in the first six months of 2017, and Amazon, which will double down on its digital ad business, will pose new threats to Google and Facebook's incumbency. More specifically, Snapchat will be an important destination for rerouted TV ad spend, as well as an increasingly significant venue for social advertising. On the other hand, Amazon will begin to harvest its riches of consumer data into advertising products that compete against Google and Facebook services. At the same time, the rising popularity of voice-based interfaces, and particularly Amazon's Alexa assistant, will chip away at Google's fortress around text-based search, ushering in a new uncontested battleground around voice-based advertising.

### The US Digital Media Ad Revenue Report from BI Intelligence

In this report from BI Intelligence, we forecast revenue trends over the next five years, while outlining the key growth drivers for overall digital ad revenue in the US.

Get it now here:

<http://read.bi/adrevenue-2017>



### 3. Interactive advertising takes off with the emergence of voice search and chatbots.

Improving artificial intelligence technology is powering the growth of chatbots on messaging apps and voice search on devices such as the Amazon Echo and Google Home. Next year will see a surge in the number of brands using chatbots for marketing purposes such as native or sponsored content through messaging apps like Facebook Messenger – a service that touts over one billion monthly active users.

Both businesses and consumers are recognizing the value of chatbots:

- When asked which emerging technologies they're already using and which they intended to implement, 80% of senior decision maker respondents said they already used or planned to use chatbots by 2020, according to Oracle.
- In the short time that chatbots have been available on messaging apps, they've already been used at least occasionally by 60% of US users aged 18-55, according to exclusive *BI Intelligence* survey data.

Meanwhile, voice search will change how brands are recognized and the methods they use to connect with their audience. As more consumers opt for audio commands over typing — Google Voice search has doubled from 2015 to 2016 — marketers will develop new interactive ways to market their product or service.

#### The Chatbot Report Bundle from BI Intelligence

In this report bundle we explore the growing and disruptive bot landscape and explain how brands can monetize their chatbots by tailoring existing models.

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## **4. Virtual reality will become the next hotbed for content creation, as brands experiment with innovative ways of reaching their audience.**

As ad blocking continues to skyrocket, impactful, emotional-driven storytelling will be vital for brands seeking to cut through the saturated ad space. Virtual reality provides just that, and 2017 will be a pivotal year in the development of VR content.

Virtual reality will continue to garner substantial momentum into the new year:

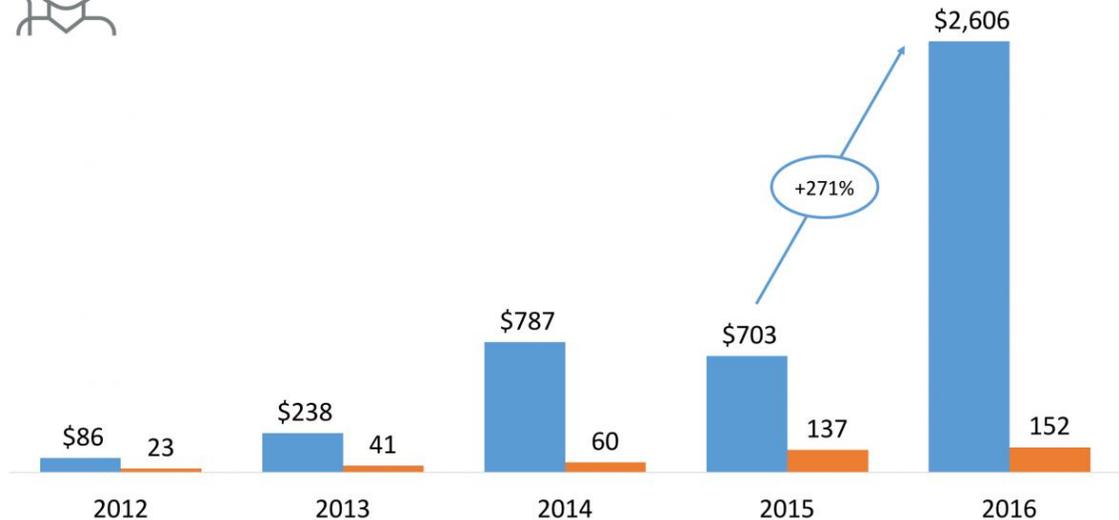
- Global investments in augmented and virtual reality increased over 250% year-over-year while topping \$2 billion in 2016, according to CB Insights. Facebook alone has invested over \$250 million in the creation of VR content.
- Thirty-eight companies – including The New York Times, Wayfair, and GoPro – directly mentioned VR as a part of their business plan during their Q1 2016 earnings release. Expect that number to skyrocket in 2017 as companies invest more into the emerging platform.
- Global VR content will grow at a CAGR of 128% from 2016 to 2020, according to the IDC. Social VR apps such as YouTube VR will be important for increasing VR's awareness and reach.

## Global Investment In VR And AR Companies

Millions (\$)



■ Amount Invested ■ Number of Deals



Source: CB Insights, 2016

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### The Virtual Reality Report from BI Intelligence

In this report, BI Intelligence explores the highly fragmented and volatile VR market that emerged in 2016. It lays out the future growth potential in numerous key VR hardware categories, as driven by major VR platforms. And it examines consumer sentiment and developer excitement for VR, presenting which headset categories and platforms are most poised for success in the near- to mid-term.

Get it now here:

