

globalpayments



2023 Commerce and Payment Trends Report

Physical, digital and virtual converge:
Five trends that will change commerce in 2023

EXECUTIVE INSIGHT



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In challenging times, businesses that survive—and even thrive—are the ones that adapt. And keep adapting. For every headwind that 2023 may impose, we are also seeing new opportunity areas for businesses prepared to adapt.

The commerce landscape is in the midst of multiple disruptions—technological, economic and social—that promise to impact payments in the coming year. Some, like inflation and ongoing supply chain issues, pose substantial challenges. Others, like the emergence of cryptocurrency, new online shopping methods and the metaverse, offer businesses a new landscape of possibilities.

Many of these emerging opportunities are tied to the increasingly digital world we live in—a trend that is accelerating. As our personal and professional lives continue to move online, so does more and more of our economic activity. But more than that, the essential nature of online commerce is evolving, largely to accommodate shifting consumer preferences and disruptive technologies. For a new generation of shoppers and creators, this is an exciting prospect. And for today's business operators, it creates new challenges to acknowledge and address.

Take the rise of social commerce, for instance. In certain ways, social platforms are filling the role that the mall or city center used to fill: one location where you can socialize, network, shop and be entertained. And this trend is expected to further gain influence if the

metaverse reaches broad adoption. The takeaway? Today's customers want to buy their products where they do everything else, and they will vote with their wallets for companies that help them do that.

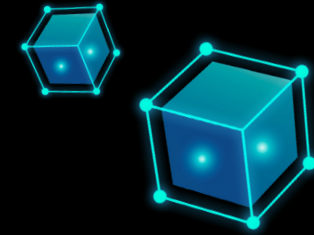
Similar dynamics are at play across the commerce landscape. We've spoken with leading industry experts and gathered survey data from businesses and issuers to identify five key trends that look to make major impacts in commerce and payments over the next 12 months. These include:

- **Social and live commerce**
- **Blockchain, real-time payments and open banking**
- **Digital currency**
- **Biometrics**
- **The metaverse**

Each is tied to new technologies that offer faster, more convenient, more seamless or more personalized commerce experiences. As always, consumer preferences lead the way, and businesses that want to navigate a potentially challenging commerce landscape would be wise to listen. Those that take the lead and wield these emerging trends in their favor stand to make strong gains—no matter the headwinds.

Ready to read more about what's in store for 2023?

Read on to discover how to plan ahead and uplevel your business.



We're in the midst of multiple disruptions—technological, economic and social—that promise to impact payments in the coming year.

Some, like cryptocurrency or the metaverse, offer new opportunities to businesses. Others, like inflation and supply chain issues, pose strong challenges.

Whatever the future brings, the best way to navigate these changes is with education and preparation. Here are five key trends to stay on top of in 2023—and what your business needs to know to chart a course for success.

2023 TRENDS OVERVIEW

TREND 1

Social and live commerce are charging ahead—
are you tapping in?



TREND 4

Biometrics unlock
new opportunities



TREND 2

Tech innovation:
Blockchain, real-time
payments and open
banking take center
stage



TREND 5

Dawn of the
metaverse



TREND 3

Digital currency
accelerates as new
use cases emerge

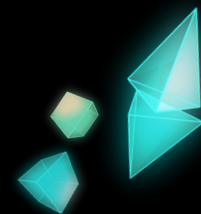


A lot can change in a year, and 2022 brought in major pivots for economies around the world. Inflation, higher interest rates and supply chain issues continue to impact consumer spending. We're also seeing a significant shift in where and how people are spending their time, and what it takes to succeed in today's market.

Knowledge is power, and staying ahead is all about staying informed. As leaders in the global commerce space, we interviewed thought leaders and payment experts from

some of the most well-respected companies in the industry to identify the biggest trends driving commerce in 2023. We also surveyed more than 200 businesses worldwide to find out what they're noticing right now, and to help us predict how it will affect us all tomorrow.

We're here to help you take on what's next. Take a look at the top five trends that should be at the top of every leader's agenda—and how they'll impact businesses everywhere.

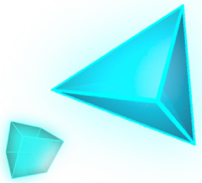


TREND 1

Social and live commerce
are charging
ahead—are you
tapping in?



Social media has evolved from a place of social interactions with friends to a place where brands can further engage their customers in shopping experiences. Now, customers can immediately buy what they see without leaving an app or platform, making it easier than ever to turn a want into a purchase.



52%
of businesses plan
to sell through
social networks in 2023.²

Social commerce: Scroll, see and shop on social media

“Social commerce” is selling goods or services directly within social media platforms like Facebook, Instagram, Pinterest and TikTok. It meets consumers where they are, allowing them to make a purchase immediately and seamlessly on social media rather than redirecting them to a business’ website. The result is a quicker path to purchase with less friction and more on-demand action.

Global social commerce sales reached \$492 billion in 2021, a number expected to nearly triple by 2025 to \$1.2 trillion.¹ In our survey, more than half of businesses indicated they will introduce social commerce as a new sales channel in 2023.²

Social media platforms are creating more and more opportunities for brands to drive commerce directly. Platforms like Facebook Shops, Instagram Shopping, Pinterest Shopping and TikTok Shop make it easy for businesses to get their products and services in front of audiences and capitalize on customers’ in-the-moment shopping impulses.



