



VisaNet

The technology behind Visa



Fifty years ago, Visa had a vision: To provide consumers, businesses and governments around the world with a better form of payment. The technology behind this vision is VisaNet, a proprietary transaction processing network.

VisaNet today connects:

2 billion cards¹

Millions of merchant outlets

2 million ATMs¹

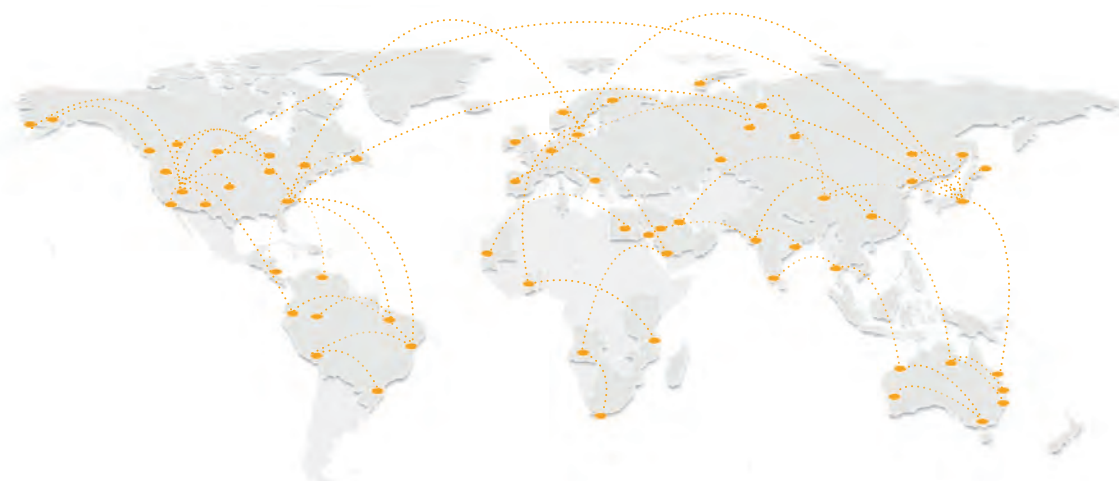
15,000 financial institutions

Today, Visa offers a comprehensive set of payment products and services. Visa-branded credit, debit, commercial, prepaid, mobile, and money transfer products are a leading choice of cardholders and financial institutions in 200 countries and territories. VisaNet also makes it possible for us to deliver the latest innovations for an increasingly mobile society, providing consumers with mobile financial services, such as mobile payments, money transfer and top-up services.

¹ Data as of June 30, 2012. As reported by client financial institutions and therefore may be subject to change; includes ATMs in the Visa Europe territory.

What is VisaNet?

VisaNet supports economic empowerment to people, businesses, banks, and governments in 200 countries and territories.



VisaNet: Connecting the world through electronic payments

Around the world, there continues to be a steady migration from cash and checks to electronic payments for every need. Consumers and businesses have discovered electronic payments offer them levels of convenience, reliability and security that are unmatched by any other form of payment.

The advantages of electronic payments have led more business and individuals to decide to reduce their use of cash- and paper-based payments. National and local governments have adopted electronic payments for everything from disbursing social benefits to collecting tolls and transit fares. These trends provide economic empowerment to more people than ever before. As a result, electronic payments now account for 66 percent of all consumer spending worldwide.²

Visa has provided electronic payments to business and consumers for decades, constantly investing to increase their convenience, reliability, security, and value. The technology behind Visa is our global network: VisaNet. For nations all over the world, this proprietary payments network already provides:

- A full range of domestic transactions processing services, from credit and debit cards to funds transfer, mobile payments and services, online transactions, commercial payments, and secure delivery of government benefits.
- An array of value-added information services that deliver efficiencies, cost savings and allow governments and businesses to effectively manage the use of electronic payments.
- An instant connection to the global economy for governments, central banks and domestic financial institutions and merchants.

² SOURCE: SEC Filings, Euromonitor, January 2012, HIS Global Insight, The Nilson Report #987, analysis by Visa Business and Economic Insights

Products and Services Enabled by VisaNet



VisaNet

The world's largest electronic payment network

As more people, more businesses, merchants, and governments have adopted electronic payments, greater demand has been placed on the infrastructure required to process these transactions. As a leading global payments technology company, Visa continues to enhance its payments processing network, which today is capable of handling more than 24,000 transaction messages per second with reliability, convenience and security.

