

VISA



Visa Asia Pacific:
Network of Networks

Contents

- 3 Foreword
- 4 Key Trends Driving Payments in Asia Pacific
 - 5 Trend 1: Payment experiences are becoming more diversified, driven by an abundance of choice
 - 6 Trend 2: Payment digitalisation is accelerating, with a proliferation of options beyond cards
 - 7 Trend 3: Payment infrastructure is modernising
 - 8 Trend 4: The line between money and data movement is blurring
 - 9 Trend 5: The payments ecosystem is becoming more flexible and expansive
- 10 Visa's Network of Networks Strategy
 - 11 All Endpoints
 - 12 All Networks
 - 13 Guaranteed Settlement
 - 14 Trusted Standards
 - 15 Capabilities Unbundled
- 16 The Next Phase of Growth

Disclaimer

Case studies, statistics, research and recommendations are provided "AS IS" and intended for informational purposes only and should not be relied upon for operational, marketing, legal, technical, tax, financial or other advice. You should consult with your legal counsel to determine what laws and regulations may apply to your circumstances. The actual costs, savings and benefits of any recommendations or programs may vary based upon your specific business needs and program requirements. By their nature, recommendations are not guarantees of future performance or results and are subject to risks, uncertainties and assumptions that are difficult to predict or quantify. Visa is not responsible for your use of the information contained herein (including errors, omissions, inaccuracy or non-timeliness of any kind) or any assumptions or conclusions you might draw from its use. Visa makes no warranty, express or implied, and explicitly disclaims the warranties of merchantability and fitness for a particular purpose, any warranty of non-infringement of any third party's intellectual property rights. To the extent permitted by applicable law, Visa shall not be liable to a client or any third party for any damages under any theory of law, including, without limitation, any special, consequential, incidental or punitive damages, nor any damages for loss of business profits, business interruption, loss of business information, or other monetary loss, even if advised of the possibility of such damages.

Foreword



Ciyi Lim,
Vice President,
Head of Innovation,
Asia Pacific at Visa

Visa's global payments network is evolving beyond the card

In a world that is accelerating towards digital-first experiences, Visa is leveraging our global network to connect the world and move beyond cards, to enable the movement of money and data for everyone, everywhere. With consumers, businesses and governments able to access growing number of ways to pay and be paid, Visa is focused on becoming the network of networks. This means Visa can be a single point of connection for any transaction, whether it's on the Visa payments network or beyond.

In this report, we outline the key trends in Asia Pacific that are shaping Visa's network of networks strategy and the core components that make up this approach, as we look towards the future of commerce.



Key Trends Driving Payments in Asia Pacific

Visa sees five key trends shaping the payments landscape in Asia Pacific, driving consumers, businesses and governments towards new commerce solutions and experiences.

While the full impact of 2020's global COVID-19 pandemic will not be completely clear for some time, Visa has already seen an acceleration of these trends as digital commerce becomes even more embedded in daily life.

Trend 1

Payment experiences are becoming more diversified, driven by an abundance of choice

Making a payment in cash is largely the same experience, regardless of the situation, location or currency. In contrast, digital payment experiences are more variable and fragmented.

There are more ways to transact:



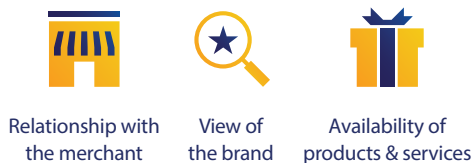
and more places where commerce can happen (e.g., face-to-face, online, in-app, smart devices).

Diversification is also being fuelled by new players entering the industry, from fintechs that are focused on payments to big techs that are branching out into the world of commerce. The conventional wisdom for several years was that the rise of digital commerce would simplify and streamline the payment experience. The reality is the opposite: more players delivering more experiences creates an abundance of choice and increases fragmentation.

Most importantly, the payment experience is secondary.

Consumers will use multiple applications and platforms to serve the same need. For example, they may have several different apps they use for food delivery, rotating between them based on offers, what restaurants are available on which platforms, and their overall affinity for the app. They are not basing their decision on the payment experience.

With so many choices in how and where they shop, consumers will base their purchasing decisions on other factors, such as:



Visa's view

Payments must meet buyers wherever they choose to transact

The reality is that people will put up with a less than optimal user experience if it leads to them getting the items they want. Because the payment experience is not the key driver of consumer behaviour, it has to be ubiquitous. Regardless of the channel or mode of purchase, the payment ecosystem must be able to support the transaction when and where it occurs, across the expanding range of fragmented channels.