SPOTLIGHT Social commerce in action

Barbour, a long-established outerwear manufacturer, adopted Instagram Shopping as a way to connect with its audience while simplifying the customer journey. Since the company started using Instagram Shopping, sales from Instagram have increased by 42% and traffic to its website from Instagram is up 98%.³

Live commerce: Streaming meets shopping

Live commerce allows customers to buy products they see on screen during live-streaming events. The purchase is often completed in one click using “buy” links or QR codes shown on screen. It’s growing rapidly, thanks in part to the appealing mix of shopping, entertainment and social interaction that it offers. In fact, sales driven by live commerce could account for as much as 10% to 20% of all ecommerce by 2026,⁴ with live commerce expected to reach \$55 billion in sales in the US alone in 2026.⁵



SPOTLIGHT

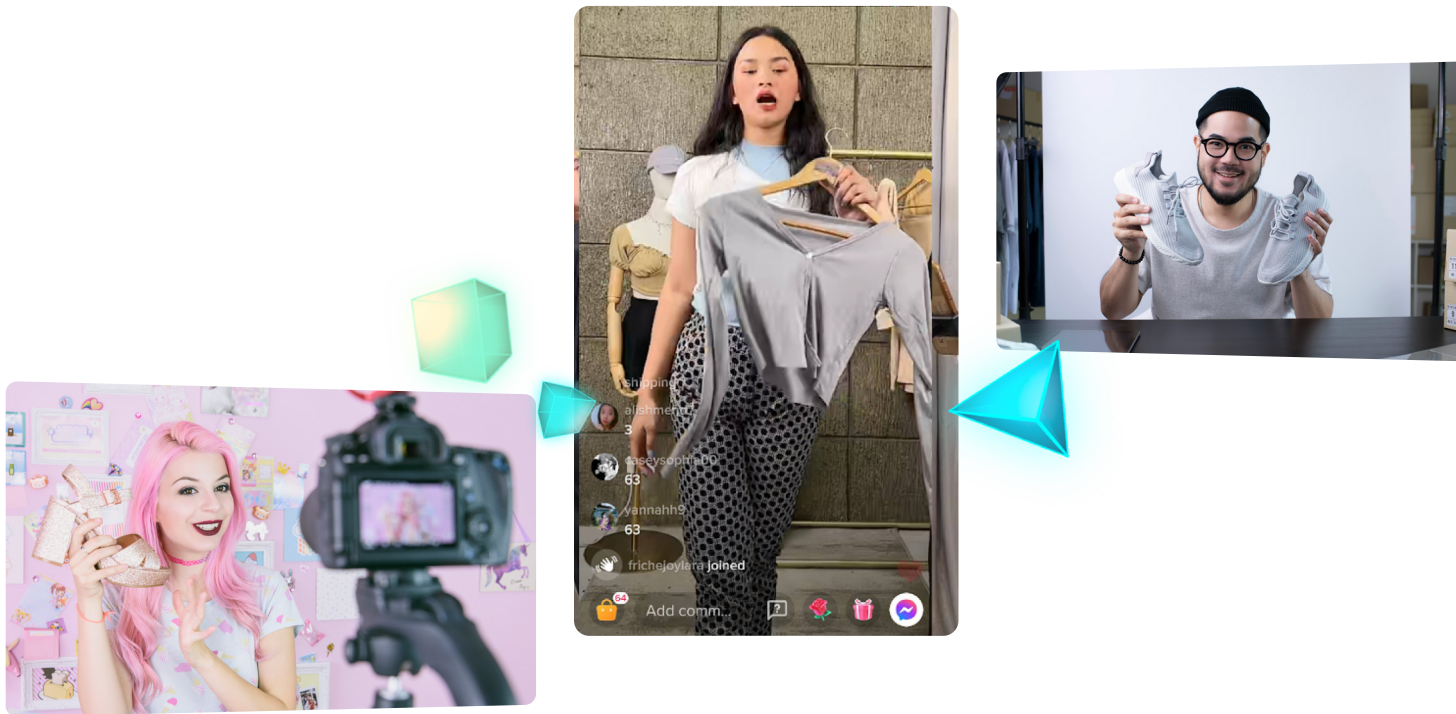
Live commerce in action

Clinique has embraced live commerce to engage customers and drive sales. In April 2022, the company held a live shopping event on Instagram. During the 20-minute livestream, three Clinique field executives shared what they loved about a product. A link to buy the product was displayed on screen, making it easy for viewers to purchase it without ever leaving Instagram. As a result, the product was added to 85% of orders over 11 days.⁶

Consumer demand across the globe

While live commerce is global, it has exploded in China. The market is estimated to grow at a compound annual growth rate (CAGR) of 58.3% over the next three years, exceeding 4.9 trillion yuan (approximately \$700 billion) in 2023.⁷

Tommy Hilfiger experimented with live commerce in China, attracting an audience of 14 million to a single event. The company sold 1,300 hoodies in two minutes.⁴ Based on this success, the Tommy Hilfiger brand has extended its programming to Europe and North America.



Social and live commerce: see now, buy now

The appeal of social and live commerce for consumers is the ability to buy a product as soon as they see it. To make it even easier to buy, a growing number of businesses are embedding payment links and QR codes directly into social media posts and live-commerce streams.

According to Antonio Gagliardi, SVP, acquiring partners, product and strategy, merchant services US, American Express, “Embedding payments is another trend that will continue to grow at a rapid pace. That’s what social and live commerce are starting to do well. They help your customer enjoy a frictionless experience without ever having to leave the platform.”⁸

The technology that fuels these social and live commerce experiences is embedded payment links. They allow businesses to integrate payments directly into posts and ads across social platforms. Businesses can also integrate these links into other channels that didn't previously enable commerce, like WhatsApp and text messages.



“Social and live commerce have become primary in the conversation in the last six months. Additionally, the trend of embedding payments directly into a sales channel has now extended into other platforms like text through texting payment links.”⁹

Vince Lombardo

President, US Merchant Solutions, Global Payments



BUSINESS TAKEAWAY

Go where your customers are

With social and live commerce growing rapidly, there are even more opportunities to develop deeper engagement with your customers that drive brand loyalty and, ultimately, increase revenue.

“It’s important to manage your social media platforms to connect with your customer,” said Konrad Chan, president of Asia Pacific, Global Payments.¹⁰ “It’s smart to be thinking about it for every size business. There’s revenue opportunity at stake.”

Moving into 2023, consider embedding pay-by-link capabilities directly into social platforms. It will make payments seamless and effortless for your customers.

“One of the most exciting things about the social commerce sector is that it brings to market the right technology and modern financial tools to fit consumer needs,” says Ruben Salazar, global head, Visa Direct.¹¹ “Where there’s commerce, payments need to follow.”

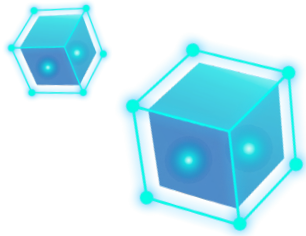


TREND 2

Tech innovation:

Blockchain,
real-time
payments and
open banking
take center stage





With the merging of physical, digital and virtual worlds, tech innovation accelerates to meet customer expectations.

