Future of Payments

Brief overview of consumer trends within the payments landscape, including media implications

NBCUniversal
<table>
<thead>
<tr>
<th>Section $1</th>
<th>The complex &amp; evolving nature of the payments ecosystem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section $2</td>
<td>Consumer saving, spending &amp; payment trends</td>
</tr>
<tr>
<td>Section $3</td>
<td>The intersection of payments &amp; retail</td>
</tr>
<tr>
<td>Section $4</td>
<td>Payments media spend insights</td>
</tr>
<tr>
<td>**Appendix: **$ub-Category Deep Dive</td>
<td>Spotlights on new payment platforms/technology</td>
</tr>
</tbody>
</table>
THE PAYMENTS LANDSCAPE CONTINUES TO EVOLVE

The way consumers pay continues to evolve, and now there are more options than ever, but the payments space has become complex.
Over time, the way we pay has always been evolving...

Many of the evolutions in payments happen well before the new methods go ‘mainstream’

Source: Ernst & Young
Today, consumer adoption of new payment methods & experiences is being driven by several key macro trends & forces

**Innovation in platform & technology**
Digital innovation, especially in the Fintech space, has created more automated solutions to streamline payments for consumers & merchants

**Lack of trust amongst consumers**
Consumer mistrust of financial services has remained high in the years following notable data breaches (i.e. Equifax, Wells Fargo)

**Retail embracing new payment solutions**
There are countless examples of retailers (of all sizes) integrating new payment solutions (i.e. QR codes/contactless, BNPL)

**Younger consumers demand for ease and simplicity**
While consumers of all ages continue to lean into new payment solutions, Gen Z & Millennials helped to drive initial adoption

**Integration of Fintech into legacy ecosystems**
Major banks and lenders continue to acquire Fintechs, in addition to investing more in innovation within their existing product lines

Specific trends & forces highlighted above include key examples, but are not exhaustive.
The payments landscape has become very complex, but consumers have more options than ever before

What consumers use…

Different Currencies
- Cash:
- Cryptocurrencies:

How consumers use…

Different Payment Platforms*
- Debit:
- Credit:
- Wire transfers:
- P2P:
- Retailer Loyalty Cards:

Why we’re seeing evolution…

New Payment Technologies*
- Mobile Wallets:
- Contactless:
  - Google Pay
  - BNPL:
  - Crypto Wallets:
  - affim
  - Coinbase
- Point of Sale:
- Embedded Finance:
  - Square
  - ibotta

*Examples only, not exhaustive
These examples highlight the diversity in different ways payment trends are evolving.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used a service such as Apple Pay, Google Pay, or Shop Pay to make a payment</td>
<td>42%</td>
</tr>
<tr>
<td>Made investments or purchased cryptocurrency through a noninvestment app</td>
<td>23%</td>
</tr>
<tr>
<td>Sent a payment directly through a social media platform</td>
<td>23%</td>
</tr>
<tr>
<td>Used a buy now, pay later (BNPL) service to finance a purchase and repay it in installments</td>
<td>23%</td>
</tr>
<tr>
<td>Used/signed up for a co-branded credit card</td>
<td>20%</td>
</tr>
<tr>
<td>Bought something within a game/VR</td>
<td>19%</td>
</tr>
<tr>
<td>Purchased insurance for a product/service through the platform you bought it from</td>
<td>17%</td>
</tr>
<tr>
<td>Paid for something using a wearable device</td>
<td>12%</td>
</tr>
<tr>
<td>Shopped at a “just walk out” store where there’s no need for a checkout process</td>
<td>11%</td>
</tr>
<tr>
<td>Ordered and paid for food from an app connected to your refrigerator</td>
<td>10%</td>
</tr>
<tr>
<td>Paid for something using your car</td>
<td>10%</td>
</tr>
</tbody>
</table>
Legacy & Fintech companies are both bullish on the future of Payments

In addition to organic integration of Fintech into legacy payment systems, we also continue to see Fintech acquisitions (by both legacy players & established Fintechs)

“Visa Buys Swedish Fintech Tink for $2.1 Billion After Plaid Takeover Blocked.”

“Mastercard acquires Arcus FI to enhance payments across Latin America.”

