

PSD2, Open Banking, iDEAL, ...

De stand van zaken

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Lunteren
29 september 2021

PSD2

Payment Services Directive (PSD)

History



- Adopted in 2007 by the EU – implemented in national laws of Member States in 2009
- Uniform access criteria for Payment Service Providers in the single market (EU)
 - Capital requirements
 - Passporting – home / host countries
- Common legal framework
 - Electronic payment services in the Single Euro Payments Area (SEPA)
 - Basic rights and obligations for PSPs and users
- License regime
 - Credit Institutions – Electronic Money Institutions – Payment Institutions

PSD2 change areas

SCOPE EXTENSION

- Covering non-EU/EEA payment transactions ('one-leg') and currencies

CONSUMER PROTECTION

- Reduced liability for unauthorised trxs
- Fee transparency
- Prohibition of cards surcharging (IFR)
- Refund rights

LICENSE EXEMPTIONS

- Specified / restricted for limited networks, telecom, ATM

SECURITY

- Strong customer authentication
- Requirements for initiation of e-payments and data protection

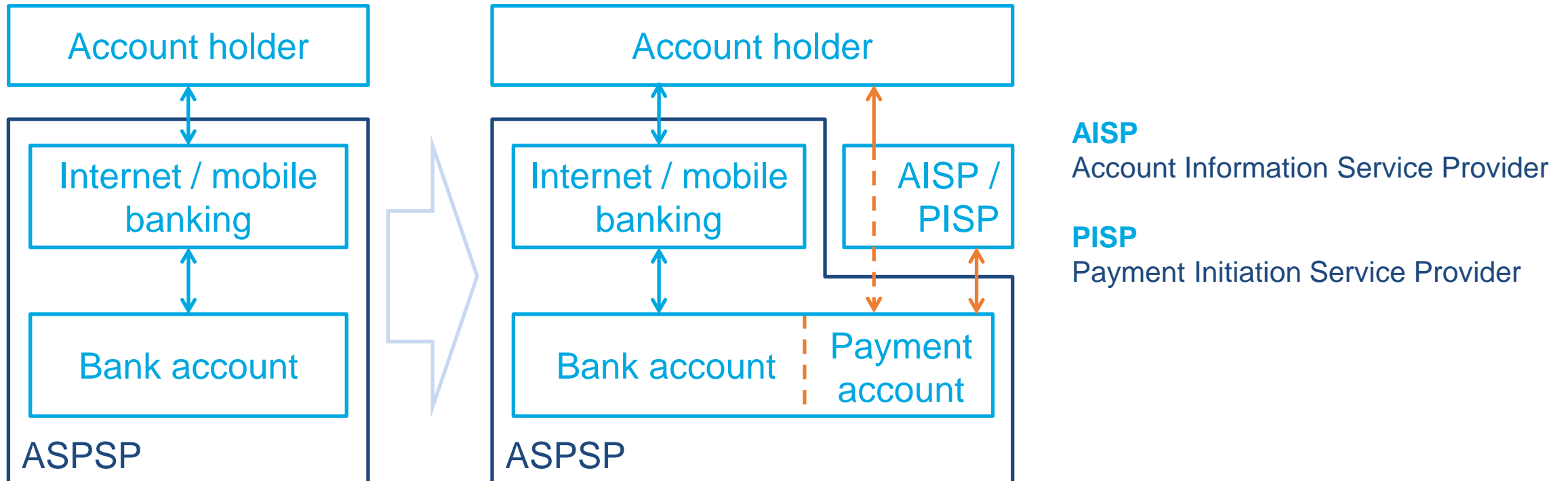
ACCESS TO ACCOUNT

- Market access regulated for Third Party Providers (TPPs): PISP and AISP

Source: Innopay analysis

PSD2 introduces new roles and services

Access to the payment account (XS2A)



AISP

Account Information Service Provider

PISP

Payment Initiation Service Provider

ASPSP

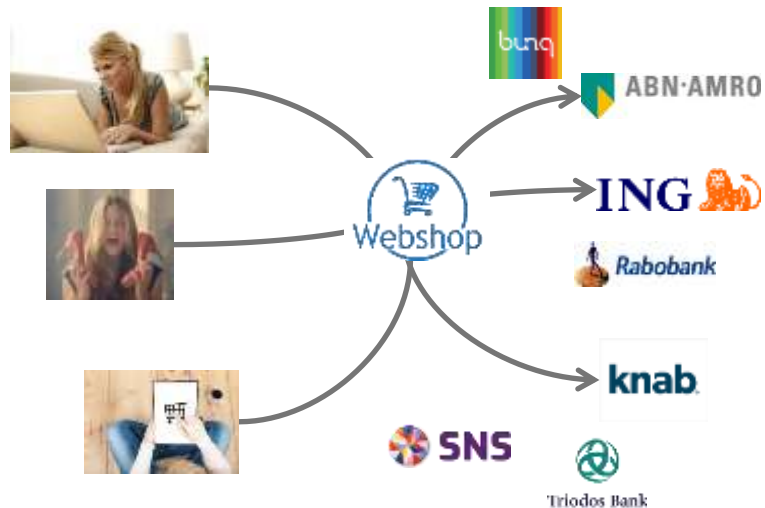
Account Servicing Payment Service Provider

Payment Initiation and Account Information Services

Example use cases

Payment Initiation Services (PIS)

Payer initiates via PISP a payment (SCT) from their bank account



Example: A web shop initiates - with the customer's permission – in the role of PISP a payment from the payment account at the customer's bank (requires a payment institution licence under PSD2).

Account Information Services (AIS)

AISP retrieves account information (accounts, balances, transactions)



Example: AISP's app displays aggregated account information from consumers who hold payment accounts with multiple banks. AISP has registration with the national competent authority.

Example use cases for AIS

- Personal Finance Man.
- Credit scoring
- Debt counselling
- Price comparison / switching

Providers with regulatory base in the Netherlands

Situation 24 September 2021



Area	Name	AIS	PIS
B2C	Buddy	x	x
	Dyme	x	
	Flow	x	x
	Peaks	x	x
	Lendex	x	
	12Budget	x	
B2B – general PSP	Buckaroo	x	x
	Online Betaalplatform	x	x
	PAY.	x	x
B2B – infra provider	ibanXS	x	x
	Invers	x	
	Ockto	x	
	Plaid	x	

Area	Name	AIS	PIS
B2B – accounting	Bizcuit	x	x
	Tellow	x	
	Skillsource	x	
	Jort	x	
	MoneyMonk	x	
	Twinfield	x	
	Exact	x	x
	Finmaster	x	
B2B – other	Asperion	x	
	Ceron – VvE beheer	x	
	Floryn – Lending	x	
	Cobase – Treasury	x	x

Banks do not require a separate license for AIS or PIS

PSD2 is not about payments... it's about the data!