As they shop, consumers are jumping between physical, digital and now virtual worlds. And they expect technology to keep up with their omnichannel habits, enabling a seamless, integrated, nearly invisible payment experience across channels. Payment providers and financial institutions are innovating to meet their needs.

“The pace and the desire of payment companies to modernize their payment platforms and applications is growing,” said Mark Smith, head of payments—market development, Amazon Web Services. “Companies that are focused on their customer and the payment experiences they desire and have the technology to deliver on those experiences will be well suited for the future.”¹²

New tech gains ground

In 2023, blockchain, real-time payments and open banking will continue to pick up steam. These technological advancements create further opportunities for businesses and issuers alike to meet customer expectations.

Blockchain

Blockchain is revolutionizing every industry—from art to agriculture.



“I believe blockchain is bringing in one of the fundamental technological changes of our generation. We’re at the very start of something that’s maybe a 10- to 20-year trend.”¹³

Alisa Ellis

Global Head of Innovation and Emerging Products, Discover® Global Network



Blockchain is a public, decentralized, distributed ledger, meaning that no one person or business owns the system of record. Because of that, anyone within a blockchain network can verify transactions or the ownership of an asset for themselves. It has broad applications across many industries, including real estate, banking and financial, legal and payments. Blockchain technology also offers some exciting benefits. It solves record-keeping problems and provides a public audit trail for all types of transactions. It will be used in payments in several ways:

Faster payments. Thanks to its agile, decentralized structure, blockchain technology increases the pace of payment processing with real-time verification of transactions without needing intermediaries.

Digital currencies. Many digital currencies run on blockchain technology, where a decentralized system verifies and maintains transactions and records rather than a central authority.

Peer-to-peer (P2P) payments. P2P payments are payments made between two individuals. Blockchain’s global reach and decentralized nature mean that it can rapidly and affordably facilitate P2P transactions across borders.

As blockchain matures, innovations in payments will emerge with it—taking advantage of its versatility, transparency and easily accessible capabilities. Analysts expect the global blockchain market to grow at a CAGR of more than 85% between 2022 and 2030.¹⁴



Real-time payments

A blend of new technology, regulatory pressure and customer expectations is driving the growth of real-time payments.¹⁵



“The largest and most important macro trend that we are experiencing in the industry is real-time payments.”

Ruben Salazar
Global Head, Visa Direct



“Whether it’s a migrant worker sending money to family in his or her home country, or a gig worker who needs access to earned wages on demand, to a multimillion-dollar company sending a payment to a vendor overseas, real-time payments are already disrupting a number of payment use cases, helping improve the lives and operations of individuals, businesses and governments across the globe,” said Salazar.¹¹

Instead of the traditional process where transactions are batched, sent to a merchant’s bank and processed at scheduled intervals, real-time payments process and, in many cases, settle instantly. Cogent Bank, for instance, has launched TassatPay, to allow its B2B clients to make real-time payments to other Cogent Bank clients enrolled in TassatPay.¹⁶

As the demand for real-time payments increases, payment rails are working to quicken the pace of money movement. Settlement will also need to evolve from batch to real time.

The demand for real-time payments is pushing industries and governments to innovate.

In the summer of 2020, at the height of the pandemic, small businesses were operating with fewer than 15 days in buffer cash.¹⁷ In a challenging economic landscape, the speed at which a business gets paid can mean the difference between success and failure. For many small businesses, cash reserves are shallower than those of their larger counterparts.

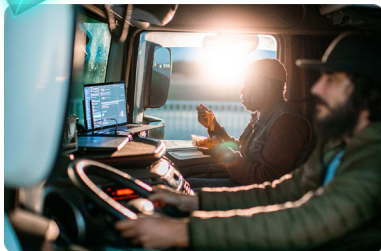
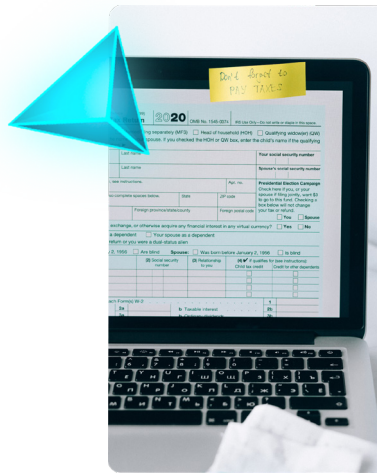
“It matters to a small- or mid-sized business to get that money at four o’clock in the afternoon versus four o’clock the next morning,” said Bob Cortopassi, president, international merchant solutions and vertical markets, Global Payments.¹⁸

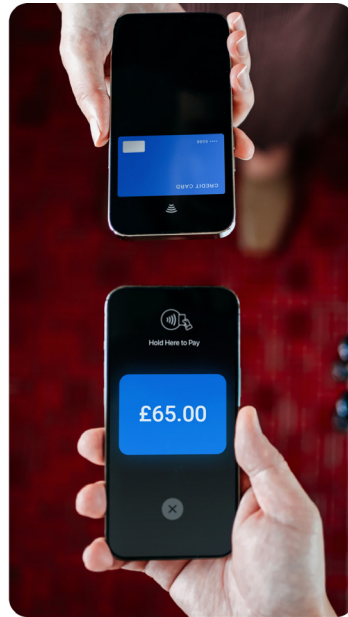
Governments are also aware of the need for real-time payments. FedNow, for example, is a new instant payment service by the Federal Reserve, the central banking system of the US, enabling financial institutions with real-time payments.¹⁹ Through FedNow, financial institutions can now rely on around-the-clock funding availability where payments clear and settle in real time.

It won’t happen overnight.

The shift to real-time payments is likely an evolution, not a revolution. To unravel a decades-long process will take time. And not all transactions are eligible for real-time payments. Additionally, businesses and consumers wouldn’t want real-time payments for every transaction. Some purchases should take longer to settle, like purchases that exceed a certain dollar amount, including cars and homes. They require more scrutiny to ensure that the transaction is legitimate and that funds are available.