Trend 2

Payment digitalisation is accelerating, with a proliferation of options beyond cards



Even as the region has been at the forefront of digital commerce, there remains an enormous opportunity to displace cash and cheques in Asia Pacific.



In Asia Pacific, over US\$6 trillion is still processed in cash and cheque – that’s almost 50% of personal consumption expenditure



Mobile commerce in Asia Pacific:

- Over half of 2.8 billion mobile phone users have made digital payments
- 700 million people use tap to pay mobile payments

In the wake of COVID-19, more individuals are going digital for everyday needs, adopting touchless payments such as tapping to pay and relying more on eCommerce.

Visa’s view

The way people access and interact with money will change

With a growing number of ways to move money:

1. A consumer’s first experience with digital payments may not always involve a card.

This is a significant shift in how digital payments have grown over the past 60 years. Traditional notions of money will change and blur as the manner in which how and when they choose to fund their payments can differ. For example, with ‘buy now, pay later’ solutions, we are seeing an increase in the use of debit products to fund instalment purchases. This empowers consumers by giving them choice, whether they use their own funds, banks’ funds, pay up front or through scheduled repayments.

2. Standards and interoperability will rise again in importance to enable participation, security, and efficiency of money movement across all types of flows.

When there were only a handful of players in payments, interoperability was important, but also easy to establish. In a landscape with many different players and networks, inefficiencies in the money movement process will show. This will lead to an increased emphasis on standards that resolve those inefficiencies and enable transactions to flow across different networks.



Own funds



Bank’s funds



Pay up front



Scheduled repayments



Participation



Security

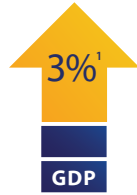


Efficiency of money movement

Source: Visa Investor Day 2020; Retail Sales and Retail Ecommerce from Emarketer (Dec2019 latest). Proximity payment: ages 14+; mobile phone users who have made at least one proximity mobile payment transaction in the past six months; includes point-of-sale transactions made by using mobile devices as a payment method; excludes transactions made via tablet. Made digital payments in the past year (% age 15+, 2017) from the World Bank

Trend 3

Payment infrastructure is modernising



Governments around the world are recognising the macro economic benefits of digitising payments, which can boost GDP by as much as 3 percentage points¹.



Governments also recognise that digital payments can help in their efforts to reduce money laundering, fraud and grey economic activity.



Underpinned by a focus on making digital payments accessible to its citizens, governments are developing national payment schemes or investing in real-time payment infrastructure.

Visa's view

Regulation will accelerate innovation across the value chain

Digital payments will commoditise, but there will be new opportunities for growth. Industry players must have the flexibility to evolve traditional models and go beyond transaction processing, clearing and settlement, into overlay services such as data, intelligence, security and risk management capabilities.

In some cases, new regulation could drive the standardisation of digital payments, reducing differentiation across payment options, which could lead to increased margin pressures.

However, regulation is also an enabler, creating opportunities for new entrants and incumbents, ultimately creating an environment where regulation, competition and market forces come together to drive innovation.

¹ How Cashless Payments Help Economies Grow, BCG

Trend 4

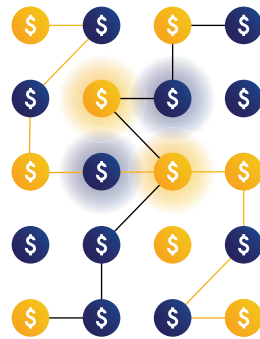
The line between money and data movement is blurring

There is no shortage of statistics that puts into perspective the enormous scale and exponential growth of data.

By 2025, it's estimated that 463 exabytes of data will be created each day globally². Every industry around the world has come to recognise the vastly transformative power of data, and payments is no exception.

The line between money and data movement is blurring. Data is actually a progression of currency. Money movement has always been about the exchange of value, and now that value takes different forms than just currency. We are actually closer today than ever to Visa founder Dee Hock's original vision:

“Digital money would be a universal currency.”



However, in order to make data useful, it cannot exist in isolation. It needs certain attributes to be valuable, namely:



Sustainably valuable

Grows with customer base



Proprietary

Leads to improvements that are hard to copy



Expansive

Creates a network effect by enhancing the experience

Visa's view

Open data will be key to extracting value

Extracting the highest value from data is where open data comes in. Our view is that open banking is better referred to as open data, because in digital commerce environment, money is data.

