

Banking
Connectivity & Tech
Digital Health
Digital Media
Fintech
Payments & Commerce

30 Big Tech Predictions for 2020

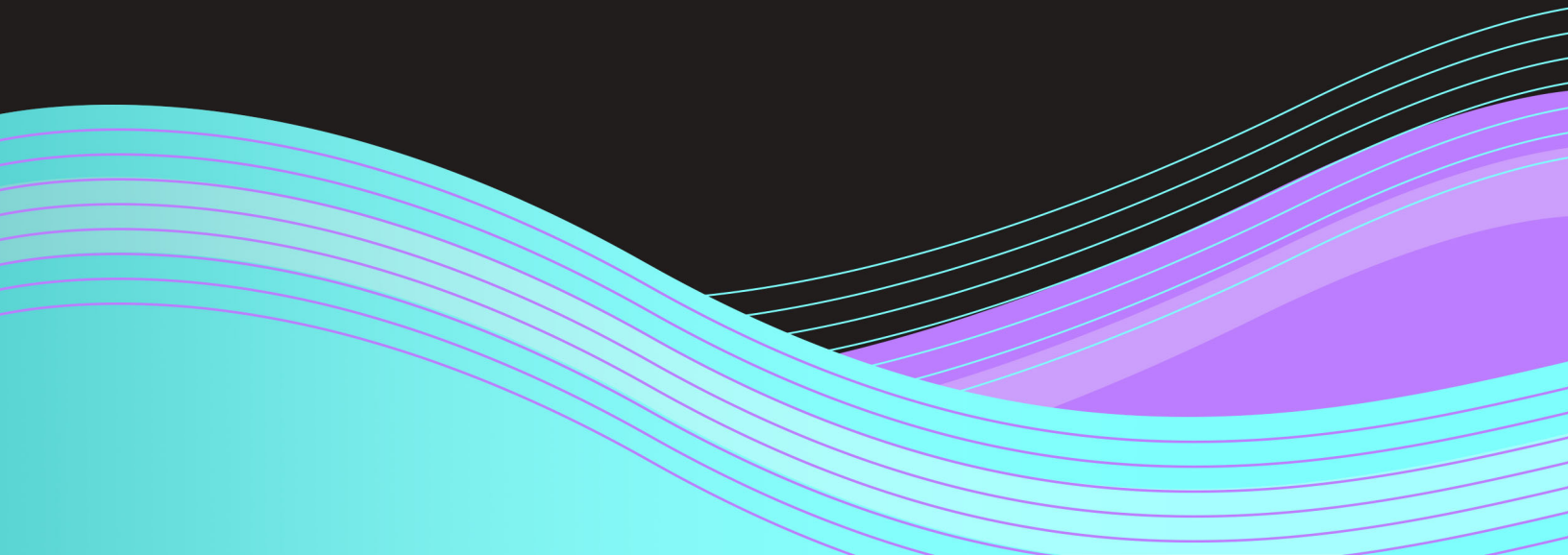


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Introduction

Digital transformation has just begun.

Not a single industry is safe from the unstoppable wave of digitization that is sweeping through finance, retail, healthcare, and more.

In 2020, we expect to see even more transformative developments that will change our businesses, careers, and lives.

To help you stay ahead of the curve, Business Insider Intelligence has put together a list of 30 Big Tech Predictions for 2020 across Banking, Connectivity & Tech, Digital Media, Payments & Commerce, Fintech, and Digital Health.

Our Top 5 Banking Predictions

2019 was a transformative year for the banking industry, as digital forces have touched banks big and small. We saw neobanks, both in the US and worldwide, bring in millions of new customers and achieve massive scale but struggle to become profitable. Meanwhile, we witnessed great success among incumbents in terms of digital engagement, with banks reporting more digital and mobile active customers than ever before and online account opening growing in popularity. 2019 also featured a flurry of M&A activity, including the creation of what will now be the 6th largest bank in the US by assets. Based on the developments we've seen this year, our research, and the trends that have risen to prominence as we approach the new year, here are our top five predictions for the banking industry for 2020.

The Digital Banking Ecosystem



Note: This graphic is illustrative, not exhaustive

1. The US will see M&A activity mint at least one new top 20 US bank by total assets.

One of the biggest banking stories in the US in 2019 was the historic merger of BB&T and SunTrust, which received the green light from regulators in November and which will create “Truist,” the sixth-largest bank in the US by assets, with \$467 billion in assets and hundreds of physical branches. And as both super-regional and top banks merge and make acquisitions — increasingly concentrating deposits among themselves — smaller banks are beginning to consolidate for growth as well, as the combined entities can enjoy stronger tech

budgets, customer counts, assets, and cost synergies (e.g. the ability to reduce overlapping branch networks). The result has been a whopping \$56 billion worth of M&A activity as measured by transaction value in the 12 months leading up to November 15, 2019, according to BSP. We expect that this trend will not only continue but that at least one other pair of US banks outside of the top 20 largest by assets will combine forces to create an entity itself reaches top 20 status.

2. Europe-based neobanks will add new users in the US at the same rate that domestic neobanks will in 2020.

Today, US consumers are finally beginning to warm to neobanks, with their anti-incumbent marketing pitches and appealing features like overdraft cushions. For example, US neobank Chime is leading US players with 5 million accounts — a figure which some have estimated falls between 1.6 million

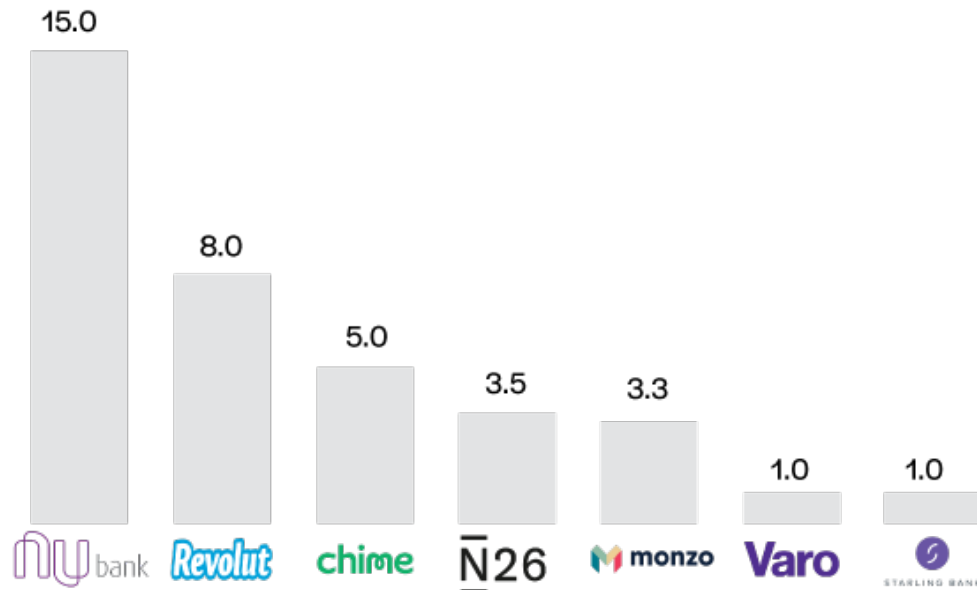
and 3.3 million real customers. While other US neobanks like Aspiration and Varo are targeting the vast majority of US customers who still lack a neobank account, the space is getting more crowded: European neobanks like N26 and Monzo are in the midst of a big push into the US.

Here's why European neobanks will go neck-and-neck with US ones next year:

- **They're similarly sized.** The 5 million account total that major US neobank Chime boasts, for example, is similar in scale to both the 3.3 million and 8 million that UK neobanks Monzo and Revolut enjoy. For that reason, both the major US and European neobanks have plenty of experience operating at scale.

Select Global Neobanks By Account Numbers

Millions



Note: Values may not be equal 100% due to rounding.

Source: Counterpoint Research, 2019

- **They have big marketing budgets too.** Publicity matters for a great deal for neobanks, and that shows in the marketing numbers they disclose: For example, Chime spent \$32 million on TV ads in the first eight months of 2019 alone, and Monzo had plans in June to spend \$20 million on marketing, per Warc.
- **Their features are similar.** Many of the core features that neobanks in the US and Europe offer to pull in customers are similar. For instance, US neobanks Chime and Varo both offer overdraft protection, as does Monzo in the UK, and both Monzo and Germany's N26 match Chime's early wage access.

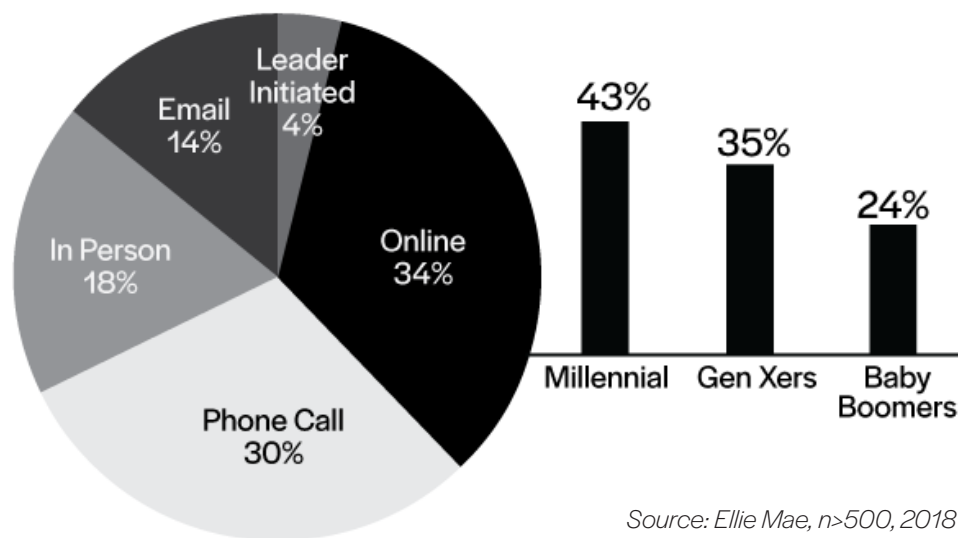
3. One of the major consumer-focused neobanks will achieve profitability and spur investors to take a harder line with unprofitable neobanks.

For the most popular neobanks aimed primarily at individuals, profits have remained elusive. Even in the UK, where online banking adoption is outpacing the US, neobanks are losing £9 (\$11.67) per customer, per data from Accenture. But we predict that a popular consumer-facing neobank, such as Starling — which claimed it will break even in 2020 — or Chime, whose CEO claimed the neobank could be profitable now if it reduced its sizeable marketing budget, will enjoy its first profitable quarter sometime in 2020. And we think that occurrence will cause investors to sour on neobanks that aren't

showing signs of being able to turn a profit in the relatively near future. The litmus test that venture capitalists employ will likely be whether a given neobank has been taking the proper steps to incentivize customers to use it as their primary bank, as this is the most likely path to profit for neobanks. The kinds of measures investors will be looking for will be things like perks caveated by a minimum deposit and/or transaction threshold, or benefits that are available only to customers that direct deposit their salaries with the neobank each month, for example.

First Outreach to Mortgage Lender

US



Source: Ellie Mae, n>500, 2018

4.

2020 will be a breakthrough year for digital sales — mortgage lending will grow the fastest among digital sales categories and help push digital sales to new heights overall.