<http://read.bi/vr-2017>



## 5. Over-the-top (OTT) video and traditional TV begin to mirror one another; Roku IPOs.

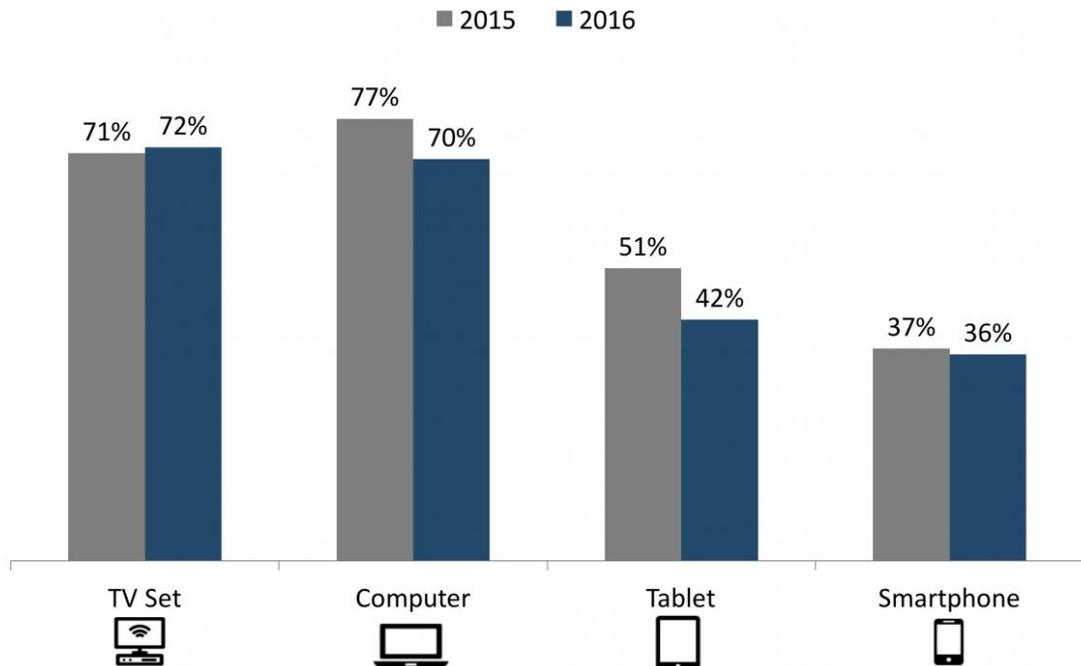
As cable providers continue to build out more robust on-demand offerings, and OTT streamers invest in more TV-like content, the lines between linear TV and pure-play on-demand services will blur. YouTube [recently](#) announced that viewing time on TVs has more than doubled in the past year and is its fastest growing platform. As the walls between linear TV and OTT video deteriorate, content will become device-agnostic, as users watch both long-form and short-form content across all screens.

- Social and messaging companies will produce more original content suited for TVs. Facebook and Snapchat will be leaders on this front as the two companies have announced investments in [original content](#) and [TV shows](#), respectively. This will also lead to more partnerships and licensing agreements with content creators over the course of 2017.
- TV providers will create more mobile-focused content. For example, during Business Insider's Ignition conference on December 6, Randall Stephenson, CEO of AT&T (DirecTV's parent) said "We're evangelical about" promoting long-form content on mobile devices.

These developments will set the stage for streaming media platform and device-maker Roku to go public. Roku has gone through eight rounds of funding, most recently in November 2015, and is most likely feeling pressure to arrange an exit for these investors. An IPO is most likely (Roku has confidentially [filed](#) in the past) as the platform is app-agnostic, and an acquisition by a larger media or telecom company could create conflicts of interest and negatively affect licensing agreements.

## Devices Used To Watch Online TV (US)

Q: Which of these have you used to watch online TV Shows?



Note: Data reflects respondents aged 16-64 who watch at least 5 hours of TV per week, n=1,502  
Source: Hub Research, March 2016

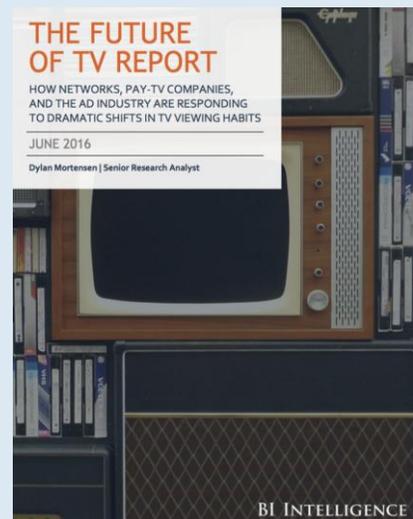
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### The Future of TV Report from BI Intelligence

In this report from BI Intelligence, we look at how TV viewer, subscriber, and advertising trends are shifting, and where and what audiences are watching as they turn away from traditional TV.

Get it now here:

<http://read.bi/tv-2017>



# OUR TOP 5 APPS AND PLATFORMS PREDICTIONS

The expectations around disruptive technologies like virtual reality (VR), augmented reality (AR), artificial intelligence (AI), and wearable devices headed into 2016 were high — too high, it turned out. But there are important breakthroughs on the horizon in 2017. AR and VR will see wider adoption. AI technology will improve and continue to dominate human-computer conversations. And traditional apps will face more fervent competition from chatbots, app streaming, and mini apps. Below are our top predictions for the apps and platforms market in 2017. These predictions are based on our ongoing tracking, analysis, and forecasting of the apps and platforms market, and conversations with industry executives.

# 1 ■ The first-year sales of first generation VR headsets will outsell the first-year sales of major game consoles.

Today's major gaming consoles, such as PlayStation and Xbox, saw their inaugural years in the early 2000s. Now, the latest mass-market consumer devices — VR headsets — are making their debut. The Oculus Rift, HTC Vive, PlayStation VR, and even smartphone-powered headsets like the Google Daydream, are in their first year of sales.

While they won't see massive growth overnight, we expect first-year sales of VR headsets to outsell first-year sales of major gaming consoles. For context, gaming consoles today have about a 40% penetration rate in the US.

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Get it now here:

<http://read.bi/vr-2017>



## 2. Consumer-oriented voice products will reach parity with text input.

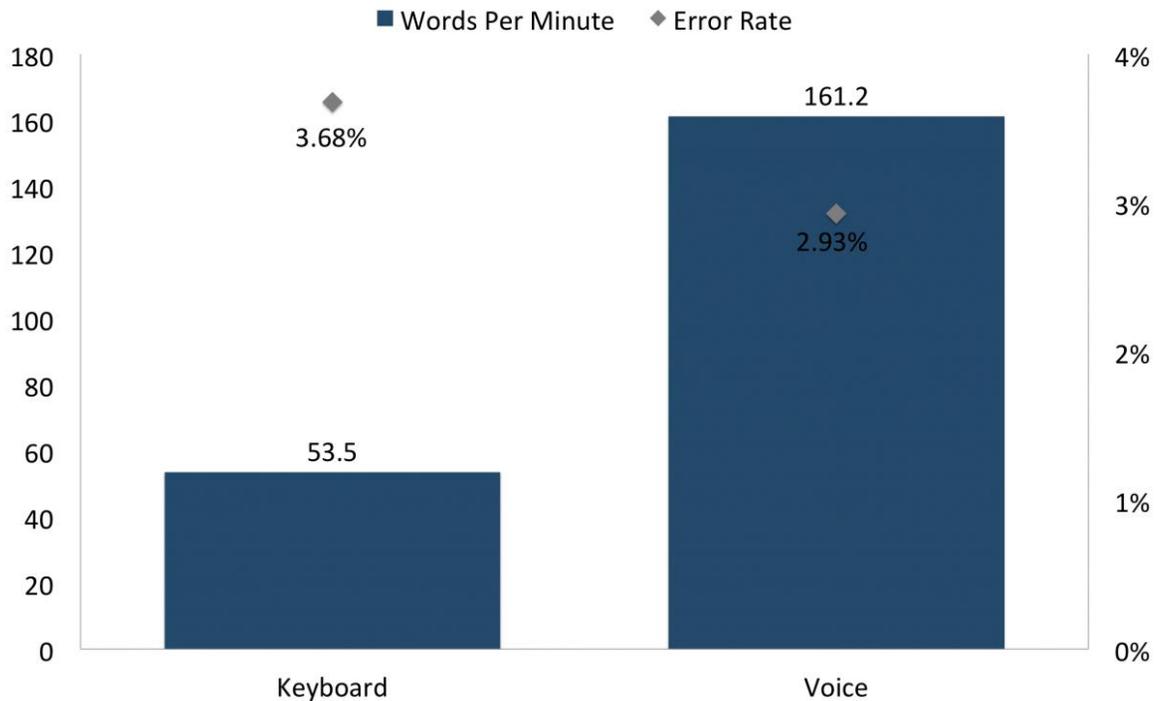
Digital voice assistants, like Siri, Cortana, and Google Now, are far from perfect. However, they tend to see yearly incremental improvements that enhance their conversational abilities and make them more functional. And as internet-connected home assistants like Amazon's Echo and the Google Home become more popular, issuing voice commands will become a normalized aspect of consumer behavior.