“Some transactions can happen really fast, and others you would want to do more slowly—for instance, if it’s a case of combating potential fraud or a higher-stakes transaction,” said Ellis.¹³





Open banking

Another evolving technology, open banking, opens more doors of opportunity for financial innovation. In 2016, European regulators proposed the opening up of consumers' financial data to third parties upon consent. From there, the Second Payment Services Directive (PSD2) legislation was introduced, prompting the UK to create an open-banking standard.

Today, open banking—one form of real-time payments—enables third-party payment and financial services providers to access consumer banking information. This includes transactions and payment history, with and when the consumer consents to this access.

Experts expect the open-banking market to exceed \$116 billion by 2026.²⁰ The transformation in structures and relationships is already beginning to change how banks relate to their customers while creating new services.



“Open banking is providing more transparency between businesses and the banking infrastructure.”¹⁸

Bob Cortopassi

President, International Merchant Solutions and Vertical Markets, Global Payments



Opportunities without bounds

Innovations built on open banking are evolving daily to provide better experiences to customers. For example, a company leveraging open banking can aggregate a customer’s bank account balances from all of her banks onto one screen and let her transfer money between them, even across different banks. This experience eliminates the hassle of manually having to transfer money between different banks and gives her better visibility into her whole financial picture.

Governments are also using open banking to allow citizens to pay taxes and other duties. For example, HM Revenue & Customs (HMRC), the UK’s tax, payments and customs authority, allowed taxpayers to pay their self-assessment payments through open-banking services during the 2021 UK tax season. Many of these taxpayers received their refunds in record time, while HMRC reduced costs and streamlined its payment process.

BUSINESS TAKEAWAY

Keep up with technology innovations to keep up with customer preferences

Blockchain, real-time payments and open banking will make commerce easier for your customers and more profitable for your business.

Consult with your payment provider to understand what new capabilities may be available to integrate today. You can also learn what's on their roadmap, helping you stay on top of what's coming for fast integration when the technology is available.



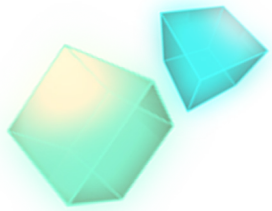
TREND 3

Digital currency accelerates as new use cases emerge



Digital currencies are coming into focus for emerging use cases, including cross-border payments and remittances, loyalty and rewards and digital-wallet integration even as the market ebbs and flows.

Cryptocurrency has been experiencing market volatility, bad actors and scrutiny by regulators, investors and consumers. As a result, we don't expect cryptocurrency to be accepted as a payment type at the point of sale anytime soon. Trust in digital currency systems by all stakeholders, including financial institutions, businesses and governments, will have to be restored before widespread adoption will occur.



Use cases for digital currency—including central bank digital currencies (CBDCs) and stablecoins—continue to emerge. They’ve found their footing because of how they meet consumer demand and solve current pain points. These include cross-border payments and remittances, loyalty and rewards and digital-wallet integration. These use cases will also need to garner the trust of stakeholders for mainstream adoption to take hold.

Cross-border payments and remittances

Thanks to their speed and transparency, digital currencies are already being used for cross-border payments and remittances. Their decentralized nature—unlike conventional currencies backed by central banks—means they represent a fast, cost-effective, transparent and frictionless option for cross-border transactions.

The World Bank notes that the demand for affordable, frictionless cross-border payments has grown. Yet, it says, “Cross-border payments have not kept pace with the intensive modernization that has characterized domestic payment services worldwide. An alternative avenue to modernize the delivery of cross-border payment services is being increasingly explored in the context of central banks issuing their own digital currency. A central bank digital currency or CBDC could well incorporate options and features specifically designed to execute cross-border payments, with a view to reducing inefficiencies... by shortening the payments value chain.”²¹



SPOTLIGHT

An international, multi-CBDC platform

Today, there’s no single international platform to facilitate cross-border payments and settlements, making these payments expensive and slow. That’s why the Bank for International Settlements (BIS) Innovation Hub and the central banks of Australia, Malaysia, Singapore and South Africa stepped in. They’re developing an experimental multi-CBDC platform for international settlements. Named “Project Dunbar,” the project will develop two prototypes for a shared platform that enables international settlements using digital currencies issued by multiple central banks. Their goal is to cut costs and increase the speed of cross-border transactions.²²

Cross-border remittances

An estimated 800 million people receive remittances—money sent from laborers working in developed economies to family and friends in the developing world. These funds pay for things like food, utilities and education, according to the United Nations.²³ In 2021, global-remittance inflows reached a new record of \$773 billion—\$605 billion of which went to low- and middle-income countries, according to the World Bank.²⁴

The speed and ease of these flows also have implications for businesses, with global B2B cross-border remittances currently worth around \$150 trillion.²⁵

The growth of CBDCs is already facilitating cross-border remittances, ensuring that they are faster and more secure. According to a BIS report, CBDCs can cut cross-border remittance costs by 50%. And can make funds available in seconds, instead of days.²⁶



SPOTLIGHT

Digital currency simplifies cross-border transactions.

Digital currencies are facilitating new cross-border trade in a growing number of sectors. Agrotoken, the first global tokenization platform for agro-commodities, has a card that converts grains into digital tokens. These tokens can be traded or stored for supplies, services and other assets across several territories. So far, users have bought supplies, vehicles, agriculture machines and farms with the tokens.²⁷

Loyalty and rewards

One use case for financial institutions and businesses to consider is loyalty and rewards. According to research from S&P, “Enabling the exchange of cashback reward points for various cryptocurrencies” is a near-term market opportunity.²⁸

Businesses can also use crypto-reward programs to appeal to new consumer groups.



“Offering cryptocurrency rewards can help brands attract and engage with younger audiences, driving richer consumer experiences and increased brand loyalty.”²⁹

Dan O'Prey
Chief Product Officer, Bakkt



SPOTLIGHT

Cryptocurrency rewards

Several well-known brands are rewarding customers with cryptocurrency today.

Bakkt has an app that lets consumers view and transact with assets, including cryptocurrencies, loyalty and rewards points, airline miles and gift cards. It also provides a cryptocurrency exchange and wallet.³⁰

Lolli, a Google Chrome extension, offers Bitcoin rewards ranging from 1% to 30% when users shop with over 1,000 brands, including Nike and Sephora.