FDigital account opening has been surging steadily recently, with two solid examples coming from the portion of US Bank's loan sales that are coming through digital channels rising 21% year-over-year and the fact that fintechs issued 38% of all US personal loans in 2018, compared with just 5% in 2013, per TransUnion. As digital channels gain more importance to the account opening process, we expect banks to add digital onboarding for more categories or optimize existing digital onboarding flows, and mortgages seem like they will be the first on the docket. Mortgages are the US' largest lending market, worth \$9.44 trillion as of September 2019, per data from the Federal Reserve Bank of New York. The popularization of rapid digital applications like Quicken Loans has already forced legacy banks to refine their procedures, which have historically been time-consuming and paper-heavy. For example, Bank of America offers a "Digital Mortgage Experience," featuring a prefill capability, access to lending specialists, and the ability to upload documents online. Closing the transaction still occurs in person, in around 20 days — significantly faster than the traditional 35-40 days. Meanwhile, Chase and Wells Fargo offer similar processes. We expect incumbents to further streamline their mortgage application processes in the coming year — and for the offering to make up a larger share of their digital sales.

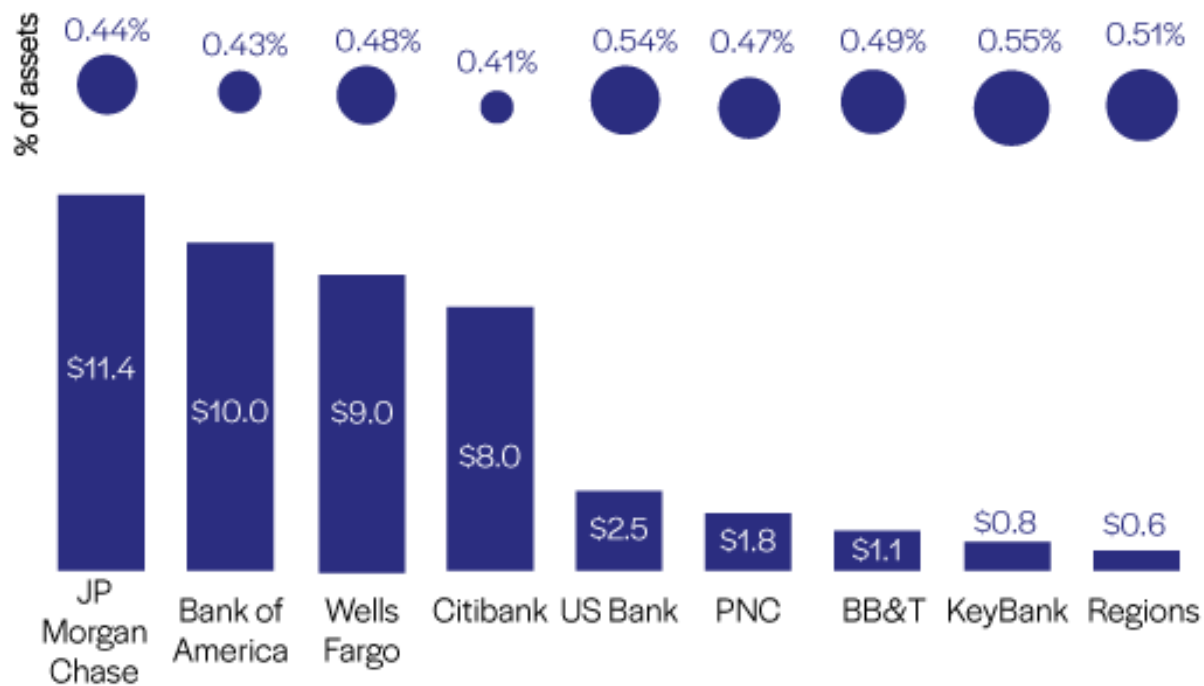
5. Smaller banks and credit unions will begin spending a percentage of their assets on technology that is equal to or greater than the percentage major banks are spending.

The biggest banks in the US set aside enormous amounts of money for their IT budgets — JPMorgan Chase, Bank of America, and Wells Fargo set IT budgets of \$11.4 billion, \$10 billion, and \$9 billion in 2019, respectively. But as digital and mobile banking tools become increasingly table-stakes, smaller banks and credit unions will need to do their best to emulate the offerings of bigger banks even if they can't go dollar-for-dollar with their monolithic counterparts. What they can do, however, is start spending more on IT as a percentage of assets. The top four US banks all hover in the .41% to .48% range when it comes to IT budget as a percentage of assets, and the median for this metric among US

credit unions is mired on the lower end of this spectrum at .42%. It's possible that, to this point, these smaller institutions have considered digital features part of the cost of doing business and less of an ROI generator. But as both digital engagement and sales through digital channels rise among banks, we think the value of a strong suite of online tools as a means of driving new customer acquisition will become more apparent. And because of this more obvious value, we estimate that in 2020 a plurality of small banks and credit unions will boost their IT spending as a percentage of assets up into the .49% to .55% range, where some of the smaller major US banks like BB&T and KeyBank were in 2019.

US Banks' IT Spend As of March 2019

Billions



Source: UBS; Bankrate.com, Business Insider, CB Insights, 2019

Correction: A previous version of this note incorrectly stated that Europe-based neobanks would add more new users in 2020 in the US than domestic neobanks would. The prediction has been updated to clarify that we actually expect Europe-based neobanks to add new users in the US at the same rate as domestic neobanks in 2020. (12/18)

Our Top 5 Connectivity & Tech Predictions

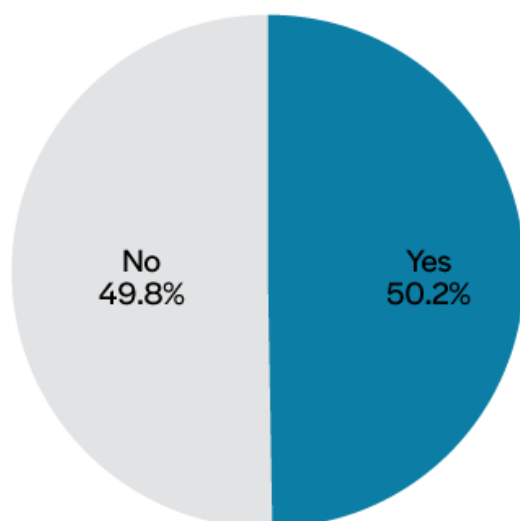
Connectivity got faster and smarter in 2019, enabling consumers to embed technology into their everyday lives to an extent that would have shocked many at the outset of the decade. Global 5G launches upended the mobile landscape this year, the cloud wars intensified amid antitrust rumblings, and the smart speaker cemented its move from niche to mainstream device. In the coming year, reactions to these developments will trigger major changes around the world. Based on these developments, our proprietary research, and emerging industry trends, here are our top five predictions for the connectivity and technology space in 2020.

1. We've hit peak smart speaker growth in the US — device sales to first-time owners will drop in 2020.

The smart speaker is a brand new device category relative to many others: The Amazon Echo debuted a scant five years ago, which is far more recent than the smartphone, the fitness tracker, or even AR glasses. But thanks to aggressive marketing and advertising campaigns, low prices combined with frequent sales, and high consumer interest, the smart speaker has experienced unprecedented growth — it's in half of US respondent's households, according to Business Insider Intelligence's Emerging Tech Survey, conducted using the Attest Consumer Growth Platform. Respondents to this online survey were representative of the US population on the criteria of age (18-73), gender, and living area.

With the device's high level of penetration, Amazon, Google, Apple, and others looking to push these devices into consumers' homes will find that the number of new adopters of these devices will shrink for the first year in 2020. There just won't be enough interested buyers in the US who haven't already gotten their first speaker as there have been in years past. But this doesn't mean that speaker shipments will fall; to the contrary, they should continue to rise as the devices remain highly accessible — consumers can buy a smart speaker for less than the price of a tank of gas — and as people with one speaker purchase additional units and spread them throughout their homes. The smart speaker is now a mature platform in terms of adoption, and will need to be thought of as such, rather than the brash emerging platform it was conceived of in its first few years.

Smart Speaker Ownership Among US Respondents



Third-Party Sample: Respondents to the online survey were sourced from a third-party sample provider to closely resemble US demographics on the criteria of gender and age. n=1,984 adults
Source: Business Insider Intelligence and Attest, Emerging Tech Survey, n=2,000 US adults, June 2019

2. Amazon or Alphabet will partner with Dish to launch a wireless carrier service in the US after T-Mobile and Sprint merge.

Together ,
Amazon and Google
account for over
80%
of paid search ads in the US

— a dominance which results largely from the companies' respective abilities to aggregate and analyze user data. The tech giants could deepen their access to user data by becoming wireless carriers, and offer their service at a below-market rate. Alphabet already offers a wireless service as a mobile virtual network operator (MVNO) through the Google Fi program and has also commercialized a high-altitude balloon network service in Kenya with Loon. And Amazon has sought Federal Communications Commission permission to launch a broadband satellite network, which would provide connectivity for large swaths of the globe. But such ventures have failed to significantly threaten telecommunications

incumbents thus far, given the industry's highly regulated nature and the significant infrastructure spending required to operate an independent network.

With the US telecoms space expected to undergo a seismic shift as T-Mobile and Sprint attempt to merge, a major opportunity is opening up for smaller incumbents and new entrants. One firm that's already pouncing is US satellite TV company Dish, which reportedly reached an agreement with T-Mobile to receive wireless spectrum to create its own rival network should the merger be approved. Still, Dish faces an uphill battle, as it needs capital to build out its network and would struggle to poach mobile customers from incumbents. Rather than challenging the incumbents head-on, we expect that Dish will team up with either Amazon or Alphabet to launch a wireless competitor. Dish would bring its telecom industry expertise to the partnership, while its tech giant partner would bring a tremendous amount of capital, a massive user base, and the potential to capitalize on broader business synergies, such as pairing the service with an Amazon Prime membership or a YouTube TV subscription.

3. The adoption of midtier phones will accelerate as smartphone manufacturers struggle with the challenges of bringing 5G technology to their premium lineups.

Midtier Smartphones (\$150 - \$399) accounted for **38%** of global device sales in **Q1 2019**, up from **29%** in **Q1 2018**, according to Counterpoint Research.