KLANTDATA

**Nieuwe betaalrichtlijn
Brussel leidt tot flinke
ruzie tussen banken
en fintechs**

Rutger Betlem en
Wouter Keuning
Amsterdam

Van wie zijn klantdata? Welke partijen hebben daar toegang toe? Op welke manier mogen die gegevens door de verschillende partijen worden gebruikt voor dienstverlening? Daarover ruziën Europese banken en de fintech-sector in aanloop naar de invoering van de Europese betaalrichtlijn PSD2 in 2018.

gedaan en voor een open bankenstandaard wordt gekozen. Daarbij geven banken derde partijen toegang tot klantdata via een speciale interface, een zogenoemde API. Na de presentatie van het document begonnen de Europese fintechs een lobby om screen scraping als alternatieve techniek naast API's te handhaven. Begin deze maand publiceerden zeventig van hen in dat kader een manifest. Daarin stellen zij dat banken bij

vloeien voort uit een document van de Europese Bankautoriteit (EBA) van afgelopen februari. Daar werd de technische invulling van de richtlijn toegelicht, waarbij

**De kern van de zaak is
of techniek die derde
partijen toegang geeft
tot rekeninginformatie
mag worden gebruikt**

weke op de ban op screen scraping op te heffen en experimenteren met een open bankenomgeving toe te staan. 'De lobby is heel sterk', zegt Gijs de Jong, adjunct-directeur van de Nederlandse. 'Het te kwestie geworden. 'framed door nieuwe n'. Ook hij ziet dat de el in de richting van vers ro l. 'Het idee is fintechs het leven wort.'

**Zorgen en ruzie rond de Europese
betaalrevolutie**

**'DNB moet voortouw nemen bij
bepalen spelregels PSD2'**

**Banken houden controle over het
nieuwe betalingsverkeer**

**Europese inval maakt banken
huiverig voor samenwerking**

**Chaos dreigt rondom invoering
Europese betaalrichtlijn PSD2**

**Data klant is banken gevecht
waard**

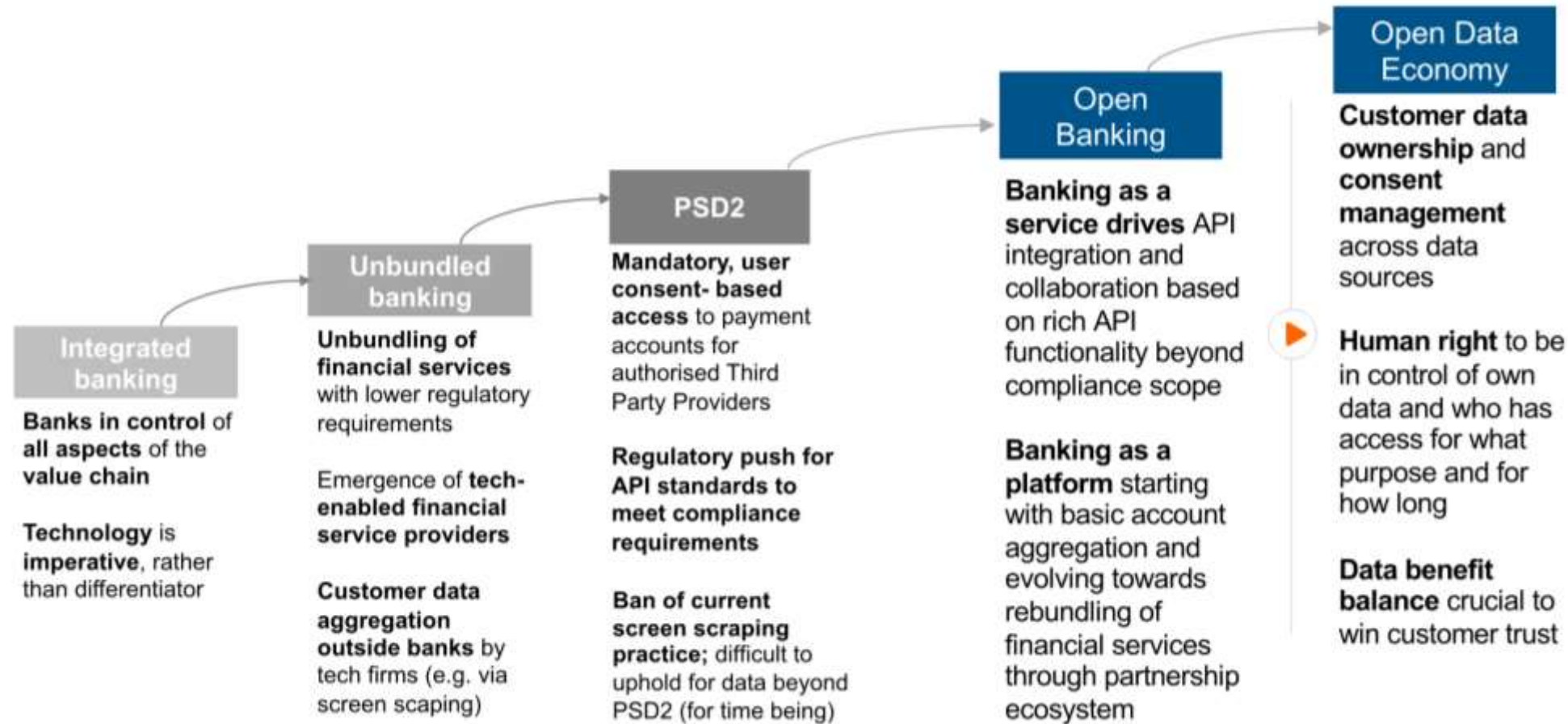
**Nieuwe betalingsregels botsen hard met
privacy: EU-regels dwingen banken tot
delen rekeninggegevens**

**Banken in geweer tegen delen
betaalgegevens met Google en Apple**

Open Banking

Open Banking beyond PSD2

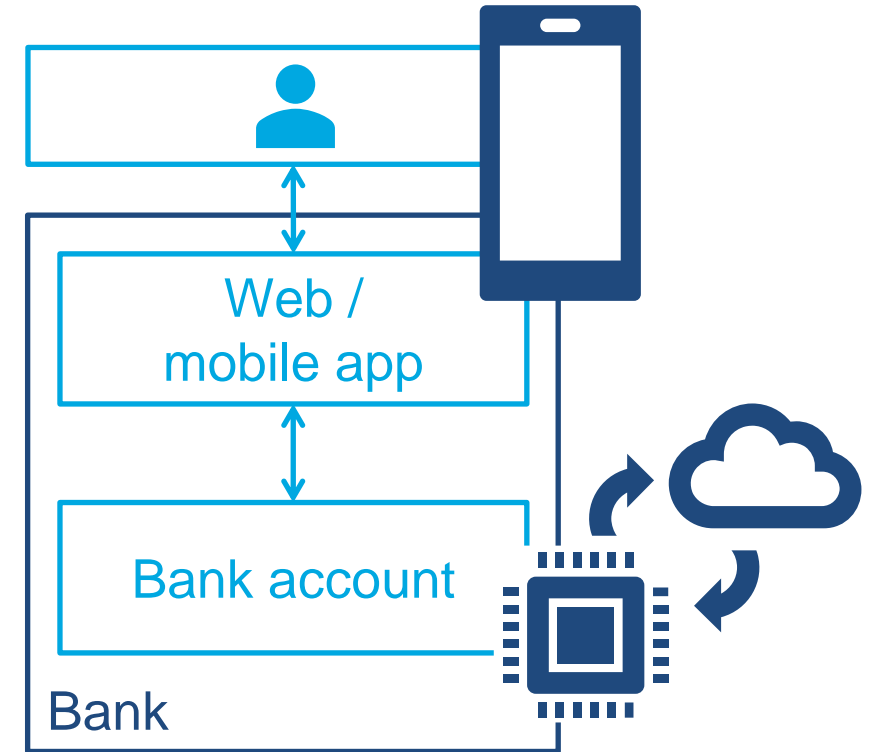
Openness in banking part of cross-sectoral trend towards Open Data Economy