Anyone who's had a conversation with or issued a command to one of the major smartphone-oriented digital voice assistants like Siri knows what a clunky and imperfect experience it can be. But we expect the technology powering these assistants to evolve and improve.

- One issue, input, is already being solved. For the first time, in 2016, voice-recognition software [trumped](#) humans at typing input in terms of speed and accuracy, according to a study from Stanford University, the University of Washington, and Baidu. And these assistants' ability to recognize voice proved better than humans' by a wide margin; it was three times faster with 20.4% fewer errors.
- Another essential aspect of voice assistants, contextual understanding, is an element major tech companies are actively trying to improve. Microsoft's Cortana can understand contextual requests and conversations, and Apple and Google are working on bringing contextual understanding to their own software.

When both of these issues are addressed, a feat we expect to see to a certain degree in 2017, voice input will be the preferred method of human-computer interaction for tasks like texting and navigating.

## Text Input Speed And Accuracy By Input Method



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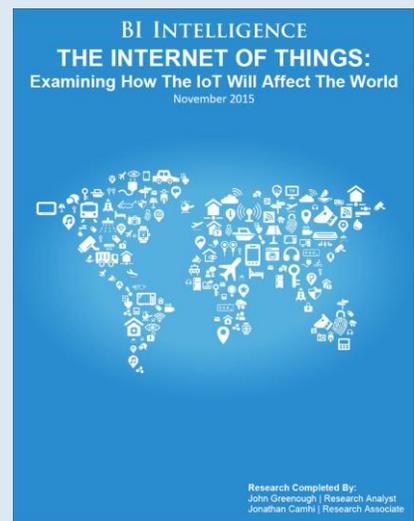
Source: Stanford University

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### 3. Apple's new iPhone will incorporate AR capabilities.

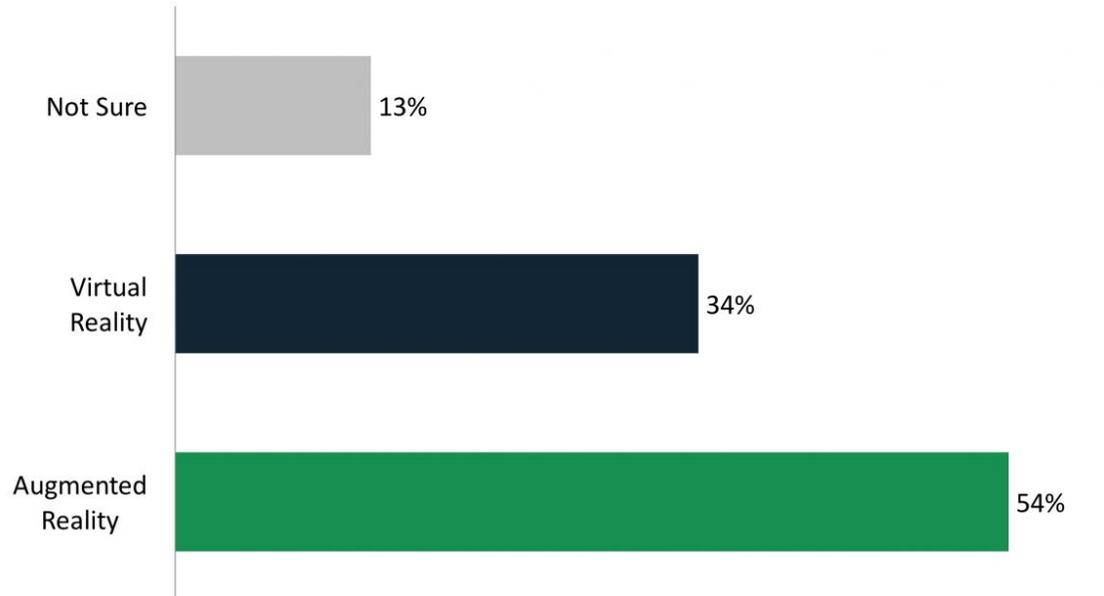
Apple CEO Tim Cook favors the commercial potential of AR over VR, according to comments he made in September 2016. He also later noted that he expects AR to eventually become a part of people's everyday lives, "like eating three square meals a day," and predicted that AR would come to operating systems (like iOS) in the "not-too-distant future." This is mainly because AR technology provides a wide array of use cases, doesn't require any hardware other than a smartphone, and allows users to share experiences.

Here are additional reasons Apple will incorporate AR into its 2017 iPhone:

- Making its devices more AR-friendly will incentivize developers to build more AR apps for iOS, helping Apple maintain its App Store revenue. The overnight success of Pokémon Go is being used as a proof-of-concept for the adoption and usage of AR apps and games; Apple alone is expected to reap roughly [\\$3 billion](#) in revenue from the app over the next two years.
- The iPhone 7 Plus, released in 2016, includes dual cameras, which provide smartphones with greater depth perception. This makes it easier for software to differentiate objects in images, enabling greater interactivity with images and videos — a key part of AR.
- Apple [poached](#) more than 25 employees from Imagination Technologies, likely to develop graphics processing unit chips for its AR ambitions.
- While reports suggest that Apple is working on an AR digital glasses product, the potential device won't be released until at least 2018, according to a [report](#) from Bloomberg. It's likely that Apple will use the iPhone to lay the groundwork for AR and AR apps to establish a market for its new product. This also makes sense considering the stalled adoption of Apple's other secondary products, such as the Apple Watch.

## Outlook For AR Vs. VR

Question: Are you more optimistic about the long-term future of virtual reality or augmented reality?