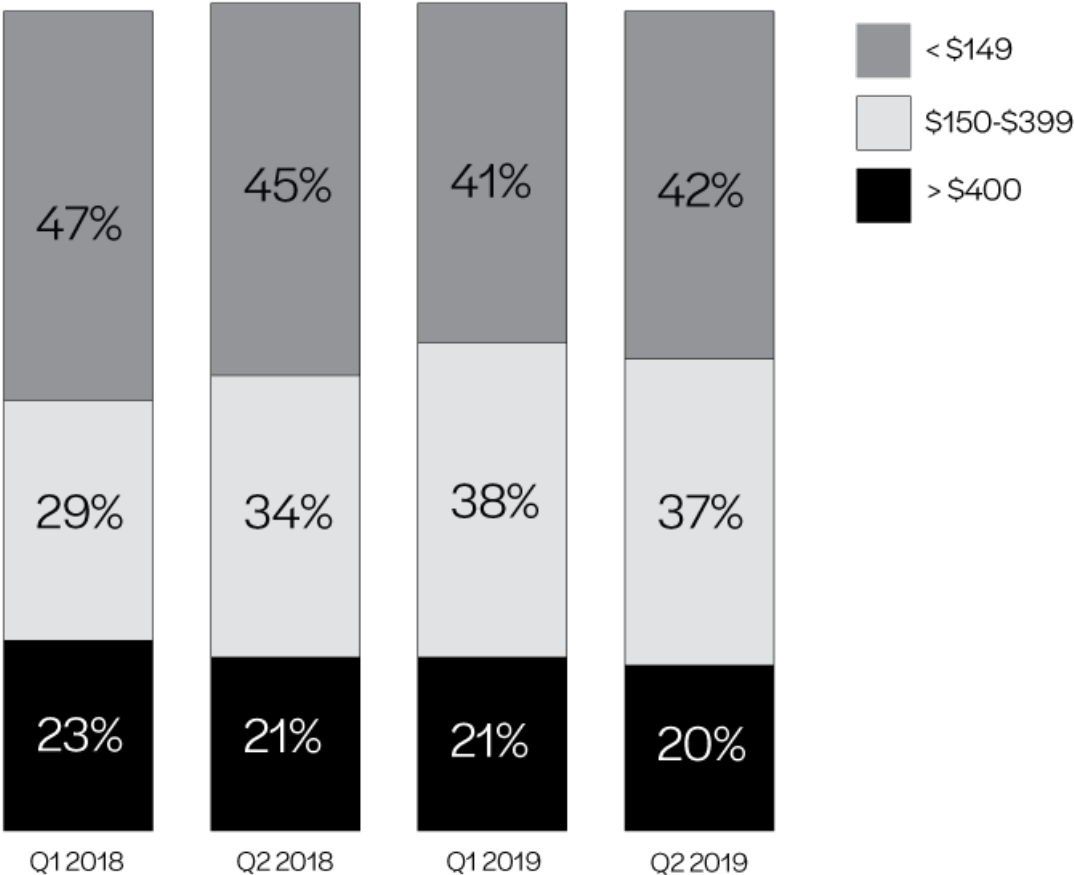
This has been largely led by consumers in emerging markets trading up from their low-end smartphones to midtier devices, which are increasingly providing more value as device-makers work to bring advanced tech to the phones. In 2020, the trend will only accelerate as 5G technology is increasingly incorporated into smartphones, which will make many premium phones even more expensive despite some technical flaws.

The value proposition of midtier phones themselves will also strengthen in the coming year, underpinned by two recent

moves from Qualcomm. In September, the chipmaker announced plans to add 5G modems to its midrange Snapdragon 6 and 7 series chipsets, which are cheaper alternatives to its high-end 5G chipsets. And earlier this month, Qualcomm showcased new chipsets that will bring 5G “mainstream.” Interestingly, the higher-end Snapdragon 865 won’t have a modem onboard, meaning that devices using it will require more energy and have less room for batteries, limiting the functionality of these expensive phones. But the new, less pricey Snapdragon 765 series will have a modem onboard — though it will be slower than the 865 — and will enable smartphone manufacturers to offer 5G devices for much cheaper. “What this mobile platform allows us to do is get to half the price of 5G devices today,” said Juho Sarvikas, chief product officer of handset-maker HMD, per Cnet. As consumers see prices for premium 5G phones increase and begin to question the devices’ functionality, 5G midtier phones will become a much more attractive option.

Midtier Smartphones Are Growing Share of Global Sales

Global smartphone market share, by price



Note: Values may not be equal 100% due to rounding.
Source: Counterpoint Research, 2019

4.

Global automakers will announce a wide range of 5G-connected models.

Connectivity has become a central part of the auto industry as it enables advanced infotainment systems, deeper vehicle analytics, and improved safety features. As automakers look to differentiate their vehicles through such connected features, they will add 5G connectivity to supplement existing 4G LTE capabilities. The next-generation standard offers faster data transmission speeds and lower latency than 4G, both of which are key for data-intensive applications such as vehicle-to-everything communication or self-driving capabilities.

We expect a slew of announcements about forthcoming 5G-connected cars in 2020 due to signs from both chipmakers and automakers. The head of 5G chip designer

Qualcomm's automotive business
Nakul Duggal believes

**“there is going to be
5G in every single next-
generation car design.”**

And Qualcomm has said that 2021 will be when 5G network coverage reaches parity with the coverage of 4G networks, meaning that cars hitting the market that year will likely boast the technology. Automakers, meanwhile, have long been eyeing the tech, with Toyota explicitly targeting a 2020 launch for 5G vehicles. Others have set later targets (like Ford) or are still in the exploratory phase (like BMW). But given the fairly long development cycle for cars, even those intended to hit the market several years in the future are likely to be announced within the next year.

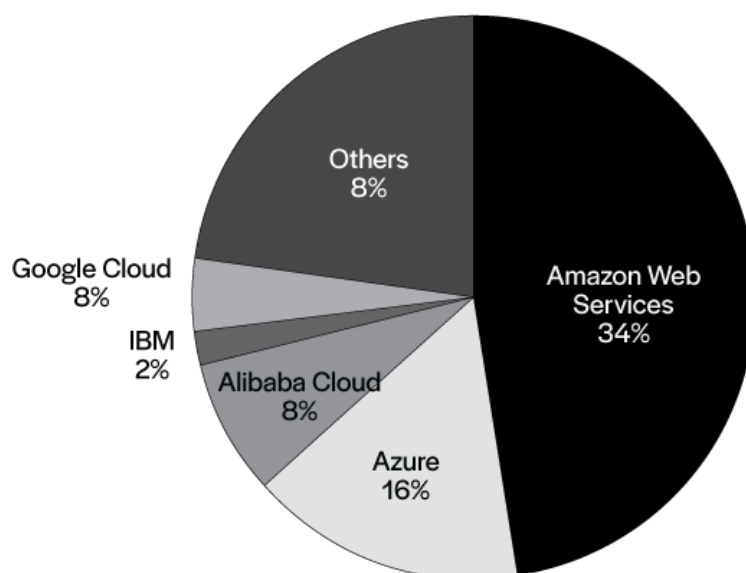
5. One of the US tech titans — Amazon, Microsoft, or Google — will spin out its cloud business to head off antitrust concerns from US regulators.

US tech leaders have their tendrils in a broad range of segments of the economy, and their influence has drawn the attention of the Department of Justice and the Federal Trade Commission. The investigations are centered on two concerns: whether the tech giants have used their dominance in certain market sectors to unfairly drive away competition and reinforce their positions, and whether they're looking to parlay a leading role in one segment into another. As cloud businesses get pulled into the

regulatory fray, it's likely that a tech giant — we think Amazon, given its core presence in e-commerce rather than technology — will spin out its cloud business into a standalone company. This would upend the power balance in the tech space, as some companies could lose a major source of revenue. It wouldn't change the status quo in the cloud market itself, however, as the core tech and clients would likely remain the same, even for a spun out cloud business.

The Global Cloud Market is Consolidated Around 4 Players

Worldwide revenue share of public cloud services in 2018



Source: Gartner: 2019

Our Top 5 Digital Health Predictions

2019 marked a year of maturation in the digital health space: We saw the first batch of digital health firms go public following a three-year IPO dry spell and investors placed bigger bets on startups. We also saw tech titans broaden their healthcare plays, infiltrating nearly all corners of the healthcare industry — both fueling innovation among legacy players and threatening slow-moving incumbents. Traditional healthcare firms welcomed digital health tools to meet patient expectations for hyper-convenient care, governing bodies amended antiquated, digital-averse regulation, and reimbursement models continued to emphasize positive patient outcomes. Based on the year's developments, our own proprietary research, and industry trends we're watching unfold, here are our top five predictions for digital health in 2020.

1.

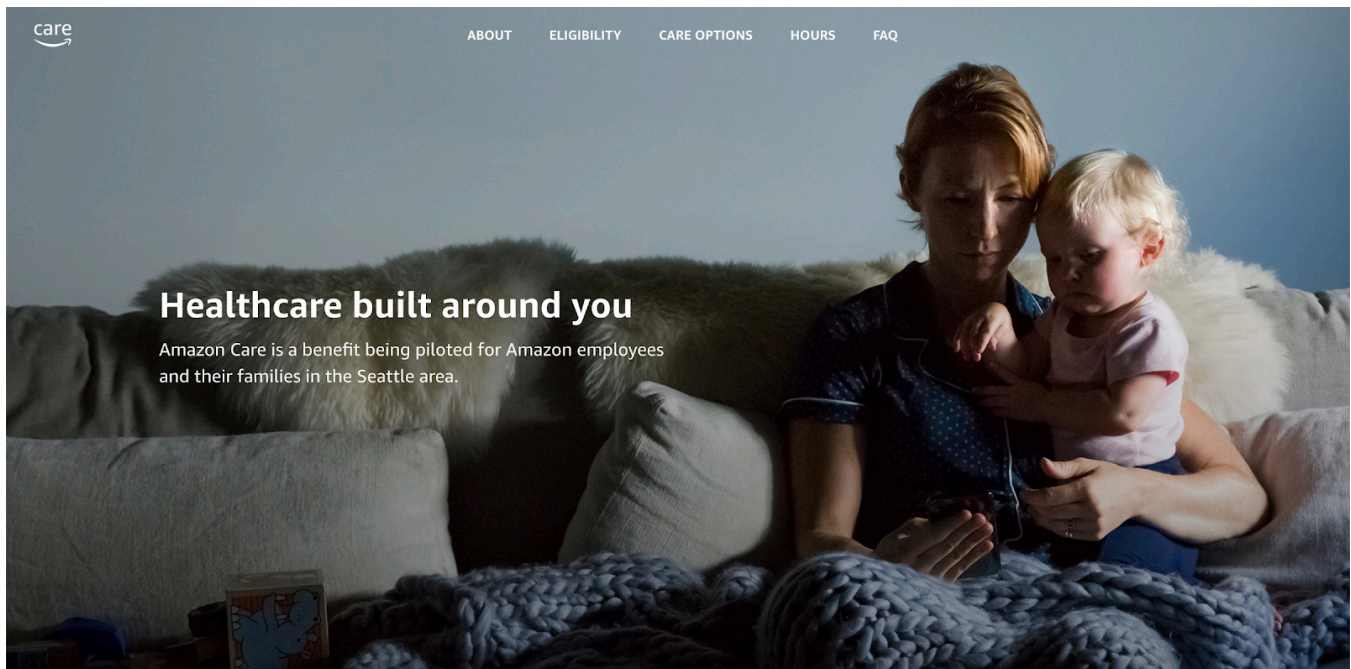
Amazon will build on its blockbuster year in healthcare by rolling out its employee-facing virtual care platform — Amazon Care — to the US public.



Amazon kicked its healthcare endeavors into high gear in 2019: It unveiled its virtual care program Amazon Care, acquired digital diagnostics platform Health Navigator, released a HIPAA-eligible medical transcription software through Amazon Web Services, and announced aggressive plans to expand Haven, its health insurance joint venture with JP Morgan Chase and Berkshire Hathaway for select US employees, throughout 2020. With so much energy behind Amazon's healthcare efforts, 2020 feels like the ideal time for the e-commerce titan to bring one of its employee-facing health ventures to the public — and we think Amazon Care is the most likely candidate, as it'll likely be several years before Haven is fully up and running, based on statements from JPMorgan Chase CEO Jamie Dimon earlier this year.

A public launch of Amazon Care could seriously shake up the telehealth market, as Amazon can leverage its brand power to improve meager adoption rates. A mere

10% of US consumers are utilizing telehealth, despite **62%** of individuals saying they'd be willing to give up face-to-face care in favor of telehealth consultations, per a 2019 PwC report.



