



**VISA**

# Inovace a vývoj platebních karet a transakcí

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# Inovace a vývoj platebních karet a transakcí

- **Úvod a terminologie**
- Platební schémata, 4 straný obchodní model
- Platba a Standardizace
- Typy karet, regulace
- Předplacené karty
- **Akceptace karet na Internetu**
- Click to Pay řešení
- **Mobilní platby; faktory úspěšnosti, užití**
- Bezkontaktní platby a bezkontaktní prostředí pro platby kartami

# Úvod a terminologie

## Ecosystem

Peer To Peer (P2P)

Payment schemes

Domestic / Cross Border

SWIFT / SEPA / VD

## Standards & Regulations

EMV

ISO 20022  
ISO 8583

PSD2 (SCA)

GDPR

FIDO

Interchange Fee Regulation

## Payments Cards

Debit, Credit, Pre-Paid

Private Label, Closed Loop

Contactless (tap to pay)

Virtual card

Tokenization

## Wallets

Closed – loop wallets (ALIPAY wallet)

Semi-closed loop wallets (Vipps, Revolut)

Swatch Pay / XIAOMI / ...

Pay Pall

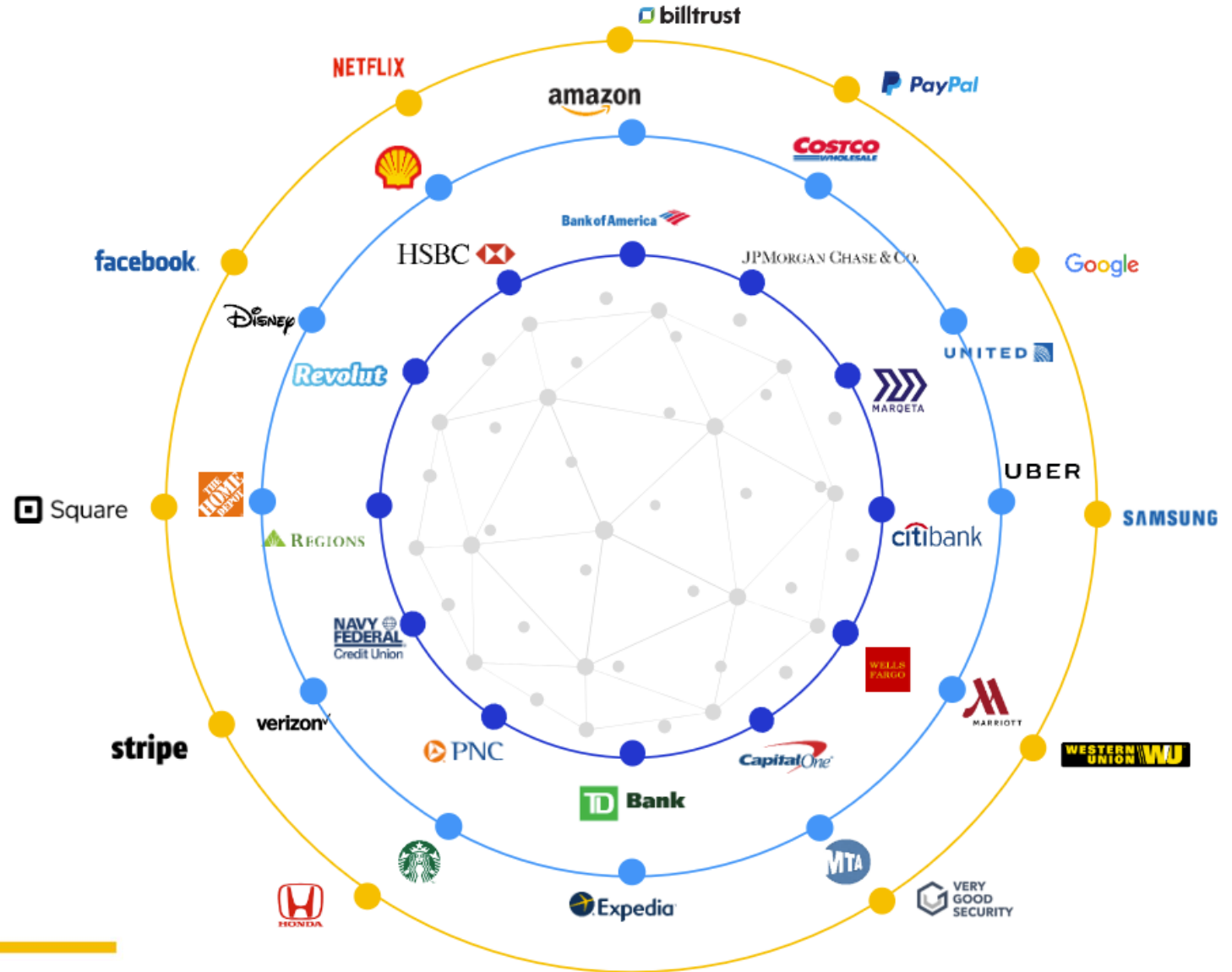
Click to Pay

# Wallets / Scheme / 4 Party model

## VisaNet

Expanding Connectivity

- Issuers
- Merchants
- Payment Enablers



# Tokens enhance the security & performance of credentials across existing & emerging digital commerce experiences

**01** Reduces risk of fraud & breach by replacing card numbers with a digital token.

**02** Each transaction is processed with a unique token + cryptogram which increases card authorization rates and decrease fraud.