Source: Innopay analysis

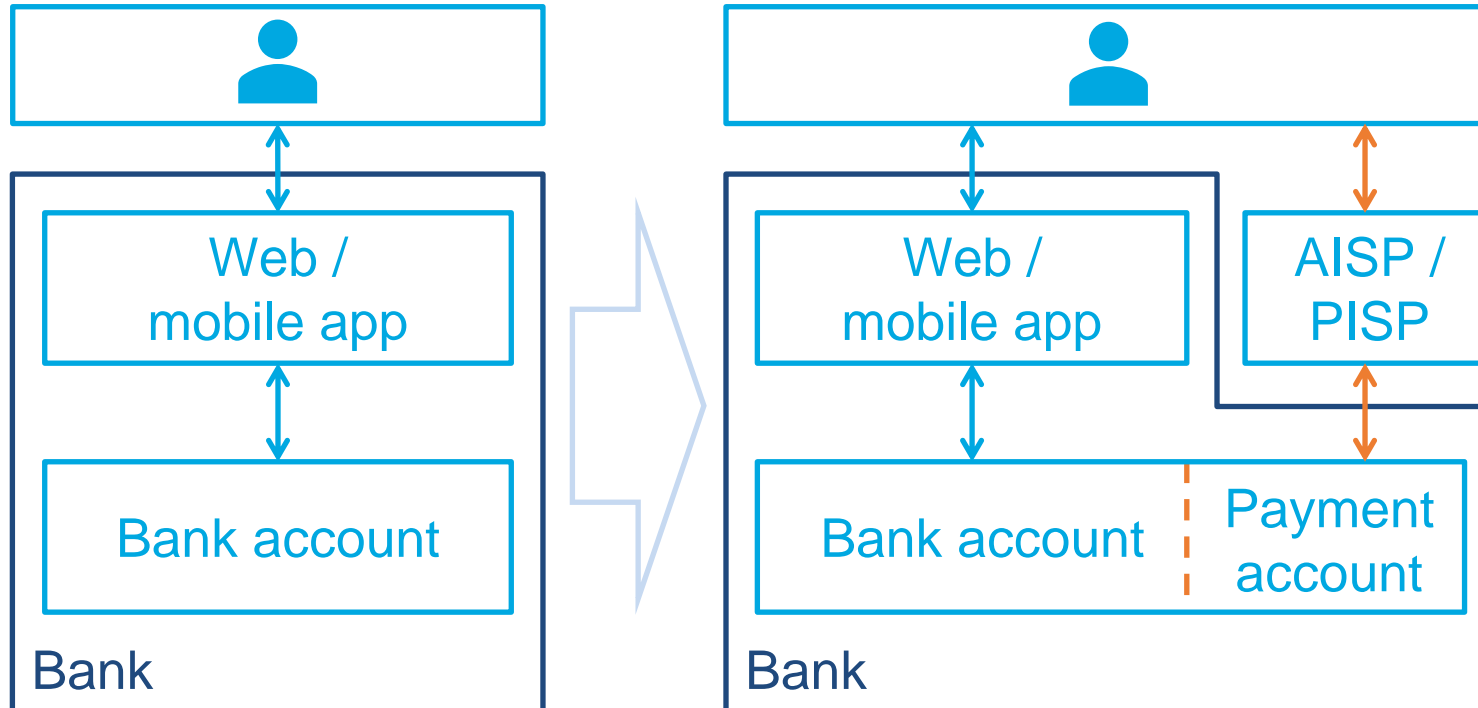
What does a bank look like today?