But Amazon holds a ton of power as a beloved consumer brand that's well-known for convenience, which could help convert interested, undecided consumers into fully avowed telehealth users. I (Zach) expect an Amazon Care rollout would mirror the strategy we've seen Amazon take with its cashierless grocery stores, Amazon Go: The virtual care service could make its limited public debut with select Seattle-based Prime members around Q3 of next year before eventually expanding to other key markets, like New York City and San Francisco. This would give the company time to work out any potential kinks with

its digital platform, iterate based on early user feedback, and work out how to scale Amazon Care's home visits into new markets with unique regulatory landscapes. The US telehealth market constitutes a \$2.4 billion opportunity, and Amazon looks primed to seize on this untapped market potential: It isn't hard to envision that, following a limited debut, Amazon Care could be offered as an Amazon Prime upsell to the company's 105 million estimated US Prime subscribers, who may be more willing than most US consumers to buy-in to Amazon's new image as a burgeoning healthcare company.

2. Established digital therapeutics (DTx) players — namely Livongo, Omada, and Virta — will become active buyers of struggling greenhorns as pharma firms previously interested in the space withdraw from partnerships.

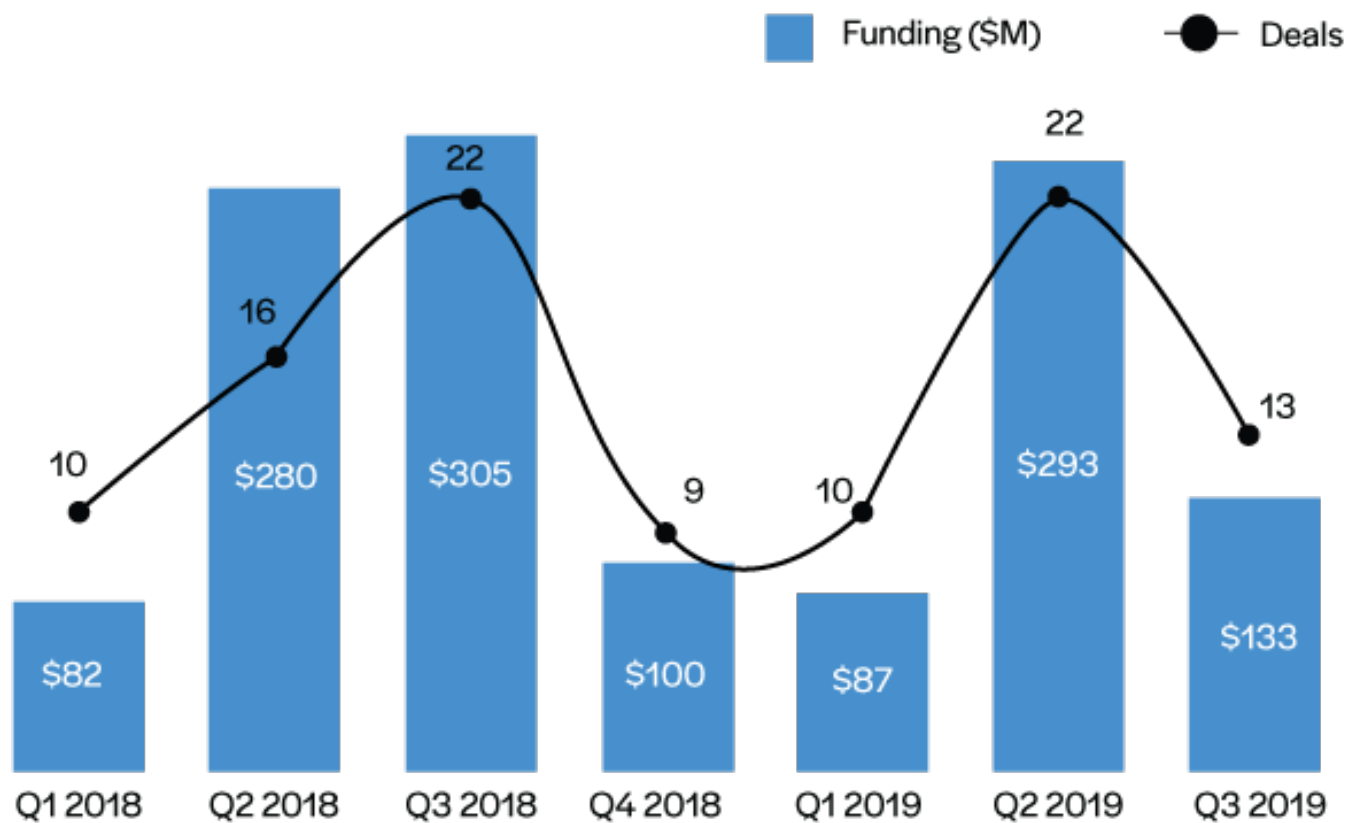
Livongo, Omada, and Virta are among the top 10 most well-funded DTx providers and are likely flush with enough cash to sustain aggressive acquisition strategies — a useful tactic to expand their services and cement their positions in the crowded DTx space. For its part, Livongo has already scooped up a handful of smaller companies to build out its line of offerings and make it attractive to a wider audience and a longer list of partners — and we think its competitors Omada — which is already expanding into new disease areas — and Virta — which would be wise to diversify offerings beyond those that treat just diabetes — will follow suit. And they likely won't have trouble scouting out prospects, as smaller players lacking the cash runway, partnerships, and enrollment needed to persevere will likely look for buyers: Toward the tail end of 2019, we've seen once-interested pharma giants reel back their involvement in deals with DTx companies — which afforded smaller players access to

their giant consumer bases and cash stores for commercialization efforts — throwing into question the futures of firms relying on pharma alliances for growth. Further, investors seem to be cooling on passing new funds over to DTx startups:

In Q3 2019, DTx firms scraped up less than half of what they did in Q3 2018.

So, littler players looking for fresh cash to drive development and enrollment might come up empty and seek refuge in the arms of more established DTx players.

Investor Appetite For Global Digital Therapeutics Startups Dropped in Q3 in 2019



Source: CB Insights, November 7, 2019
Methodology: CB Insights kept track of emerging digital therapeutics companies' financing rounds for those that had received funding at any point from venture capital firms, corporate venture groups, or super angel investors from 2018 to September 2019

3.

The digital health IPO floodgates will snap back shut — with fewer than five companies hitting the public market — as the threat of a recession looms and newly public digital health firms struggle.

An IPO drought plagued the digital health sector for nearly three years, but in the latter half of 2019, the floodgates opened, with six digital health firms going public — including Health Catalyst and Change Healthcare, which we pegged as potential IPO candidates in last year's predictions. But we don't think digital health IPO activity will remain as robust in the year ahead — and we expect to see only a handful of firms announce IPOs in 2020. This is partly due to a potential economic slowdown: The chance a recession will hit in the US next year hovers at around 30%, per Bloomberg's tracking, and historically, the number of IPOs decreases during economic downturns, per Forge Global. Further, companies that do go public during economic slumps are, on average, older than companies that do so during times of economic prosperity, and so the nascence of many digital health companies could make them unlikely IPO contenders. What's more, several of the digital health companies that went public 2019 are performing suboptimally, CNBC notes, which could send a warning sign to other health tech startups eyeing the public market.

While we think digital health IPOs will slow down in 2020, here are a few startups we think will still take the leap:



One Medical. News surfaced in October that the primary care provider plans to go public in the first half of 2020. We anticipated it wouldn't be long before One Medical went after an IPO after it pocketed \$350 million in funding in 2018, rocketing it beyond unicorn status to a \$1.5 billion valuation. And an IPO would afford the primary care disruptor the consumer awareness it needs, since it relies on poaching business away from traditional firms.



Omada. The competitor of newly public-Livongo has raised nearly \$200 million — and, like the lion's share of DTx vendors, it likely struggles to capture a sizable portion of its addressable market since striking partnerships with payers doesn't always translate into consumer uptake. Livongo advertised its June IPO as a branding event, and has since landed a handful of huge contracts that should greatly expand its membership base. Omada could follow in Livongo's footsteps to hit the public market to grab more attention from consumers and prospective partners.



American Well. The telehealth provider has accrued north of \$500 million in funding since its 2006 launch, indicating it has an established foothold in the virtual care market. Further, American Well focuses on business-to-business (B2B) offerings — and the fact that most other digital health firms that went public this year don't primarily take a direct-to-consumer approach could send a positive signal to the cash-rich startup to test out the public market.

2020 will be the year US government officials are forced to address the cybersecurity crisis in healthcare — likely after an especially disruptive ransomware attack makes the problem too dangerous to ignore any longer.

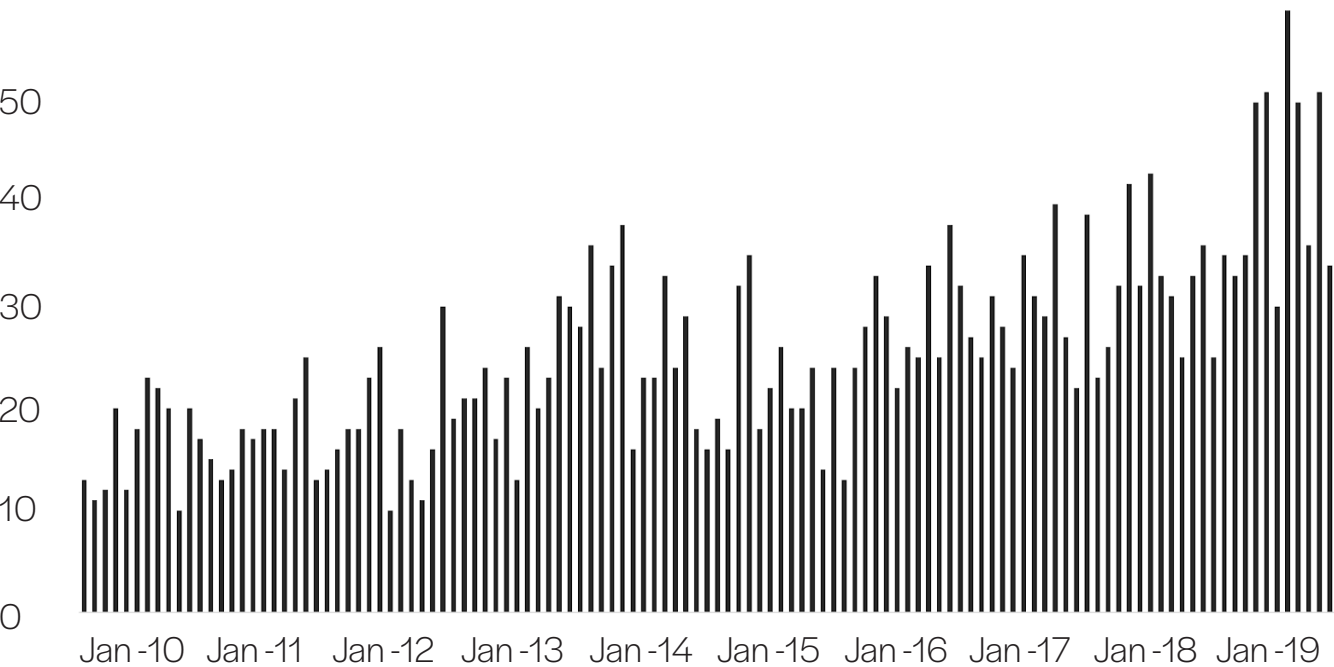
Cyberattacks targeting healthcare organizations have been on a steady uptick over recent years, and 2019 has been the worst year so far: Over 32 million people have had their health data exposed by a data breach this year — more than twice as many people as were affected in 2018. And cybersecurity is worsening all around — we're seeing increases in the scale of attacks, their frequency, and the cost per breach. But healthcare organizations' prioritization of cybersecurity isn't escalating, in turn: Cybersecurity is no longer the top priority for industry leaders, with many citing a mismatch between tight hospital budgets and the increasing sophistication of cyberattacks. It seems like every day there's news of another massive healthcare data breach, and perhaps no kind of threat is more dangerous than ransomware attacks — which present hospital executives with the catch-22 of either paying up or risking dire consequences: Michigan-based ENT and Hearing Center was forced to shut down after its cofounders decided to forego a \$6,500 payment to buy back access to its medical files, prompting hackers to delete all patient records held by the provider, for example.