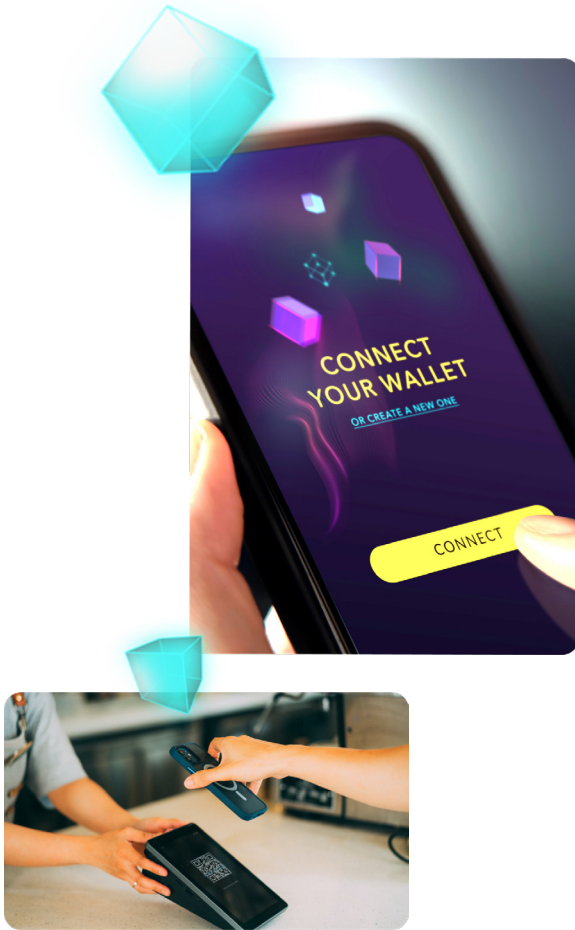
Satsy allows customers to earn Bitcoin, not just when they shop, but also when they play games and participate in surveys.



Ups and downs

An issue that businesses will have to consider when exploring cryptocurrency rewards is volatility. The fluctuating prices of cryptocurrencies can create uncertainty for consumers earning these reward points and the brands offering them. For example, if a consumer collects cryptocurrency rewards today, what value will they have next month?

In a recent survey, concerns about the redemption value of crypto points versus the redemption value of more familiar points schemes were cited by 42% of respondents as the number one issue when considering investing in crypto.³¹



Crypto in wallets

A crypto wallet is a digital file that allows consumers or businesses to store and manage their cryptocurrencies. They also enable users to make cryptocurrency transfers—converting their cryptocurrencies back into the user’s local currency.³²

More than nine out of 10 (93.5%) merchants report that customers prefer to pay for goods or services using well-established digital wallets such as PayPal, Google Wallet and Apple Pay. In comparison, just 6.5% favor paying with crypto-specific digital wallets.³³

A key appeal of digital wallets for consumers is access to their finances and payment methods—all in one place. It makes checking things like credit card accounts, stocks and cryptocurrencies as easy as a click.

BUSINESS TAKEAWAY

A trend to watch

Digital currencies are an ever-changing space with many factors that could accelerate or decelerate their potential over time. We recommend continuing to monitor how these trends unfold. Stay connected with your payment partner to explore how and when they could offer you a competitive business advantage.

“We’re still not at a point where cryptocurrency is playing a material role in the everyday payment experience,” said Gagliardi. “There are multiple reasons for that. One is the volatility of cryptocurrencies. They lend themselves to be an asset class, as much as a stock or a bond is. But not so much, at least not yet, as a payment method that the average merchant would be happy to take.”⁸



TREND 4

Biometrics unlock new opportunities



32%

of businesses believe payments using biometric identification and authentication will be a top payment trend in 2023.²

As it develops and gains greater adoption, biometric authentication will enable faster, more secure and frictionless payment options across all channels. Consumers increasingly demand inventive ways to make their payment experience even easier.

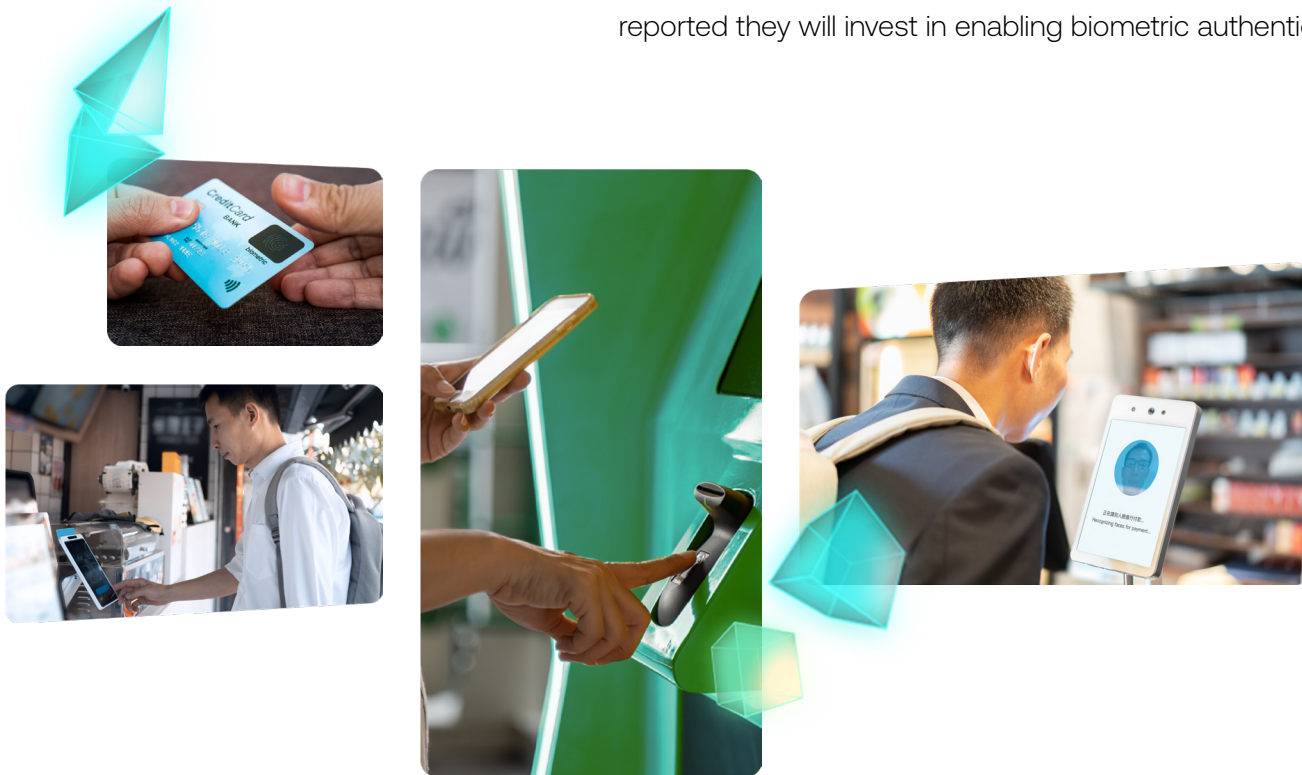
Consumers are already familiar with using biometrics—physical markers like a finger, face or iris—to access their smartphones. Now, they're ready to use them for payments. Eighty-six percent are interested in extending the use of biometrics to verify their identity or make payments.³⁴

