Commerce and Fintech
2020 Outlook

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01. Consumer update

02. Fintech unicorns: Stay private or go public?

03. Banking moves to the cloud

04. Challenger banks come calling for small business

05. Crypto – Beyond Bitcoin and Libra

06. AI – Everywhere you want to be

07. The state of installment loans

08. Amazon to expand in 800B U.S. grocery market

09. B2B eCommerce

10. Retailers explore rental and resale

11. Consumers hunger for food delivery

Of small businesses use mobile banking compared with 53% in 2018.¹

YoY holiday spending growth: +5.9%

Of consumers used take out more often than the previous year¹
01.

Consumer spending update: Holiday Highlights

Full Holiday Season

<table>
<thead>
<tr>
<th>Category</th>
<th>YoY Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Spend</td>
<td>+5.9%</td>
</tr>
<tr>
<td>Retail Spend</td>
<td>+3.8%</td>
</tr>
<tr>
<td>Brick &amp; Mortar</td>
<td>+2.9%</td>
</tr>
<tr>
<td>eCommerce</td>
<td>+9.8%</td>
</tr>
<tr>
<td>Brick &amp; Mortar</td>
<td>+1.4%</td>
</tr>
<tr>
<td>eCommerce</td>
<td>+8.1%</td>
</tr>
</tbody>
</table>

YoY Spending Growth

Dollars

- Pre-Holiday
- Thanksgiving Thru Cyber Monday
- Full Season

Slowest Growth

<table>
<thead>
<tr>
<th>Category</th>
<th>YoY Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Furniture and Furnishings</td>
<td>-1.5%</td>
</tr>
<tr>
<td>Sporting Goods</td>
<td>-0.8%</td>
</tr>
</tbody>
</table>

Fastest Growth (Retail)

<table>
<thead>
<tr>
<th>Category</th>
<th>YoY Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics and Appliances</td>
<td>8.4%</td>
</tr>
<tr>
<td>General Merchandise</td>
<td>4.8%</td>
</tr>
<tr>
<td>Specialty Retail</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

YoY Spending Growth:

- 2017: 5.7% (Retail), 6.2% (Electronics and Appliances), 5.0% (General Merchandise), 3.0% (Specialty Retail)
- 2018: 2.6% (Retail), 7.1% (Electronics and Appliances), 5.0% (General Merchandise), 3.4% (Specialty Retail)
- 2019: 5.1% (Retail), 5.9% (Electronics and Appliances), 5.1% (General Merchandise), 5.9% (Specialty Retail)
01. Consumer spending update

Consumer payment volume growth remains solid.

<table>
<thead>
<tr>
<th>Issuer</th>
<th>Metric</th>
<th>3Q19</th>
<th>4Q19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital One</td>
<td>Credit</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Chase</td>
<td>Credit</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Chase</td>
<td>Debit</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Citi</td>
<td>Credit (Branded)</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Wells Fargo</td>
<td>Debit</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Bank of America</td>
<td>Debit</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Wells Fargo</td>
<td>Credit</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Bank of America</td>
<td>Credit</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>U.S. Bank</td>
<td>Credit</td>
<td>8%</td>
<td>4%</td>
</tr>
<tr>
<td>U.S. Bank</td>
<td>Debit</td>
<td>7%</td>
<td>-0%</td>
</tr>
<tr>
<td>Citi</td>
<td>Credit (Retail Services)</td>
<td>-2%</td>
<td>-2%</td>
</tr>
</tbody>
</table>

Source: Respective bank quarterly earnings reports.

“...So the fourth quarter definitely, I would say, stabilized... stopped getting worse. And we saw sentiment improve a bit. The U.S. consumer remains in very strong shape, both from a credit perspective, sentiment, spending. Obviously, the labor market is very strong. Capital spending still a bit soft, but sentiment is at least certainly better than it was 6 months ago. So, broadly speaking, we have a constructive outlook as we're heading into 2020.”

– JPMorgan, January 14, 2020

“In our consumer business, we see that our customers are coming off a strong finish in 2019 in their spending activity.”