Emboldened by successful, high-profile cyberattacks on healthcare orgs — hackers will more aggressively pursue protected patient health info and cause major disruptions for providers in 2020.

Next year, hackers will force more hospital shutdowns through ransomware attacks, like the one we saw in Tuscaloosa, Alabama this past October — but these attacks will be even larger and more disruptive, like the recent cyberattack that crippled the city of New Orleans and forced it into a state of emergency. The number of ransomware attacks across industries more than doubled in 2019 compared with 2018, with Q1 of 2019 alone seeing a 118% increase in ransomware attacks, according to McAfee. We are rapidly approaching a data breach tipping point where the patient health risks of poor cybersecurity will no longer be possible to ignore. And I (Zach) hope that whatever happens, it will finally prompt the US government to take concrete steps toward addressing the very real dangers posed by unchecked cybercriminals, whether through government-funded and enforced minimum cybersecurity protocols or through the creation of new funding pools designed to help hospitals counteract the rising threat of cybercriminals.

US Healthcare Data Breaches Surged Over The Last Decade

Monthly Breaches



Methodology: Data is from the US Department of Health and Human Services Office for Civil Rights' database of breaches that affected the protected health information of 500+ individuals. Data includes cases currently under investigation.

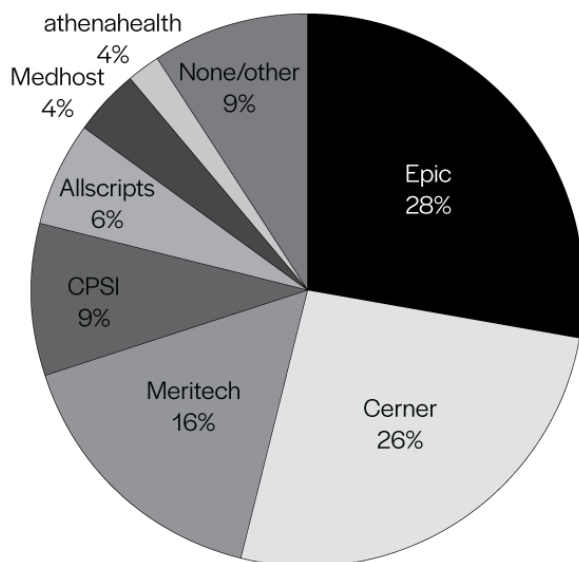
Source: US Department of Health and Human Services Office for Civil Rights, 2019.

5. EHR giants Epic and Cerner will turn to aggressive M&A to shore up against the threat of a potential Google offering

The juggernauts of the electronic health record (EHR) industry have remained unthreatened in their overall command of EHR market share for several years: Collectively, Cerner and Epic control 54% of the total EHR market. And while we still think these two companies will retain their iron grip on the space in 2020, we expect both companies to more aggressively pursue M&A as the threat of a Google EHR system looms. The tech giant recently revealed a demo video for a potential EHR tool that would empower doctors the same kind of intuitive and snappy search functionality they've come to expect from

Google. And that could be enough for at least some providers to make the jump to a new system, especially if it came bundled with Google Cloud and data analytics support that would help hospitals more easily navigate the move to data heavy, value-based care (VBC) reimbursement models. But if Epic and Cerner can acquire smaller vendors next year, like Meditech or Allscripts, before Google fully debuts whatever it's working on, they might be able to reach a level of market penetration and system interoperability that could help them beat back a disruptive Google system.

Epic, Cerner Dominate The Competition In 2018 US Hospital EHR Market Share



Methodology: Data is based on market analysis of 5,447 acute care hospitals

Source: KLAS Research, "US Hospital EMR Market Share 2019 Report," 2019

Our Top 5 Digital Media Predictions

2019 marked a major year of transformation in digital media: Tech giants including Google, Facebook, Apple, and Amazon faced mounting regulatory scrutiny from US lawmakers on multiple fronts, including antitrust, data privacy, and messaging; media giants including Disney launched or announced they would launch new streaming video services as cord-cutting losses accelerated; Spotify invested heavily in podcasting and we saw the launch of the buzzy subscription podcast experiment Luminary; and emergent platforms and media experiences exploded into the mainstream, including short-form video-sharing app TikTok, free-to-play digital games like Fortnite, and live-streaming platforms like Twitch and Mixer. Based on the year's developments, our own proprietary research, and industry trends we're watching unfold, here are our top five predictions for the digital media space in 2020.

1.

Spotify will grow to account for 25% of global podcast listening as it doubles down on discoverability and exclusive original content — and much of that share will come directly from Apple.

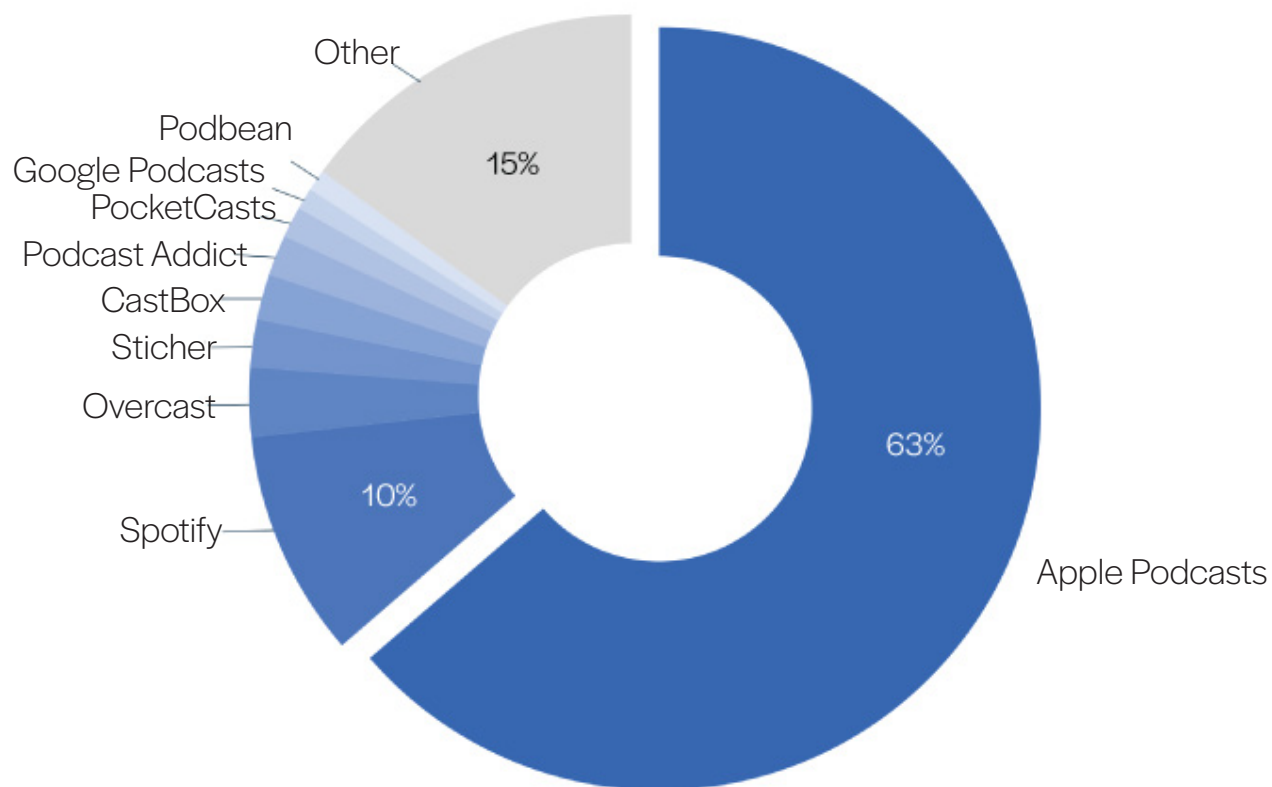
Despite Android's dominance worldwide, Apple dominates podcast listening via its Podcasts app, with 63% market share as of February 2019, per Libsyn analysis of App Annie data. But Spotify has already become the second-largest podcast platform, with about 10% share of listening, double its 5% share in December 2017. And in recent months, Spotify has seen significant increases in listening as it invests more aggressively in the space: About 14% of Spotify's MAU base now listen to podcasts, and total podcast hours streamed jumped 39% quarter-over-quarter (QoQ) in Q3 2019.

We think Spotify will drive further podcast listening on its app thanks to an emphasis on discoverability and original content — its two biggest advantages over Apple:

- **Discoverability.** Apple Podcasts currently has greater volume (800,000 podcasts) versus Spotify (500,000), but we expect that discoverability is more valuable than sheer content volume, which is meaningless if users struggle to find shows they're interested in. In terms of enhancing discovery, we believe Spotify's emphasis on expanding algorithm-driven personalized playlists — an approach it has honed with music — will beat Apple's emphasis on indexing. In June, Apple promised search enhancements on Podcasts, but these features are likely still limited.
- **Exclusive original shows.** To boost originals development — which we expect can drive loyalty — Spotify spent \$400 million in 2019 on podcast-focused acquisitions, including Parcast and Gimlet Media, and struck output deals with mega-talent including the Obamas, Jordan Peele, and Mark Wahlberg. All told, it boasts a slate of more than 30 Spotify-exclusive pods. For its part, Apple has reportedly sought exclusive podcast rights, but so far has no exclusive shows of its own.

Top Podcast Consumption Apps

Share of traction by top listeners



Source: Libsyn, App Annie, February 2019

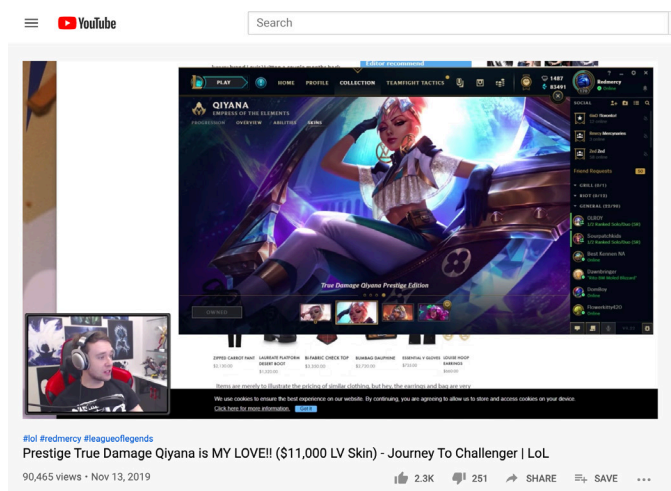
2.

Video game developers will add commerce features that go beyond in-game purchases, following the lead of social platforms that have seen success with shopping integrations.

2019 has been a big year for shopping integrations across social media: Platforms from Snapchat to Instagram have been building shopping into the user experience in order to eliminate friction in the advertisement to purchase funnel. As more users pick up on this behavior, the opportunity for wider integration across the digital landscape will blossom — and carry over into the gaming world. Video games have long offered in-game purchases that allow users to advance levels, change their in-game avatar's outfit, or unlock key features. And as gaming becomes increasingly mainstream — there are now over 2.5 billion gamers worldwide, up from 2.3 billion in 2018, per Newzoo — as a destination for both gameplay and for socializing, video game publishers could begin to build out broader commerce features to further monetize those users.