Source: Yeti, 2016

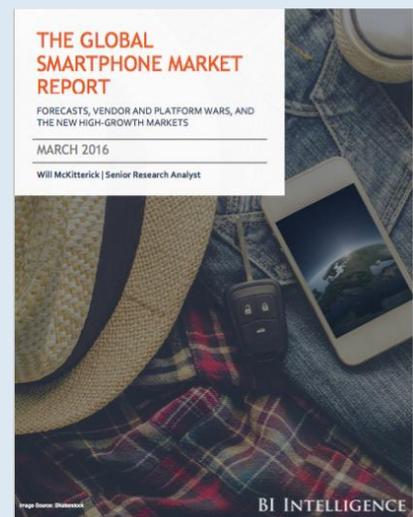
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### The Global Smartphone Market Report from BI Intelligence

In this report from BI Intelligence, we updated our smartphone forecast through 2021 to reflect slower, stabilizing growth in the long term.

Get it now here:

<http://read.bi/smartphonemarket-2017>



## 4. Chatbots, app streaming, and mini apps will begin to eat into app downloads and usage.

Voice assistants and messaging apps are becoming increasingly prolific. In 2016, the quality of voice assistants improved exponentially. Messaging apps expanded their global footprint, with the top four surpassing 3 billion combined active users. Companies within these markets have begun to let users interact with app-like services within their products — like viewing or purchasing goods — to add more value to their offerings. App streaming and chatbots enable these activities. However, consumers won't need to download and use apps if they can rely on voice assistants and messaging apps for an end-to-end experience. For example, WeChat — the popular Chinese messaging app that accounts for 30% of all mobile online time spent in China — launched mini apps, a feature that lets users interact with many traditional app services without having to download the app.

Adoption of app streaming will lead to a reduction in app downloads and app usage, diminishing the importance of app stores. This could result in a decline in app store vendors' revenues, an increasingly important segment for companies like Apple and Google. For example, in 2016, 12% of Apple's revenue came from its Services business, 60% of which is composed of the App Store, according to Piper Jaffray. These vendors will need to find new ways to offer consumers value. Apple recently gave developers the ability to build and launch streamlined apps within iMessage, its native messaging service. And Google unveiled Instant Apps, which lets users engage with portions of apps through deep links without having to download them.

### The Chatbot Report Bundle from BI Intelligence

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<http://read.bi/chatbot-2017>



## 5. Rich Communications Services (RCS) standards will become widely integrated into mobile devices.

RCS is a program for inter-operator communication services, and an upgrade from the SMS standard. It's part of the GSMA's new Advanced Messaging standard, which is designed to provide consistent messaging services across mobile devices and networks, and comes installed on smartphones by default. This encompasses text messages, high-quality picture messaging, group chats, location sharing, video calls, and read receipts. These features are similar to those within iMessage and some popular third-party messaging apps, like Facebook Messenger and WeChat.

Google, the GSMA, and global operators announced the launch of an RCS initiative, bringing the standard to Android devices under the GSMA's Universal Profile standards. In November 2016, Sprint became the first carrier to partner with Google on the initiative. Other carriers have launched older iterations of the standard, so we expect that many will update in 2017. More than 58 operators, OEMs, and OS providers covering a subscriber base of 4.7 billion people globally have committed to supporting the Universal Profile, according to the GSMA.

### The Wireless Carrier Report from BI Intelligence

In this report from BI Intelligence, we examine how the wireless industry has fundamentally changed since carriers began aggressively responding to the launch of T-Mobile's "Un-Carrier" movement. We also look at the factors underpinning changes in the broader wireless industry and the challenges carriers face in 2016 and beyond, including the upcoming spectrum auction and the deployment of new wireless technologies.

Get it now here:

<http://read.bi/wirelesscarriers-2017>



# OUR TOP 5 E-COMMERCE PREDICTIONS

In 2016, e-commerce and retail saw the rise of numerous tools and industry segments that either helped push online shopping to its full potential, or fell flat with consumers. One of the most anticipated tools — buy buttons — failed to catch on with shoppers and may well be wiped out in the new year. But in their looming absence are emerging areas for online merchants to capture new audiences and gain market share.

Below are our top predictions for the e-commerce industry in 2017. These predictions are based on our ongoing analysis of the e-commerce market and broader retail industry, as well as conversations with industry executives.

## 1. Online grocery shopping will become commonplace in US households.

Numerous retailers made significant strides to expand their online grocery programs in 2016, from adding new cities to employing more flexible fulfillment options. And while just 2% of all grocery purchases took place online in 2016, according to *BI Intelligence estimates*, grocery seems increasingly on the verge of shifting online. Amazon's [push](#) into the brick-and-mortar space, as well as expansions from [Walmart](#), Instacart, and [FreshDirect](#), are providing consumers with increasingly more attractive options for online grocery. And as retailers present shoppers with greater options that meet their needs, like click and collect or same-day delivery, online grocery will likely resonate with more customers.

US consumers began trialing online grocery in 2016 — overall, 31% of US shoppers had purchased grocery products online "in the past six months" as of late June, according to [a survey](#) from The Harris Poll. Additionally, 10% of those who bought grocery items online said the habit replaced some or all of their regular grocery shopping trips to brick-and-mortar stores. (No data was provided for comparison with last year.) These early adopters will likely grow the online grocery industry further in 2017 and help it steal significant market share in the new year.

## On-Demand Meal Delivery Report from BI Intelligence

A new report from BI Intelligence sizes the market for on-demand meal delivery, outlines the main business models, assesses which key players are in the best and worst position in the market, and also analyzes the underlying risks that all stakeholders will have to navigate.

**Get it now here:**

<http://read.bi/mealdelivery-2017>

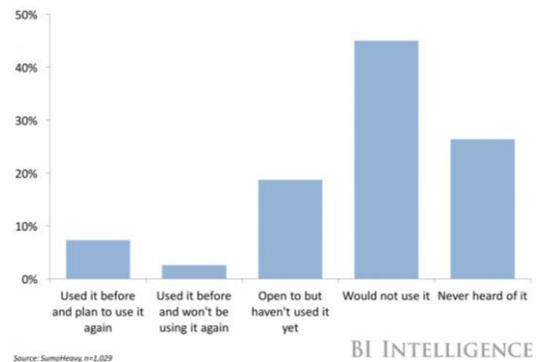


## 2. Buy buttons will die out.

Retailers continue to see extremely limited returns from the social media tool, according to [a report](#) from Campaigner. Seventy-two percent of global retailers report seeing *no sales* from their buy buttons in 2016, which has led to a significant drop in usage among merchants. In fact, 25% are already using them less now than they were a year ago, and an additional 40% plan to reduce their usage in the new year. The tool has failed to take off because [consumer interest](#) remains low, and in other cases, shoppers are simply unaware that buy buttons even exist. The problem is so severe that Twitter officially halted all development of its buy buttons in May. Looking ahead, retailers will need to look to new tools, like chatbots, in order to push social commerce into the mainstream.