– Bank of America, January 15, 2020
02. **Fintech unicorns:**
Stay private or go public?

~7x as many tech companies (and Fintechs) raised mega-rounds in private financing than conducted IPOs in 2019.¹

Many that did go public have **underperformed**, as public market investors remain skeptical of their paths to profitability.

Source: 1. The 2020 Tech IPO Pipeline, CB Insights.
02. **Fintech unicorns:**

Stay private or go public?

Many outsized valuations of private companies were driven by Softbank investments.

Source: 1. Business Insider, "SoftBank is reportedly taking control of WeWork. Here's a running list of all the Japanese giant's major investments in tech.", October 22, 2019
Fintech unicorns: Stay private or go public?

Some of the largest privately held Fintechs do not appear to be heading to IPO anytime soon, as they are sitting on a large amount of funding to fuel growth.

While 2019 saw some successful debuts, most are likely to continue taking private money in 2020.
03. Banking moves to the cloud

“We’re all-in on the cloud.”

Scott Blackley
Capital One Chief Financial Officer
September 10, 2019
03. Banking moves to the cloud

Capital One was one of the first large banks to move a substantial part of their technology to the public cloud, using Amazon AWS.

Number of data centers Capital One is planning to have by end of 2020 (down from 8 in 2014).¹

03. Banking moves to the cloud

Bank of America recently announced it was partnering with IBM to build a cloud for banks running on IBM’s existing public cloud.

Key benefits:
- Consolidate and simplify infrastructure
- Cost savings
- Improve client service

03. Banking moves to the cloud

Historically:

• Large FIs kept everything in-house, preferring to maintain control over security and compliance, believing scale = cost-effectiveness

• Smaller and mid-sized FIs outsourced to private systems operated by specialized providers

After some initial hesitancy, banking service providers and FIs of all sizes will increasingly embrace the public cloud.
Challenger banks come calling for small business

The last few years brought an influx of challenger and digital-only banks.

Business models are based on targeting retail consumers and driven by mobile banking adoption and consumer comfort with Fintech.

Source: General industry information.
Challenger banks come calling for small business

The digital-only bank market may have reached a tipping point for small businesses.

Small business is still an orphan from a business banking standpoint.

— Jacob Jegher, President at Javelin Strategy & Research, November 1, 2018


Small businesses:

Are adopting mobile banking

61% now use mobile banking compared with 53% in 2018.¹

Overall satisfaction among mobile users is higher than among non-users.¹

Don’t feel appreciated by their banks

37% say their bank appreciates their business.

Only 32% say their bank understands their business.²
04. Challenger banks come calling for small business

Recent digital-only banks have arrived that target small businesses, startups, and entrepreneurs.

Expect greater focus on, and competition for, small business digital banking in the next year and beyond.

Source: General industry information.
05.  
**Crypto – Beyond Bitcoin and Libra**

In 2019, headlines were again dominated by Bitcoin’s ups and downs, as well as the launch of, and reaction to, Libra.

Source: CoinDesk, CNBC, CNET, Fortune.
05. Crypto – Beyond Bitcoin and Libra

In 2020, it may be the seemingly lower profile projects that will drive the crypto sector forward.

“At this stage, there is no strategy set in stone for the markets or the product, or how it will actually get rolled out.”

– Patrick Ellis, board member of the Libra Association

Source: Reuters, December 19, 2019, General industry information.
AI – Out of sight (but not out of mind)

AI is already powering many leading consumer experiences.

Source: General industry information.
06. AI – Out of sight (but not out of mind)

Investing in AI will lead the way in the future.

AI investing happening across entities both:

Big…

58% of large companies report adopting AI in at least one function or business unit in 2019, up from 47% in 2018. ¹

..and small

$26B+ invested globally in AI startups in 2019, up from $22B+ in 2018, and $16B in 2017. ²

“We have been dialing up our in-house capabilities and investments in AI with an initiative we call Deep Brew. Deep Brew will increasingly power our personalization engine, optimize store labor allocations and drive inventory management in our stores. We plan to leverage Deep Brew in ways that free up our partners so that they can spend more time connecting with customers. Deep Brew is a key differentiator for the future and as we continue our quest to build world-class AI capabilities to better support partners.”