For instance, if a player purchases a certain

kind of sneaker for their in-game avatar, they may eventually wish to purchase those shoes in real life as well. Game publishers could facilitate that sort of shopping behavior through a portal that matches up in-game and physical products, and which pulls from payment information that's already on hand due to previous in-game purchases. Such integrations also create space for creative promotions, like exclusive products that are only available to those playing a new season of a game or to those who have reached a certain level in a game, creating a virtuous cycle for game publishers. Some publishers and brands have already joined together for deals that approximate this behavior: The wildly popular game League of Legends, which makes money from in-game purchases, recently inked a partnership with luxury brand Louis Vuitton. For the partnership, Louis Vuitton created a capsule collection and designed skins for LoL avatars. The collection, which launched on its own site, sold out in Europe in less than an hour. And earlier this year, Adidas designed a Snapchat game to launch a pair of cleats, which included an option for users to “try on” the shoes within the game.



3. The 2020 US election will be a breaking point for social platform content moderation, leading US lawmakers to propose legislation that regulates the space in 2021.

The 2016 US presidential election dredged up a great deal of public concern about the role social platforms play in disseminating misinformation. Since then, the major social platforms have undergone multiple congressional investigations on the matter, made changes to content policy and enforcement, and their CEOs have issued grandiose promises to solve the problem of content moderation. The result has been a set of disparate policies and approaches to content moderation, spanning issues from political advertising to hate speech. These policies have all been implemented with mixed results, but the 2020 election will likely serve as a stress test measuring the efficacy of these efforts. On the whole, we think the election will highlight platform vulnerabilities, and that misinformation and other harmful election-related content will spread on their platforms, and initiate a second round of public and regulatory outcry.

That will ultimately lead US officials to propose comprehensive legislation that regulates content moderation on social platforms, and we think they'll follow the European Union's lead on the issue.

The EU has become the agenda-setter in terms of digital policy, as legislation like GDPR has become the framework for global data privacy regulation, for instance. Along those same lines, we expect US lawmakers to borrow from the European Commission President Ursula von der Leyen's plans to roll out new, comprehensive legislation aimed at liability and safety on digital platforms, called the Digital Services Act, within the next two years.

4.

In 2020, the streaming wars will be defined by promotion-fueled growth for new-to-market services, setting the stage for a service shakeout in 2021 as these offers expire.

The SVOD streaming wars will finally become a reality in 2020 as the major new SVODs will have all come to market by April 2020, including Disney+, Apple TV+, and HBO Max. Broadly, we expect that new-to-market services will grow significantly in their first years on the market and that the bulk of subscriber growth in 2020 will stem from distribution partnerships that expose them to operator customer bases, offer promotional discounts, or bundle services. For example, Disney's partnership with Verizon offers unlimited wireless customers and new Fios or 5G broadband customers a year of Disney+ free; Apple will offer a year of Apple TV+ free with new device purchase; and AT&T will offer HBO Max free to all customers who already subscribe to HBO. As a result, some of these offers could artificially inflate the base on new-to-market services beyond actual consumer demand in their first year — but for the most part, that won't catch up with services until 2021.

Here's what we expect to characterize 2020 for four of the major streaming services:

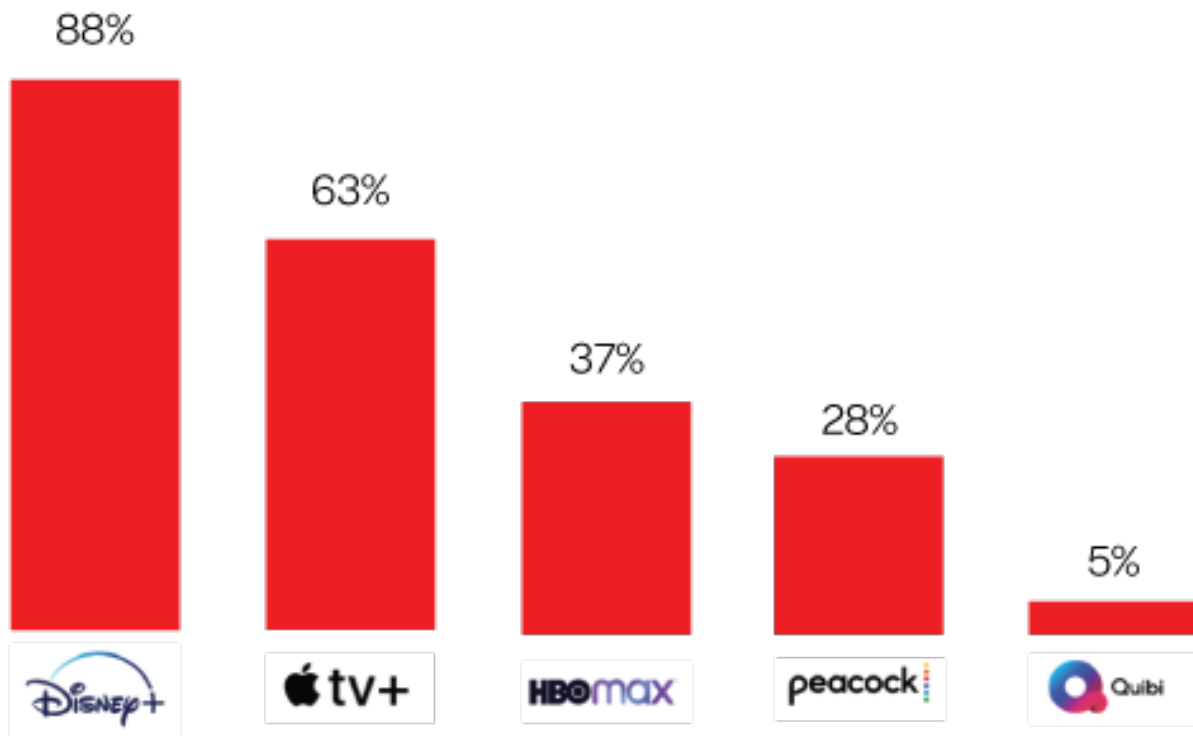
- **Netflix will remain dominant, but will become increasingly reliant on international subscriber growth.** Netflix is a must-have among US streaming households, with an estimated 87% penetration, per eMarketer estimates. Netflix's outsized investment in original content — \$15 billion in 2020 — will enable it to remain a foundational service in the US, but domestic growth will slow further due to market saturation and likely as major new entrants draw interest. That will cause the service to push harder for international growth: Since 2015, international markets have collectively contributed at least two-thirds (66%) of quarterly sub additions.
- **Disney+ subscriber growth will exceed internal expectations sooner than expected, hitting at least 60 million subs in its first year on the market.** Disney expects Disney+ to have 60-90 million global subs by 2024. But if growth continues at its current pace, the service already looks likely to blow its own projections out of the water — the service reached 10 million sign-ups in its first 24 hours. And as of December 11, the app had been downloaded to mobile devices 22 million times, per app-tracking firm Apptopia. Interest in Disney+ among US consumers is high: 43% said they would subscribe, as of mid-August, per UBS. We expect that Disney+ will gain subs fast in the first half of the year thanks to its distribution deal with Verizon, which exposes it to at least 17 million customers, while growth in the second half of the year will be powered by its expansion into new markets, including in Western Europe (March 2020) and Southeast Asia (H2 2020).
- **HBO Max will initially benefit from the transfer of existing AT&T customers and HBO subscribers, but it will struggle to add new subs beyond that. That's because AT&T's branding is confusing to consumers and potentially waters down the premium brand equity of HBO itself. HBO will be under greater pressure to prove the broad-based value prop of its service to consumers at the same time as it reinforces the prestige value of HBO.** by its expansion into new markets, including in Western Europe (March 2020) and Southeast Asia (H2 2020).

- **Apple TV+ will surpass Netflix to become the largest global SVOD.**
Apple will likely draw some sign-ups from among existing device owners, who collectively make up a global install base of 1.4 billion devices. But offering the service free for a year with any new device purchase could independently deliver over 100 million subscribers if

50% or more of expected iPhone unit shipments in 2020 result in a consumer taking the free service. And while we would expect a percentage of trial subs to churn out after the first year, if Apple continuously offers its free one-year trial on new devices, it can likely grow the sub base on TV+ incrementally over time.

SVOD Service Awareness

Percent of US respondents who have heard of each service



Q: Which of these forthcoming services have you heard of?

Source: TV Time/United Talent Agency, n=4,816 US respondents, 1,216 in the Netherlands, 448 in Canada, 154 in Australia; September 2019

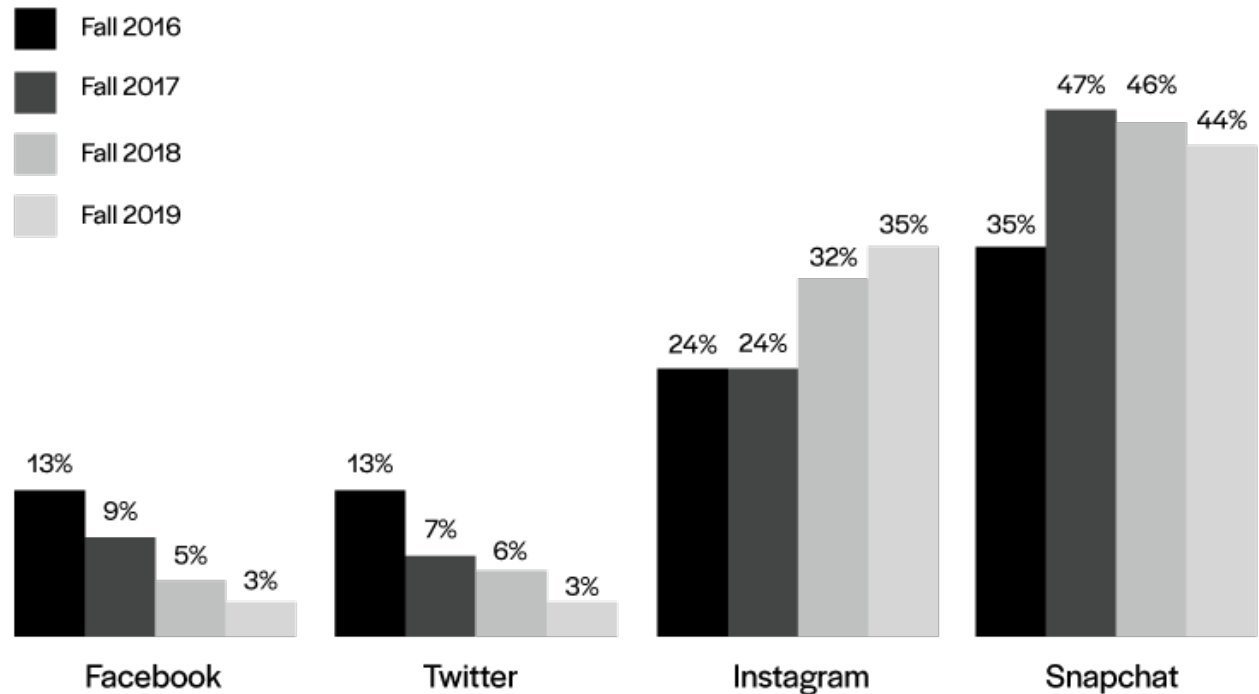
5. Facebook's attempts to win back younger users with Snapchat and TikTok copycat apps will fail by the end of 2020, and it will lose younger users in the US at an even faster rate.