Three core beliefs we hold about open data:



Partnerships

Open data will grow in many ways, but it will be underpinned by partnerships, which will contribute to the creation of greater network effects



Source of future value

How data will be exchanged is the source of future value, and those who have proprietary knowledge to control the process will have a competitive advantage



Harness and protect their value

Companies solving for increasingly complex consent and security needs will reap the largest benefits, and success will come to those who can harness and protect their value across different customer groups

Having access to data is no longer enough. Many data sources – demographics, bank data – can be replicated. These principles will be core to extracting value from data. Furthermore, there will be lots of data movement in an open environment – consumers will lift and drop their information between companies on a whim. The advantage will be with whomever can capture this movement and make the data more than just the sum of its parts.

² <https://www.weforum.org/agenda/2019/04/how-much-data-is-generated-each-day-cf4bddf29f/>

Trend 5

The payments ecosystem is becoming more flexible and expansive

Today, there are more players in payments than ever before. Many of these new players aren't trying to own the entire value chain, but are focused on specific aspects of the experience and plugging into what others have built.

As an open network business, Visa has the responsibility to partner with players that are bringing innovation into the global digital payments network. At the most fundamental level, what Visa does is connect buyers with sellers in order to transact in a growing variety of channels where commerce happens. We are adopting a more flexible view of the four-party model, where closed-loop players can join our open model. We believe this benefits the entire ecosystem, because ultimately everyone in the ecosystem wants to deliver the best possible customer experience. This evolution presents opportunities to add value to the customer experience in new ways.



Visa's view

Payments are unbundling to meet demand

As the number of participants in the ecosystem expands, there is demand for capabilities, user experiences and standards to be available across a wider set of players and payment options. The demands of new players and operating models mean that the existing ways of consuming services need to become modular and disaggregated.

These unbundled capabilities span three key areas:



Trust

Capabilities that add a layer of security and reliability to transactions



Convenience

The ability to make transactions in the channels and apps people are already using everyday so they have an integrated, seamless experience



Choice

Empowering buyers and sellers with more options, such as instalment services

VISA





Visa's Network of Networks Strategy

There are five main components of Visa's network of networks strategy:

- All Endpoints
- All Networks
- Guaranteed Settlement
- Trusted Standards
- Capabilities Unbundled

This section of the paper will explain each of these components and how they fit into the overall strategy.

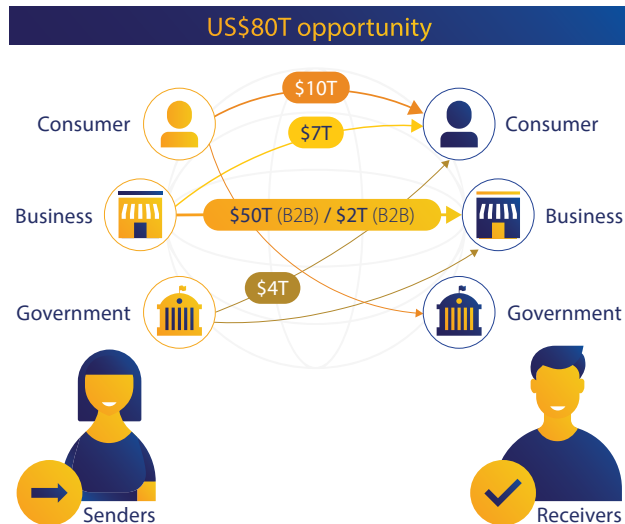
All Endpoints

Endpoints are access points that senders and receivers use to move money, such as a bank account, card or a mobile app.

Visa's network of networks can now reach more endpoints, meaning we can drive further digitisation of new payment flows and bring the strength of our network to new partners. Today, we can reach 2.1B banked and 770M unbanked through a combination of 970M credentials and 700M bank accounts in Asia Pacific. By partnering with 20+ wallet players, we can reach an incremental 1B+ users and 65M+ merchants in the region.

Digitising new payment flows in Asia Pacific

While the bulk of digitising payments has been in consumer to business payments, we have identified other flows where the digitisation of payments represents a US\$80T opportunity:



Bringing open-loop ecosystem benefits to new partners

We are rapidly expanding our endpoints through the opening of traditionally closed-loop ecosystems. This allows us to bring the following open-loop ecosystem benefits to our partners such as:



Expanding solutions: We help non-traditional payment entities to expand their payment capabilities and tap into our digital solutions, such as the ability to issue a payment card digitally



