

50 Years of ATMs



Who invented the ATM?

While **John Shepherd-Barron** is commonly believed to have come up with the idea for the ATM, others have contested it. Other teams of engineers at banks were said to have been working on a cash dispenser at the same time.

How did it work?



The customer had to insert a cheque into the machine and enter a PIN, which had to match the cheque before cash was dispensed. This was followed by a magnetic-stripe card following concerns over security.

Predecessors to the ATM

Vending machines for stamps, newspapers and candy

Bankograph, a short-lived machine to deposit cash and cheques, invented by Luther George Simjian in 1960

Source: Smithsonian magazine

Infamous ATM Frauds

In May 2016, a gang of thieves in Japan used credit card data stolen from South Africa's Standard Bank to **withdraw \$13 million from 14,000 ATMs in all of three hours.** The criminals are still at large.

Ercan Findikoglu, a Turkish citizen, hacked into banks' systems and even removed the withdrawal limits at ATMs. He then used a global network of thieves to **withdraw \$55 million in three attempts between February 2011 and February 2013.** One of them was caught in a New York diner with \$1 million in cash, which finally led to Findikoglu's capture and extradition to the US in 2015. He was convicted in February this year.

Last year, around 3.2 million debit cards were found to have been compromised in India after banks discovered that **certain debit cards were used to withdraw money in other countries when the account holders were in India.** The security breach may have originated in a malware in the systems of Hitachi Payment Services, which offers ATM and point of sale machine services.

Source: CBS News, Reuters and other media reports

Total ATM installations worldwide are projected to hit 4 million in four years

Global ATM installations (million)



Source: Retail Banking Research

The ubiquitous automated teller machine (ATM) is turning 50 this year. It was on June 27, 1967, that the first ATM was opened to the public at a Barclays branch in a suburb of London. *ET Magazine* takes you through the history of a utilitarian and time-saving invention and ATM statistics around the world at a time when digital transactions seem to be growing rapidly

Source: G Seetharaman

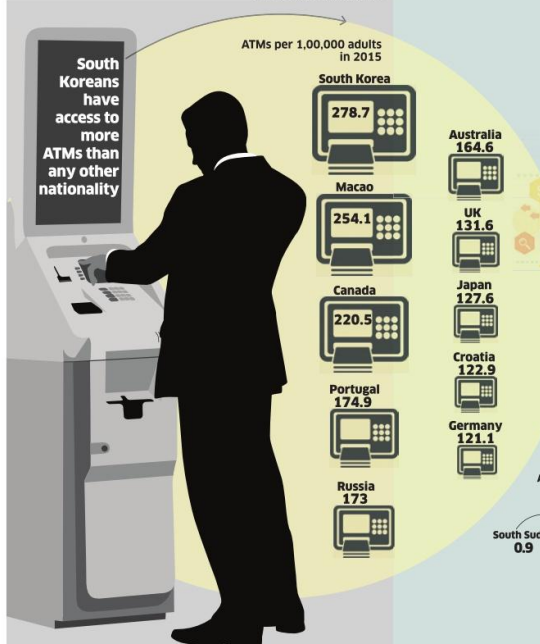
Growth of ATMs is slowing as cashless transactions rise

Global ATM installations grew at CAGR of 9.9% between 2010 and 2015, but are **expected to grow at just 4% between 2015 and 2020**

The volume of **cashless transactions grew 52%** between 2011 and 2015, while **ATM withdrawals grew at 33%**

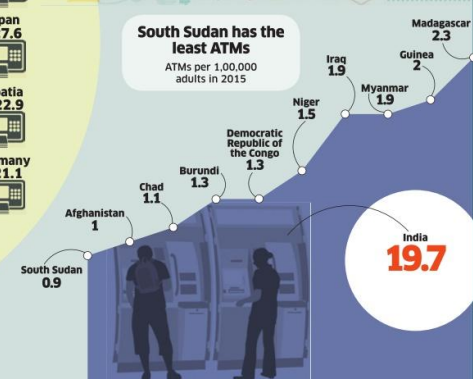
There were **99 billion cash withdrawals** and **471 billion cashless payments** in 2015

Source: Retail Banking Research, Accenture



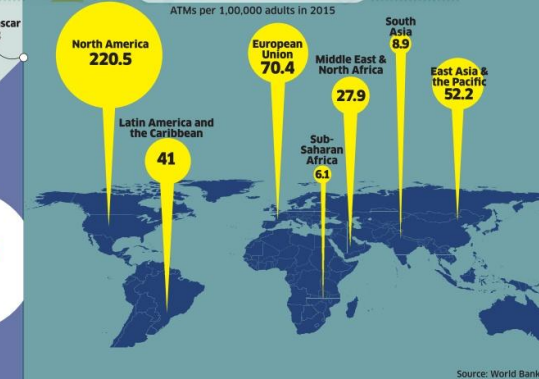
South Sudan has the least ATMs

ATMs per 1,00,000 adults in 2015



North America has three times as many ATMs as the European Union

ATMs per 1,00,000 adults in 2015



Source: World Bank

India has more than doubled its ATMs since 2012

Installed ATMs



Source: Reserve Bank of India