Facebook recently launched two new standalone apps targeted at the younger generations: Snapchat-esque Threads from Instagram (October 2019) and TikTok-like Lasso (November 2018). Both of these apps were widely panned for being transparent attempts to copy TikTok and Snapchat in order to replicate their success among teens, as the younger generation flees Facebook in the US: Core Facebook has lost users in the 0-11, 12-17, and 18-24 age groups every year since 2015, and eMarketer expects that trend to continue through 2023. We think Facebook's attempt to reverse that trend with this pair of new apps will fail, and that in 2020 Facebook will lose young users at an even faster clip than in 2019. While Facebook's Instagram famously and successfully copied Snapchat's Stories in 2017 and sent Snap into a tailspin for over a year, the app's positioning among US teens didn't budge during that time: Since Fall 2016,

Snapchat has ranked as US teens' favorite app, per Piper Jaffray. And, for its part, TikTok is considered the domain of Gen Zers and the short-form music-backed videos it's popularized are widely known and referred to as "TikToks" rather than as something more general, like video clips or Stories — a degree of cultural entrenchment similar to that of now-defunct Vine. While Facebook might have helped kill Vine, it lacks the same degree of control over TikTok's distribution and is also unlikely to act so aggressively against a competitor while under mounting antitrust scrutiny. Ultimately, we think Facebook will shutter at least one of its new apps next year, and the other shortly thereafter. The social company's best bet is to continue milking Instagram and international markets for growth among younger users, although core Facebook is also seeing young people leave in certain international markets, like France and Germany, per eMarketer estimates.

Social Media Preferences Among US Teens

Percentage of teens who say ___ is their favorite social platform



Source: Piper Jaffray, n=9,500 teens with an average of 15.8 years, 2019

Our Top 5 Fintech Predictions

2019 marked a dynamic and eventful year for the fintech industry, with big tech players pushing deeper into financial services, corporate giants and governments alike turning their focus to digital currencies, and the industry shifting its attention from fintechs' user growth numbers to sustainability. Further, both incumbents and fintechs have been exploring new business models to diversify their revenue streams, players like Robinhood and Freetrade have been disrupting the trading industry by transforming the rules of the game, and emerging markets — such as Latin America — have come to the fore as vibrant fintech ecosystems. Based on these developments, our proprietary research, and the trends we've seen intensifying as we head into the new year, here are our top five predictions for fintech in 2020.

1. Libra won't launch in 2020, but China will launch a digital currency and push other jurisdictions to follow suit — here's why:

- **Facebook remains confident it can deliver on Libra, but since the project has been plagued by criticism, we don't think it will launch in 2020.** In June, Facebook announced its plan to launch its cryptocurrency, Libra, with 28 partners in H1 2020. Many regulatory bodies and governments have scrutinized the project since then — Mark Zuckerberg had to testify in front of Congress amid concerns that Libra could facilitate money laundering, endanger users' assets, and give Facebook more power, for instance. **The loss of support from some of its key members, including Visa, Mastercard, and PayPal, has also put a damper on the project.** But Facebook has already logged over 51,000 test transactions in November and insists it can resolve government worries and launch within H2 2020. This confidence is likely fueled by a strong track record of getting its way, including with the acquisitions of Instagram and WhatsApp, despite regulatory concerns. However, we think this time will be different given the slew of voices globally that have raised concerns and mounting antitrust scrutiny against all big tech giants — if at all, Libra won't launch in the next 12 months.
- **Meanwhile, China will launch its own crypto in 2020, leading a number of other countries to ramp up similar efforts.** Although Facebook's crypto plans are looking bleak, China's central bank has gotten close to launching its own crypto: It began researching the venture in 2018, and it was reported in August that the crypto was "close to being out." We expect this will happen in 2020, as it has already started testing the digital currency in two cities. This will push an avalanche of other major authorities, particularly the Bank of England and central banks in the EU — with Sweden being a current forerunner — to take steps in that direction to avoid falling behind China.

Libra Ecosystem

TECH AND CONSUMER



PAYMENTS COMPANIES



BLOCKCHAIN



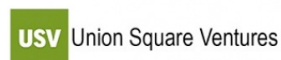
NGOs



TELECOM



VENTURE CAPITAL

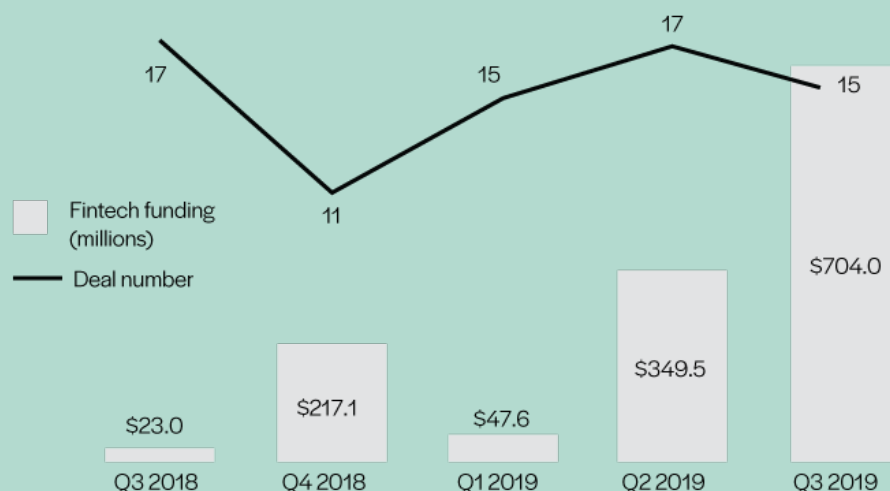


2. South America's fintech funding will reach a historic high of \$1 billion within a single quarter next year.

Fintechs in the region raised \$704 million in Q3 2019, marking a record quarter in terms of funding, per CB Insights, and there have been four mega rounds so far this year, including Brazil's Nubank securing \$400 million in July and Argentina's Ualá snagging \$150 million in November. Investors in these companies include Tencent and SoftBank, while Goldman Sachs' special situations group has also set its sights on investing in the region's fintechs. The large number of unbanked consumers, combined with an uncompetitive financial industry that's dominated by a few incumbents, have

created a fertile ground for disruption, especially since smartphone and internet penetration across the region are accelerating. For instance, three-quarters of Brazilians used smartphones in 2017, and this figure is expected to tick up to 86% by 2025, per GSMA data. Coupled with the effects of supportive regulatory initiatives — Brazil published guidelines for open banking implementation in April 2019, while Argentina's central bank authorities introduced an initiative in 2018 that enables interoperability between traditional bank accounts and accounts operated by nonbank entities, as examples — we expect South American fintechs to reach quarterly funding of \$1 billion in 2020.

VC-Backed Fintech Funding in South America



Source: CB Insights, 2019

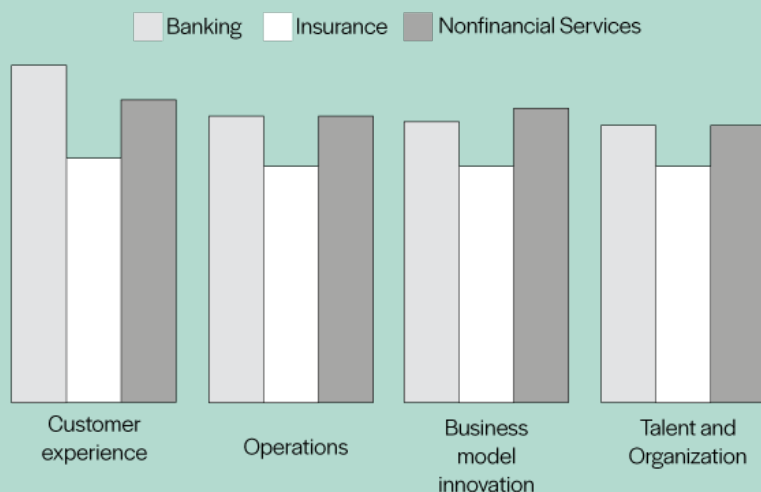
3. A handful of the most innovative incumbent insurers will lead the way on Insurance-as-a-Service (IaaS).

Developments in banking are often good indicators of upcoming trends in the insurance industry. One trend that accelerated in the banking space in 2019 was Banking-as-a-Service (BaaS), which saw neobanks and incumbents — including BBVA and Starling — open up their APIs to let third parties build banking solutions using their licensing and underlying infrastructure. And as a number of full-stack insurtechs, which have their own insurance licenses and own the whole value chain, encroach on incumbent insurers' turf — much like neobanks are doing in the banking space — we expect to see a few insurers turn this threat into an opportunity by allowing

both incumbents and startups to leverage their technology and licensing to replace legacy IT or build innovative business-to-customer solutions. We expect Munich Re, which invested \$250 million in insurtech Next Insurance earlier this year, and Zurich Insurance, which has already struck a number of fintech partnerships, to take this approach next year, while Allianz will lead this trend, having recently announced an IaaS offering with Microsoft. By adopting this model, insurers will be able to generate new revenue streams and turn some competitors into customers, while staying on top of the latest digital trends in the industry.

Digital Transformation Capabilities, By Sector

Share of organizations that believe they have the digital capabilities required for digital transformations in 2018



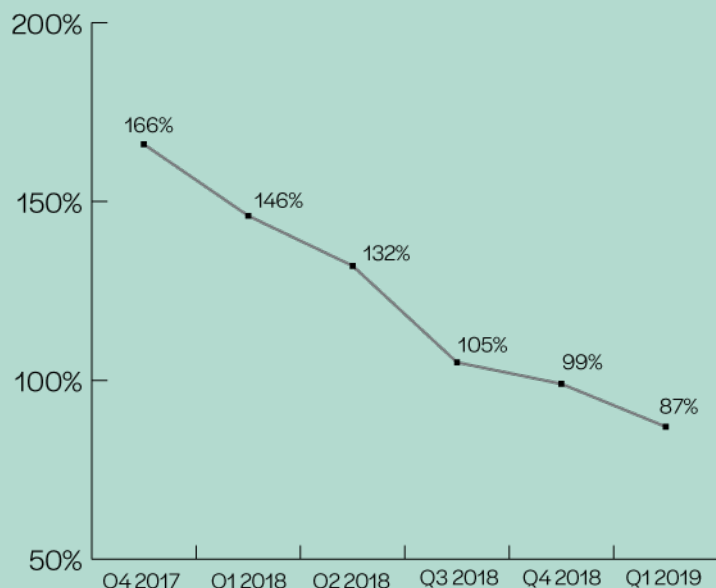
Source: Capgemini Digital Mastery Survey, n=1,338 global respondents, 2019

4.

E*Trade will be snapped up in 2020 — but not by Goldman Sachs.

Players like Robinhood have shaken up the US online investment space by undercutting incumbent brokerage firms with their fee-free commission models. This led Charles Schwab to become the first major online broker to eliminate its \$4.95 per-trade fee in October — a move that was quickly matched by TD Ameritrade, E*Trade, and Fidelity. Now, the industry is bracing for a wave of consolidation as eliminated fees force incumbents to seek ways to cut costs to offset declining revenues. And with Charles Schwab having agreed to acquire TD Ameritrade for \$26 billion in late November, we think E*Trade is the next most likely acquisition target: The smaller peer will need to look for potential buyers following the announced deal between the US' two biggest publicly traded discount brokers. But while Goldman Sachs has been rumored to be looking into an E*Trade acquisition, it's reportedly also exploring a move for US Bancorp. We believe pursuing a merger with the latter makes more sense for Goldman since the deal would allow it to scale faster, given US Bancorp's size, and avoid getting too invested in the battered discount trading space.

Lemonade's Loss Ratio Over Time



Note: These numbers reflect Lemonade's loss ratio in the US.