In the early 1970s, Visa created one of the world's first electronic credit card authorization systems. Since then, Visa has been continually improving, refining and expanding VisaNet. We've invested hundreds of millions of U.S. dollars in our network to ensure it remains ahead of the growing demand for secure and reliable electronic payments.

Over the years, Visa has applied technology to provide our clients with information, efficiencies and global connectivity. Today, VisaNet provides domestic and international processing of credit, debit, prepaid, and commercial payment products to nations in every corner of the world. Our synchronized, state-of-the-art data centers are connected to the world through 1,600 secure network endpoints linked by 1.2 million miles of fiber optic lines.

VisaNet is a centralized and modular payments network, providing three essential functions in one complete, flexible package:

Fast

Transactions processed in less than one second

Secure

Multiple, advanced defense layers

Reliable

Near 100 percent network availability in 15 years

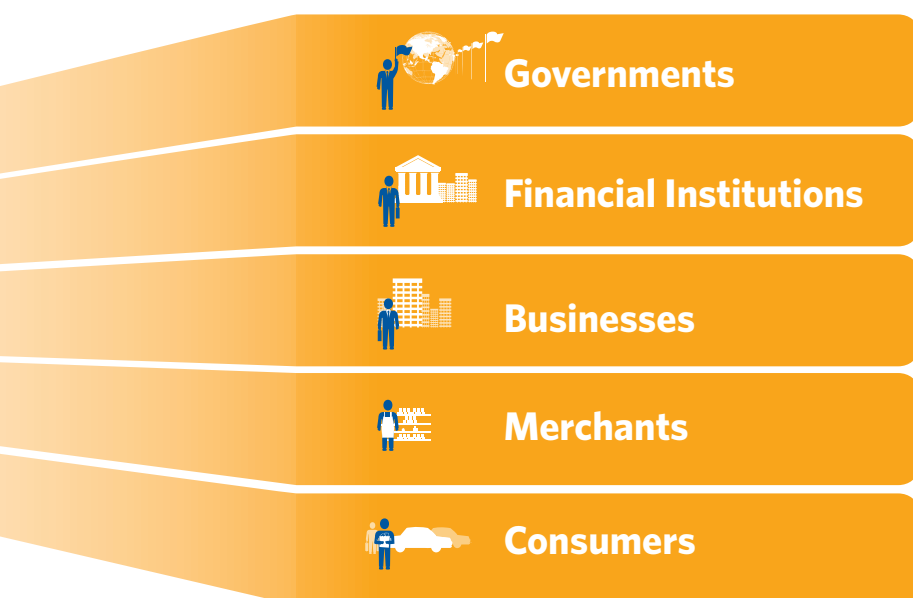
Scalable

Processing 80 billion³ transactions annually

Flexible

Domestic processing in more than 100 countries

³Includes authorization & clearing transactions for payment and cash disbursements.



Transaction Processing Services

- More than 150 million transactions every day authorized in 175 currencies
- Globally, unsurpassed merchant acceptance of Visa as a form of payment
- Sophisticated, automated dispute resolution, minimizing cost and time needed to handle disputed transactions

Risk Management Services

- Protection from fraud, theft or unauthorized use for issuers, acquirers and merchants alike
- Real-time fraud scoring and multiple layers of security against data theft and misuse
- Fraud remains near historic lows, less than six cents per \$100 transacted on Visa products, despite huge increases in network volume

Information Services

- Transform transaction data into actionable information and business intelligence
- Help businesses make informed procurement decisions, optimize revenues and business processes, and enrich the cardholder experience
- Allow banks and merchants to offer personalized cardholder rewards and send Visa transaction alerts directly to consumers via SMS text message
- Empower governments and businesses to better manage expenditures and ensure funds go where they should, and help spot potential waste, fraud or abuse

Impact of Visa



Financial Inclusion

Thirty-four million Indians join the banking mainstream yearly, including Kunal Chheda. Visa debit helped Kunal go cashless, leaving worry behind. Now he pays bills, shops the Internet and books travel in minutes.



Saving Governments Money

When the Dominican Republic switched to Visa prepaid for public services, funds for the basics could be reloaded easily. Maria Alta Gracia Reyes gets better benefits; the government saves money.

Instant integration into the payments economy for central banks and governments

VisaNet provides a two-part foundation that supports economic growth. First, it powers domestic processing, delivering the efficiencies and convenience of electronic payments throughout a nation's economy. Next, it links those domestic economies instantly into the larger global economy.