Thanks to its familiarity in everyday use—from unlocking a smartphone to clearing security at the airport—public acceptance of biometric authentication is strong. Nearly three-quarters (74%) of consumers around the world have a positive attitude toward biometric technology.³⁵

For consumers, among the advantages of biometric authentication are simplicity and security. In fact, 70% of consumers believe biometrics are easy, and 46% think they are more secure than passwords or PINs.³⁴ That's because they don't need to memorize passwords and PINs or worry about handing their credit card over to someone to swipe.

Businesses are focused on the potential of biometrics and what they can do to improve operations. For example, biometrics offer greater security by relying on a physical characteristic, more convenience without needing a card or wallet and a faster payment experience overall.

A third of the businesses we surveyed indicated that payments using biometric identification and authentication will be the top commerce and payment trend of 2023. Nearly a fifth (19.8%) reported they will invest in enabling biometric authentication in the year ahead.²



Biometric authentication means more efficient payments.

Biometric authentication helps make paying faster and easier. These two reasons are why biometric payments are on the fast track for adoption.



“From an efficiency perspective, biometrics in payments are really interesting. People want faster payments or don’t want to think about payments at all anymore—biometrics are a really easy way for us to do that.”³⁶

Shelley Joyce

Chief of Merchant Acquiring Technologies, Global Payments

globalpayments

The technology is already available with companies building solutions to authenticate payments using several unique biometric markers.

Fingerprint verification

As a feature in older smartphones, consumers have used fingerprints for years to unlock their phones. Biometrics are at once new and rapidly evolving while, at the same time, familiar. When asked in our survey, “Which type of biometric authentication are you likely to accept from your customers?” nearly 70% of businesses cited fingerprint as the number one choice, equal to facial recognition.²

Businesses are working with technology providers to enable this experience. For example, Global Payments TSYS issuer solutions and Zwiipe, a biometric fintech company, have collaborated on a viable biometric card. The biometric card is easy for businesses to accept—it can be used at any location equipped with POS devices that accept today’s contactless chip and PIN cards.³⁷

“Imagine a debit card—on one end of it is a small sensor that you would place your finger on when you make the payment. It quickly authenticates your identity and authorizes your payment,” said Blake Barker, SVP, output services, TSYS.⁴²



SPOTLIGHT

Fingerprint biometrics in action

Amazon is introducing palm biometric authentication to its customers. In September 2020, Amazon introduced Amazon One, a biometric authentication device that lets users authenticate their purchase using the palm of their hand. Initially piloted at Amazon Go stores in Seattle, this year, Amazon One expanded into 65 Whole Food locations across California—with further expansion on the way.

~70%

of businesses said they are likely to accept face and fingerprint biometric recognition from customers.²

Facial recognition

As with fingerprints, many consumers are already familiar with using facial recognition to unlock their smartphones. When we asked businesses, “Which types of biometric authentication are you likely to accept from your customers?” nearly 70% reported face as the number one choice, equal to fingerprint recognition.²



SPOTLIGHT

Payment providers pave a path for biometrics

Businesses are looking to payment providers to help them leverage the benefits of biometrics. Mastercard has introduced a facial biometric payments program for the brick-and-mortar retail environment, providing consumers with more choices and new ways to pay beyond contactless cards and smartphones. Their Biometric Checkout Program includes in-depth requirements for security and biometric performance to instill confidence and trust in this new payment method. The biometric payment solutions enrolled in the program allow shoppers to scan their face or other biometric to retrieve a card held on file. Mastercard's standards require that this biometric data is converted into a digital template and encrypted, rendering the data useless in the event of a data breach.³⁹

When creating the Biometric Checkout Program, the Mastercard team kept a few important questions in mind. "Can we create a secure, frictionless consumer experience? How do we transform the consumer experience across channels wherever consumers are interacting?" asked Nili Klenoff, head of authentication solutions, Mastercard.⁵⁶

In another example, Wendy's First Kitchen in Tokyo used PopPay to deploy an iris and face recognition-based ordering and payment system. With PopPay, customers can complete transactions using their face by linking their identity to a credit card or the Wendy's First Kitchen prepaid card.

"Hundreds of brands now accept PopPay in the United States, and we have witnessed exponential growth in consumer usage," Andrew Schwabecher, CEO of JCV, told BiometricUpdate.com.⁴⁰

Iris recognition

Iris as a biometric marker is less familiar to many consumers than facial and fingerprint authentication and may be slower to gain popularity. In our survey of businesses, 32.6% of respondents are likely to accept iris authentication from their customers.²

However, new iris-based biometrics products are emerging as the biometric sector powers ahead. The EyePay Mobile Phone, for instance, developed by IrisGuard, uses iris scanning to provide financial services via a smartphone. According to the company, the solution can "enroll, register and verify people in over 212 countries serving a potential population of over 7 billion."⁴¹



An evolving space

Other aspects of our human behavior known as behavioral biometrics could be used as biometric markers to facilitate payments. For example, according to Smith, “There are ways to authenticate a customer in a transaction behind the scenes without asking them any questions. This might be by how fast they type, how they hold their phone or how they move their mouse. Some companies are exploring these options as another way to reduce friction for their customers and prevent fraud.”¹²

