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The Evolution of Payments

How Unified Commerce is shaping modern
payment channels



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Payments over the years



Cash/Coin:

Originally, Cash was the primary payment instrument used. Cash exchanged for goods and services.

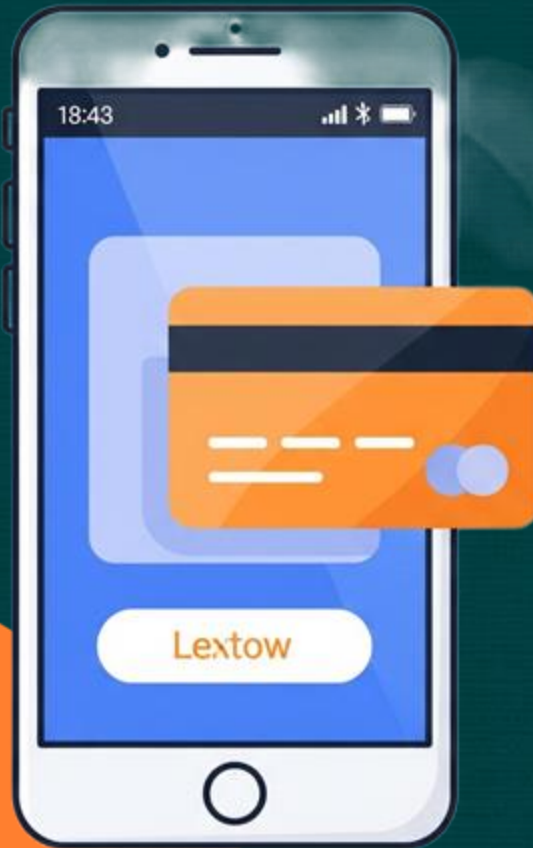
Credit/Debit Cards

In 1950, card payments were introduced as a way to pay. Authentication for cards happened with signature verification, PIN, or ID check.



Rise of e-Commerce

With the rise of e-commerce, people paid for goods and services with PAN and CVV. Authentication happened through CVV and Address Verification.



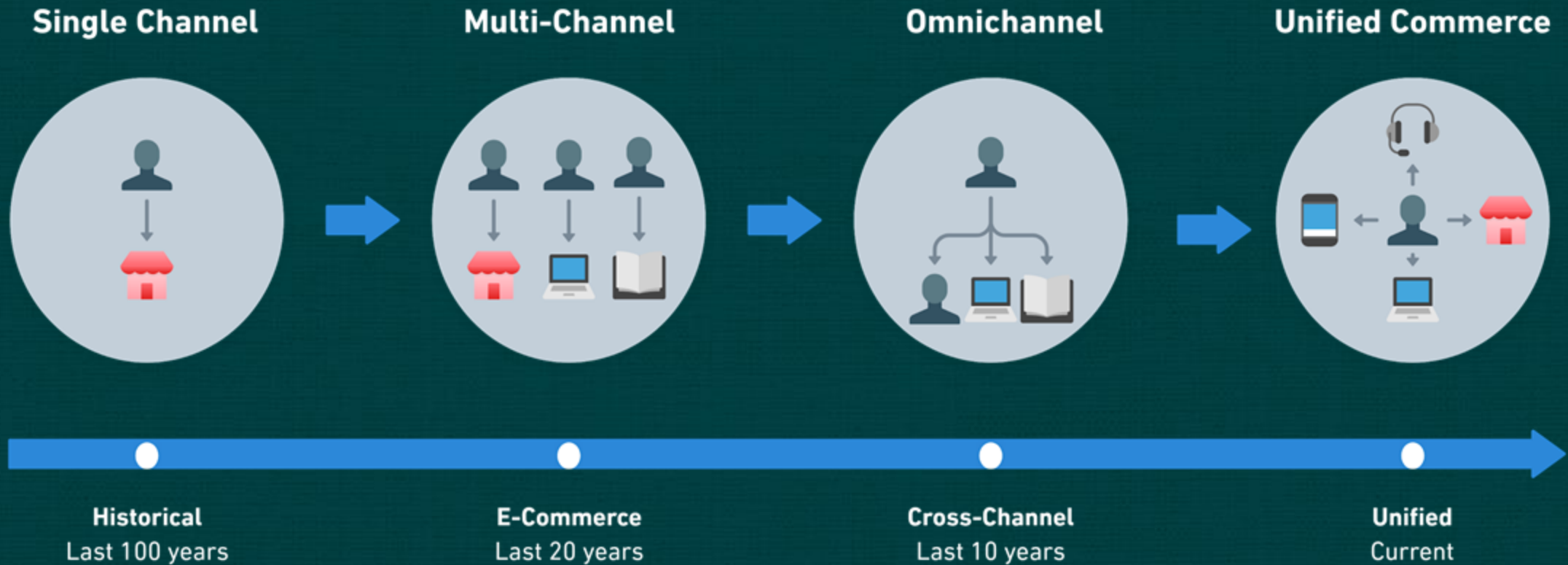
Current Trends in Payments

Mobile Payments / Local Payment Methods are dominating globally. Globally, mobile wallets were the preferred payment method, accounting for ~30% of in-person transactions and ~50% of e-commerce transactions¹.

