

Payments Innovation Is Key to the Future of Commerce in America

Innovation is crucial for keeping the economy functioning, growing, and moving forward. At no time was the need for innovation more on display than during the pandemic. The ongoing innovation of the digital transactions industry, for example, helped make it possible for consumers of all income levels to receive, hold, and spend money during the pandemic. The industry's response during the pandemic, though, is just one chapter in a long history of innovation that continues to spur future waves of innovation.

The digital transactions industry drives economic growth. Not only does the industry continue to invest heavily in digital technologies to more rapidly address evolving customer preferences, but it also collaborates with other technology organizations to accelerate innovation in infrastructure, products and services, and anti-fraud measures. Here are some of the many ways in which the modern payments industry produces a positive and seamless experience for consumers that makes receiving, holding, and spending money convenient and easy.

Infrastructure Innovation

Over several decades, the digital transactions industry has built a sophisticated, interconnected infrastructure to serve all Americans.

- The industry has essentially built a “highway system” for digital transactions in America, and around the globe, with mature, interconnected networks that make it possible for consumers to connect with their favorite merchants, while protecting them against fraud and ensuring that transactions are made safely and quickly.
- The industry has invested billions in R&D to develop the current financial infrastructure and continues to modernize its infrastructure to support new product and service offerings.

Products and Services Innovation

The digital transactions industry is continuously developing and deploying new products and services for greater financial inclusion. The ongoing innovation of the industry has produced many options to allow all Americans to conduct their daily financial transactions safely and securely — even during a pandemic. These products and services include the following:

- **Prepaid Products** – A prepaid card can be used instead of cash when making a purchase. Prepaid products provide cost-effective, convenient, and innovative payments solutions for millions of consumers.
 - Visa, Mastercard, Discover, Money Network (Fiserv)
- **Contactless Payments** – Contactless payments are a secure payment method using a debit card, credit card, or another payment device that uses RFID technology and near-field communication. Contactless payments allow consumers to pay by tapping the point-of-sale terminal at checkout. The U.S. is now the largest market in the world for contactless cards, and 60% of U.S. merchants now accept contactless payments.

- **Peer-to-Peer (P2P) Payments** – P2P providers allow consumers to transfer funds to others via a mobile phone app. The transfer is usually free and comes directly from the user’s P2P account, which can be loaded with cash or transferred from a bank account or credit card (which the user has linked to the mobile application).
 - Venmo (PayPal), Cash App (Square), Apple Pay Cash, Zelle (Early Warning Services)
- **E-Cash** – E-cash allows cash-based consumers to make purchases online and then complete the transaction at a retailer with cash — no credit card or bank account needed.
 - Paysafecash and Paysafecard (Paysafe Group)
 - Amazon Paycode (Amazon)
 - PayPal Cash and PayPal Cash Mastercard (PayPal)
- **Mobile Wallets** – Mobile wallets allow consumers to store payment cards on their phone. They offer many benefits, including strong security. These digital wallets require a passcode, fingerprint, or facial recognition before a transaction can occur, and thus are highly secure. More than half of U.S. consumers have downloaded mobile card apps and use them on a weekly or even daily basis.
 - Apple Pay, Android Pay (Google), PayPal, Amazon Pay, Google Wallet
- **Buy Now/Pay Later (BNPL)** – BNPL is a service that allows you to purchase goods and pay for them either later or by installments.
- **QR Codes** – Smaller businesses, parking lots, and vending machines have been using QR technology for payments for years, and now major retailers, restaurants, and gas stations are adding QR codes to their mix of payment methods.
- **Connected/Integrated Internet of Payments (IoP)** – IoP enables payment processing over Internet of Things (IoT) devices such as automobiles, appliances, and wearables.
 - Wearables — Technology, fashion, and sports all connect in wearable devices, like watches, that use near-field technology for secure and reliable payments.
 - Voice payments – Digital commerce voice technology will soon help you pay for your gas by activating the pump and facilitating token generation to help ensure a secure payment.
 - Connected Cars — Newer car models are leveraging apps like Apple CarPlay to use voice controls to buy gas, pay for parking, order food ahead from restaurants, and use entertainment features integrated into the dashboard.
 - Unattended retail operations are using apps, self-service kiosk providers, and smart shopping carts for automated payments, allowing customers to skip the checkout line.

Anti-Fraud Innovation

For the payments industry, one of our top priorities is the safety and security of digital transactions. Our anti-fraud services prevent billions in fraud each year and are continually evolving to ensure the safety and security of transactions in both established and emerging payments systems:

- **Tokenization** protects against fraud by ensuring that a user’s card number is never seen by the payment terminal. Card numbers and other sensitive account data are replaced by unique digital identifiers called “tokens,” which are unique to each transaction and cannot be replicated or



reused, allowing payments to be processed without exposing actual account details that can potentially be compromised.

- **Encryption** ensures that payment card data is encoded and cannot be read without a key — from the moment the payment is initiated to when the payment is cleared and settled.
- **Consumer Authentication** refers to the tools that are intended to validate that the authorized card holder is the person actually intending to make the purchase.
 - Biometrics are biological measurements (physical characteristics) that can be used to identify individuals. Mobile biometrics will authenticate \$2 trillion worth of in-store and remote mobile payment transactions annually by 2023.
 - Behavioral security is a proactive approach to security incidents that involves monitoring end user devices, networks, and servers in order to flag or block suspicious activity. Payments providers can create cross-platform identity checks and custom levels of authentication depending on the transaction type.
- **Credit Score Access** – Several ETA members provide unlimited access to your credit score and digital features to help you monitor your score for potential signs of fraudulent activity.

Each year, the digital transactions industry processes more than \$22.5 trillion annually in purchases worldwide and deploys payments innovation to merchants and consumers. ETA and its members support a positive regulatory environment that encourages innovation while furthering financial inclusion and the continual evolution toward seamless digital transactions.