## Dynamic capabilities

Instantly replace stolen credentials, cards never expire, consumer maintains control

## Enhance the token platform

Additional value-added services like Cloud Token Framework, VCEH and VCES enhance security & consumer experience

## Secure transactions

Domain controls & fail safes secure transactions across various devices

# Overview of EMVCo

## (Overview of EMVCo | EMVCo)



# Fast Identity Online
















































**FIDO** is a set of standards-based authentication protocols intended to **reduce the reliance on passwords** for online authentication



# What is FIDO & Alliance overview (<https://fidoalliance.org/>)

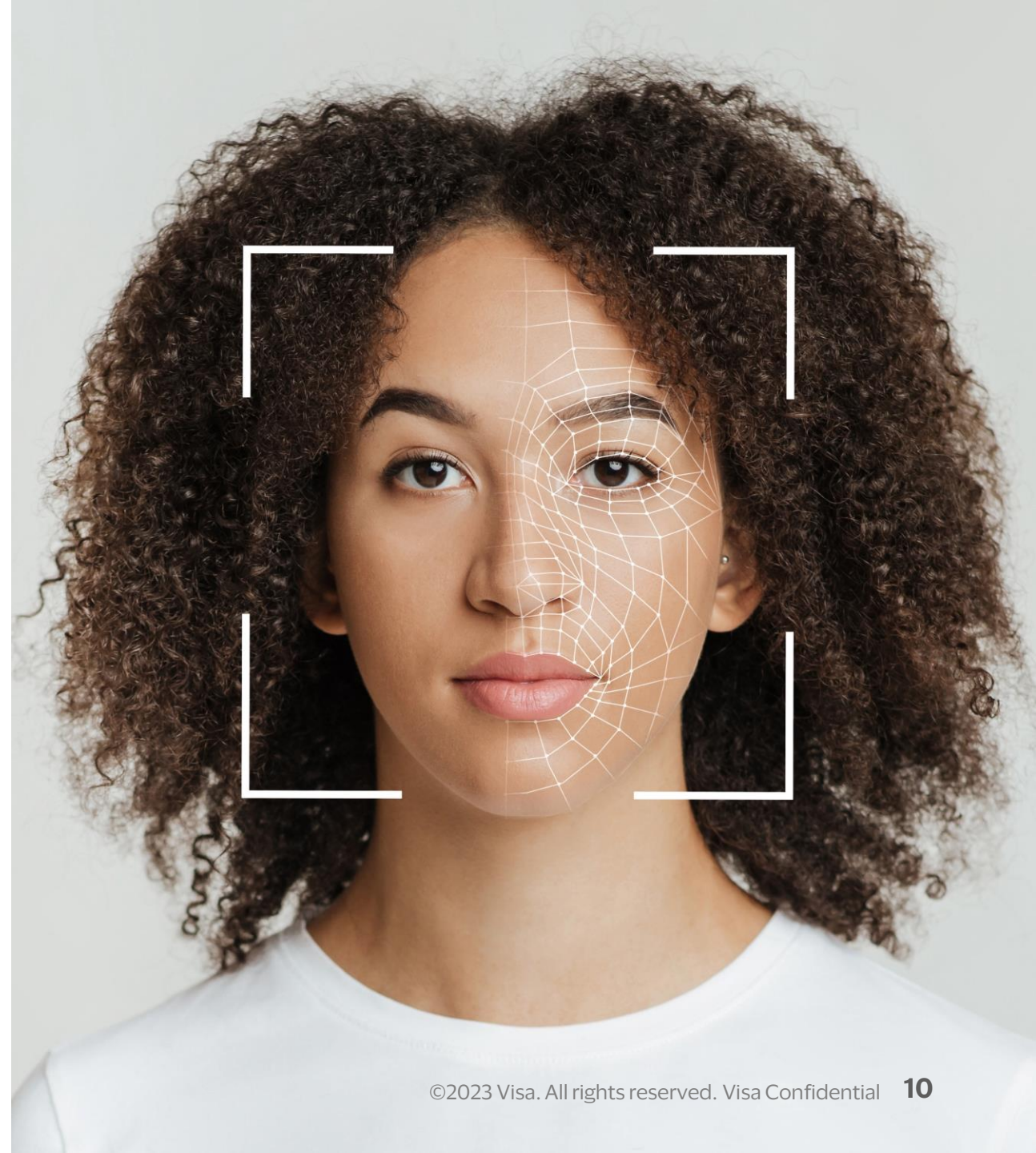
- Specification Development
- Certification Programs
- Membership
- Working groups
- Industry Engagement

FIDO Members				
Board Level Members				
				
				
				
				
				
				
				
				
				