US Adults' Attitude Toward Social Buy Buttons

June 2016



### The Social Commerce Report from BI Intelligence

In this report from BI Intelligence we analyze social media's role in online retail — whether that's driving direct sales with the use of embedded "Buy" buttons on social media posts, or referring traffic to retailers' websites and apps. We measure the impact social media has on e-commerce by looking at metrics such as conversion rates, average order value, and revenue generated by shares, likes, and tweets. We also outline the latest commerce efforts by leading social networks.

Get it now here:

<http://read.bi/socialcommerce-2017>

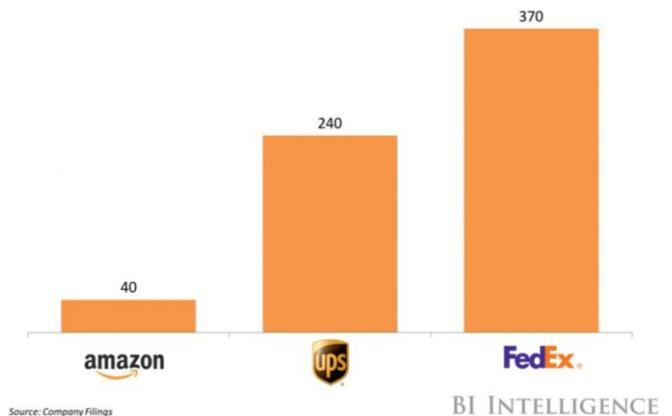


### 3. Amazon will steal market share from logistics providers.

Amazon made significant progress in building out its transportation and logistics arm this year, and we expect that to continue into 2017. To support back-end fulfillment, the retailer has signed leases for 40 air cargo planes from two US air freight operators — [Atlas Air Worldwide](#) and [Air Transport Services Group](#). Meanwhile, as part of its efforts to support the last mile of fulfillment, Amazon completed its first successful delivery via its Prime Air drone program in the UK in

December. These developments indicate that Amazon does not want to rely on third-party shippers like FedEx and UPS. As the country's largest online retailer, Amazon is a valuable customer to shippers, but expect that to change in 2017 as it begins handling a greater share of its own packages.

Number Of Air Cargo Planes In Operation, By Carrier  
May 2016



#### The Future of Shipping Report from BI Intelligence

In this report, BI Intelligence looks at efforts by Amazon, Alibaba, and Walmart to handle more of their own shipping and concludes that big retailers are well positioned to disrupt the parcel industry.

Get it now here:

<http://read.bi/shipping-2017>

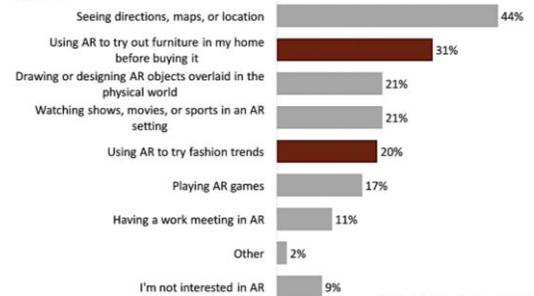


## 4. AR will enter the e-commerce mainstream.

Augmented reality (AR) was adopted by select retailers throughout 2016 and helped fuel online customer engagement particularly in the furniture and beauty categories. Home furnishings e-tailer Wayfair debuted its AR app to allow shoppers to see how a piece of furniture would fit in their home, and numerous beauty merchants including Sephora launched AR tools to show how makeup would look on a user's face. Moreover, the popularity of the Pokémon Go mobile game demonstrated the willingness of mobile users to adopt AR tools and keep engaged with them.

### SURVEY: Which augmented reality activities would interest you?

US, 2016



Source: BI Intelligence survey, n=920, October 2016

EXCLUSIVE DATA FROM  
BI INTELLIGENCE

Such tools will become vital to e-commerce as consumers become less reliant on brick-and-mortar locations. One of the main barriers that keeps shoppers from going online is not being able to see products in person — 60% of US consumers prefer to shop in-store because they can see, touch, and feel the products, according to a report from [PwC](#). But AR tools will change this over time by giving shoppers in-store capabilities at home, spurring e-tailers to launch their own features to boost user engagement and overall sales.

### The Future of Retail Slide Deck from BI Intelligence

The retail industry is on the cusp of a fundamental transformation driven by digital technologies. And as retailers adapt to the digital age, the line between physical and digital commerce is becoming increasingly blurred. BI Intelligence has created a slide deck exploring the most disruptive trends in e-commerce.

Get it now here:

<http://read.bi/futureofretail-2017>



## 5. Mobile commerce will grow to nearly half of all e-commerce.

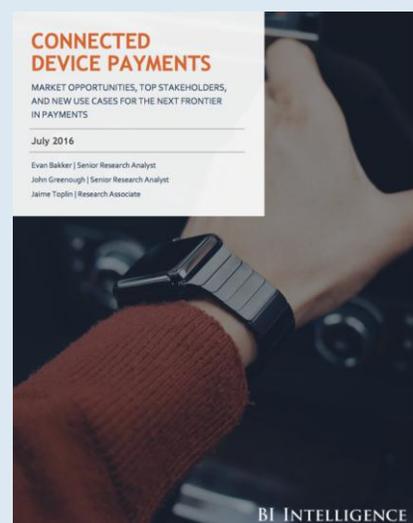
Mobile commerce has been slow to pick up, with consumers preferring to search on smartphones and tablets but complete purchases on desktop computers. However, 2016 was a banner year for growing mobile commerce, with 35% of all online purchases coming from a mobile device in Q2, marking 17% year-over-year (YoY) growth, according to a report from Criteo. In the new year, we expect to see an even greater shift to mobile, particularly as retailers adopt tools that remove significant friction from the mobile shopping experience. Such tools include AR apps that give customers the in-store shopping experience at home, and seamless checkout options like Apple Pay, which remove pain points like entering shipping information on smaller devices. Although the gap between mobile browsing and purchasing remains, we expect 2017 to be the year that retailers begin to see a significant return on investment from their mobile tools and platforms.

### The Connected Device Payments Report from BI Intelligence

A report from BI Intelligence dives into the budding industry of connected device payments, providing a rundown of the stakeholders driving innovation in wearables, connected cars, and connected home devices. It also gauges the impact of new payment devices on different payments companies, along with how these devices could shift consumer purchasing behavior.

Get it now here:

<http://read.bi/connectedpayments-2017>



# OUR TOP 5 PAYMENTS PREDICTIONS

Whether by tapping new markets, developing innovative new platforms, or pushing new use cases that add value to existing products, digital payments providers will be focused on finding fresh avenues for growth in 2017. As digital disruption continues to revolutionize the way we pay — and digital payments become more seamlessly integrated into daily life — the coming year will be defined by payments companies pushing for ways to gain new users, incentivize user engagement, and build habitual usage and brand loyalty.