VisaNet's centralized, modular network offers something few other payment networks can: a complete, customizable processing package that can deliver precisely the products, services and features demanded by any nation or any central bank. In an effort to enable banks in a domestic market to offer domestic payment products and diversify their product portfolio, Visa has formed a joint venture, Visa Processing Services (VPS). VPS provides domestic processing solutions — including multi-currency and multi-language debit, credit and prepaid issuer processing services — to financial institutions in Asia Pacific, Latin America, Canada, Eastern Europe, Africa, and the Middle East.

Cross Border and International Processing

Growth and development of domestic economies also depend on the ability of institutions and individuals in nations around the world to participate in the interconnected global economy. The global reach and scalability of VisaNet allows governments and central banks to integrate themselves immediately into that economy. Once that connection is made, nations and their citizens can share a network that provides connectivity to the economies of 200 other nations and territories.



Government Responsiveness

Visa rebuilds lives. Fazal Mahmood and 1.5 million Pakistanis were displaced by fighting. The government turned to Visa for efficient, secure relief. Now, Fazal shops with Visa prepaid.



Merchant Benefits

The owners of Commerce Restaurant in Manhattan would rather cook than count cash — so they removed the register and went with electronic payments only. Business is convenient, secure and booming.

See more about these stories and others at www.CurrencyOfProgress.com

Domestic Processing

The migration from paper to electronic payments helps stimulate economic growth by improving the efficiency, operation and breadth of a nation's domestic economy. The speed, safety and dependability of Visa's products and services, delivered through VisaNet, make it easier for people and businesses to conduct transactions every day. For billions of people, Visa provides the financial access that helps them to realize their dreams.

The convenience, security and transparency of electronics payments also help to bring people out of the informal economy, thus increasing a nation's economic activity while assisting with proper administration and collection of taxes. Electronic payments also enable governments to distribute benefits to thousands in need, as well as reduce the costs and complexity of everything from purchasing to payroll. Visa provides governments and businesses alike with solutions that deliver greater efficiency, transparency, accountability, and control.

- **Corporate/Government Purchasing Cards** - Reduce the cost and complexity of any type of business or government expense. In the U.S., the federal government saves an estimated \$1.8 billion a year by switching from paper to electronic payments.
- **Prepaid Benefits Disbursement** - Deliver child support funds, food purchasing assistance, welfare benefits, and retirement pensions to millions of people in countries as diverse as the Dominican Republic, the Philippines and the United States.
- **Domestic and Cross-Border Remittances** - Streamline the process of moving funds between individuals and across borders, safely bringing overseas wages to family members at home.
- **Domestic Debit Programs** - Provide consumers with convenient and secure access to ready funds, fueling everyday spending and driving local economies.

A History of Visa Innovation



Decades of continuous investment and innovation

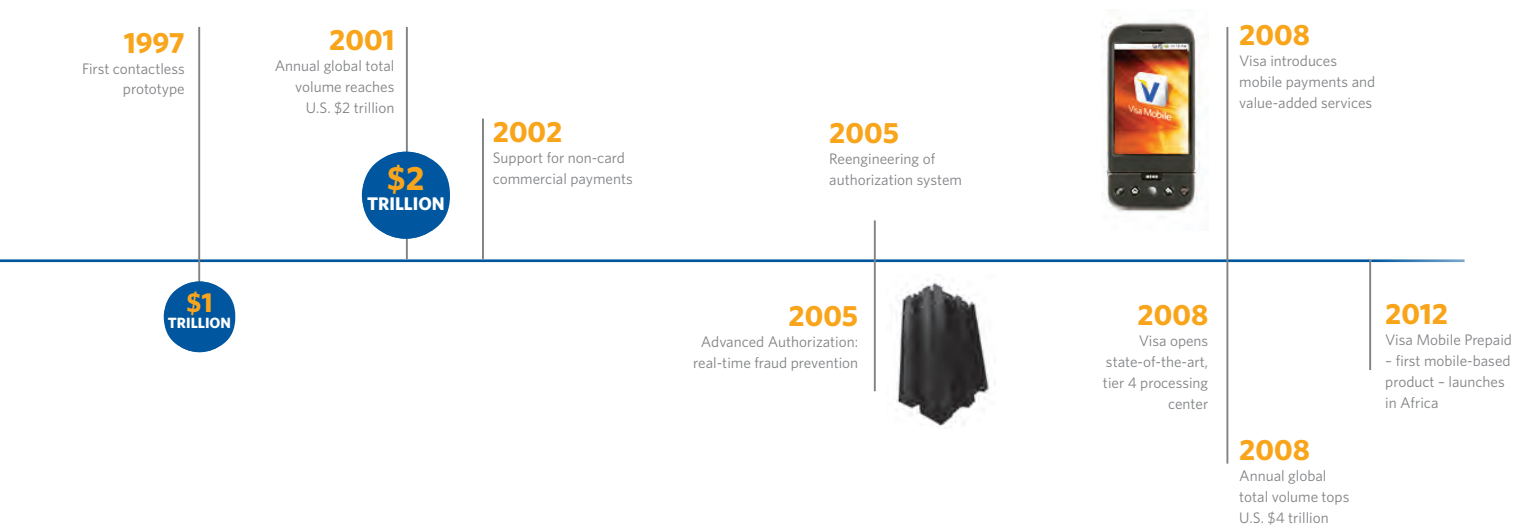
Since the creation of VisaNet, Visa has kept ahead of the constant evolution of electronic payments through the investment of hundreds of millions of U.S. dollars into its payments network. This commitment has enabled Visa to continuously deliver advanced payment products and services.

