

Dear Stripe community,

It's an odd time to sit down and write an update on Stripe's business and our industry. As the headlines switch abruptly from global pandemic to geopolitical tragedy, the machinations of the internet economy seem less pressing by comparison. The past two years have taught us, however, that we all have a job to do. Millions of internet businesses are now relying on Stripe to sell to customers all over the world. So we're sharing this update on what's happening at Stripe, what we're seeing in the industry, and what we have planned.

Collectively, businesses on Stripe processed more than \$640 billion in payments in 2021, up 60% from the prior year. (Since a lot of this came from one-time behavioral adjustments caused by the pandemic, 2022 won't match the same level of growth.) These payments came from a rapidly growing group of businesses: 1,400 new companies (and 100 nonprofits) joined Stripe each day last year. And, over the course of 2021, more than 100 businesses every day passed the milestone of \$1 million in lifetime sales on Stripe. We often say that the internet economy is in its early days, which may sound trite, but everything we observe directly gives us confidence that it's true. Online spending was only 12% of global spend in 2021. There's a long way yet to go.

Stripe's mission is to grow the GDP of the internet. That means both helping existing economic activity migrate to the internet and enabling completely new undertakings that couldn't exist in an offline world. We're part of a larger ecosystem of other infrastructure companies, SaaS tools, indie developers, bootstrappers, investors, open-source projects, engineers, marketers, accountants, supportive partners, parents, and educators that are playing a part in this growth.

We think we can help grow the internet economy in four primary ways:

- Increasing the rate of new business creation by lowering the cost and complexity of getting started.
- Helping established enterprises adapt their business models to the internet.
- Increasing cross-border commerce by simplifying and standardizing the complex international payments landscape.
- Lowering the costs of scaling by providing simple, reliable, secure, and developer-friendly APIs and services.

In this letter, we'll describe how we're progressing in those four categories and touch on two interesting new trends we're seeing: the creator economy and embedded finance.

Startups

Our first customers were friends who were starting companies, and we still spend a lot of time with startups. We try to better understand what they're up to, what they need, and what could help more get started. We want to support startups from the first lines of code through IPO and beyond. 60% of the technology companies that went public in 2021 are Stripe customers.

Some of the new functionality and improvements we made last year include:

- Payment Links. We built this because it became clear that even the small amount of code involved in setting up Stripe can be an impediment in the early days.
- Stripe Tax. We heard how much hassle is entailed in sales tax and VAT. We acquired TaxJar (the leaders in sales tax filing) and launched Stripe Tax, one of our fastest-growing products.
- Stripe Invoicing. Our Invoicing product has existed for a few years, but we've made big strides in expanding its global coverage.
- Revenue Recognition. Handling revenue recognition is always tricky at scale (and it's particularly nuanced for SaaS companies), so we launched Revenue Recognition to help automate this. We also acquired Recko, a very cool company based in Bangalore, and have an exciting roadmap in store for 2022.

One of the first products we launched to help more companies get started was Stripe Atlas. After years of tireless iteration and improvement by the team, Atlas is now used for around one in ten new C Corporations in Delaware, a milestone that we're quite proud of.

The biggest structural investment we've been making is in our fintech products. In Y Combinator's recent blog post, they described that 13% of the winter 2022 batch is comprised of consumer companies—but 24% are fintech companies. We're making heavy investments in Stripe Treasury (easy money management, powering products like Shopify Balance) and Stripe Issuing (programmatic card issuance for companies like TripActions). We'll talk about this trend more later on.

Lastly, when we talk with policymakers and regulators, we work hard to represent the aggregate observations of the founders and early-stage businesses that we work with. (Onerous financing processes and sluggish EIN issuance mechanisms, we're looking at you.)

Enterprises

When we started out, our startup focus was a drawback in the eyes of incumbent businesses. ("We want an enterprise-oriented payment provider," we heard.) Over the past decade, this dynamic has inverted. Established businesses have realized that they need to match the customer experience that the world's most exciting startups invent, and that to be stuck on legacy technology is a business liability.

In practical terms, getting payments right in the enterprise means things like having a direct relationship with your customer (rather than relying on various intermediaries), adopting

modern business models like subscriptions and marketplaces, being a truly global business by properly supporting the growing panoply of global payment methods (plus Apple Pay, Google Pay, and so forth), having real-time visibility into your supply chain, and being able to properly integrate in-person and online commerce channels.

To give some recent examples: *Le Monde*, France's largest daily newspaper, chose Stripe to help grow its international readership. Thanks to digital subscriptions, Le Monde has more than doubled its subscriber base over the pandemic and recently launched the English version of its newspaper to serve more readers around the world. In January, Ford signed a five-year partnership with Stripe to build ecommerce experiences for their car, truck, and services customers and dealers. Atlassian, which has built one of the world's leading SaaS companies with a unique sales model, chose to re-engineer its subscription and revenue management atop Stripe Billing.