Digital transformation of a long-established model



PSD2 broadens the landscape of payment services

Differentiating between manufacturing and distribution

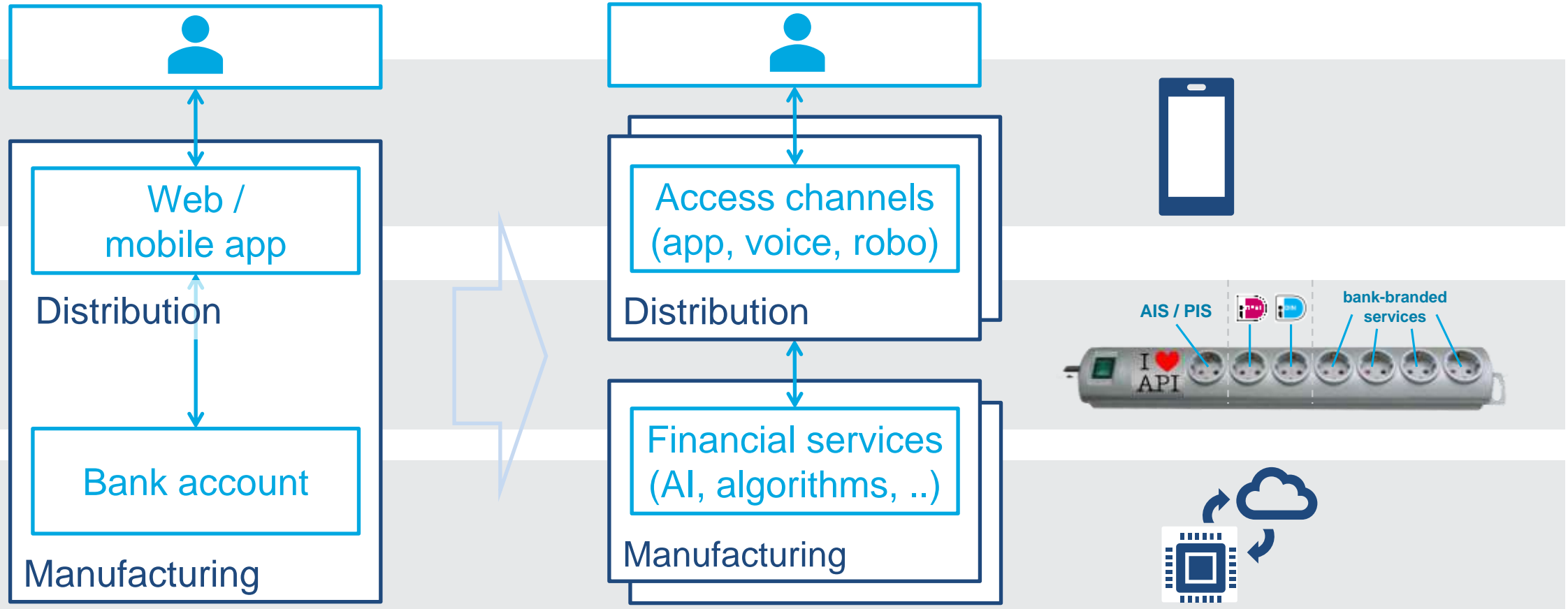


AISP Account Information Service Provider

PISP Payment Initiation Service Provider

APIs are technological driver behind services unbundling

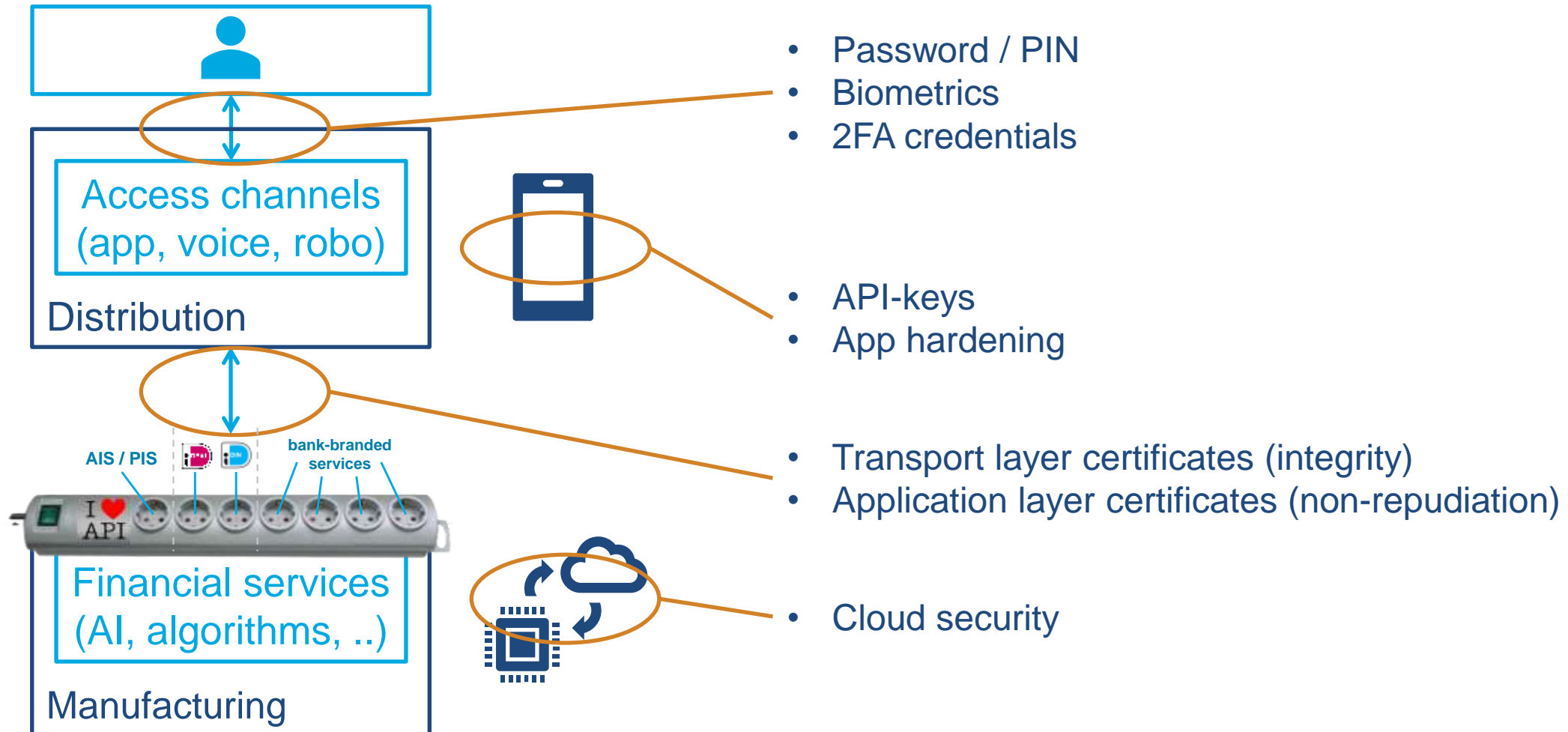
Further separation of manufacturing and distribution functions



Source: Chris Skinner, Digital Human, 2017 (book) – David Birch, Rearranging the banks, 2018 (blog)

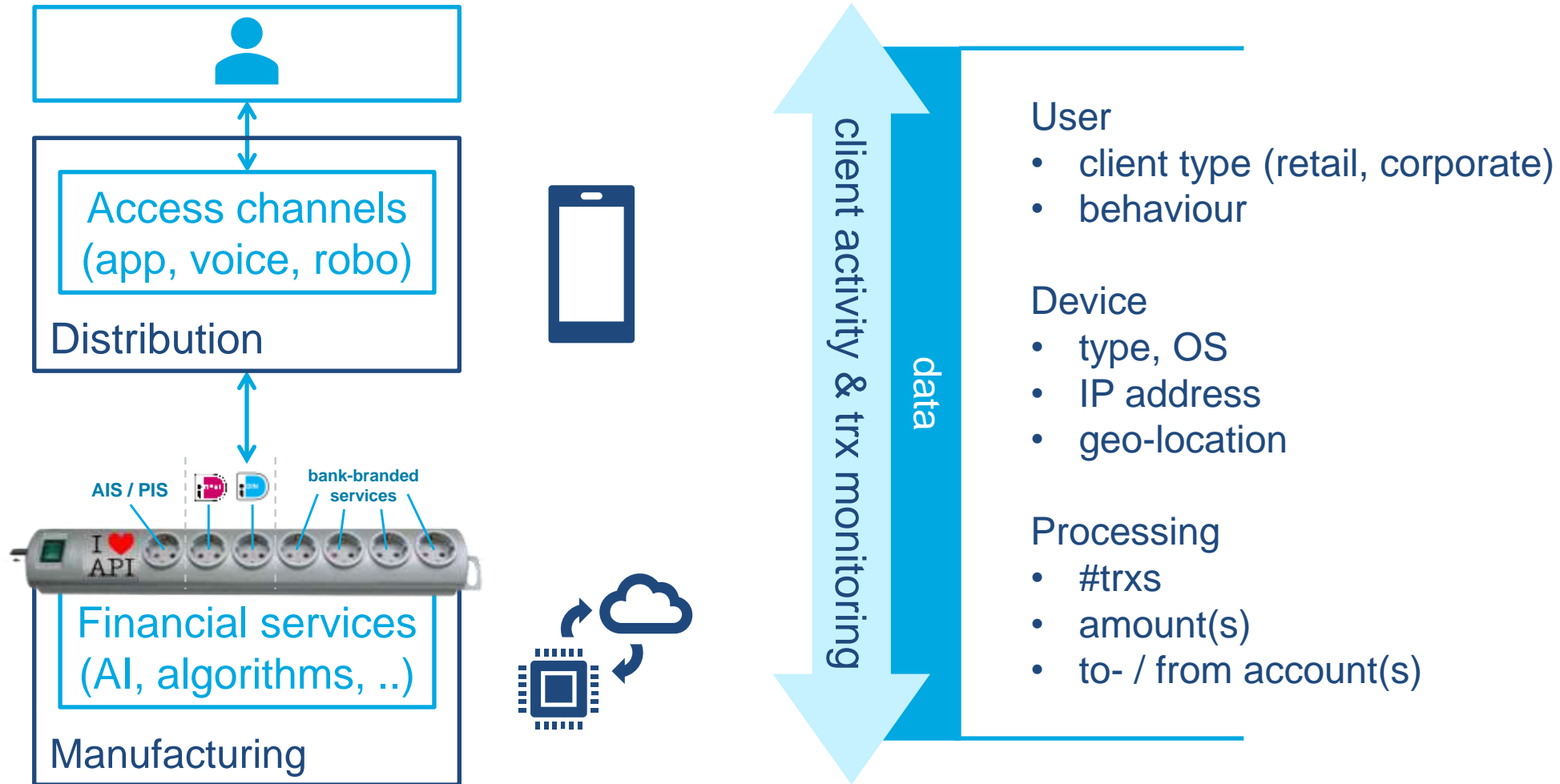
Open banking: **open** for customers, **closed** for crooks

Longer 'supply chain' has increased risk of attacks, malware, user manipulation etc.