Contactless cards and payment systems have become mainstream, as consumers favor quick and seamless transactions.

With changes in technology and payments, authentication is constantly evolving.

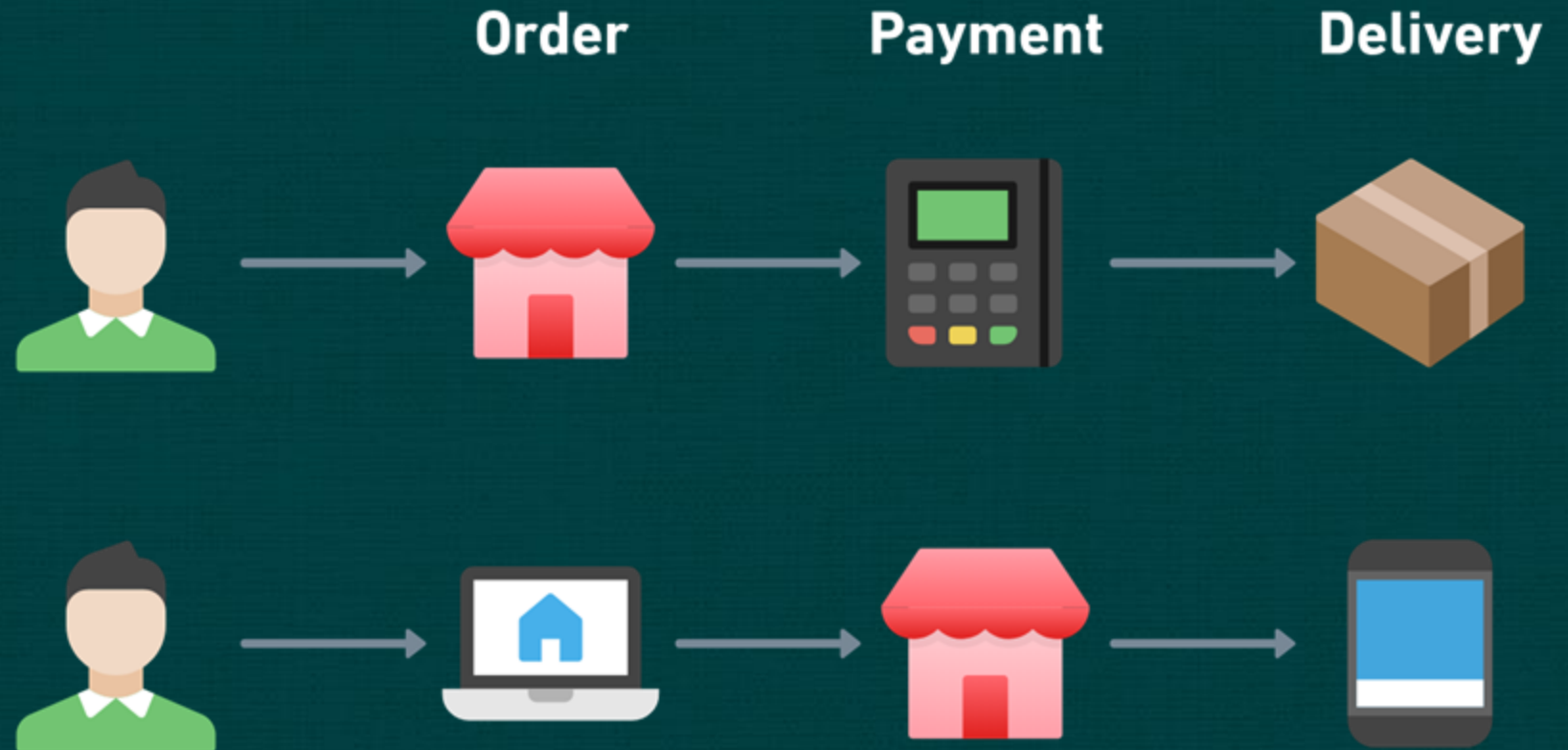
Changes in Modern Retail



What is Unified Commerce?

Unified Commerce *integrates multiple sales channel, data, and system* into one platform.