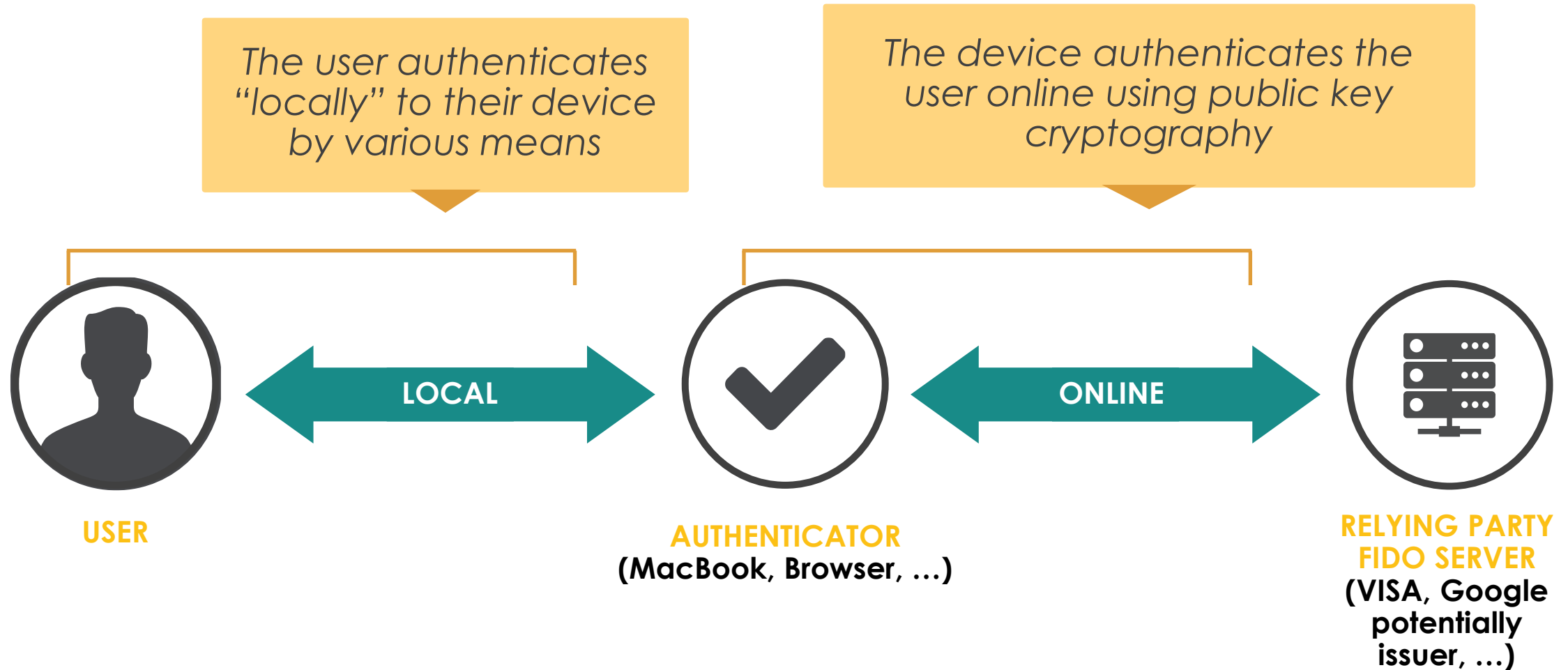
# FIDO

**FIDO (Fast Identity Online) is the industry standard for authentication**

- Device agnostic – widely supported across a variety of hardware
- Supports various authentication methods (i.e., PIN, USB key, biometrics)
- Supports binding to both hardware devices and logical devices (such as browsers)
- Designed for privacy – data never leaves the device



# How does FIDO Authentication work?



# Tap to pay is driving cash displacement



## Cash remains prevalent in the U.S.<sup>1</sup>



Americans average

**11**

cash transactions  
per month



Cash still accounts for

**47%**

of all transactions <\$10  
(down from 55% in 2018)