– Kevin Johnson, President and CEO at Starbucks, October 30, 2019

07. The state of installment loans

Approximately 75% of consumers who made a big ticket, installment purchase decided to do so well before the actual transaction took place.

Regardless of revenue model, omnichannel merchant integration will be crucial.

The state of installment loans

Blue chip incumbents are in the market, looking to incorporate these technologies into their core offerings.

Acceleration of investment in deployment to continue thru 2020

Lasting impacts?

Source: Company reports.
Amazon confirmed plans to open a grocery store distinct from its Whole Foods brand. Initial plans indicate:

- **Will not use Amazon Go cashierless tech**
- **Will target mainstream consumers who shop at traditional grocers**
- **Will facilitate online orders and test new tech**

Source: Company reports; CNET, “Amazon will launch new grocery store as alternative to Whole Foods,” November 11, 2019.
B2B eCommerce

Marketplaces are a $1 Trillion opportunity.

Though not as prominent as consumer eCommerce, the sector is growing fast.

09. B2B eCommerce

Changes in B2B buying behavior and online efficiencies are fueling growth.

Advancing digital-first approaches to discovery and purchasing

10. **Retailers explore rental and resale**

Changes in consumer preferences have driven retailers across a variety of industries to explore rental services.

**Key benefits:**
- New revenue streams
- Add customers
- Valuable feedback

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**Clothing retailers**
- Banana Republic
- Urban Outfitters
- Express
- American Eagle Outfitters
- H&M
- Bloomingdales

**Other retailers**
- REI
- FEATHER
- Fernish

**Rental clothes subscription market expected to more than double in next 5 years**

- **2018:** $1B
- **2023:** $2.5B

Retailers explore rental and resale

Secondhand market expected to reach $51B by 2023.

Compared to the overall apparel market, resale’s growth has been phenomenal. As the market uniquely meets consumers’ preference for variety, value, and sustainability, we expect the high growth to continue.

― Neil Saunders, Managing Director and Retail Analyst at GlobalData Retail, March 19, 2019

11. Consumers hunger for food delivery

When it comes to food, consumers love “convenience”...

39% of consumers used drive-thrus more often than last year

29% of consumers used take out more often than the previous year

70% of QSR sales come from drive-thru

...and that attraction is driving the growth of food delivery

Revenue for online food delivery in the U.S.³

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>$22B</td>
</tr>
<tr>
<td>2024</td>
<td>$29B +32%</td>
</tr>
</tbody>
</table>

Number of users of online food delivery³

<table>
<thead>
<tr>
<th>Year</th>
<th>Users (M)</th>
<th>Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>85M</td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td>116M +22%</td>
<td></td>
</tr>
</tbody>
</table>

Source: 1. 2019 National Restaurant Association and Technomic.
11. Consumers hunger for food delivery

As the food delivery market grows, increasing competition is close behind.

“The easy wins in the market are disappearing a little more quickly than we thought. This is a significant change in our industry that will require us, and everyone else, to compete by creating the most value for diners and restaurants rather than relying on industry tailwinds…”

– Grubhub, October 28, 2019

11. Consumers hunger for food delivery

As the impact of food delivery grows, how we define “restaurant” may ultimately change.

**Restaurant noun**

res-tau-rant

**Definition:**
A business establishment where meals or refreshments may be purchased¹, or prepared.

**Synonyms:**
Cloud kitchen, shared kitchen, dark kitchen, ghost kitchen, virtual restaurant or restaurant-as-a-service.

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**Cloud kitchens** are dedicated to preparing food for delivery, or take out, and not for serving in-house.

These could be a shared common kitchen for multiple “restaurants” or an internal kitchen for a single food brand.

Allows testing of new food concepts without taking on leases or hiring staff.

Increases efficiency of delivery operations.

VC firms are investing in startups in the space.

Established food outlets are investing as well.

Long term viability remains a question.

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Source: 1. Merriam-Webster, General industry information.
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