**Core Banking systems**

A core banking system is the software that banks use to manage their most critical processes, such as customer accounts, [transactions](https://www.techtarget.com/searchcio/definition/transaction) and risk management. It is the central nervous system of a bank, and it is essential for providing a seamless customer experience ([CX](https://www.techtarget.com/searchcustomerexperience/definition/customer-experience-CX)) and maintaining [compliance](https://www.techtarget.com/searchdatamanagement/definition/compliance) with regulations.

The term CORE stands for Centralized Online Real-time Environment, which implies that the customer can experience the bank as a single entity, regardless of their location – with the aim to provide more independence for the customers in terms of using their accounts and conducting transactions from any location in the world.

A core banking system typically includes the following modules:

* **Accounting.** This module tracks all a bank's financial transactions, including deposits, withdrawals, loans and payments.
* **Customer relationship management (CRM).** The [CRM](https://www.techtarget.com/searchcustomerexperience/definition/CRM-customer-relationship-management) module helps banks manage their relationships with customers by storing customer data, tracking interactions and generating reports.
* **Risk management.** This module helps banks identify and mitigate risks, such as fraud and credit risk.
* **Operations.** This module supports day-to-day operations, such as processing transactions and managing accounts.
* **Reporting.** This module generates reports that help banks track performance and make decisions.

A core banking system comprises back-end servers that handle standard operations like interest calculation, passbook maintenance, and withdrawal.

When a customer withdraws money from a branch or an ATM, the application sends a request to the centralized data centre, which then processes the request and authenticates the operation.

The data centre contains the database, an application server, a web server, and a firewall to protect the system from malware attacks. Banks can host their data centre locally or on the cloud.

A diagram of data center

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Core banking systems can be either [on premises or cloud-based](https://www.techtarget.com/searchcloudcomputing/tip/Evaluate-on-premises-vs-cloud-computing-pros-and-cons). On-premises systems are installed and maintained on the bank's own servers, while cloud-based systems are hosted by a third-party provider.

There are many different core banking systems available, and the best choice for a particular bank depends on its size, needs and budget. Some of the most popular core banking systems are the following:

* **Finacle.** This system is developed by Infosys and is used by over 1 billion customers in over 100 countries.
* **Oracle Banking Cloud Services.** This system is developed by [Oracle](https://www.techtarget.com/whatis/definition/Oracle-Cloud) and is used by over 130 banks in over 70 countries.

Core banking systems are a critical part of any bank's operations. By choosing the right system and implementing it effectively, banks can improve their efficiency, reduce costs and provide better CX.

**U.S. Core Banking Software Market**

A graph of a financial market

Description automatically generated with medium confidence

U.S Core banking Software Market Share, By Banking type,2022

A pie chart with numbers and text

Description automatically generated

**Benefits of a core banking system**

There are many benefits to using a core banking system, including the following:

* **Improved efficiency.** Core banking systems can help banks automate many of their manual processes.
* **Reduced risk.** Core banking systems can help banks identify and mitigate risks, such as fraud and credit risk.
* **Enhanced CX.** Core banking systems can help banks provide more seamless CX by making it easier for customers to manage their accounts and transactions.
* **Increased compliance.** Core banking systems can help banks [comply with regulations](https://www.techtarget.com/searchcio/definition/regulatory-compliance) by providing a central repository for all of their financial data.

**Challenges of implementing a core banking system**

There are also some challenges to implementing a core banking system, including the following:

* **Cost.** Core banking systems can be expensive to purchase and implement.
* **Complexity.** Core banking systems are complex pieces of [software](https://www.techtarget.com/searchapparchitecture/definition/software), and it can be difficult to implement them effectively.
* **Integration.** Core banking systems need to be integrated with other systems, such as the bank's CRM system and its risk management system. This can be a complex and time-consuming process.

**Recent Developments**

* **September 2021 –** SAP SE announced the establishment of “Fioneer,” a financial services industry joint venture between Dediq GmbH and SAP SE. SAP Fioneer is a financial services software add-on from SAP. It offers new solutions to help its customers in the ever-changing banking and insurance industries.
* **August 2021 –** As part of the Oracle Banking Suite, W1TTY integrates Oracle FLEXCUBE, Oracle Banking APIs, and Banking Payments. Real-time payments, digital experience, and retail and business banking applications are all part of the package

**ATM (Automated Teller Machine) networks**

An ATM network is a group of ATMs that are either owned by the same company or are linked to a common system. Large, national banks have their own networks of ATMs, but many financial institutions – particularly those with fewer physical branches – belong to networks operated by companies such as Allpoint or MoneyPass.