## Tap to pay displaces cash<sup>2</sup>

Debit

**+2.5**

Transactions per month

**+\$71**

Spend per month

Credit

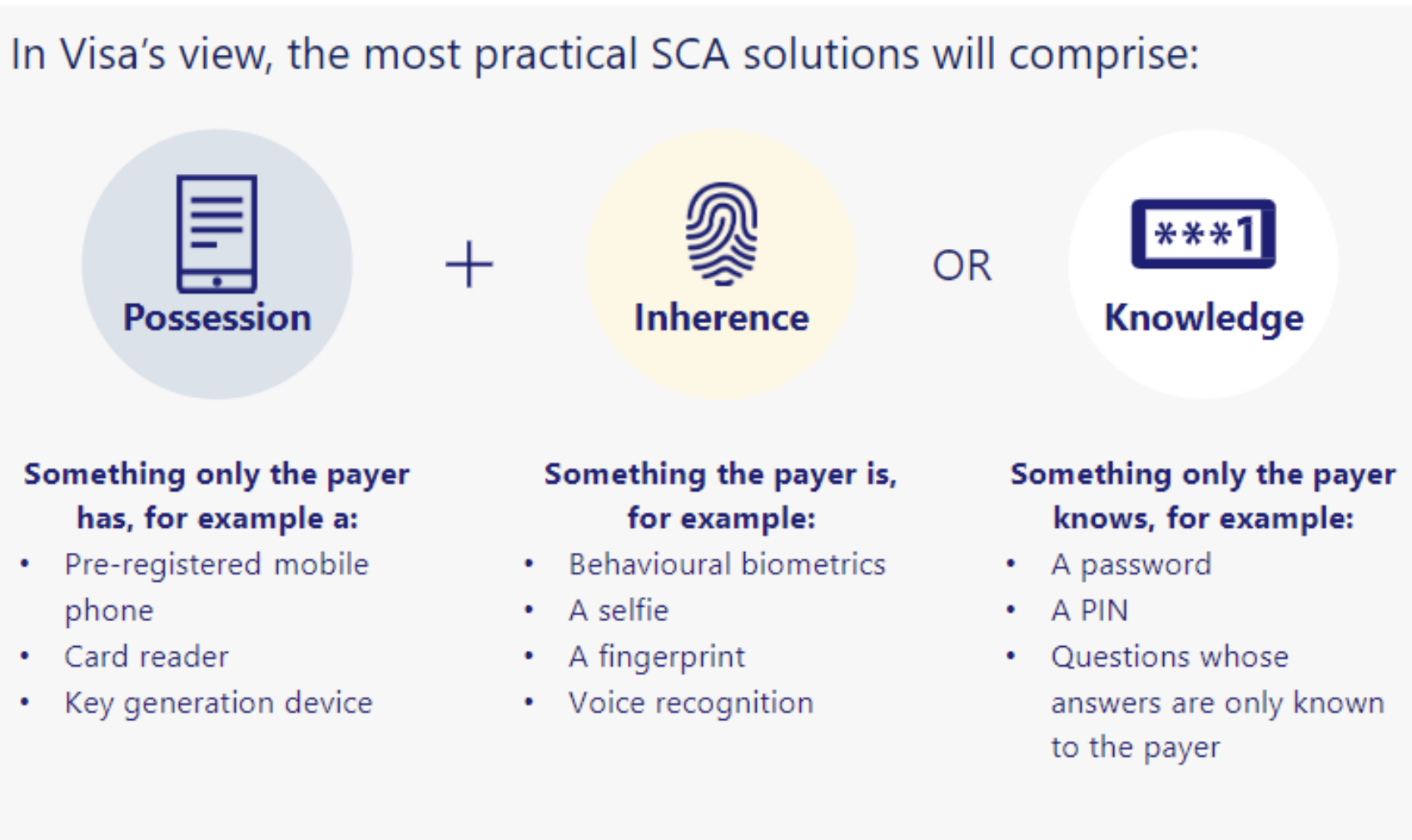
**+1.6**

Transactions per month

**+\$56**

Spend per month

## PSD2 requires that SCA is applied to many electronic payments



# Úvod a terminologie

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Click to Pay

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# Akceptace plateb na internetu



# When did shopping become a quiz?

What is my card number?

What is my password?

What is my address?

Am I who I say I am?

Do I trust this merchant?

Where is my card stored?





# 69%

**Global Average for  
Cart Abandonment<sup>(1)</sup>**

## Consumer friction still exists. In the U.S., reasons for abandoning cart included:



### 24%

The site wanted  
me to create an  
account



### 17%

too long or  
complicated  
checkout process



### 18%

did not trust  
the site with  
credit card



### 4%

credit card  
declined

Source: Baymard Institute, 2022

Q: Have you abandoned any online purchases during the checkout process in the past three months? If so, for what reasons?

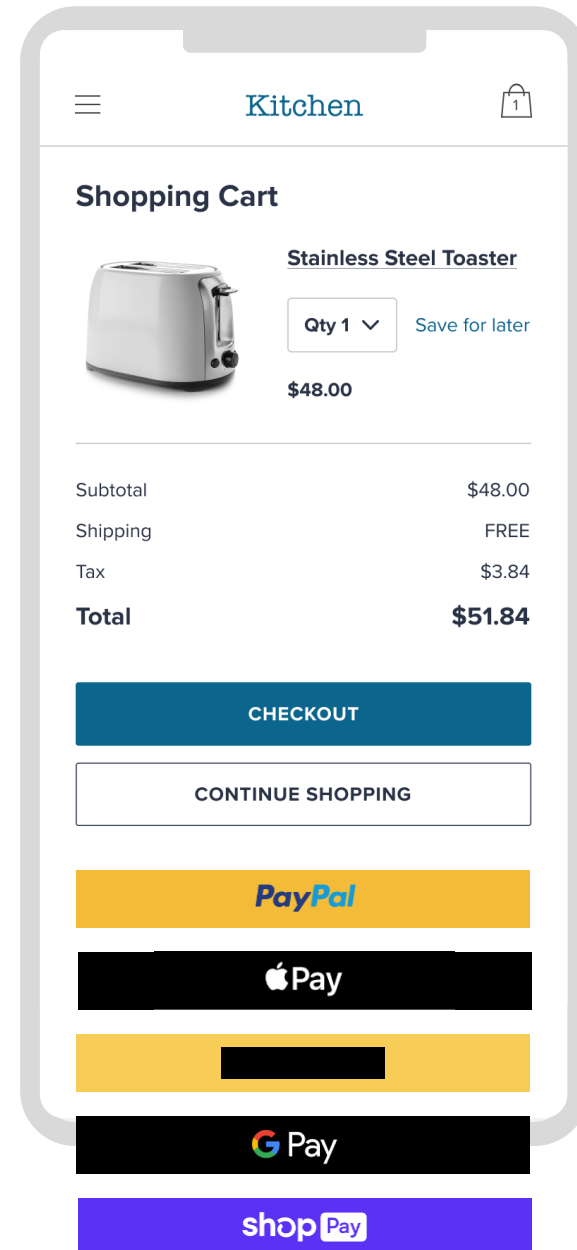
"Note: Answers were normalized without the "I was just browsing option". Respondents could select multiple options.