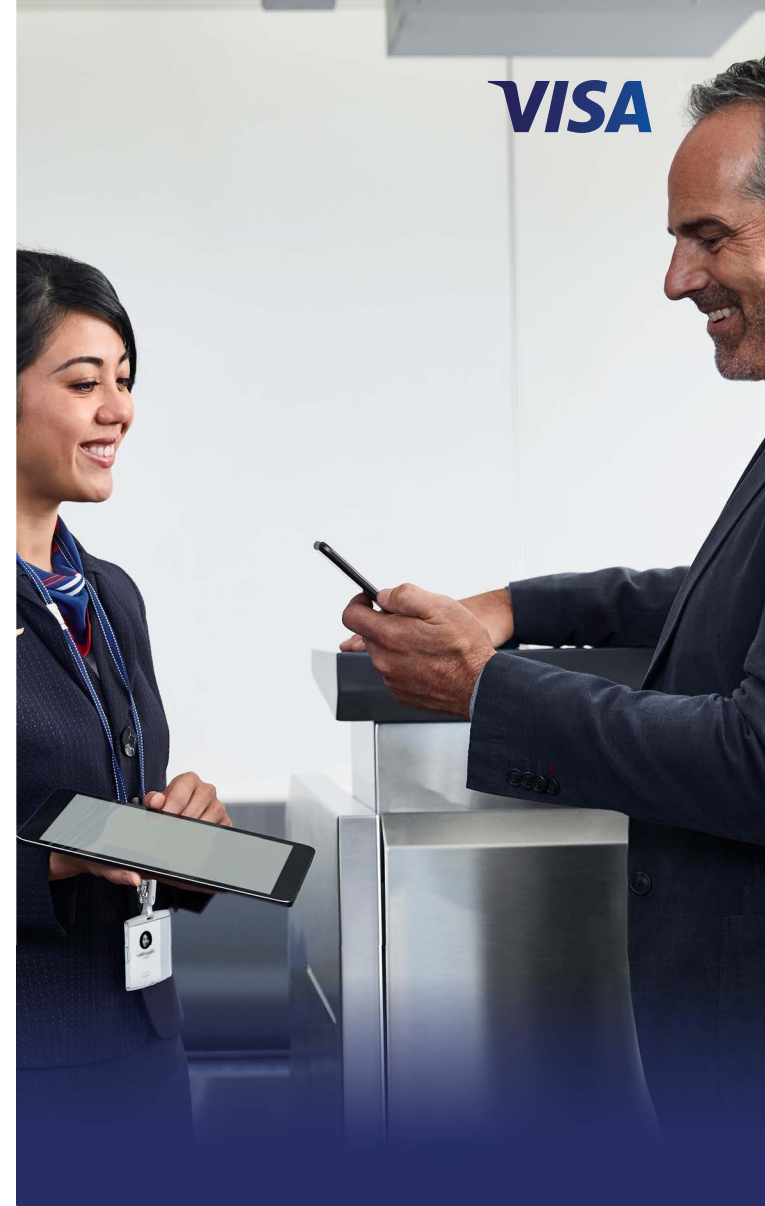
Going global: We help our partners scale and reach new market segments as Visa is accepted in 200+ countries



Industry expertise: With Visa's experience in the global payment space, partners can leverage our expertise and established best practices to grow their own businesses



Interoperable standards: Visa is able to share with our partners the standards that ensure a secure, trusted commerce network



Visa supports Senders and Receivers wherever they transact, and whomever they want to transact with

Note: Regional total rounded. Payment opportunity is defined by destination of transaction in Asia Pacific
Sources: McKinsey Global Payments Map; Visa Analysis.

All Networks

Being the network of networks, a transaction can start on one network and end on a different one.

Networks are the infrastructure that enables money and data movement between endpoints.

Traditionally, money movement was card-based and facilitated by networks like VisaNet.

We are building, acquiring and partnering with non-card networks to extend our reach, such as Visa B2B Connect, Visa Direct Payout Services and Real-Time³ Payments.

Visa's Networks



VisaNet

VisaNet is the world's largest electronic payments network. Apart from our core strengths in security, reliability, speed, scalability and availability, we are future-proofing VisaNet based on four guiding principles:

- Accelerate payment flows
- Provide technology & innovation leadership
- Expand access
- Smarter capabilities



Visa B2B Connect

Visa's newest (non-card) network that was designed from the ground-up. It allows banks to move high-value, cross-border B2B payments for corporate clients directly from the origin bank to the recipient bank, through a multilateral and global network.



Visa Direct Payout Services

Visa Direct is Visa's global real-time payments platform that provides a fast, convenient and secure way to deposit funds directly to a Visa account. With Visa Payments (formerly Earthport), we have expanded our reach to 99% of bank accounts in 88 countries.