“Visa acquires Currencycloud, which makes APIs for remittances and currency transfers, in a $963M deal.”

“Why Square Acquired Afterpay for $29 Billion: Merchant and CashApp User Acquisition.”

Sources: Forbes, S&P Global, TechCrunch
Evolution in payment platforms & payment technology has been in response to changing consumer payment and shopping behaviors...
Broad consumer spending & payment trends

- **Consumer spending** continues to increase vs. pre-pandemic, growing +3.3% in Q4’21

- **Consumer card spending growth** in Feb ’22 (highest growth since Nov ’21)

- Expected **CAGR for digital payments market** from 2021 to 2025

- Of US adults now own at least some cryptocurrency

Sources: Bureau of Economic Analysis, WSJ, Barclays, NBC News Poll
In March 2020, there was a shift to how consumers paid. For the first time ever, card-not-present transaction volume surpassed card-present, and the shift has not reverted back to pre-pandemic levels.

- Joel Henckel
  SVP, US Market Acceptance
  Mastercard

<table>
<thead>
<tr>
<th>Consumer Sentiment</th>
<th>Retailer Responses &amp; Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 in 2</td>
<td>53%</td>
</tr>
<tr>
<td>consider themselves <em>more digital</em> than ever before</td>
<td>will accept <em>more</em> digital payment options (in 2022)</td>
</tr>
<tr>
<td>39%</td>
<td>60%</td>
</tr>
<tr>
<td><em>shop from a smartphone</em> daily or weekly</td>
<td>will add <em>digital wallets</em> as a payment option (in 2022)</td>
</tr>
<tr>
<td>4.4b</td>
<td>2.2b</td>
</tr>
<tr>
<td>global consumers will <em>shop from a digital wallet</em> by 2023</td>
<td><em>QR-code payment</em> users by 2025 (equating to 29% of all mobile users globally)</td>
</tr>
</tbody>
</table>

Sources: Mastercard, PwC, Insider Intelligence.
The intersection of retail & payments
“Payments can be the conduit to deepen connections between brands and consumers, solving their problems, meeting their demands and creating better, more meaningful shopping and payment experiences,”

Talbott Roche
Chief Executive Officer
Blackhawk Network
Payments can significantly impact the customer shopping experience, and retailers’ bottom lines.

Poor online payment & checkout experiences results in cart abandonment while poor in-store experiences result in lowered foot traffic.

70% of online shopping carts are abandoned.

5 of the top 10 reasons for abandonment are directly related to payments:

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra costs too high (shipping, tax, fees)</td>
<td>48%</td>
</tr>
<tr>
<td>The site wanted me to create an account</td>
<td>24%</td>
</tr>
<tr>
<td>Delivery was too slow</td>
<td>22%</td>
</tr>
<tr>
<td>I didn't trust the site with my credit card info</td>
<td>18%</td>
</tr>
<tr>
<td>Too long / complicated checkout process</td>
<td>17%</td>
</tr>
<tr>
<td>I couldn't see / calculate total order cost up-front</td>
<td>16%</td>
</tr>
<tr>
<td>Website had errors / crashed</td>
<td>13%</td>
</tr>
<tr>
<td>Returns policy wasn't satisfactory</td>
<td>12%</td>
</tr>
<tr>
<td>There weren't enough payment methods</td>
<td>9%</td>
</tr>
<tr>
<td>The credit card was declined</td>
<td>4%</td>
</tr>
</tbody>
</table>

Source: Baymard US Adults Survey 2022, Shopify 2021
Seamless payment experiences can boost transactions in the short and long-term.

There is no neutral ground…

Good payment experiences drive repeat engagement, while bad payment experiences end customer relationships.