## Statistics (Source: GoPay)

Platební metoda	Online	Offline	CZK	EUR	CZ tržní podíl
platební karty	✓		✓	✓	58 %
bankovní převody					
<ul style="list-style-type: none"> <li>• online bankovní tlačítka</li> <li>• PSD2 platby</li> <li>• bankovní převody</li> </ul>	✓		✓	✓	37 %
		✓	✓	✓	
mobilní platby	✓		✓		1 %
elektronické peněženky	✓		✓		0,9 %
kuponové platby	✓		✓		3 %
platby v bitcoinech	✓		✓		0,1 %

# More ways to checkout were introduced to reduce the number of times you had to type in your card number.

Unfortunately, it often resulted in added complexity for merchants



Illustrative — for discussion only.  
All brand names, logos and/or trademarks are the property of their respective owners and are used for identification purposes only.

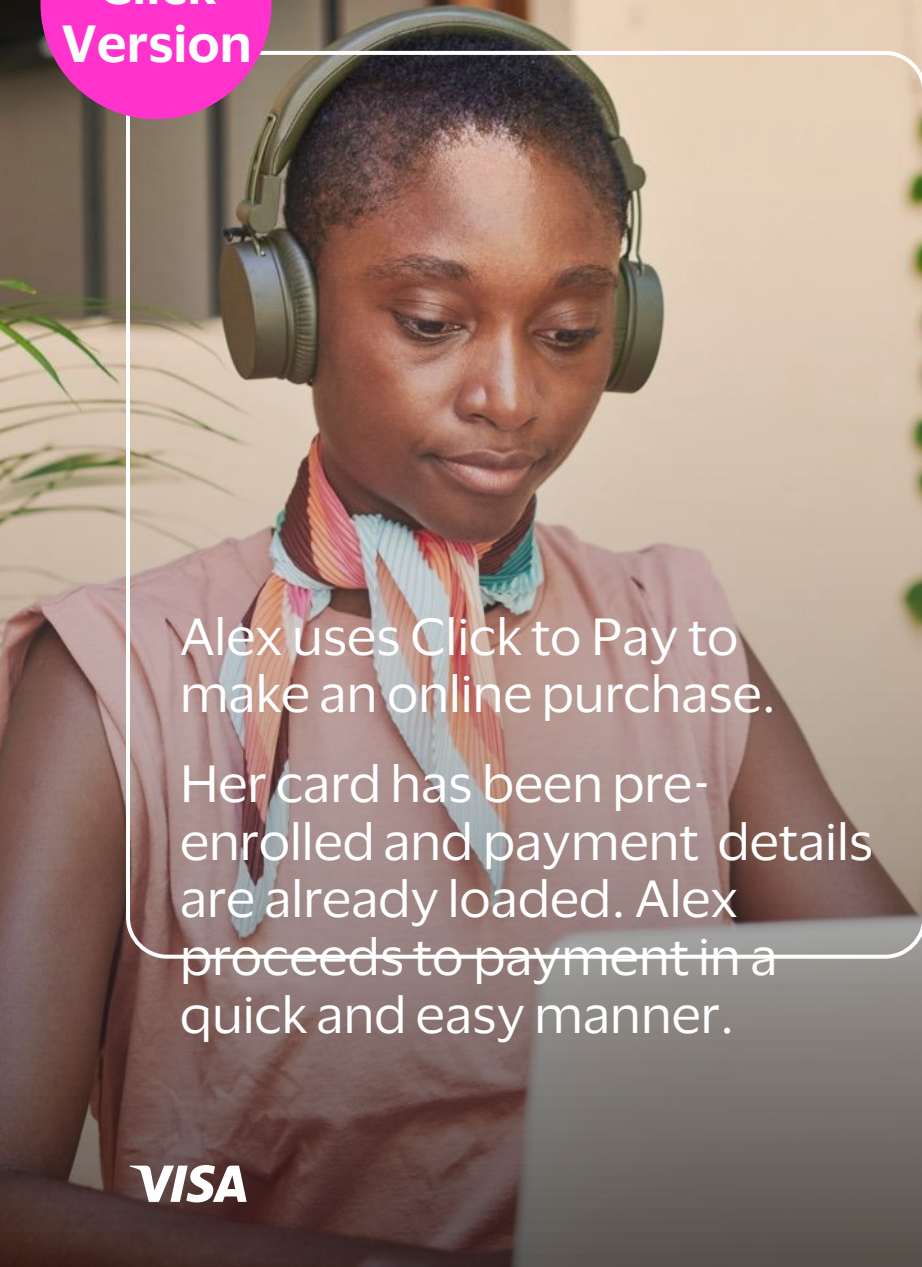