Some of what we've been working on over the past year includes:

- Investing in Stripe Terminal. We're seeing enterprises move quickly to consolidate online and
 offline payments since it makes the customer experience a lot better. As part of our efforts,
 we recently acquired BBPOS, the world's leading mobile point-of-sale hardware
 manufacturer.
- Expanding Stripe Connect, our multi-party payments product used by everyone from Shopify to Deliveroo to Mercedes-Benz Group. We've been working hard to enable platforms and marketplaces to scale globally (with new countries supported), to easily manage evolving compliance requirements, and to offer financial services to their customers. (This last part is described in more detail below.)
- Improving our payments performance. We've been honing our machine learning models that optimize authorization rates, building out global coverage for real time expired card updaters, rolling out Network Tokens, and adding direct connectivity to new networks.
- Rapidly adding new rails to our Global Payments and Treasury Network (GPTN). We now support more than 50 local payment methods around the world and support payouts to 72 countries.

Of course, many of the above improvements benefit not only enterprises but Stripe customers of every size.

In all, we now work with more than 50 category leaders, which we define as businesses that process more than \$1 billion in payments on Stripe, and that set continues to expand rapidly.

International commerce

It's not widely known that the majority of new businesses joining Stripe last year came from outside the United States. Back home, 85 European companies passed the milestone of a \$1 billion valuation in 2021, registering a unicorn growth rate that's more than twice that of the US. The number of businesses on Stripe in Latin America and APAC grew 518% and 106%, respectively, over the course of the pandemic. We expect that a very large fraction of the important tech companies of the next decade will be built outside of the traditional US tech hubs.

We often observe that we have two kinds of customers: companies that operate globally and companies that aspire to. This means that, unlike in the offline world, even a small internet business operating out of West Virginia may benefit considerably from supporting iDEAL, the most popular online payment method in the Netherlands. Between 2019 and 2021, cross-border payment volumes have at least doubled in every region in which Stripe operates. We're continually looking to simplify global selling to drive cross-border trade up further.

On average, businesses from Austria, Belgium, Germany, the Netherlands, and Poland have increased their sales from EU customers by over 40% after accepting popular European payment methods (such as Sofort, iDEAL, and Bancontact) and reduced transaction costs by 40 basis points. (That is, almost half a percent more of their topline revenue ends up in their bank accounts.) On average, businesses that offer buy now, pay later methods (like Afterpay or Klarna) have seen a 27% increase in sales. Wherever you're based, more payment methods can make a difference for your business.

The foundations

Stripe's customers rely on us for secure and reliable payments: we're well aware that if we don't deliver that, nothing else matters. We are investing hundreds of millions of dollars each year in our security and reliability foundations.

Cybersecurity attacks are becoming more frequent and sophisticated, while the effort required to comply with the tapestry of personal data regulations (such as GDPR and CCPA) is formidable. The stakes for getting any of this wrong are also getting higher. In 2021, reported ransomware attacks were up 105%. Cyberinsurance premiums are growing 10% per year and likely still not keeping up with risk. We avoid describing our security practices in detail to avoid assisting adversaries, but we're proud of the level of protection that our customers automatically benefit from by virtue of building atop the Stripe platform.

Reliability is one of the top concerns for companies selecting their infrastructure, and rightly so. We now handle more than 500 million API requests every day with 99.999% uptime. At our peak load during Black Friday and Cyber Monday last year, we handled 99.9998% of API requests successfully. (That's 1.2 seconds of unavailability over that entire week.) Many of our customers saw large spikes in usage over the course of the pandemic, with companies like Instacart, Zoom, and DoorDash rapidly scaling to new heights. Our infrastructure teams have built elastically-scalable infrastructure that can readily support these growth spurts.

We've been continuously evolving the Stripe innards in support of customer-facing performance and reliability. Much of Stripe—15 million lines of code, in fact—is built on Ruby, for which we built (and open-sourced) typed Ruby. Type-checking allows us to both move fast and eliminate entire classes of bugs. Similarly, we recently migrated our largest frontend codebase to TypeScript. This involved landing the biggest single code change in Stripe's history: 3.5 million lines changed in a single weekend. We're also rebuilding the architecture (in a more service-oriented fashion) on which the core Stripe API calls run; our pilot customers running on that new architecture are seeing 99th percentile latency improvements of over 50%. We'll continue over the course of this year to make Stripe more reliable and performant for you.

The world around us

Access to opportunity facilitated by the internet is still underestimated: it's as if several billion people recently immigrated to the world's most vibrant city and the system hasn't yet equilibrated. A bigger city generates notable gains in economic productivity, creativity, and innovation—and when that metropolis is the internet, this can take interesting new forms.

We are delighted by the growth in the **creator economy**, a term that refers to directing payments to those creating content or products on internet platforms: think developers on GitHub, podcasters on Spotify, or the Twitterati on Twitter (with its Ticketed Spaces) all getting paid directly for their creations. Creators take all forms, from Craig Mod who writes a paid newsletter about walking the Japanese countryside to Charli D'Amelio, the most followed and highest-earning creator on TikTok. Last year, we indexed the creator economy by measuring the growth of 50 popular platforms on Stripe.