Source: Oliver Wyman analysis, Morgan Stanley Research
Retailers are improving their payment experiences in a range of ways…

<table>
<thead>
<tr>
<th>Payment Type or Experience</th>
<th>Example</th>
<th>Customer Benefits</th>
<th>Retailer Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternate forms of payment</td>
<td>A retailer accepting cash, credit, PayPal/Venmo, Crypto, Zelle, etc.</td>
<td>Pay with whichever payment method is preferred</td>
<td>Higher conversion, lower abandonment, higher cross-border (global) sales</td>
</tr>
<tr>
<td>Contextual / Content Commerce</td>
<td>Instagram checkout, NBCU Shoppable TV, any shoppable content, etc.</td>
<td>Frictionless experience and seamless checkout</td>
<td>Increased transactions</td>
</tr>
<tr>
<td>New Fintech Services</td>
<td>Buy Now Pay Later (BNPL)</td>
<td>Improves accessibility to higher cost items with flexible payment plans</td>
<td>New customer acquisition, lapsed customer retention</td>
</tr>
<tr>
<td>Owned &amp; Operated Payments</td>
<td>Retailer Branded Credit Card</td>
<td>Rewards, exclusive offers, new lines of credit</td>
<td>Increased loyalty, increased spending/visits, mitigate extra transaction fees</td>
</tr>
</tbody>
</table>
... and these changes are being implemented and adopted quickly

<table>
<thead>
<tr>
<th>Alternate Forms of Payment</th>
<th>Content Commerce</th>
<th>New Fintech Services</th>
<th>Owned &amp; Operated</th>
</tr>
</thead>
<tbody>
<tr>
<td>36% of small to medium sized businesses now accept <strong>crypto</strong> as a form of payment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Contactless credit card adopters undertake 5 more transactions</strong> per month (on avg.) for retail goods vs. non-adopters</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social commerce is expected to grow at a 31.7% <strong>CAGR</strong> between 2020 and 2027, hitting <strong>$605B</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65% of retailers plan to add <strong>BNPL</strong> as a payment method in <strong>2022</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>12% of consumers have shopped at a “just walk out” store</strong> where there’s no need for a checkout process</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>52% of e-commerce payments</strong> will be facilitated via <strong>mobile wallet</strong> by <strong>2023</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>83% of brands plan to increase spending on loyalty</strong> by 5% or more in the next 12 months.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>86% of US consumers belong to a retailer loyalty program</strong> (at least one)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources in notes section
BNPL is being embraced by some of the biggest names in retail

**KEY INSIGHT:**

For merchants, BNPL can translate into **20-30% higher** conversion rates and **30-50% higher average ticket sales**

“At Nordstrom, we are constantly evaluating and evolving to enhance the customer experience in-store and online. Part of the Nordstrom customer experience now includes flexible payment options”

“With Klarna, we continue to see higher spend per visit and increased acquisition of new younger customers, 45% are under 40. Our goal is to convert all these new customers to Macy’s loyal customers, who return for future purchases.”

https://www.investopedia.com/major-retailers-that-accept-buy-now-pay-later-5187164
In addition to third-party payment partner integration, some retailers are also creating their own payments products & services.

More Consumer Touchpoints

17% of consumers bought insurance directly through a retailer for a product they purchased from the same merchant.

Creating New Currencies

Walmart is preparing to create its own cryptocurrency and has also recently acquired several fintech start ups.

Acquiring Payment Services

Amazon acquired emerging fintech brand, Payfort, in 2017, which was ultimately relaunched as Amazon Payment Services in 2020.

Sources: CB Insights, Walmart, Amazon
Topline Media Spend Insights
Media spend growth is evident in several areas of Payments:

Overall growth for FY’20 vs. FY’21

**Crypto media spend growth**

+530%

**BNPL media spend growth**

+323%

**B2B Payments media spend growth***

+35%

Sources: MediaRadar, eMarketer

*B2B Payments growth is a projection for FY’22
For specific sub-category insights, please *click* any of the below:

- Mobile wallets
- B2B Payments
- Buy Now Pay Later
- Cryptocurrencies
Mobile wallets
With the increased acceptance of digital transactions, coupled with consumer preference, there’s going to be an acceleration in digital wallet usage, even more than there already has been.