**VISA**

**Click to Pay**



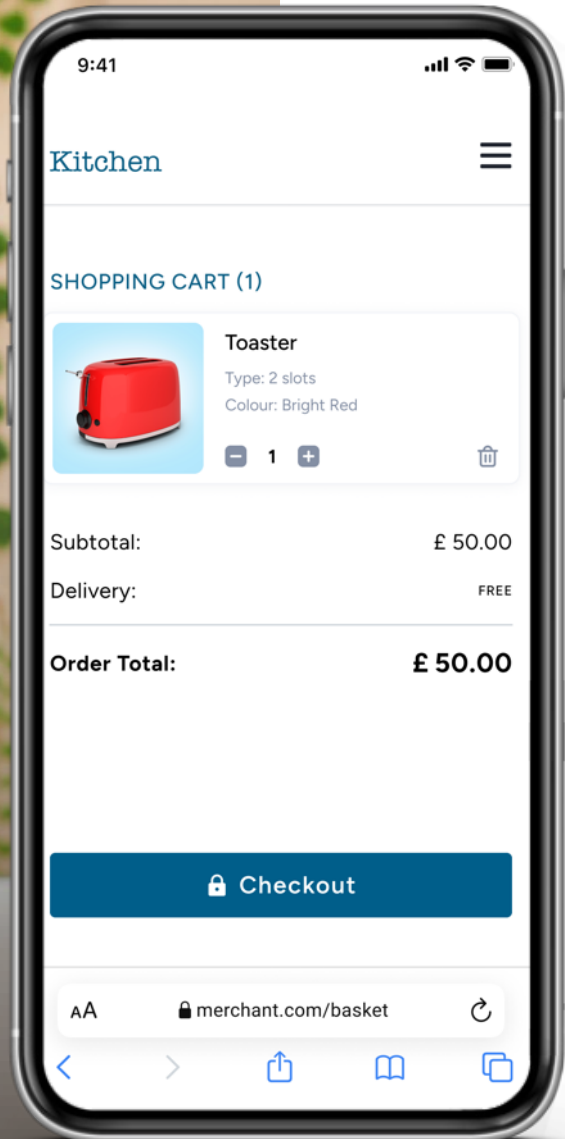
Click Version

Unified Click to Pay



Alex uses Click to Pay to make an online purchase.

Her card has been pre-enrolled and payment details are already loaded. Alex proceeds to payment in a quick and easy manner.



# Click to Pay experience

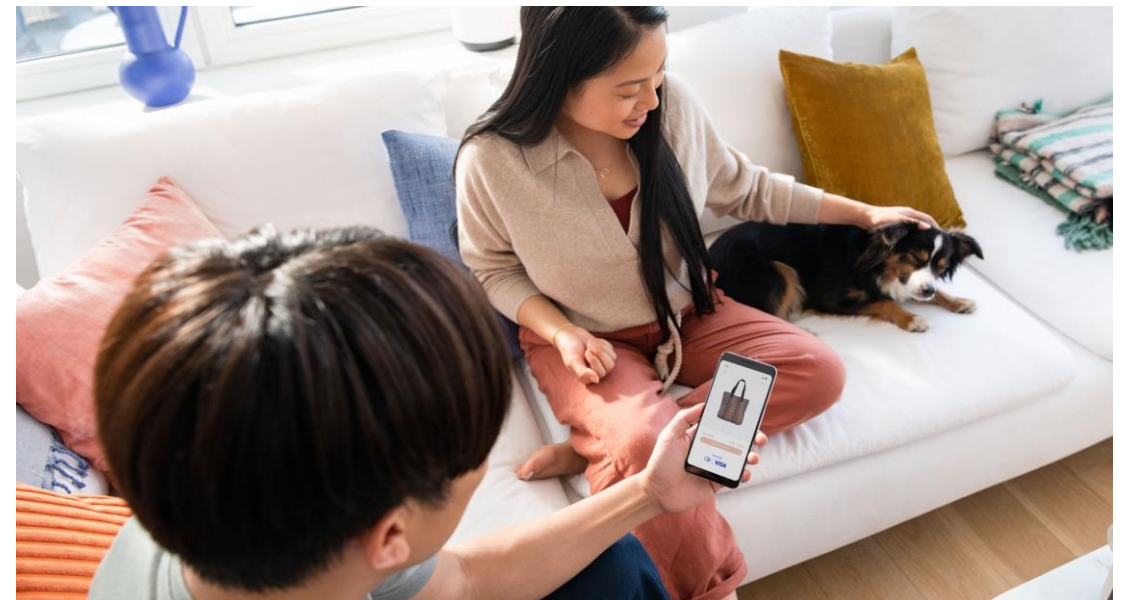
- ✓ EMV standard that integrates into the merchant's existing checkout experience
- ✓ Presents issuer-enrolled cards to consumer
- ✓ Replaces manual PAN entry with tokenized card credentials



# Click to Pay is network, device, and merchant agnostic and ready for new use cases

## Enable a secure and streamlined guest checkout experience

- ✓ No impact to existing checkout flow
- ✓ User and device recognition
- ✓ Verified consumers can bypass PAN entry and form fill