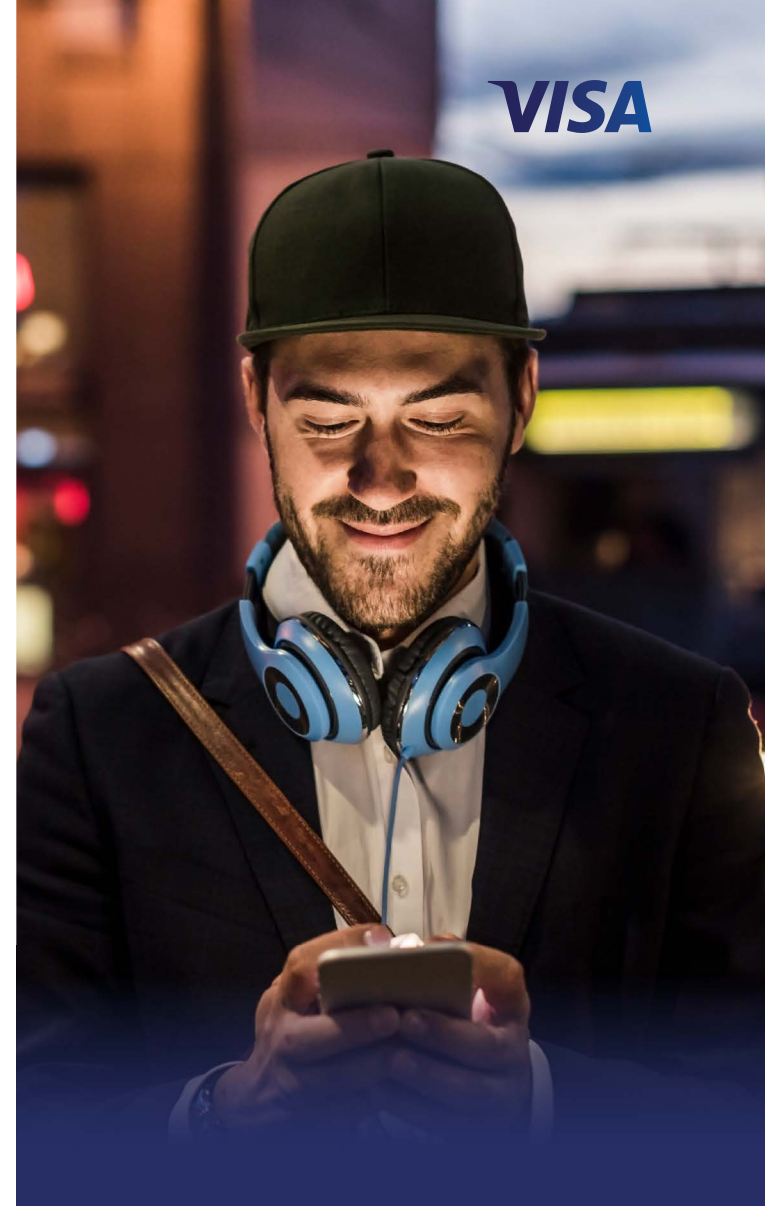
Visa Direct is often used for small to medium ticket transaction amounts with high frequencies, such as cross-border remittance, on-demand merchant settlement and funds disbursement to gig economy workers.



Future network capabilities

Visa is expanding our network capabilities as we build out solutions for real-time payments.

³ Actual fund availability depends on receiving financial institution and region. Visa require fast-fund enabled issuers to make funds available to their recipient cardholders within a maximum of 30 minutes of approving the transaction



Our new networks connect senders and receivers to **enable money and data movement across more use cases**

Guaranteed Settlement

Guaranteeing settlements is a key part of Visa's network of networks strategy for a fundamental reason. The Visa Settlement Service (VSS) ensures that both the sender and receiver have the confidence and peace of mind that the money gets to where it's supposed to go, when it's supposed to be there.

The Visa Settlement Service has four key functions:



Maintains available funds
in partner banks globally



Calculates net financial position
of originating and receiving institutions



Transfers funds
between institutions



Bears
counterparty risk

Through the VSS, Visa offers guarantee of funds received, immediacy of transfer and movement of money across all networks. In addition to that, VSS drives network efficiencies.