Below are our top predictions for the digital payments market in 2017. These predictions are based on our ongoing tracking, analysis, and forecasting of the payments market, and conversations with industry executives.

## **1. US mobile wallet firms will drastically expand their use cases in an attempt to catalyze adoption.**

Mobile wallet adoption in the US has largely stagnated at about a quarter of users with eligible devices. That's bad news for the likes of Apple Pay, Samsung Pay, and Android Pay, and it's likely these players will scramble to push new initiatives in an attempt to galvanize interest in their wallets.

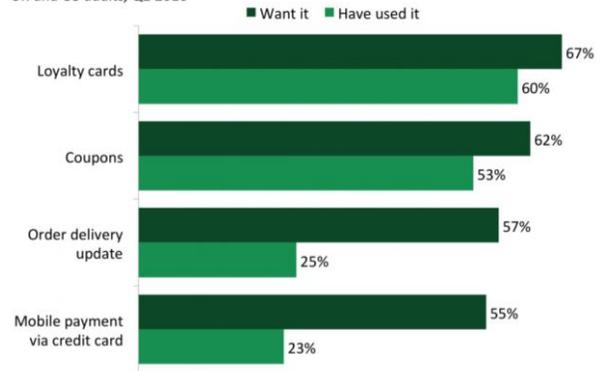
It's likely that the addition of value-added services and use cases will go beyond what we've already seen as mobile wallets look to grab users.

- Historically, mobile wallets were focused on making credit or debit card payments at the in-store point-of-sale (POS). But the use cases have expanded, first to in-app payments, then to rewards and loyalty offerings, and most recently, to browser-based payments on the desktop and mobile web. These have likely helped mobile wallets onboard users, because they're desired services, but they haven't been entirely effective tools.

- It's likely we'll see that go further. At a recent event, Apple Pay lead Jennifer Bailey [noted](#) that the wallet is looking to encompass "everything in [a user's] wallet." Down the line, it's likely that will include newer forms of payment, like mass-transit fares, which at least 12% of customers want despite limited market availability, according to [ACI Worldwide](#). And it could help users form habits around the wallet, since these payments tend to be made on a relatively regular basis. This is a model that's seen success in other markets, like Japan and the UK. Adding new, habit-related features to mobile-wallet offerings could be part of an attempt to cast a wide net in order to acquire and engage consumers more effectively, which could grow both adoption and usage.

**SURVEY: Top Functions Consumers Want For Mobile Wallets**

UK and US adults, Q2 2016



Source: Urban Airship, n=2,000

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## The Mobile Payments Report from BI Intelligence

In this report, we forecast the growth of in-store mobile payments in the US, analyze the performance of major mobile wallets like Apple Pay, Android Pay, and Samsung Pay, and address the barriers holding mobile payments back as well as the benefits that will propel adoption.

Get it now here:

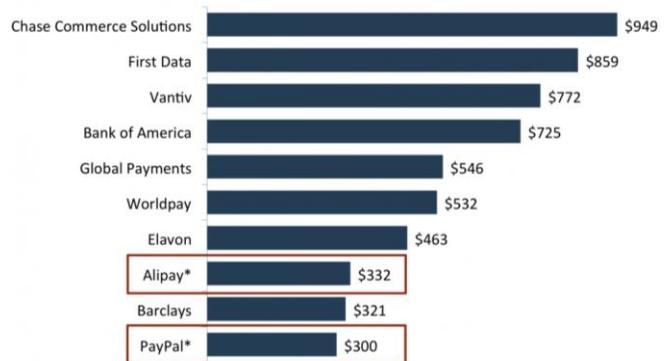
<http://read.bi/mobilepayments-2017>



## 2. Alibaba's Alipay mobile wallet will begin to target international users as the company continues to build partnerships in the global payments ecosystem.

In the last year, Alipay has moved into foreign markets with the avowed goal of catering to its Chinese users when traveling abroad. This expansion includes partnerships with point-of-sale (POS) terminal vendors and processors First Data and Verifone to move into the US, adding its first UK partner in Zapper, and working with several POS terminal providers to move deeper into Europe. However, by building these partnerships, Alipay has also set itself up to begin targeting foreign users, which it will do in 2017 as it looks for a new revenue source to hold off WeChat. Tencent, which owns the rival app, captured a 20% share of mobile payments in 2015, up from 11% in 2014, while [Alipay's share fell](#) from 82% to 68%, according to The Wall Street Journal.

**Top 10 Merchant Acquirers Worldwide, By Volume**  
2015, \$Billions



\*Volume during the four quarters ended March 31, 2016  
Source: The Nilson Report

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### The Mobile Payments in China Report from BI Intelligence

This report from BI Intelligence takes a deep dive into China's mobile payments ecosystem and deciphers which growth drivers can be exported to the US to help spark its relatively lackluster market.

Get it now here:

<http://read.bi/mpaymentschina-2017>



### 3. International markets will get major boosts in digital payments from government intervention aimed at strengthening financial sectors or curbing corruption.

In the last month alone, a number of governments have pushed demonetization. India and Venezuela have both removed several banknotes from circulation, and Australia is considering removing the \$100 bill. This could have a tremendous effect on the payments ecosystem in these countries — for context, in India its been reported that digital payments have grown by over 400% since demonetization. Sub-Saharan Africa is also ripe for disruption, largely due to regulatory reform, which has encouraged digital payments growth in the region. The region also has high mobile-phone adoption, which is currently at [66% of adults](#) and rising — this is often a prerequisite for digital payments to catch on, according to McKinsey & Company. This has led to major payments firms like Visa and Masercard expanding further into the region in 2016, in order to to capture a share of this market before digital payments take off. These investments will likely continue in 2017, which will accelerate the adoption of digital payments as merchants and consumers find more offerings in mobile and peer-to-peer payments and digital remittance.

#### The Financial Inclusion Report from BI Intelligence

In this report, we take a close look at who the un- and underbanked are, the way financial institutions are using mobile phones and payment cards to access these populations, and whether there's a profit opportunity for these stakeholders.

Get it now here:

<http://read.bi/financialinclusion-2017>



## 4. Card networks will become more merchant-friendly in the face of increasing pressure from retailers and regulators.

When a customer pays with a credit or debit card, merchants are forced to pay a variety of fees to card networks and issuers. This model was thrust into the spotlight in 2016, when a number of high-profile retailers in the US and UK sued card networks because of their fee structures, which they argued unfairly influenced them in a variety of ways, ranging from consumer price inflation to an inability to mandate that consumers verify their debit purchases with PINs, which are cheaper and more secure. That spotlight brought these types of policies to the attention of regulatory bodies, like the Federal Reserve and the Federal Trade Commission (FTC) in the US, as well as bodies internationally.