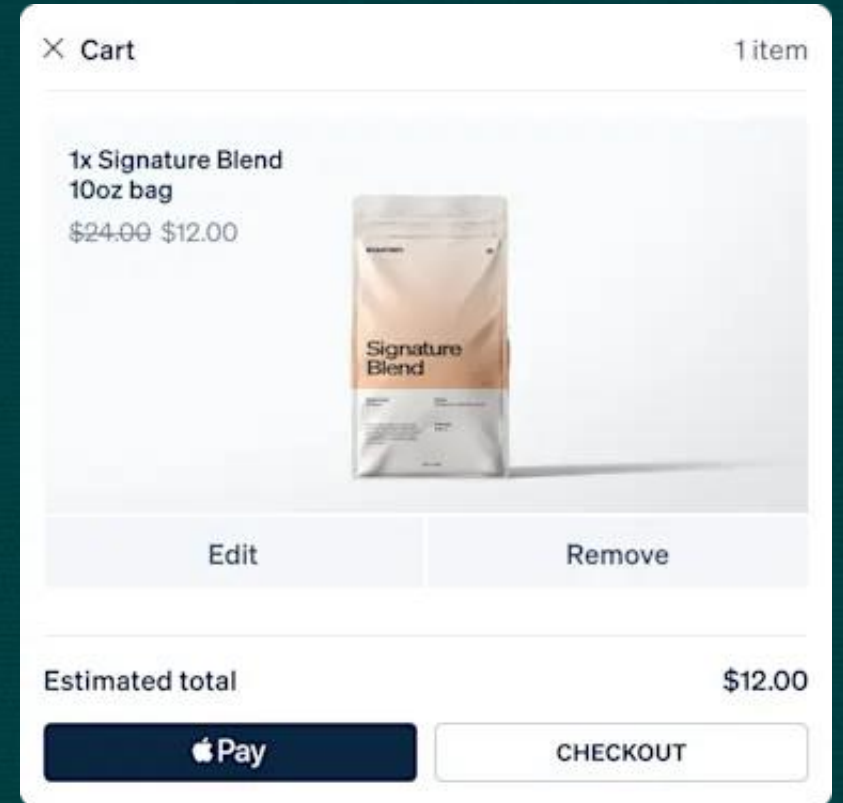
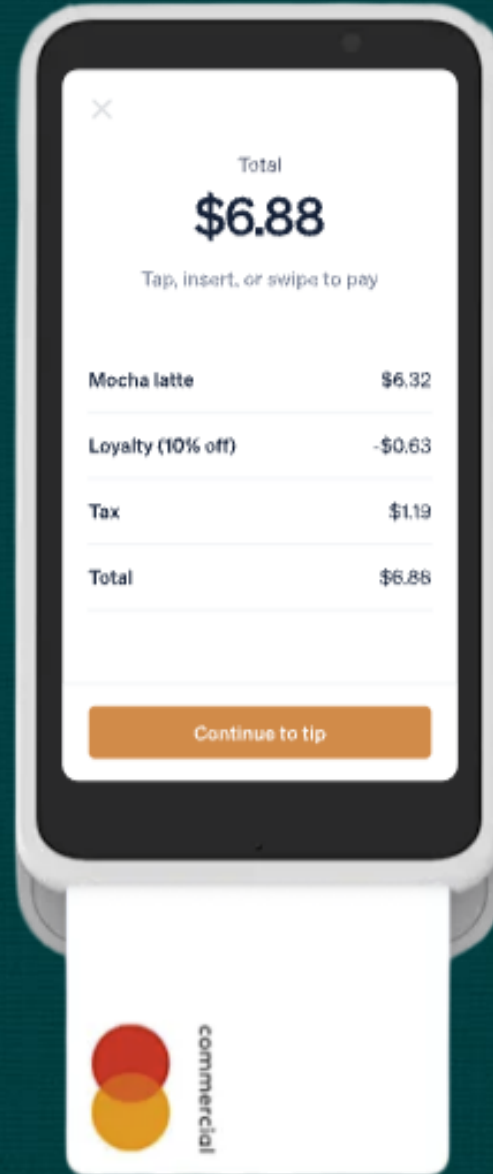
For the customer, this means a *convenient and seamless payment* experience.



What is Unified Commerce?

For the business:

- **Improves customer recognition across different channels**
- **Increased customer conversion** from one channel to another channel.
- **Improved risk models** by consolidating data across all channels into one place



Identity as Authentication

Unified Commerce seamlessly combines card-present and card-not-present transactions into a single payment channel.

With Unified Commerce, authentication is vital to the payment process. The industry has shifted from cardholder verification to consumer presence, blurring the lines between e-commerce and in-person payments.

Example: Digital payment methods operate as both a payment method and a form of authentication



Security Considerations

How Unified Commerce is Shaping Security for
Today's Users

PANs Are Being Replaced

Tokenization



Multifactor Authentication



Biometrics



Identity as Authentication



Fraud Vectors in a Unified Commerce Environment

Tokenization Fraud

Improper tokenization reuse, compromised tokenization platforms

Account Takeover (ATO)

Stolen credentials from phishing and social engineering.

Synthetic Identity Fraud

Lack of personal identification allows for identity theft and fake data creating fake identities.

Digital Payment Channel Exploitation

Attackers find and exploit the many digital payment channels we have in place, including mobile apps, online stores, IoT devices, payment systems, including fake sites.

Designing for Security in a Unified Commerce Environment

Machine Learning & AI

Using sophisticated algorithms to analyze real-time transaction data.

Behavioral Analytics

Analyzing purchasing patterns.

Enhanced Authentication Methods

Implementing strong MFA.

Secure Token Management

Enforcing strict controls.

User Story

Combating fraud tactics in a unified commerce environment using AI, Behavioral Analytics, Enhanced Authentication Methods, and Secure Token Management



Future for Unified Commerce





Thank you

References

[1] Digital Wallet Statistics - <https://capitaloneshopping.com/research/digital-wallet-statistics/>