Improved convenience and security

During the pandemic, consumers were naturally wary about making physical contact during transactions. Offering a contactless way to pay, biometrics saw rapid uptake. “There are a lot of people who don’t want to touch a terminal,” said Barker.³⁸

At the onset of the pandemic in March 2020, 31 million Americans tapped a Visa contactless card or digital wallet, up from 25 million in November 2019. Overall contactless usage in the US has grown 150% since March 2019.⁴² The momentum has continued post-pandemic, with the number of contactless card purchases globally set to increase by an average of 23% per year—exceeding more than 522 billion by 2026.⁴³

“When the pandemic happened, everybody went digital, and consumers embraced new technologies,” Mastercard’s Cyber & Intelligence President Ajay Bhalla said in an interview. “Consumers all over the world are now asking us for something similar for their retail experiences.”⁴⁴

Some resistance to overcome

Despite the enthusiasm and many advantages, there are concerns about using biometrics to authenticate payments, including accuracy, security and trustworthiness. Increased security, for instance, involves preventing fraudsters from using images of customers' faces hijacked from social media and other sources.

Biometrics privacy and data use raising concerns

Consumers and privacy groups have expressed concerns about where data is stored and what it's used for. Companies developing these technologies will have to prioritize data privacy to generate market traction and reassure consumers that their data and privacy are secure and always within the consumer's control.



“When you’re dealing with personally identifiable data, it’s critical to have processes to protect it and handle it responsibly, as the consumer intended.”⁵⁶

Nili Klenoff

Head of Authentication Solutions, Mastercard



Staying compliant

Asked about the biggest business challenge they anticipate in the year ahead, the second most popular response in our survey was “staying current with the regulatory environment (35%).”²



Biometrics regulations are heavily discussed in the debate around privacy across the world. The US, for instance, has no comprehensive federal data privacy legislation to date. However, as the regulatory landscape continues to develop, the most important current national mechanism to regulate biometric data is Section 5 of the Federal Trade Commission Act. The Federal Trade Commission (FTC) has taken action over at least one company's use of biometric data. In a Tweet, former FTC Commissioner Rohit Chopra stated, "Today's facial recognition surveillance technologies are discriminatory and dangerous."⁴⁵

Meanwhile, the European Parliament has voted for a blanket ban on biometric mass surveillance. It has also argued to prohibit the use of private facial recognition databases. However, the European Banking Authority (EBA) favors implementing biometrics within the identity verification processes of the PSD2.⁴⁶

"For the expansion of biometrics to happen at even more scale, it would have to accompany the ease and security of payments with enhanced confidence in data privacy because you're giving very personal information to a company," said Gagliardi.⁸

Concerns about privacy and the willingness of consumers to share their data are part of a bigger question about consumers' trust in technology.

Klenoff added, "Consumers must trust the technology and then they have to use it several times before they become comfortable with it—and that's when you start to get a hockey stick effect. You get that rapid adoption all over the world. And so, it's the same maturity curve that we see with so many technologies."⁵⁶

BUSINESS TAKEAWAY

Consumers are ready to use biometric payments but have valid concerns.

Consumers' familiarity with biometrics technology means it has the momentum needed for more wide-scale adoption as a payment authentication method. It's hardly surprising that so many of those we surveyed see it as a top trend for 2023.²

Biometric authentication pilots in brick-and-mortar stores are already in progress. Early results indicate that consumers are beginning to benefit from a more seamless, secure and intuitive payment experience.

We suggest considering how it could apply to your business. As is the case for all payment technology, ensuring data privacy and following security regulations

will be critical. Your payment and biometrics provider can help you understand your responsibility and walk you through how they have followed proper measures in developing the technology.



TREND 5

Dawn of the metaverse



The metaverse could present exciting new opportunities for companies willing to reimagine the customer experience in a completely new environment. It offers the potential for co-creation with consumers, leading to even deeper relationships with customers everywhere. However, with challenges like accessibility, data privacy and security, it's still very early and could take years to realize its full potential.

The metaverse represents a new opportunity for businesses to reach and engage new and existing customer segments. To make the most of it, businesses are exploring early, and ultimately, will need to reimagine how they interact with consumers in a virtual world.

The metaverse is still being defined. Most tend to agree that it represents the blending of digital and physical realities. Its immersive experiences give people a real-life “feel” even though they interact in virtual, digital spaces.



1 in 6

businesses are planning to set up a presence for their business in the metaverse in 2023.²



“The metaverse is the next place people are going to interact and connect,” said Chan. He described what social experiences could look like. “Let’s say you walk into a clothing store and you want to try something on. Your avatar can actually put it on and ask your friends what they think. Then you go to the cashier to make the purchase, completing the experience with human interaction. These 3D experiences, combining virtual and physical, are unlike ecommerce today.”¹⁰

SPOTLIGHT

Major brands are already entering the metaverse.

Benetton is just one of several notable brands already exploring this new tech environment. During Milan Fashion Week, the brand transformed one of its physical stores in Milan to mirror its virtual world in the metaverse. Visitors can’t buy items in the Benetton metaverse store yet, but it does offer gaming experiences and the opportunity to collect QR codes to make purchases in Benetton’s physical stores.⁴⁷ This kind of virtual-to-physical commerce experience will become more common as the metaverse matures.

Nike recently launched a partnership with Roblox, a centralized metaverse and online multiplayer gaming platform. The project involves the creation of a virtual world called Nikeland, based on the brand’s real-life HQ building. Nikeland is an experience within Roblox that features fields and arenas for players to compete in various mini-games, including tag and dodgeball. In its first four months of operation, Nikeland attracted 7 million people.⁴⁸ Roblox has also created metaverse experiences with brands such as Ralph Lauren, Chipotle and the NFL.

The metaverse: future potential for commerce

Just as commerce has evolved over the years from traditional brick and mortar to ecommerce and omnichannel, the metaverse may be the next evolution of commerce in the years ahead. There are a few ways we predict brands may pursue commerce opportunities in this new space.