Dave Duncan
EVP, chief product officer
Global Payments
By the end of 2021, US consumers used a mobile wallet for payment (+10% growth vs. 2020, and accounting for 43% of total smartphone users)

Of all mobile wallet POS transactions, 34% are from 25–34-year-olds

High income consumers represent 39% of all mobile wallet users

Spend volume via mobile wallets will grow 4x faster than user growth

Digital Wallet Examples:

Sources: MRI, catalyst.org, sbc.senate.gov
### US Proximity Mobile Payment Users, by Platform, 2021

<table>
<thead>
<tr>
<th>Platform</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple Pay</td>
<td>43.9</td>
</tr>
<tr>
<td>Starbucks</td>
<td>31.2</td>
</tr>
<tr>
<td>Google Pay</td>
<td>25.0</td>
</tr>
<tr>
<td>Samsung Pay</td>
<td>16.3</td>
</tr>
</tbody>
</table>

Note: ages 14+; mobile phone users who have made at least one proximity mobile payment transaction in the past 6 months; includes point-of-sale transactions made by using mobile phones as a payment method; excludes transactions made via tablet

Source: eMarketer, March 2021
US Proximity Mobile Payment Spending per User, 2020-2025

average annual spend per user and % change

<table>
<thead>
<tr>
<th>Year</th>
<th>Proximity</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$1,973.7</td>
<td>10.1%</td>
</tr>
<tr>
<td>2021</td>
<td>$2,439.7</td>
<td>23.6%</td>
</tr>
<tr>
<td>2022</td>
<td>$2,822.7</td>
<td>15.7%</td>
</tr>
<tr>
<td>2023</td>
<td>$3,254.3</td>
<td>15.3%</td>
</tr>
<tr>
<td>2024</td>
<td>$3,692.5</td>
<td>13.5%</td>
</tr>
<tr>
<td>2025</td>
<td>$4,064.3</td>
<td>10.1%</td>
</tr>
</tbody>
</table>

Note: average payment spend per user, per year; point-of-sale (POS) transactions made by using a mobile phone as a payment method; also known as POS mobile wallet payments and POS mobile contactless payments; includes scanning, tapping, or swiping a mobile phone at the POS to complete a transaction; excludes purchases of digital goods on mobile phones, purchases made remotely on mobile phones that are delivered later on and transactions made via tablets

Source: eMarketer, March 2021
Buy Now Pay Later (BNPL)
The recent surge in BNPL transactions can be attributed to several factors, including rising merchant adoption, its omnichannel application, flexibility, and loyal youth consumers.
Buy Now Pay Later Examples:

In 2022, 65% of merchants plan to add Buy Now Pay Later as a payment method.

Among demographic groups, 44% of Gen Z expected to make a BNPL payment in 2022 (37% of Millennials, 23% of Gen X, 9.4% of Boomers).

BNPL payments online are expected to account for 24% of all global ecommerce transactions by 2026 (up from just 9% in 2021).

BNPL can translate into a 20-30% higher conversion rate for merchants, and a 30-50% higher avg. ticket sales.
Even as BNPL grows, there has been concern over its potential negative impacts to consumers.

Headlines in the press continue to spotlight the long-term harm BNPL may cause from a debt perspective.

“Buy now pay later is sending the TikTok generation spiraling into debt.”

“The Dangerous Rise of ‘Buy Now, Pay Later’ Offers.”

“The Dark Side of Buy Now, Pay Later: Risks Facing the Banking Industry.”

“The Hidden Dangers of ‘Buy Now, Pay Later’ Apps.”

Sources: SFGATE, Forbes, The Financial Brand, WIRED
These concerns are being realized by the younger generations

Younger generations, **inadequately educated in financial concepts,** appear to have used BNPL to make purchases they couldn’t afford at the time, **without any plan to afford them via BNPL**

*Source: nymag.com*

- Only **25%** of Americans 23-35 years old demonstrate a basic knowledge of financial concepts
- **4/5** of BNPL users have said they used the service to avoid credit-card debt
- **>40%** Of Gen-Z will have used BNPL by the end of 2022
Crypto Examples:

Wallets: Metamask, Coinbase, Mycelium, Robinhood

Exchanges: FTX, Binance, Crypto.com, Kraken, Coinbase

Currencies: Bitcoin, Ethereum, USD Coin

20% of US adults now own at least some cryptocurrency

69% Of US adults still don’t “really understand” cryptocurrency

>3x Expected growth of global crypto market over the next 10 years

1 billion Crypto users expected worldwide by end of 2022

Sources: MRI, catalyst.org, sbc.senate.gov
The crypto investor profile is more diverse than assumed

**Perception:**
*The “Crypto Bro”*

- Primarily white males
- Fairly young (18-30yrs)
- Wealthy (with disposable income)
- Associated with “hustle culture”