We're bullish on the creator economy for two big reasons. First, because of the broadly participatory cultural dynamism that it is enabling. Production decisions shouldn't just be made in centralized fashion by corporate managers; the growth of everything from Substack to Teachable shows that there are important topics, niches, and other forms of cultural creation that have been left under-addressed. New entrepreneurs ("solopreneurs") are capitalizing on these opportunities and we're building lots of functionality in Stripe Connect to help platforms serve them.

Second, we're excited because it represents compelling economic opportunity for people in emerging markets. Many creator-economy platforms are, by their nature, just as accessible to people in Lima as they are to people in London, and the compensation offered by those platforms looks relatively more favorable in places with lower GDP per capita.

Another trend we're watching with interest is the explosive growth in fintech (a label that didn't exist when Stripe started out) and especially in **embedded finance**. Small businesses around the world are currently underserved for financial services or experience additional friction to access them. Research shows that:

- Only 48% of small businesses say they have access to all of the financing they need
- 55% of businesses have to visit a local branch in-person
- 23% of businesses have to send a fax in order to open a bank account

In short, the landscape still looks pretty antiquated.

Increasingly, these small businesses are running on SaaS platforms with expansive visions for helping SMBs. For example, retailers and restaurants might run on Lightspeed while home service professionals might use Housecall Pro or Jobber. These platforms combine tailored software services, like scheduling and dispatching plumbers or electricians, with Stripe-powered building blocks for card payments, invoicing, and more.

Platforms are now integrating additional financial services directly into their products, such as business expense cards, monetary accounts, and loan access. As just one example, Lightspeed launched Lightspeed Capital to give its customers access to loans. This tends to be a huge win for both sides, offering SMBs financial services they may not otherwise have had access to and creating new revenue streams for the platforms (they can increase their revenue by 2-5x by offering those services). We're increasingly seeing platforms become a one-stop destination, enabling customers to manage all aspects of their business in their SaaS system of record.

Putting users first

Stripe is now comprised of more than 7,000 people working across 23 countries. We have, of necessity, expanded a great deal during the pandemic. We sometimes use the analogy of solid rocket boosters: once lit, they can't be extinguished. They remind us of our customer base. We're proud to work with the fastest-growing companies in the world, from Airtable to Zoom, but it also means that we have to work hard to stay ahead of their needs.

We look for people who aren't put off by that intensity and rigor. Nobody enjoys postponing a launch or redoing a page for the third time, but we try to find people who'd rather do that than ship something subpar. And we try to find people who genuinely care about making those around them better off and can face challenges with a good sense of humor.

The Nebraskan philosopher Warren Buffett once referred to the "ABCs of corporate senescence": arrogance, bureaucracy, and complacency. We're terrified of these failure modes. We work hard to convey to new people joining Stripe that humility and curiosity are strict prerequisites for improvement. We need to continually iterate on our corporate processes to ensure that we strike the right balance between providing a structure and imposing a straitjacket. And, fortunately, it's hard to become complacent when there are customers with so many needs that we are (painfully!) unable to yet serve today.

Internally, our first Operating Principle is "Users First". Some companies are technology-first: they do some R&D, invent interesting tech, and figure out how to commercialize it. That's a very viable and successful approach for many companies. But Stripe is lucky enough to serve millions of smart, discerning, and demanding businesses that aren't shy about telling us what they need. So everything we develop at Stripe tends to stem from a user need and works backwards to find a good way to solve it.

Users First is the foundation of both our strategy and our tactics. It's our strategy because our users are sophisticated and tend to understand exactly what's holding their business back. We therefore don't need to dazzle them with products they've never thought of. Users First is the foundation of our tactics because Stripe is mission-critical infrastructure for our customers. (An hour-long outage isn't a huge deal for many online services. For Stripe, however, many of our customers would view that as cataclysmic.) The businesses running on Stripe use us to charge their customers, calculate revenue, make payroll, file taxes, pay suppliers, and perform a variety of other functions that have to be executed exceptionally reliably.

We're well aware that there's plenty about Stripe we need to improve; our goal in describing our approach is to give you a sense of how we go about doing so. We're delighted when Stripe users share ideas for what they'd like to see improved or expanded—it's likely that the leader of your favorite Stripe product is reachable on Twitter, and we personally love receiving emails from Stripe's customers.

The internet economy that you participate in is one of the bright spots of today's global economy: talented teams are building exciting products not previously possible, people around the world have opportunities they wouldn't otherwise have, and many important long-term trends are still pointed in the right direction.

If you, like us, nerd out on this stuff, come join us at Stripe Sessions! It's our once-a-year conference where we feature both what's going on in the industry writ large and all the new stuff we're launching at Stripe. You can reserve your place at sessions.stripe.com.

Best,

John and Patrick