Who's data is it?

Input data needed for client activity monitoring & transaction monitoring



Toezichtsperspectief

Waardeketens worden langer



Scenario studie – januari 2020



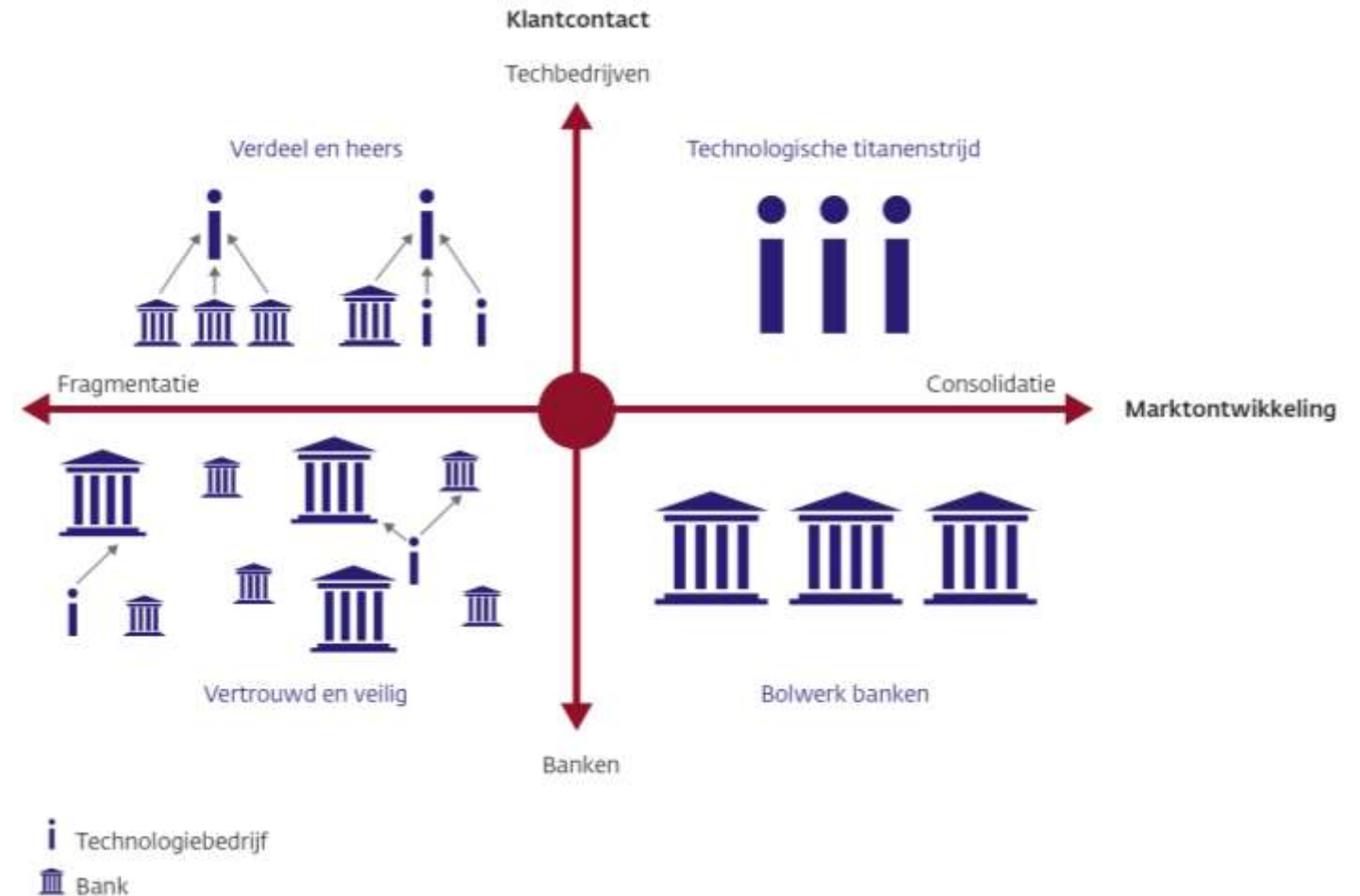
FD – 2 augustus 2021

Expansie BigTech (VS / Azië) betaaldiensten

Scenario analyse - DNB rapport "Veranderen voor vertrouwen" - januari 2020

Viertal **scenario's** op basis van twee dimensies waarover toekomstige onzekerheid bestaat

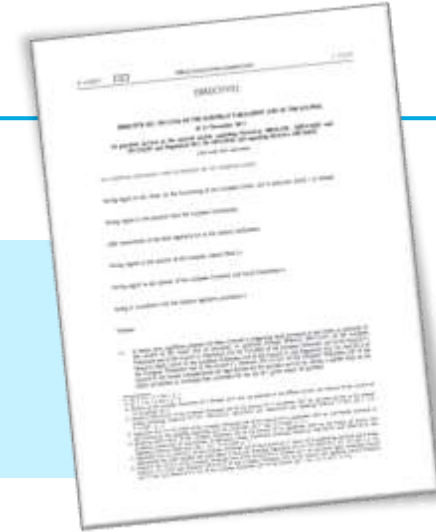
- **Klantcontact** hoofdzakelijk via banken of via 'tech'
- **Marktontwikkeling** richting consolidatie of fragmentatie



Noot: scenario's zijn bedoeld als denkkader over de toekomst. Het zijn geen voorspellingen of voorkeuren voor de toekomst.

Legislation and technology are two ends of a spectrum

Contractual agreements needed to fill the gap



Legal framework (PSD2)

- Basic responsibilities and liabilities

Product features

- UX guidance
- Availability
- API standard

Security

- Client & trx data
- Fraud prevention
- Incident management

Business rules

- Dispute resolution
- Change management
- Merchant onboarding

Legal aspects

- Intellectual property
- Governance
- Sanctions

Technical interface (API)

- Basic standards
REST, JSON, ISO20022, OpenAPI, ...

