Software eats the checkout

Evolution of POS

For decades, the point of sale (POS) has been the driving force behind in-store transactions. However, in the rapidly advancing landscape of technology, emerging innovations are redefining the traditional POS

As technology continues to move forward, customers are seeking seamless and personalized shopping experiences



HARDWARE

Early
development

The first cash register was developed in 1879 to help shopkeepers track sales, monitor their income and prevent any fraud or stolen money





1879

1884

The first POS register was developed

To prevent fraud, registers added paper rolls to print receipts for each transaction

HARDWARE

First steps towards an electronic system

Initial developments for POS registers revolved around introducing mechanical systems like calculators and other electronic technologies











1906

1960

1966

1970s

1973

The first motorized POS register

Introduction of the first credit card, with IBM using magnetic tape to attach the data-loaded magnetic stripe to plastic cards

Mastercard founded as Interbank

The Interbank Card
Association (ICA) changed
its name to MasterCard
International

IBM developed the first POS system, the electronic cash register (ECR)

SOFTWARE

The digital breakthrough

Following the emergence of the initial desktop computer, the focus pivoted towards digital advancements and their implications on the POS. Graphical interfaces led to the first PC-based POS system. This development coincided with the rise of the World Wide Web, fueling subsequent evolutions

The first desktop computer was launched by IBM (the IBM 5100) marking the start of a switch to a digital POS

Data machines with graphical interfaces rolled out as a low-cost solution

Mastercard acquired the Cirrus ATM network

IBM launched the first PC-based POS system

Gene Mosher pioneered his graphic POS software with colored widgets and touchscreen interface Mastercard and Cirrus launched Maestro, the world's first online POS debit network

World Wide Web launched

1975

19809

1985

1986

1991











00000000

Reshaping the payments ecosystem

The convergence of the internet and the evolution of cloud-based POS systems has pushed electronic POS solutions to the forefront of traditional retail transactions. With the widespread adoption of smartphones and tablets, the once tangible POS is being reimagined as a digital service

2000



Microsoft created the first tablet, later produced by Lenovo

2002



Introduction of the first cloud-based POS system in the United Kingdom

2007-2010



Tablets and smartphones
become mainstream with the
introduction of the iPhone and
iPad, adding to a new potential
screen for consumer and
merchant interactions

PRESENT

Consumer habits shift to digital

The dependence on smartphones and tablets has transformed traditional business transactions. SoftPOS combines traditional POS with ongoing technological advancements, creating a more digital, less physical, and more connected future

2010



First app-based card reader launched

2012



POS market taken over by consumer-grade tablets

Mastercard announces the expansion of their contactless payments program

Urban Outfitters becomes one of first stores to move to all mobile tablet checkout

2014



Mastercard teamed up with Apple to incorporate a new mobile wallet feature known as Apple Pay

Launch of the first smart POS terminal

2015



EMV chip card payments introduced in the US

Payments via Apple Watch launches

2018



Autonomous checkout launched



Facilitating the next wave of innovation

Mastercard is playing a key role in driving SoftPOS innovation. To stay ahead of rapidly shifting consumer demand, Mastercard new solutions within the POS space, with enhancements like Tap on Phone and Cloud Tap on Phone further empowering POS systems

2019



Mastercard begins talks around Tap on Phone

2020



Mastercard announce advancements in SoftPOS to promote touch free payments

New ways to shop and pay emerge including QR codes, click and collect and biometric checkout

2021



Mastercard launch Cloud Tap on Phone in the US

POS installation declines -21.7% in India due to emergence of new, cost effective technologies

FUTURE

A digital future

The direction of the POS landscape is undoubtably moving toward a digital future, as online and in-store transactions converge. Alongside tokenization, the adoption of biometrics in payments is on the rise, aiming to create seamless and user-friendly transaction experiences. The emergence of AI is showcased by the introduction of ChatGPT and its remarkable growth, with these innovations highlighting the continuing rapid evolution of digital commerce in the times ahead

2021-2022

2022

2023

2023-2024



Biometric payments launch and gain popularity



Mastercard launches the Multi Token Network



Dynamic Yield unveils Element models and spend insights that will allow customers to deliver greater personalization on any digital channel



Mastercard expands
Tap on Phone to customers

Mastercard launches Mastercard Receivables Manager to streamline B2B accept and process virtual card payments

In a HospitalityTech survey, 43% plan to deploy POS software for use on a mobile device



FUTURE

Reimagining digital commerce

The future of POS is a reimagining of the payments space, with advanced technology driving ongoing innovation. Businesses should adopt these new technologies to stay ahead of upcoming trends, such as the rise of alternative payment methods and digital currencies. Tokenization's significance for businesses and the integration of Al in transaction digitization are set to see further advancements

Point-of-sale software market value grows rapidly, going from \$12.2 billion in 2018 to a projected \$42.5 billion in 2027

SOURCES

Mastercard History: Founding, Timeline, and Milestones History of POS Systems: Story, Timeline & Developments The Evolution of the Modern POS System Urban Outfitters Says It Will Never Buy Another Cash Register Again New technologies dents relevance of PoS, downturn in transaction volume 40+ Point of Sale (POS) Statistics You Should Know Dynamic Yield Launches Element, Bringing the Power of Mastercard to Personalization

Mastercard introduces a fast, safe and cost-effective solution for businesses to accept virtual card payment