**Reality:**
*Diverse and Accessible*

- Significant Female Demo (34%)
- Median age of an investor is 40yrs
- 34% of investors are parents
- 50% of investors have a HH income of <$30K - $99K

*Sources: MRI/Simmons*
**Additional crypto adoption insights**

Crypto payment users will reach 5.5M by 2023, a **350% increase** over 3 years

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**US Cryptocurrency Owners, by Age, 2022**

<table>
<thead>
<tr>
<th>Age</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>3.9</td>
</tr>
<tr>
<td>25-34</td>
<td>11.2</td>
</tr>
<tr>
<td>35-44</td>
<td>9.7</td>
</tr>
<tr>
<td>45-54</td>
<td>4.7</td>
</tr>
<tr>
<td>55-64</td>
<td>2.4</td>
</tr>
<tr>
<td>65+</td>
<td>1.7</td>
</tr>
</tbody>
</table>

*Note: individuals who own cryptocurrency (such as Bitcoin, Ether, Dogecoin, etc.) in digital storage/an account. Source: Insider Intelligence, April 2022*

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**US Cryptocurrency Payment Users, 2018-2023**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cryptocurrency payment users</th>
<th>% change</th>
<th>% of internet users</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>0.9</td>
<td>0.4%</td>
<td>0.4%</td>
</tr>
<tr>
<td>2019</td>
<td>0.9</td>
<td>5.1%</td>
<td>0.9%</td>
</tr>
<tr>
<td>2020</td>
<td>1.2</td>
<td>29.9%</td>
<td>0.5%</td>
</tr>
<tr>
<td>2021</td>
<td>2.1</td>
<td>9.9%</td>
<td>2.1%</td>
</tr>
<tr>
<td>2022</td>
<td>3.6</td>
<td>68.6%</td>
<td>3.6%</td>
</tr>
<tr>
<td>2023</td>
<td>5.5</td>
<td>51.7%</td>
<td>5.5%</td>
</tr>
</tbody>
</table>

*Note: Individuals ages 18+ who have used any cryptocurrency (such as Bitcoin, Ethereum, Dogecoin, etc.) to make a payment for goods or services or to another person in the past 12 months. Source: Insider Intelligence, April 2022*
Recent volatility in crypto markets has been a key point of focus

While we still anticipate long term growth, we are keeping an eye on the latest market impacts.

**Created to provide stability in the crypto market, stablecoins are pegged to fiat currency - Terra was meant to hold a 1-to-1 value with the U.S. dollar.**

### JUST HOW FAR THEY’VE FALLEN:

- **Terra, the third-biggest stablecoin**, and sister coin Luna have lost **99% of their value**, eliminating nearly **$20 billion**.
- **The price of Bitcoin** was last down nearly **9%**, reaching lows of **$26,848**.
- **The price of Ethereum** dropped more than **23%**, sinking below **$2,000**.

### IMPACT ON CRYPTO EXCHANGES:

- **Binance**, the world’s largest crypto exchange, has halted trading of Terra and Luna tokens on its platform following the meltdown. Other major crypto exchanges have also taken steps to address the incident.

- **Coinbase** warned its users that they might lose access to their holdings if the company ever went bankrupt. The company recently reported a **$430 million quarterly loss** and the departure of more than two million users.
B2B Payments
The digitization of B2B payments continues to grow, as evidenced by high valuations of public firms bringing solutions to market and the amount of venture capital money backing a growing number of Fintechs. The tipping point—meaning rapid acceleration away from checks and manual payments – is poised to happen soon.

Dave Duncan
EVP, chief product officer
Global Payments
B2B Payments

Consumer Audience & Merchant Insights

B2B Payment Examples:

Reducing checks by 10-50%, equates to

$1.3 - $58.3B

In savings each year

Global B2B non-cash transactions will increase to

200B

By 2025

Paper checks for biz transactions still account for

>50%

of the overall transaction value for B2B payments

$11.3 trillion

Estimated value of global digital B2B payments market by 2026 (+110% growth vs. 2020)

Sources: MRI, catalyst.org, sbc.senate.gov
For more info or to set up time to discuss, please reach out to:

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David Curley  
David.Curley@nbcuni.com