But as pushback against these fees, and other card network policies, has intensified, card networks have begun to soften. Visa recently adjusted its debit routing policy, in order to make chip-and-PIN more accessible for merchants, for example, and all four card networks modified their EMV chargeback policy in the face of migration-related delays. Because competition in the credit landscape is heating up, it's likely that card networks will step up their game in order to ensure they don't lose out on business. As part of that, it's likely we'll see these players push to form stronger relationships with their merchant partners in the next year.

### The US EMV Migration Report from BI Intelligence

In this report from BI Intelligence, we take a close look at the US migration to EMV standards and determine whether it's worthwhile for merchants to upgrade. We also assess the inconsistencies and inconveniences that EMV migration could cause for the average consumer and retailer, and its potential to shift consumers toward new forms of payment technology, like mobile wallets.

Get it now here:

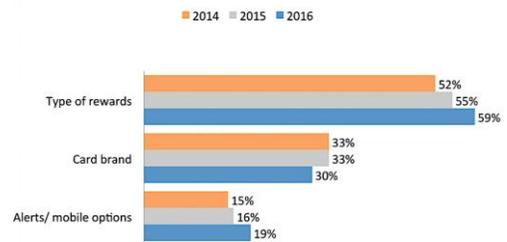
<http://read.bi/emv-2017>



## 5. Credit card rewards have hit their peak as costs begin to outweigh benefits for banks and providers by the end of 2017.

Just recently, JPMorgan Chase CEO Jamie Dimon [revealed](#) that the firm's new Sapphire Reserve credit card will end up reducing the bank's profit by \$200 million to \$300 million in Q4 2016, according to Bloomberg. This is significant, because the aggressive increase in credit card reward offerings was fueled in part by the release of this card. For context, Amex, which is the biggest credit card issuer in terms of consumer spending, expects marketing costs to rise by more than 10% in 2016, which is directly related to rewards. Not only are these rewards becoming costlier for financial institutions, but the Fed's recent interest-rate hike will make it more expensive for these institutions to borrow money. This added expense will be offset in part by reducing the growing costs of credit card rewards by either offering less rewards, or making it more difficult for consumers to earn them.

Credit Card Features That Consumers Find Attractive  
US consumers



Source: TSYS 2016 US Consumer Payment Study

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### The Payments Ecosystem Report from BI Intelligence

In BI Intelligence's Payments Ecosystem report, we explain how the industry works, who the key players are, and where it's headed. We drill into the industry to explain how a broad range of transactions are processed, including prepaid and store cards, as well as revealing which types of companies are in the best and worst position to capitalize on the latest industry trends.

Get it now here:

<http://read.bi/paymentsecosystem-2017>



# OUR TOP 5 FINTECH PREDICTIONS

There were many ups and downs for the fintech industry in 2016. We've seen some of the oldest and most well-funded segments, like marketplace lending, stumble, while global fintech funding dipped after 2015's all-time high. But this year also brought the rise of new segments and increasing support for the fintech sector from governments, and there are still some bright spots attracting investment. Based on these factors, our own research, and the trends we're seeing heading into the new year, here are our top five predictions for fintech in 2017:

## 1. Insurtech will continue to ascend.

Insurtechs are firms that use new technology to update or disrupt the insurance value chain. These firms attracted serious levels of funding in 2016 — the biggest VC-backed fintech deals through mid-December outside of China were for insurtechs, with Oscar raising \$400 million and Clover raising \$160 million. Insurtechs will also attract significant investment through 2017 and continue to dominate when it comes to deal size outside of China. Investment will be driven by increased interest from the corporate investment arms of legacy players and tech giants including Google.

### The Insurtech Report from BI Intelligence

In a report from BI Intelligence, we look at the drivers behind the increasing number of insurtech companies, how they are helping or disrupting legacy players in the insurance industry, and where legacy players are innovating off their own backs.

Get it now here:

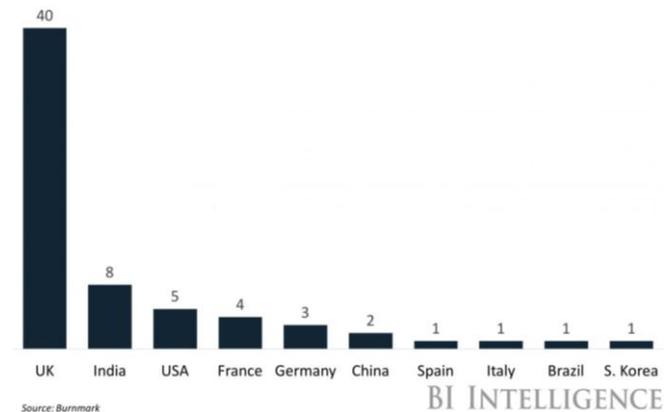
<http://read.bi/insurtech-2017>



## 2. The US will get more challenger banks.

In December, the Office of the Comptroller of the Currency (OCC) announced its [decision](#) to introduce a federal charter that will allow fintechs to become licensed as special-purpose national banks. A federal charter means that small firms will no longer have to go through the expensive and complex [process](#) of being licensed state-by-state. In addition, the incoming Trump administration's pro-business stance will facilitate the establishment of new banks. These factors will boost the US challenger bank scene, just as special fintech licenses have done in the UK and Europe. As a result, the number of digital-only banks in the country will swell — a trend we have already begun to see with newcomers like [MemoryBank](#) — helping the US fintech sector to catch up with its transatlantic rivals.

Number Of Challenger Banks, By Country  
2016



### The Fintech Ecosystem Report from BI Intelligence

In this report, BI Intelligence assesses the state of the global fintech industry, highlights the drivers of its growth, outlines the areas of fintech that are coming to the fore, and explains the different models that are emerging as the relationship between fintechs and incumbent financial services firms evolves.

Get it now here:

<http://read.bi/fintechecosystem-2017>



### 3. There will be a shift from ideation to tangible use cases for blockchain technology in financial services.

In 2016, we saw a plethora of new blockchain experiments and proofs of concept carried out by financial services industry participants as they sought to realize the benefits — namely efficiencies and cost savings — promised by the technology. These included Santander’s use of [Ripple](#) to run a pilot program for international P2P payments, as well as several supply chain finance transactions. We will see this focus on tests and trial runs of blockchain technology for real life use cases increase throughout 2017. In addition, some dominant players will emerge with market ready solutions and wide networks of participants. However, we will not see the establishment of sole providers in any area by the end of the year.

#### The Blockchain Report from BI Intelligence

In this report, we explain how blockchain works, why it has the potential to provide a watershed moment for the financial industry, and the different ways it could be put into practice in the coming years.