Direct-to-avatar commerce

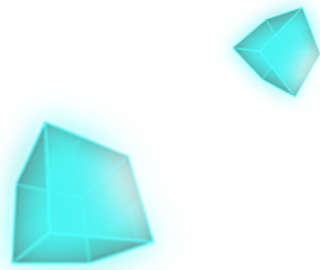
A direct-to-avatar (D2A) business model involves selling virtual products directly to consumers' avatars, so there's no need to ship physical products. Shoppers might buy digital clothes and other accessories, for example, to enhance their avatars. The opportunities for co-creation between brands and consumers—and for sharing experiences and products with others on social media—are driving this market and making a case for the growing use of avatars.

Ralph Lauren released a digital clothing collection available for purchase in the social networking app Zepeto. The collection features over 50 unique items, representing a mix of vintage Polo Ralph Lauren pieces and selections from Polo Ralph Lauren's summer collection⁴⁹ Similarly, American Eagle announced a digital clothing collection for Bitmoji avatars.⁵⁰

Virtual-to-physical commerce

Virtual-to-physical commerce involves making a purchase in a virtual space like the metaverse and then exchanging that virtual entity for a physical product or experience.





Non-fungible tokens (NFTs) are a great example of an asset that enables virtual-to-physical commerce. NFTs run on the blockchain like cryptocurrencies, but every NFT is unique and can be used to prove ownership or authenticity of a virtual object such as a work of art, design, meme or written content. Blockchain technology establishes ownership and digital origin, redefining what it means to have collateral.

The global NFT market is growing at a CAGR of 33.7% and will be worth over \$230 billion by 2030.⁵¹

Brands are launching NFT projects to create deeper engagement with their customers through virtual-to-physical commerce. Gap, for example, launched a range of NFT versions of its famous hoodies named its “Threads” NFT collection in partnership with artist Frank Ape. Consumers buy the NFT and exchange it for a physical garment. The hoodie NFTs have ranged in exclusivity from “common” to “rare.” Reuters reported that the announcement moved Gap’s share price up 5%.⁵²

Seamless and simple: keys to success in metaverse commerce

Even though its potential for new business opportunities is still emerging, one thing is clear about the metaverse—customers will demand a frictionless buying experience.

“I don’t want to carry a card anymore. And that’s what I’m very excited about with the metaverse—it’s going to simplify payments,” said Joyce.³⁶

Just as they move effortlessly from the physical to the virtual worlds and back again, consumers will expect to traverse both without switching payment methods when doing so.



With seamless, integrated payments, the metaverse is an extension of card-not-present (CNP) commerce, allowing businesses to monetize the metaverse effectively.

“The metaverse is part of omnichannel commerce. It’s just another channel, and we do payments across all channels,” said Lombardo.⁹

The challenges: privacy and security

With so many rapidly developing technologies, there’s a trade-off between convenience, personalization, engagement and the management of the data needed to deliver these benefits.

According to a survey by McKinsey, there are several risks to address for the metaverse to be adopted successfully. The top two are data privacy and cybersecurity (86% and 85% respectively), followed by ethics and regulatory compliance (60%), technological limitations (53%), brand image (45%) and payment safety (40%).⁵³

The metaverse will create an abundance of data for each user, significantly more than the internet has to date. For example, using virtual reality for just 20 minutes can generate over 2 million unique data elements.⁵⁴ But as for who will own this data, how willing customers will be to share their data and how it will be regulated—that’s still up for debate.

Kavya Pearlman, founder of the XR Safety Initiative, a non-profit that advocates for the ethical development of immersive technologies, comments, “At any given time, the way you move, the way your gait is, the way you’re gazing, your pupil dilation—is giving away information to developers.”⁵⁵

BUSINESS TAKEAWAY

A new opportunity to deepen customer relationships

It's still too early to know exactly what the metaverse of the future will look like, but early adopters are giving us a look at experiences that add value to their customers and build loyalty for their brands.

It's already clear that gaming, co-creativity and social interaction will be among the many ways to engage with consumers in the metaverse. New businesses entering the metaverse should study early examples when developing their strategies, and work with their payment partner to execute these strategies.

As was the case with the internet, there will be mistakes—but business leaders and others

will have the opportunity to fail fast and learn faster. The organizations that will succeed in the metaverse will be those with the courage to reimagine their business models, taking the time to listen to their customers and respond quickly.

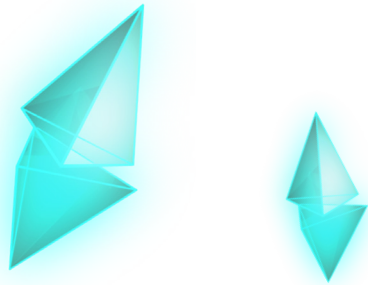


Seize the opportunities

Change can be overwhelming—especially when it’s as rapid and profound as the change that we’re seeing right now. But it’s also empowering.

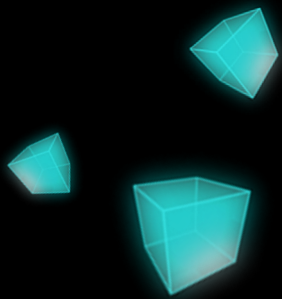
Just as consumers have never had so many platforms for retail, entertainment and other experiences, businesses have never had so many opportunities to connect with them in ways that drive more revenue for their business. And just as consumers have so many new currency and payment options, businesses can harness different payment technologies—making them faster, easier and more secure for their customers.

2023 is shaping up to be another innovative year for commerce and payments. Now is the time to seize these opportunities—and really own them.

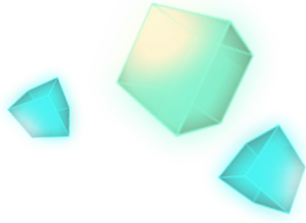


Methodology

The information contained in this report is based on in-depth interviews with executives from **Global Payments, Amazon Web Services, American Express, Discover® Global Network, Mastercard** and **Visa** combined with survey data from businesses and issuers gathered between July 12, 2022, and August 12, 2022. We also supplemented our findings with secondary research, as noted within the report.



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About us

Global Payments Inc. (NYSE: GPN) is a leading payments technology company delivering innovative software and services to our customers globally. Our technologies, services and team member expertise allow us to provide a broad range of solutions that enable our customers to operate their businesses more efficiently across a variety of channels around the world.

Headquartered in Georgia with nearly 24,000 team members worldwide, Global Payments is a Fortune 500® company and a member of the S&P 500 with worldwide reach spanning over 170 countries throughout North America, Europe, Asia Pacific and Latin America.

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