Source: Lemonade, 2019

5. In the aftermath of WeWork's failed IPO, Lemonade will have to contend with another year of staying private.

News about the US insurtech unicorn wanting to go public first emerged in June this year, when Israeli news outlet CTech reported that Lemonade was looking to raise over \$500 million during an IPO in New York. However, in November, sources said that the insurtech postponed plans to go public this year — which it wanted to do as early as August or September 2019 — amid concerns over how fast-growing fintechs are perceived by the market. WeWork's failed IPO earlier this year likely triggered the

decision, as the company's potential float was met with concern around its business model and ability to become profitable. While the insurtech made real strides toward building a profitable business this year — it reduced its loss ratio from 99% at the end of 2018 to 78% in Q3 2019 — it still has a long road to sustainability, with the industry average falling between 65% and 70%, so we don't anticipate the insurtech to go public in the next 12 months.

Our Top 5 Payments & Commerce Predictions

In 2019, the pace of change in payments and commerce intensified as the industry faced rapid-fire consolidation, rising omnichannel commerce, and a wave of new competitors — particularly big tech companies. And firms across the ecosystem have aggressively pursued new offerings and forged partnerships to head off squeezing margins and fight back against the competition. Based on the year's developments, our own proprietary research, and industry trends we're watching unfold, here are our top five predictions for payments and commerce in 2020.

1. Amazon will expand POS financing across its site.

As consumers worldwide seek out noncredit ways of financing purchases, the alternative credit space is crowding: An array of digital upstarts, including Affirm, Afterpay, Klarna, and PayPal Credit have blanketed the market with retail partnerships, while industry giants like Visa and Mastercard are also taking on the space. But Amazon,

despite its dominance over US retail, doesn't have much of a presence in the arena: Though the brand offers some products that it sells itself on installment, it lacks a financing offering that extends across its entire marketplace — which could cost it sales in the current environment.

Consumer Demand For Instant Financing



*Note: Note: Values don't add 100% respondents could select multiple answers.
Source: Klarna, n=2,000, 2018*

The e-tail titan is already tiptoeing into financing, indicating it will deepen its stance to maintain its retail dominance:

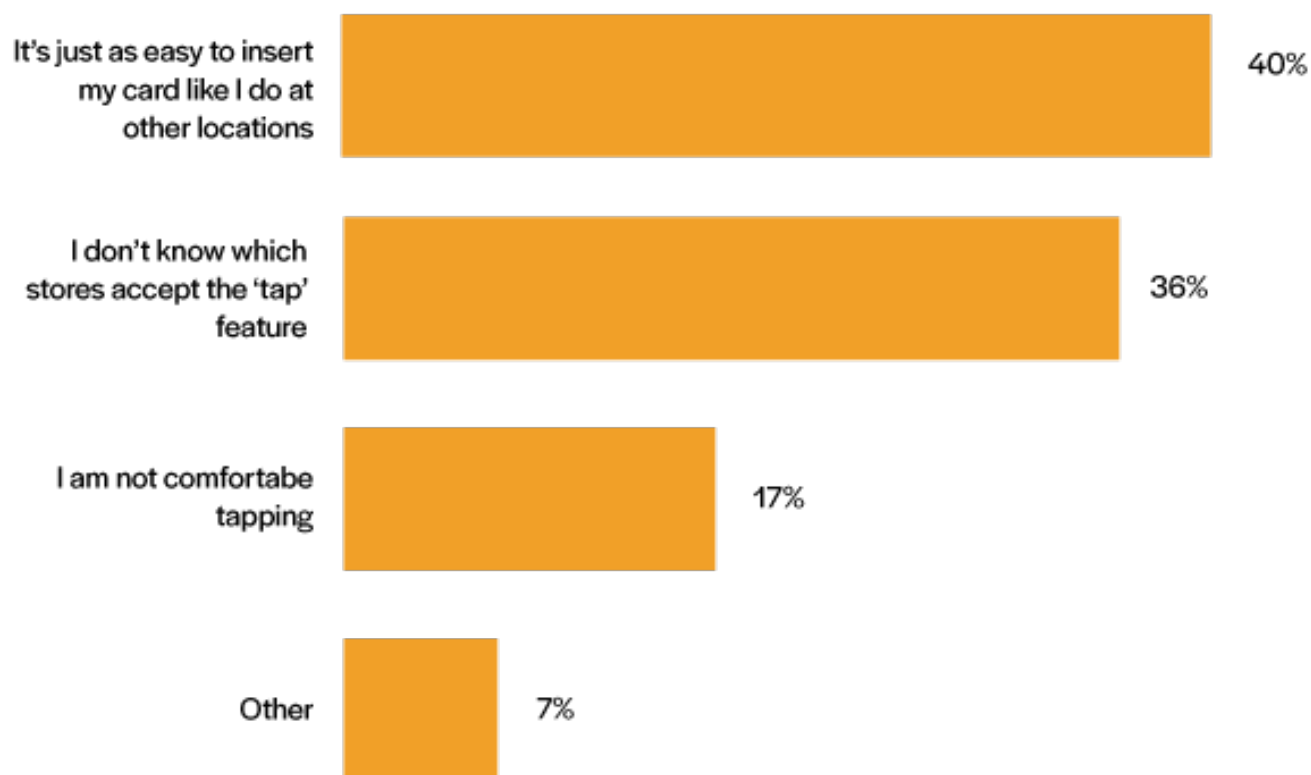
- **Amazon started dabbling with with POS financing tech abroad via partnerships — which could enable it to more widely extend financing without taking on too much risk** In the past few months, Amazon made two POS financing partnerships in smaller markets — Zip Co in Australia and Paidy in Japan — that could let Amazon examine different approaches to offering financing. Because moving into POS financing involves extending credit, it represents some risk to providers. Leveraging partnerships in smaller markets could either let Amazon pass off that risk to a third-party provider, or enable it to use these early launches as a testing ground to find which products might see the most use of the technology. As a result, the firm could later expand financing across its marketplace in a targeted manner that best improves conversions and maximizes returns.
- **And moving on POS financing, particularly for higher-ticket purchasing, could help incentivize conversions.** Customers are interested in POS financing for purchases of all sizes, but POS financing is most beneficial for high-ticket items, because it makes those purchases more affordable. Offering the solution broadly, but likely above a certain dollar threshold, could ensure that customers — especially millennials and Gen Zers interested in noncredit financing — stay loyal to Amazon when buying expensive products, rather than jump ship to competitors or even financing providers like Affirm and Klarna. This could, over time, not only prevent attrition, but also increase average order value — which is key in a moment when the firm's sales growth is starting to slow.

2. 2020 will not be the year contactless mainstreams in the US despite transit payments helping grow adoption.

Major US cities like Chicago, Miami, and New York City, have added contactless payments to their transit systems. And because contactless transit payments are a key driver of contactless payments' popularity in the UK, we've posited that they could serve a similar role in the US — where contactless adoption has been sluggish — as they showcase frictionless payment experiences in an environment where speed is particularly important, which could convince consumers to use contactless payments regularly.

Why US Contactless Cardholders Haven't Used The Feature

2018



Source: TSYS 2018 Consumer Payments Study, n= 1,222, 2019

But for most consumers to use contactless payments regularly beyond transit, two things must happen:

- **Contactless acceptance must become nearly ubiquitous in the US.** Two top benefits of contactless transactions are speed and convenience — but confusion about how or where to use contactless automatically damages these values. And if consumers aren't sure which merchants accept contactless payments, it creates uncertainty and brings a new step of confirmation to the checkout process, which may cause consumers to revert to a familiar payment method. Considering an estimated 22 of Visa's top 100 US merchants by transactions still did not offer contactless payments at checkout as of April 2019, the tech's lack of ubiquity remains an obstacle to adoption in the US.
- **Providers will need to give consumers clear reasons to adopt.** Consumers may not initially see a reason to use contactless payments outside transit because speed can be less important elsewhere. To address this, issuers and digital wallet operators should consider offering limited or one-off rewards for contactless transactions to get consumers to expand their usage of the payment option — since rewards can be influential on why consumers use one payment option over another.

3. We expect business-to-business (B2B) to become a large area of focus for noncard and real-time payments (RTP) innovation from card networks and other providers.

RTP schemes are rapidly expanding worldwide — and though progress in the US has been slower, the Fed's planned entrance to RTP with FedNow — slated to launch in 2023 or 2024 — has accelerated movement, which could threaten the volume flowing through providers like card networks. In response, card networks have been snapping up alternative payment rail providers, like Vocalink and Transfast (Mastercard) as well as Earthport and Rambus (Visa), to protect against disintermediation and shore up volume sources across the board.

Right now, providers are testing different noncard and RTP use cases to see what sticks — but that's poised to change, and B2B will become a smart initial focus area.

Card networks are leveraging their acquisitions to build new noncard and RTP offerings across the space, but innovation isn't targeted to a specific industry sector: Mastercard, for example, recently launched solutions in both the B2B segment as well as in bill pay, and at the same time is building out its retail-based offerings in the UK. In the year ahead, we expect providers to close in on one or two areas of RTP that hold the most potential as they aim to counter threats from the Fed or other government-supported services, like the system the European Central Bank (ECB) is developing in the market. Focus on retail, where cards have a stronghold, will likely decline, and it's likely B2B payments will be the first primary target, since there's considerable interest in faster payments and networks likely want to tap into the space's accelerating digitization.

4.

Autonomous checkout technology, like in Amazon Go stores, will fail to expand significantly in 2020 despite contrarian reports that suggest thousands of contactless stores are coming soon.

We think that less than 50 new stores will deploy autonomous checkout technology in 2020 as providers struggle to quickly retrofit existing stores with the tech.

Despite their lofty expansion goals, Amazon currently operates just 24 Go stores and Standard Cognition has not yet announced a successful opening in Japan, indicating autonomous checkout providers are having difficulty with rapidly expand their technologies. I (Daniel) think all providers are likely struggling with retrofitting existing stores with their solutions because each store has a different layout and presents unique challenges: For example, large stores are difficult to retrofit because it's hard to track all shoppers and products in a big store, while specific formats, like grocery stores, feature nonuniform products, which can also be difficult to track. Part of why Amazon has expanded more than any other autonomous checkout provider is because its stores don't need to be retrofit — they're built specifically for the tech — but Amazon and other providers have yet to quickly and fully retrofit a preexisting public store and deal with the challenges they present. Working out this process may slow down Amazon's rumored licensing initiatives and other firms' plans to retrofit stores, making broad-based expansion within the next year unrealistic.

Store Concept Square Footage Comparison



*Note: All sizes are averages of approximations
Source: Company filings, CNBC, The Verge, 2019*

5. At least one major processor will delve further into issuing as the lines between those players converge.

Historically, issuers and processors have remained largely separate players, offering some complementary products, but otherwise divergent lines of business. But those lines are blurring with the rise of players like Marqeta: The issuer-processor enables enterprise customers such as Affirm, Kabbage, and DoorDash to begin issuing their own physical and virtual payment cards, and then processes payments made on those cards. Considerable interest in the space — and a massive boom on Marqeta's part, as it closed a \$260 million Series E round and boosted its presence in two new regions this year — has led other digital-first providers, including Adyen and Galileo, to launch issuing segments as well in an attempt to get ahead of the curve.

While leading processors, like First Data (now Fiserv), Worldpay, and TSYS have issuer-facing solutions, we think rapid digital movement in the space precipitates the launch of at least one more robust, API-based digital issuing solution in the year ahead.

Such a service, which would come as rapid consolidation pushes firms to increase diversification, could help legacy providers attract a new set of clients or keep existing customers loyal — particularly as clients increasingly attrit to digital-first players — while also opening up a new source of revenue.

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