# Click to Pay with **Payment Passkeys**



Click to Pay with 3DS authentication



Eliminates manual PAN key entry



Easier and quicker, integrated checkout



Driving higher approval rates



Performing 3DS payment authentication



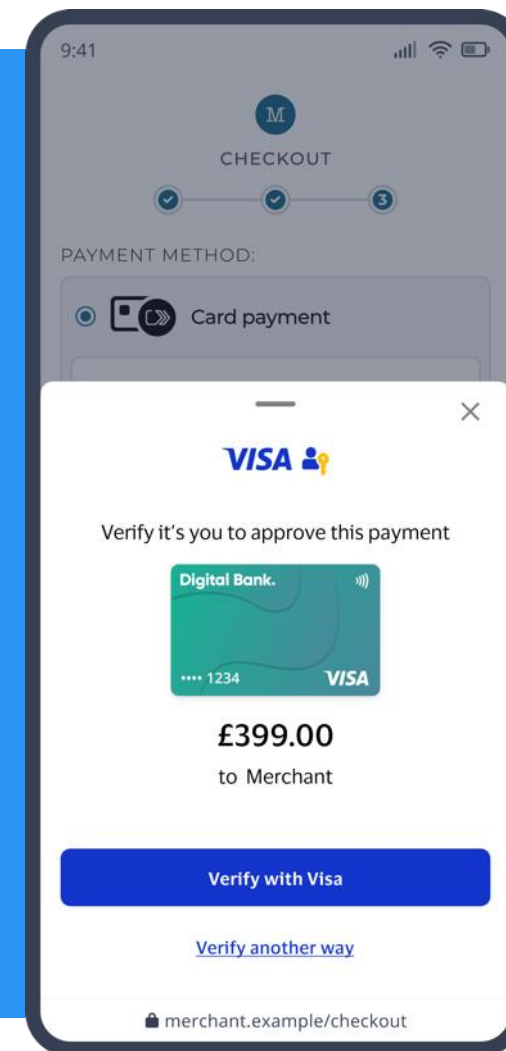
Click to Pay soon with Visa Payment Passkey authentication



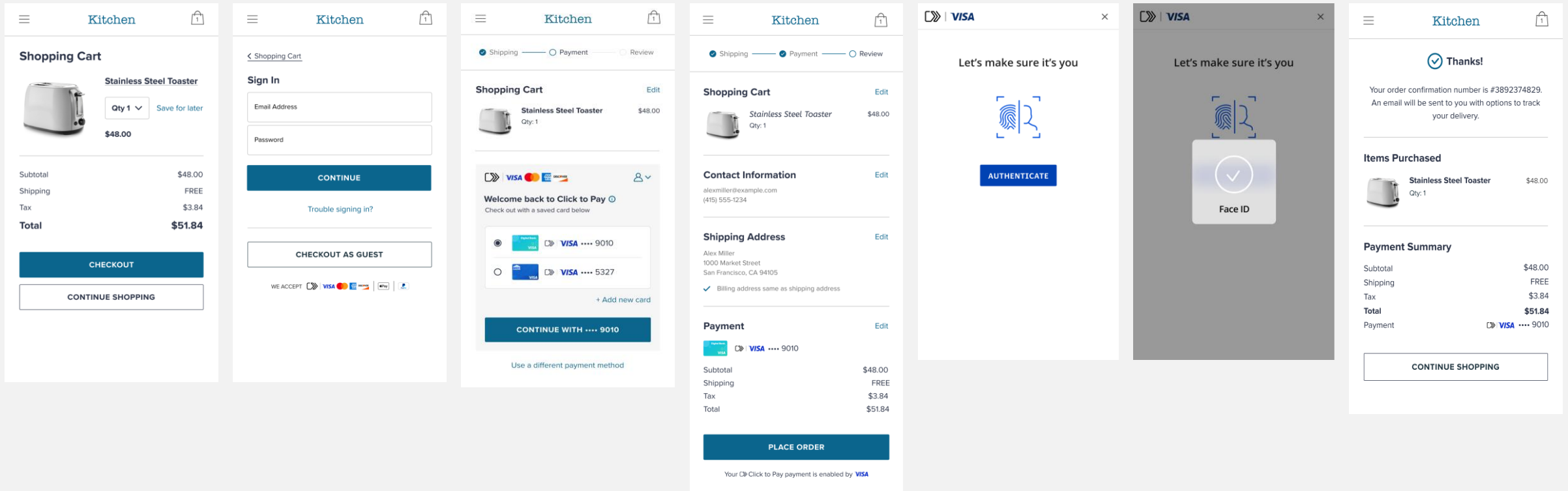
Uses FIDO (Fast ID Online) as the open industry standard for payments, such as biometrics



Enables a seamless payment authentication closer to that of face to face



# Click to Pay integrated experience lets users speed through guest checkout like they would with a card-on-file account



Consumers can securely checkout without reaching for plastic, encountering a form, or being overwhelmed with checkout options



Illustrative user experience – for discussion only

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# Why DAF?




Digital Authentication Framework (DAF) aims to increase authorizations, reduce fraud, and minimize friction



## Non-Authenticated Transactions<sup>1</sup>

-  Fraud Protection
-  Can Uplift Authorization Approvals
-  No Issuer Authentication Friction

## Authenticated Transactions<sup>2</sup>

-  Fraud Protection
-  Can Uplift Authorization Approvals
-  Issuer Authentication Friction Every Transaction

## DAF Authenticated Transactions<sup>3</sup>

-  Fraud Protection
-  Can Uplift Authorization Approvals
-  No Issuer Authentication Friction after initial ID&V

1. Defined as authorization requests containing an Electronic Commerce Indicator (ECI) value of 7 or 8  
2. Defined as authorization requests containing an ECI value of 5 or 6, for which the associated authentication request was approved via Visa Secure  
3. Defined as an authorization request containing an ECI value of 5, for which the cardholder used an Authenticated Payment Credential (APC) under the Digital Authentication Framework. APC is defined in Visa Core Rules and Visa Product and Service Rules, Rule ID 0030743