This investment has allowed us to apply innovation and new technologies and implement a flexible and modern transactions-processing architecture and operating system. Our technology has let us evolve electronic payments in ways that make lives easier for people, while delivering increased value to financial institutions, merchants and governments over cash and checks.

Visa's continued focus on innovation applies to all aspects of electronic payments, including:

Card technology Chip technology enhances transaction security and opens new merchant segments where speed of the transaction is important to consumers, such as in taxis, on mass transit, at fuel pumps, or in quick-service restaurants. Visa payWave, Visa's contactless payment technology, adapts to nearly any form factor, enabling consumers to make point-of-sale purchases by simply waving a mobile device, card or key fob in front of a payment terminal.

Processing Visa has conducted two major system upgrades each year for the past 20 years, in coordination with thousands of financial institutions, merchants and processors around the world. Our recent upgrade in core operating system and processing memory gives VisaNet significantly improved processing speeds and a new degree of scalability.



eCommerce Visa was an early pioneer in eCommerce, developing solutions that will reshape the consumer online shopping experience. VisaNet supports services that allow consumers to shop at merchants across borders, and provide a secure payment choice for all types of eCommerce transactions. V.me by Visa, a wallet service by Visa, delivers the simplicity, security and personalization that merchants, financial institutions and consumers demand as eCommerce and mCommerce converge.

Personal Payments Visa personal payments represent a significant opportunity for financial institutions to offer their customers a safe, reliable and fast way to send and receive money from friends or family members. These transfers can be initiated by using VisaNet's existing infrastructure and endpoints, including ATMs, Internet or by simply visiting a bank branch.

Security As a centralized network, VisaNet offers visibility into every transaction. VisaNet's Advanced Authorization service offers a high level of security and fraud protection at the time of transaction. Alerts technology can notify a consumer of a potential problem transaction in near-real time.

Products and Services VisaNet provides a complete range of payment products and services that can be tailored to the needs of consumers, financial institutions and merchants. These include credit, debit, prepaid, and commercial payment products, as well as risk and other information-based services that provide efficiency and transparency.

Mobile VisaNet supports a broad range of mobile financial services for emerging and developed countries. Visa technology supports mobile payments, personal payments and mobile prepaid accounts as well as a suite of services that provide consumers with more control over everyday spending.

Merchant Direct Connections Visa's merchant direct program allows Value Added Resellers, acquirers and service providers to have direct access to VisaNet. Those institutions can then offer their merchants the same direct access, which facilitates payment innovation, simplified processing and enhanced security.

White Label Processing Visa can provide its processing services to select clients as the foundation for their own branded offerings. Businesses and governments can thus take advantage of the speed, convenience and security of VisaNet, yet maintain their own look and feel, branding and network marks.

VisaNet today delivers the benefits of electronic payments to nearly a quarter of the world's population, and on every continent. It offers a wide range of products and services in a completely flexible and customizable package.

As electronic payments increasingly replace cash and checks at the heart of the global economy, central banks and countries can rely on Visa to continue to invest in keeping VisaNet one of the world's most advanced payment networks.





VisaNet

The power of electronic payment

To learn more about how Visa's electronic payments are helping individuals, businesses, financial institutions, and governments worldwide, please visit www.CurrencyOfProgress.com

To learn more about Visa, Inc., please visit www.visa.com