VISA



Moving money with Visa gives our partners the **assurance that it will always be received**

Trusted Standards

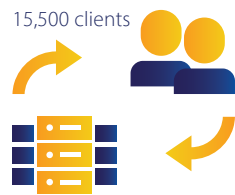
Standards provide a common, interoperable experience so that money can be moved across networks to and from all endpoints.

Our standards can be grouped into three categories:

Operational



We connect 15,500 clients with six data centres globally. With over 40 years of investment and evolution, we ensure 99.999% uptime and service availability in over 200 markets



6 data centres globally

Security

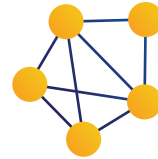


We mandate a data protection framework that devalues and protects account information. We also analyse 500 data elements in about 1 millisecond to identify fraud and collaborate across industry to combat fraud



Analyse data to identify and combat fraud

Network rules



We protect participants by adhering to a common set of operating rules, which upholds interoperability so anyone can start and end a transaction anywhere on the Visa network



Adhering to a common set of operating rules



With our best in class standards as the bedrock, Visa enables money to be moved across the networks by all endpoints, so that you **can start anywhere, and end anywhere with Visa**

Capabilities Unbundled

In the trends section, we discussed the fragmentation of payment experiences and the need for the four-party model to become more flexible.

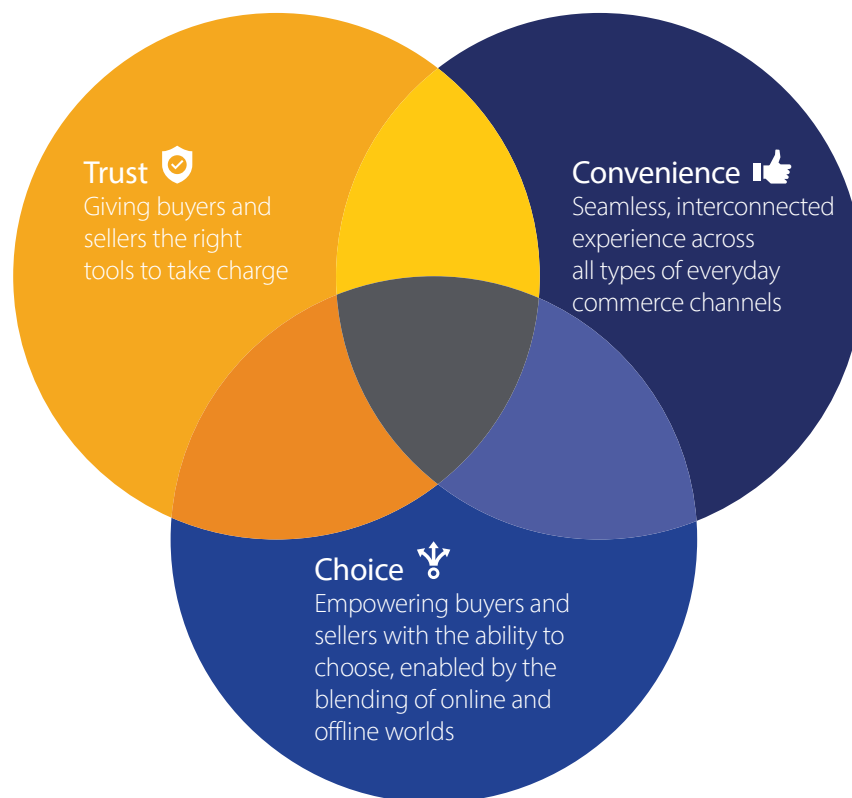


The unbundling of Visa's capabilities is a response to that

We know that in this new landscape, our partners won't always need or want to consume every single Visa service in the way that we've packaged them up internally.

We recognise that adding value is about being able to offer our capabilities in a more modular way, so they can be more easily accessed across all networks by all participants.

Visa capabilities that can be deployed across all networks follow three foundational principles:



With capabilities unbundled, Visa can drive quality and value across a broader set of transactions as we **become the network of networks**

The Next Phase of Growth

Globally, we are seeing payments at its inflection point, and there's opportunity to move money via our network of networks.

In the next five to ten years, new flows of money, new players and new partnerships will open tremendous opportunities for the payments ecosystem.

Visa's strategy is about extending our reach to more buyers and sellers, via more endpoints and more networks beyond our own. We believe the trust, reliability and standards we bring add value to this expanded payment ecosystem.

As the ecosystem and players within it continue to stretch beyond the traditional four-party model, we are delivering Visa's network capabilities in a more flexible, modular way.

For more information on Visa's network of networks, please contact your Visa account representative.

VISA everywhere
you want to be