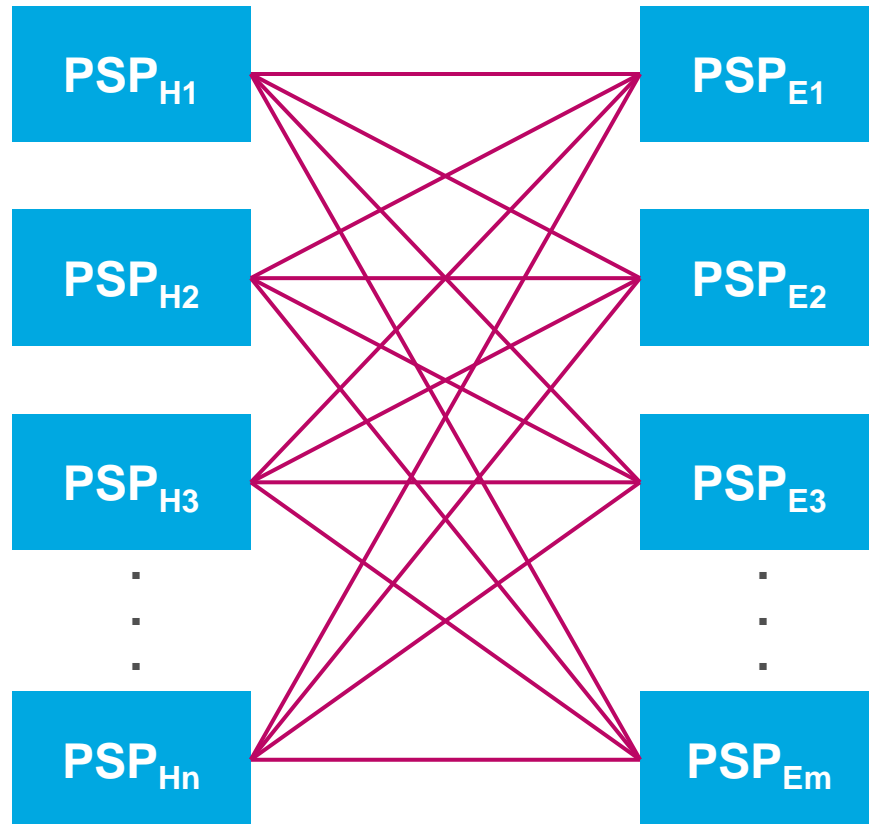


Efficient contractual arrangements are possible

Reduction in number of contracts from $O(n^2) \rightarrow O(n)$

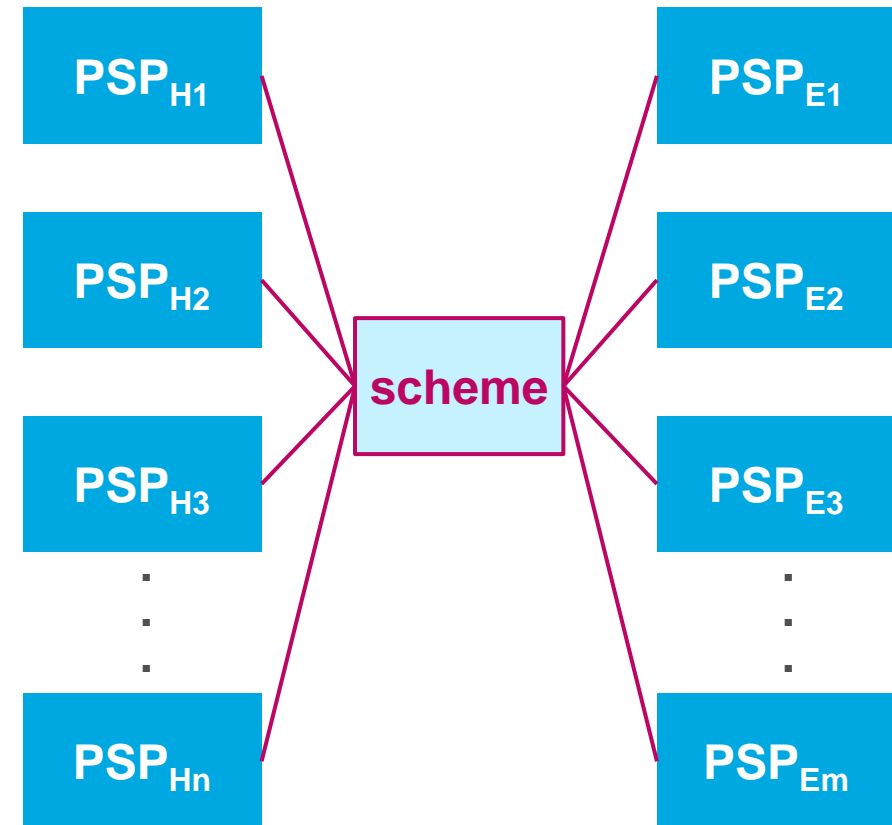
Manufacturing

Distribution



Manufacturing

Distribution



Schemes, standards and specifications

Schemes

- EPC Request-to-Pay scheme
- ERPB SEPA API Access Scheme
- European Payments Initiative (EPI)

Standards and specifications

- Berlin Group / NextGenPSD2
- Berlin Group / openFinance
- ISO 20022 (XML)
- World Wide Web Consortium (W3C) / Web Payments

SEPA RtP Scheme – processes & context



Preparatory stage establishing the underlying transaction for which a **payment is due**.

Creation and **presentation** of the Request-to-Pay (RtP) to the Payer.

The customer (Payer) can **accept** the RtP – to be followed by an immediate or future payment – or **refuse** it.

Payment process, starting with the selection of the payment instrument *SCT* or *SCT Inst*, followed by the execution of the payment after appropriate **customer authentication**.

SEPA RtP Scheme – use cases & channels

Physical retail commerce (C2B)

- Payment terminal → Consumer device
- QR, Bluetooth, NFC, ...

P2P

- Payee mobile device → Payer mobile device
- Proximity technology, messaging app, ...

Online retail commerce (C2B)

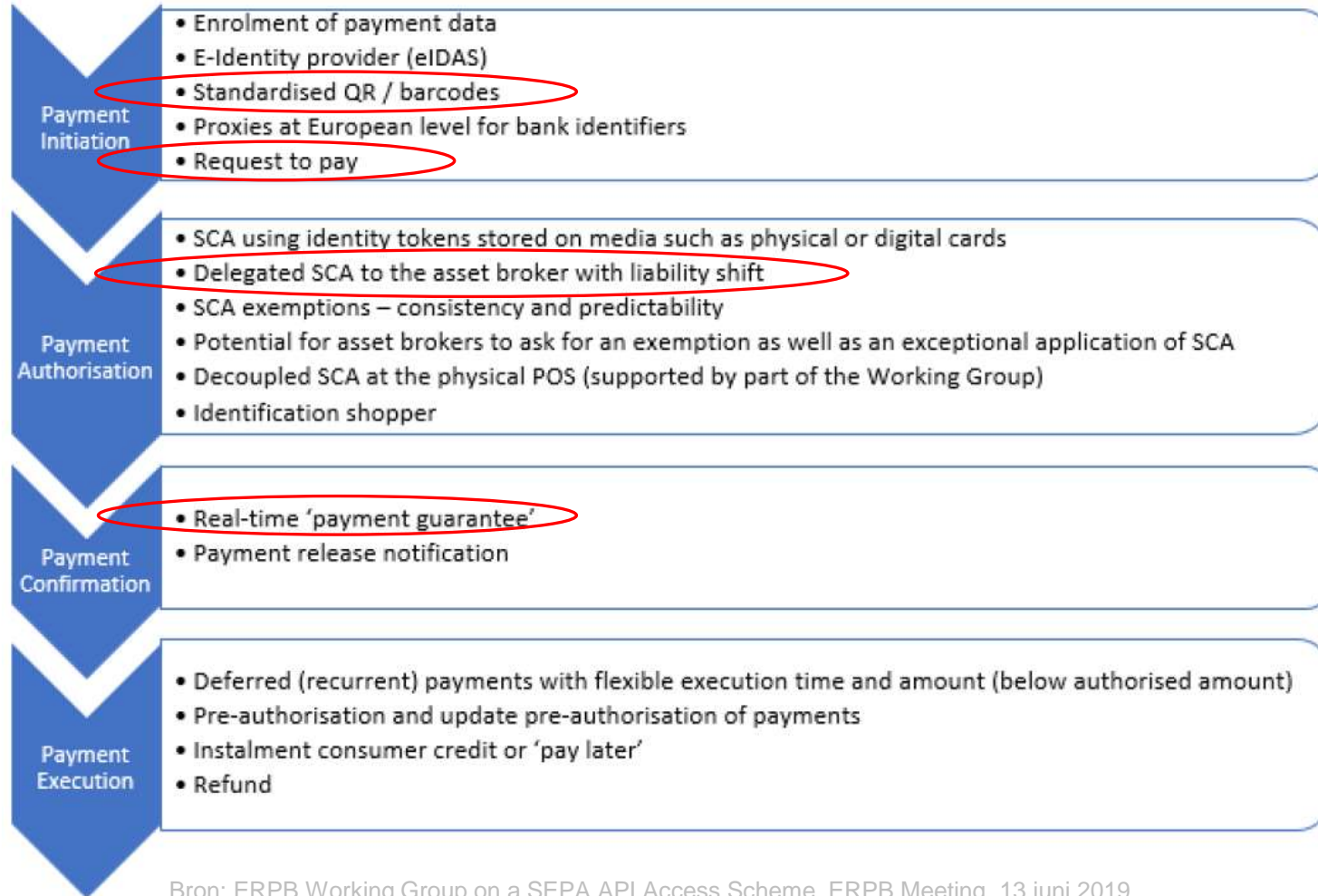
- Check-out page → Consumer device
- PC, mobile, ...