ATM networks can refer to machines operated by a specific bank or credit union. For instance, Bank of America has a network of approximately 16,000 ATMs.

ATMs can also be part of systems known as interbank networks that are managed by third-party companies.

Machines in these networks are often found in non-banking locations, such as gas stations and grocery stores.

Banks and credit unions may belong to one of these networks to provide their customers with more options for accessing their money.

Either way, using an in-network ATM is crucial if you want to avoid costly ATM fees.

**How an ATM Network Works**

When you use an ATM, it automatically checks to see whether your card comes from a bank that participates in its network. If not, you will likely receive a message notifying you that a fee will be assessed for your transaction.

During your transaction, the ATM communicates securely with your financial institution to correctly route deposits or receive permission to dispense cash from an account.

Some machines are only configured to handle certain transactions, such as withdrawals, while others may be able to handle a variety of functions.

**ATM Networks that are available**

Outside bank’s own ATMs, here are some of the major networks currently available:

**Allpoint**

The Allpoint network includes more than 55,000 ATMs worldwide.

There is no surcharge for transactions completed by members of participating institutions. Those include [Capital One](https://www.moneyrates.com/reviews/capital-one-360-savings-account-review.htm) and [PNC Bank](https://www.moneyrates.com/reviews/pnc-bank-savings-review.htm). Allpoint is also a popular network for credit unions.

**PULSE**

Owned by Discover, the PULSE ATM network includes 400,000 ATMs in the U.S. and 1.8 million globally. For surcharge-free transactions, it partners with another network: MoneyPass.

**MoneyPass**

With about 37,000 ATMs nationwide, MoneyPass is a surcharge-free ATM network that is used by national institutions such as [Discover Bank](https://www.moneyrates.com/banks/discover-bank/) as well as smaller local and regional banks.

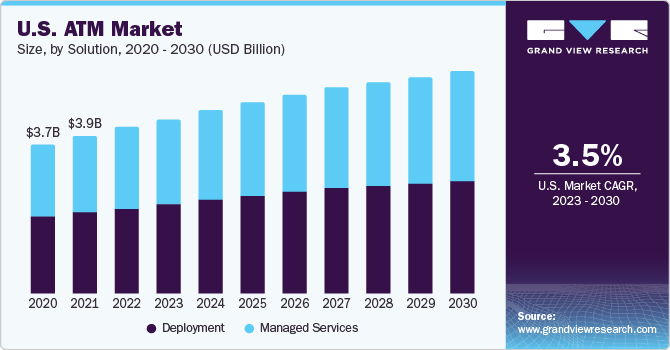
**Plus Alliance Network**

Operated by Visa, the Plus Alliance Network has more than 2 million ATMs worldwide, and in the U.S., its machines are placed in businesses such as Costco and Target. Chime is one of the participants in this network.

**Co-op ATM Network**

Nearly 2,000 credit unions participate in the Co-op ATM Network. Together, they provide members with access to more than 30,000 surcharge-free ATMs in all 50 states and 10 countries.

**US Atm Market**



**Average ATM Transactions per Month**

**Key ATM Data Points**

* There are more than**3.2 million** automated teller machines (ATMs) around the world.
* The Global ATM market size grew up to **$20 billion in 2020.**
* The global ATM market is predicted to reach**$28.82 billion by 2026.**
* As per a report published in 2021, nearly **40 percent of people** in the US use an **ATM 8 to 10 times per month.**
* ATM statistics show that around **10 billion transactions** are processed via ATMs in the US each year.
* ATM transactions across the globe grew up to**$12.6 trillion in 2021.**
* **Developing countries** have been witnessing rapid growth in ATM deployments.
* As per the latest ATM market,**China and India** are predicted to be the fastest-growing region for the ATM market in the next few years.
* At present, there are nearly more than**2.1 million in-network machines** and more than **1 million out-of-network machines** functioning in the worldwide ATM Market.