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<http://read.bi/blockchain-2017>



## 4. Alternative lending will consolidate around a few big players.

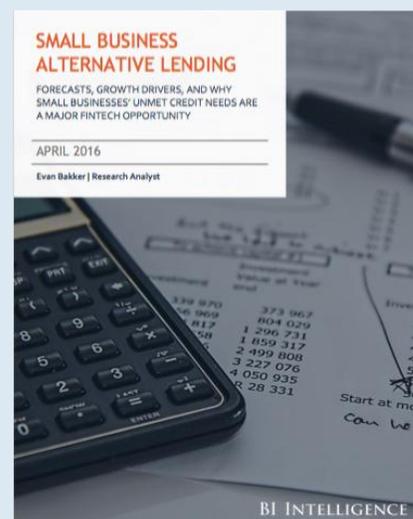
The global alt lending industry experienced a series of shocks in 2016, from major players' [misconduct](#) and the resulting [punishments](#) from regulators, to fluctuating interest rates highlighting the fragility of some firms' models. Examples of the latter include major US lender [Prosper](#) tightening its lending criteria and upping fees in a bid to counter a lack of capital, while UK firm [Zopa](#) had to stop accepting new funds from investors due to a shortage of demand for its loans. And these are two of the biggest and oldest lenders around — if they are struggling to make their models work, it seems there is little hope for many of their smaller competitors. In 2017, we will see more platforms diversify their offerings and start working with incumbents in order to shore up their businesses. In addition, the new year will bring the demise or acquisitions of a number of smaller players that fail to make their business models work in the new economic environment. Regulators and law makers will also start taking a closer look at alternative lenders to ensure adequate retail investor protections are in place.

### The Small Business Alternative Lending Report from BI Intelligence

In this report, we analyze the market opportunity for alternative lenders, forecast the market share and volume growth of alternative lending platforms, profile key players, and address the main industry risks.

Get it now here:

<http://read.bi/altlending-2017>



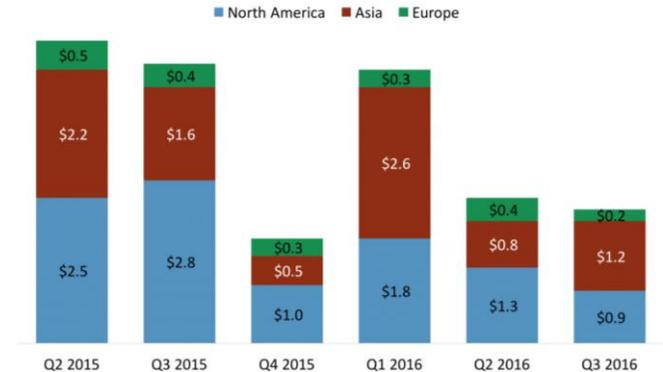
## 5. Asia – or more accurately China – will take the lead in fintech funding.

The last 12 months have seen a decline in fintech investment in the US and Europe, but one region managed to buck the trend — Asia, and this will continue through 2017. Largely driven by Chinese megarounds the size of which is unheard of elsewhere, Asia's fintechs attracted staggering amounts of funding in 2016 — the [largest](#) deal was Ant Financial's \$4.5 billion round in April. Although unusual in a weakening global funding

environment, these megarounds will continue over the next 12 months, driven by ongoing state and corporate investment in fintechs in China through 2017. Admittedly, funding trends in the US and Europe have been negatively affected by the considerable political upsets in the US and UK, but even if they stabilize in 2017, they are unlikely to match the growth we're seeing in Asia, and particularly in China.

**Global VC-Backed Fintech Funding Trend**

Billions (\$), August 2016



Source: CB Insights and KPMG

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### The Regtech Report from BI Intelligence

In this report from BI Intelligence, we explain what's driving the regtech trend and where the biggest opportunity lies. We also provide examples that show how regtechs are providing solutions to compliance problems.

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<http://read.bi/regtech-2017>



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### IoT—

Become a domain expert on the “Internet of Things” ecosystem, including how businesses, consumers, and government entities are connecting their assets and objects to the digital world.

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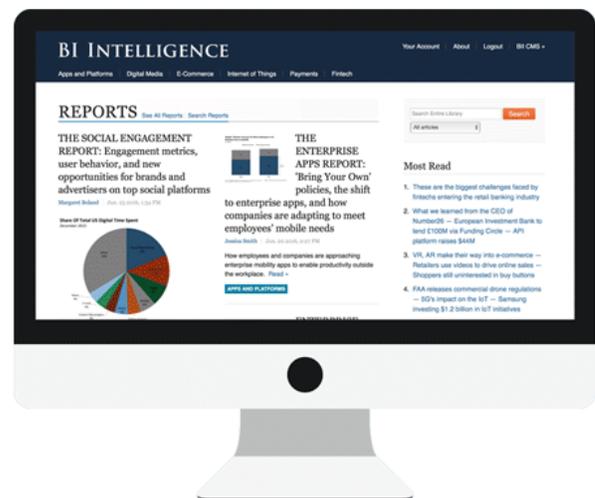
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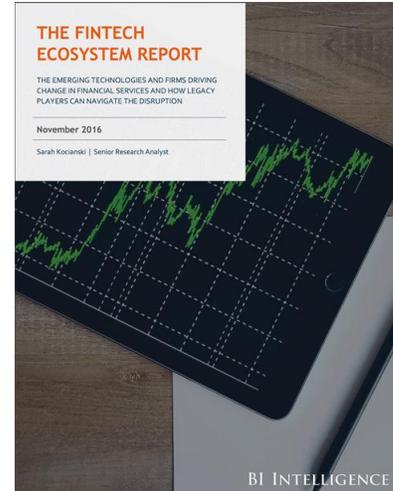
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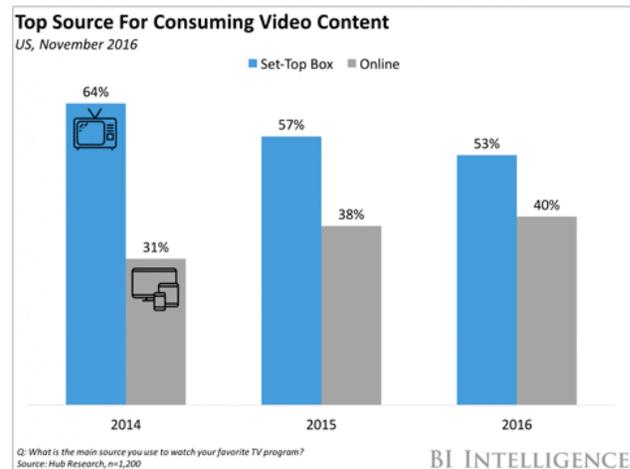
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