e-Invoice (B2C, B2B, G2C, G2B)

- e-Invoice → Consumer / Business (Payer)
- Clickable link, QR code, ...

ERPB SEPA API Access Scheme

Multi-stakeholder initiative in European Retail Payments Board (ECB chaired)

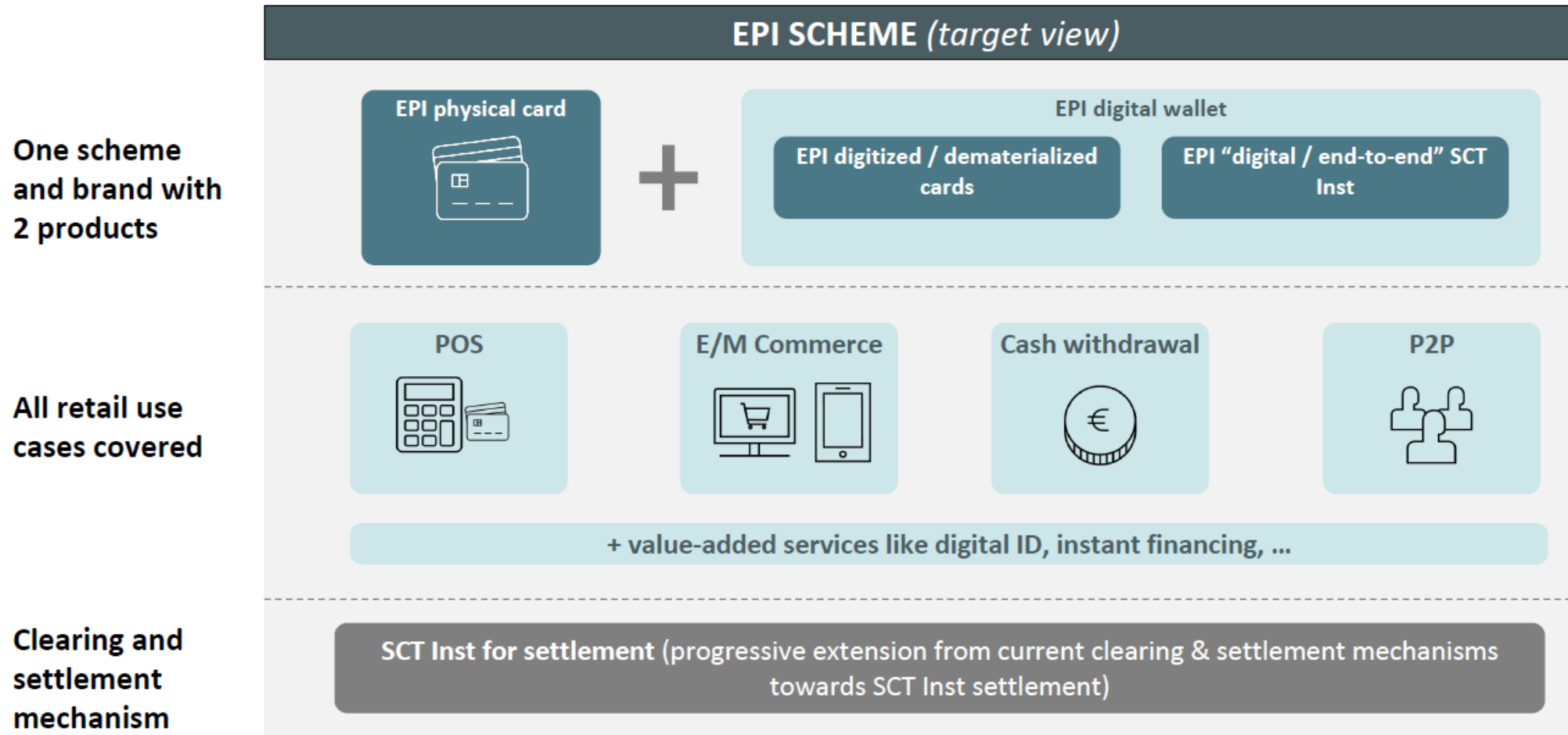


Bron: ERPB Working Group on a SEPA API Access Scheme, ERPB Meeting, 13 juni 2019

Report June 2021

- Customer journeys / requirements
 - C2B, B2B and P2P payments
- Scheme governance for asset holders and asset brokers
 - eligibility criteria
 - business conditions
 - rights and obligations of participants
 - security
 - liability
 - compliance
- Scheme manager
 - competences, resources, flexibility

European Payments Initiative (EPI)

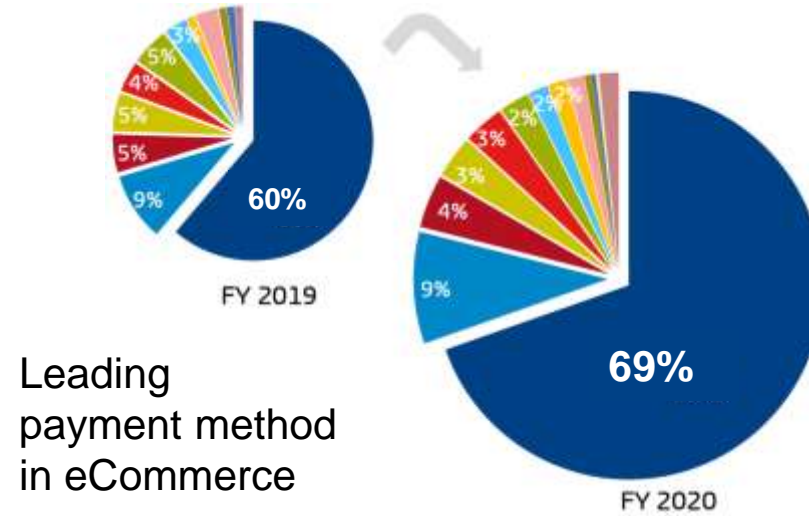
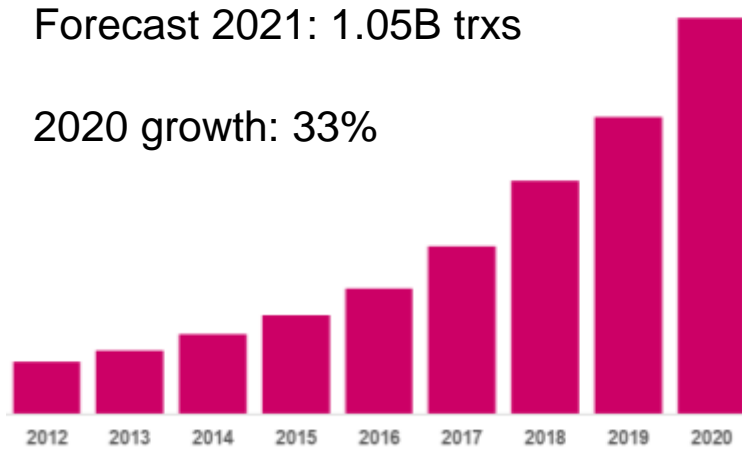