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# Mobilní platby; faktory úspěšnosti, užití



# Implementation view on mobile wallets

<p><b>Closed-loop wallets</b></p> <p>Allow users to top up a spending account via a linked credit or debit card and are tied to specific merchants for in-store payments and online purchases via merchant platforms. They are exclusive to transactions involving that merchant/company or its affiliates.</p> <hr/> <p>EXAMPLES INCLUDE ALIPAY, STARBUCKS WALLET, AND AMAZONPAY.</p>	<p><b>Semi-closed loop wallets</b></p> <p>Allow users to transfer virtual funds to other accounts within the same wallet network. They also allow users to pay at offline retailers and online e-commerce websites who they have entered into agreements with.</p> <hr/> <p>EXAMPLES INCLUDE VENMO IN US, PAYTM IN INDIA, BIZUM IN SPAIN, AND VIPPS IN NORWAY.</p>	<p><b>Open-loop wallets</b></p> <p>Also known as card-based wallets, allow users to link their credit and debit cards to their mobile phones and make payments by tapping their phone at any NFC-enabled payment terminal.</p> <hr/> <p>EXAMPLES INCLUDE APPLE PAY, GOOGLE PAY, AND PAYPAL.</p>
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Source: Thunes, Complete Guide to Mobile Wallets

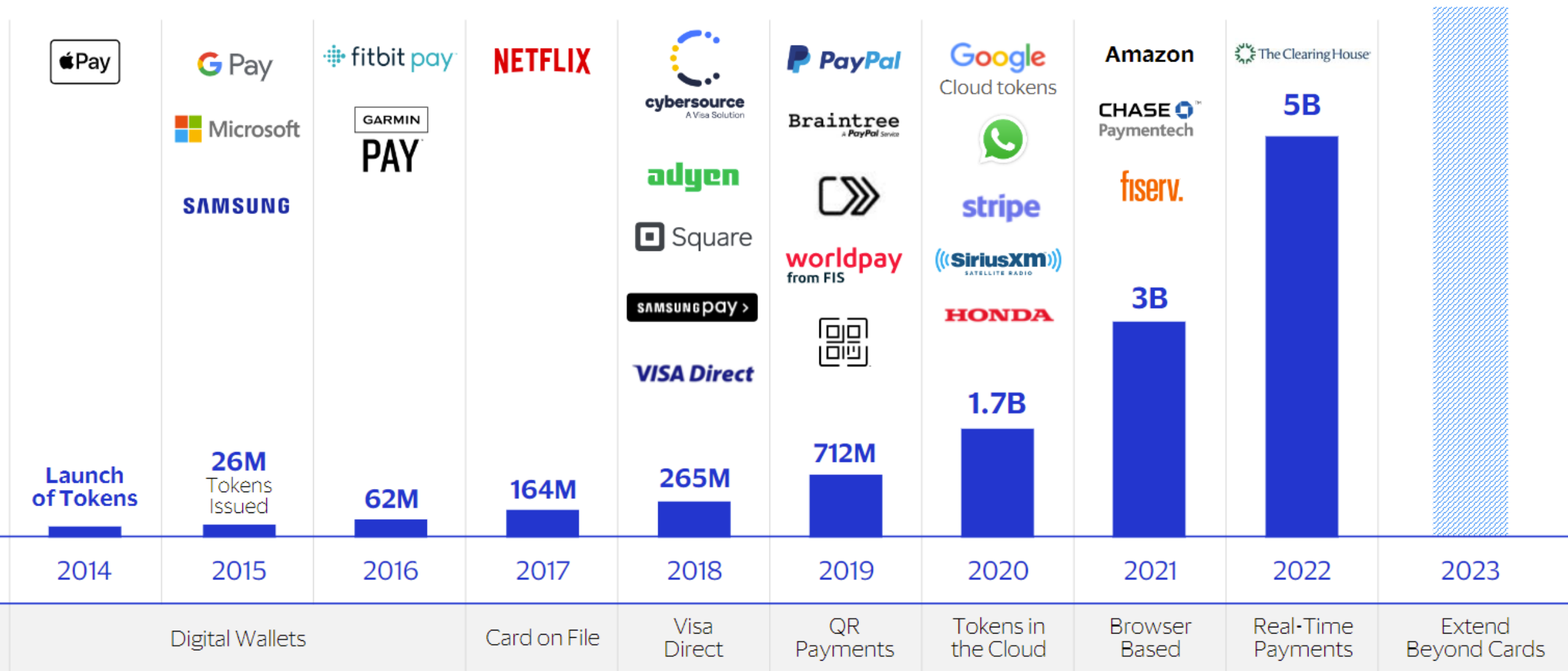
## Consumer view on mobile wallets

Tech wallets	Network wallets	Bank wallets	Fintech wallets	Merchant wallets
APPLE PAY GOOGLE PAY	VISA DIGITAL COMMERCE APP CLICK TO PAY	PAZE CITI PAY	PAYPAL VENMO SQUARE	STARBUCKS WALMART PAY

Examples not exhaustive



# Visa has paved the way for Tokens



Q

VISA

&

A



# Thank you

For more information, please contact

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