Source: European Payments Initiative

The 'new iDEAL'

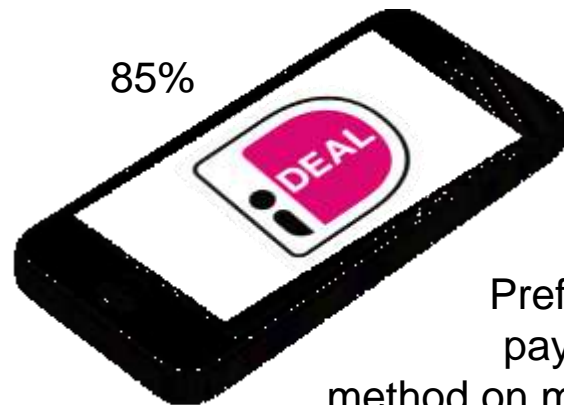
iDEAL is a trusted brand in NL and still growing strong

... and has been so for the past 16 years



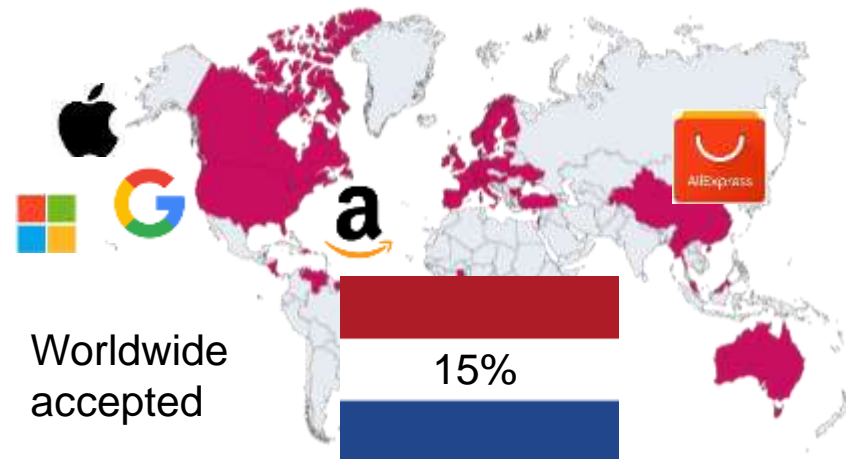
Instant P2P payments

25% of total volume



85%

Preferred payment method on mobile



Offline payments through iDEAL QR

10 million codes generated monthly



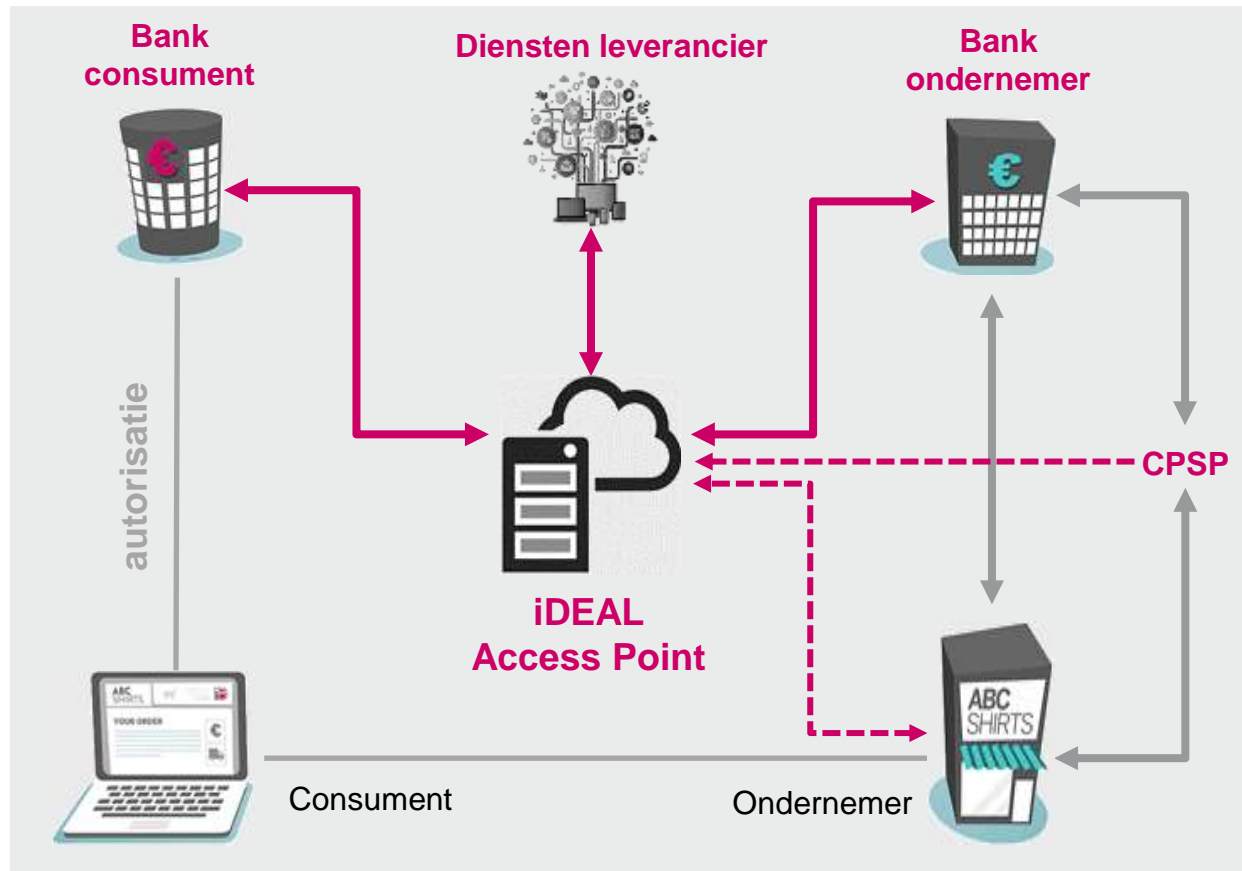
Het nieuwe iDEAL – alles draait om klantvoorkeuren

Consument en ondernemer zijn in control van koop- en betaalproces



Klantherkenning en Snel bestellen zijn vanaf de lancering beschikbaar. De andere diensten worden na de lancering ontwikkeld in samenspraak met de markt.

De nieuwe centrale infrastructuur geeft mogelijkheden voor nieuwe diensten, betaallopties en samenwerkingsmogelijkheden



Nieuwe technische infrastructuur met een centraal Access Point

1. Sneller en korter betaalproces dankzij **klantherkenning**
2. Verrijking van het checkout proces met **nieuwe diensten**
3. Toevoeging **nieuwe betaalmogelijkheden**

Het nieuwe iDEAL

Animatie video



<https://vimeo.com/user18171637>

Questions?

