

A wireframe sculpture of a hand holding a pen, rendered in a light gray color. The sculpture is composed of many thin, parallel lines that create a sense of depth and texture. The hand is positioned as if writing, with the pen held between the fingers. The background is a light gray grid of diagonal lines.

Wirecard AG

Analyst day 2016

September 2016

Agenda

- 1) **Welcome and introduction**
Markus Braun, CEO
- 2) **Building a global issuing platform**
Susanne Steidl, EVP Issuing
- 3) **Global omni-channel PSP & payment acceptance**
Carlos Häuser, EVP Payment & risk services
- 4) **Value added services**
Jörn Leogrande, EVP Mobile services

The background features a complex, abstract wireframe structure composed of numerous thin, intersecting lines. The lines are rendered in various shades of orange and brown, creating a sense of depth and movement. The overall effect is that of a digital or architectural mesh, possibly representing a globe or a network. The text is overlaid on this background in a clean, white, sans-serif font.

Building a global issuing platform by Susanne Steidl

1

Current situation: unique opportunity based on Wirecard's ability to differentiate

The market is rapidly evolving, customers are searching for flexible but reliable service providers

Customers point of view:

- The globalisation and internet technology are forcing products that can be used globally
- Requirements regarding payments and especially issuing products are getting more and more complex due to regulation and increased technical possibilities
- Client wants one point of contact as full service provider, getting only bits and pieces is not an attractive solution in most cases
- Service provider is requested to be able to offer guidance (License options, AML, Compliance, KYC etc.) regarding various factors
- Small players cannot easily enter new markets e.g. are not able to get BIN sponsorships because they do not have the volume or customers or transactions

Wirecard is willing to take the global opportunity

Competitive landscape:

- There is a niche that can be filled
- Competitors have a different view on the market, their focus is often more on local markets and products



- + Wirecard covers the whole value chain and is focused on “the whole big thing” for issuing and acquiring
- + Deep understanding of various markets and the various requirements
- + Strong technology and stable platform
- + Ability to scale globally

2

Wirecard's issuing system: status quo and success stories

Wirecard's issuing system

Issuing product portfolio

To be made available globally...

- Virtual cards
- Corporate cards
- Payout cards
- Closed loop / private label card
- Programme manager platform
- Aggregated micropayments
- General purpose reloadable card
- Gift card
- Family card
- Closed loop card
- Payment wearables
- Mobile wallet
- E-wallet / in-app payments
- Mobile banking
- Mobile payments
 - Host card emulation
 - Apple pay / android pay
 - Proxy card
- Mobile apps and SDKs
- Load & funding management
- Business intelligence & reporting
- Loyalty, couponing & cashback
- Integrated merchant billing

Wirecard's USPs due to the ability to differentiate

What makes Wirecard's products different:

- Instant user registration, incl. all relevant PEP and sanction checks, scoring etc.
- Sophisticated risk management methods
- Mobile payments / in app payments with enhanced risk management for card not present transactions
- Ability to connect to various 3rd parties for example processors, risk engines, perso offices and financial institutions

Wirecard's issuing system



Any of the platform solutions are configured based on market needs

Plastic Card



- EMV Cards
- Dual Interface (NFC)
- Magstripe

Payment Scenario:
Any card payment,
online or at POS

Virtual Card



Payment Scenario:
Payment in online shop

Mobile Card



Payment Scenario:
Payment at the POS with
your handset by „tap
&pay“

Wearable



Payment Scenario:
Payment at the POS with
your Wearable by „tap
&pay“

MyCard2Go as a success story in classic plastic cards

mycard2go

PURCHASE. TOP UP. AND PAY WORLDWIDE.

The prepaid Visa card – simple and easy to take away.

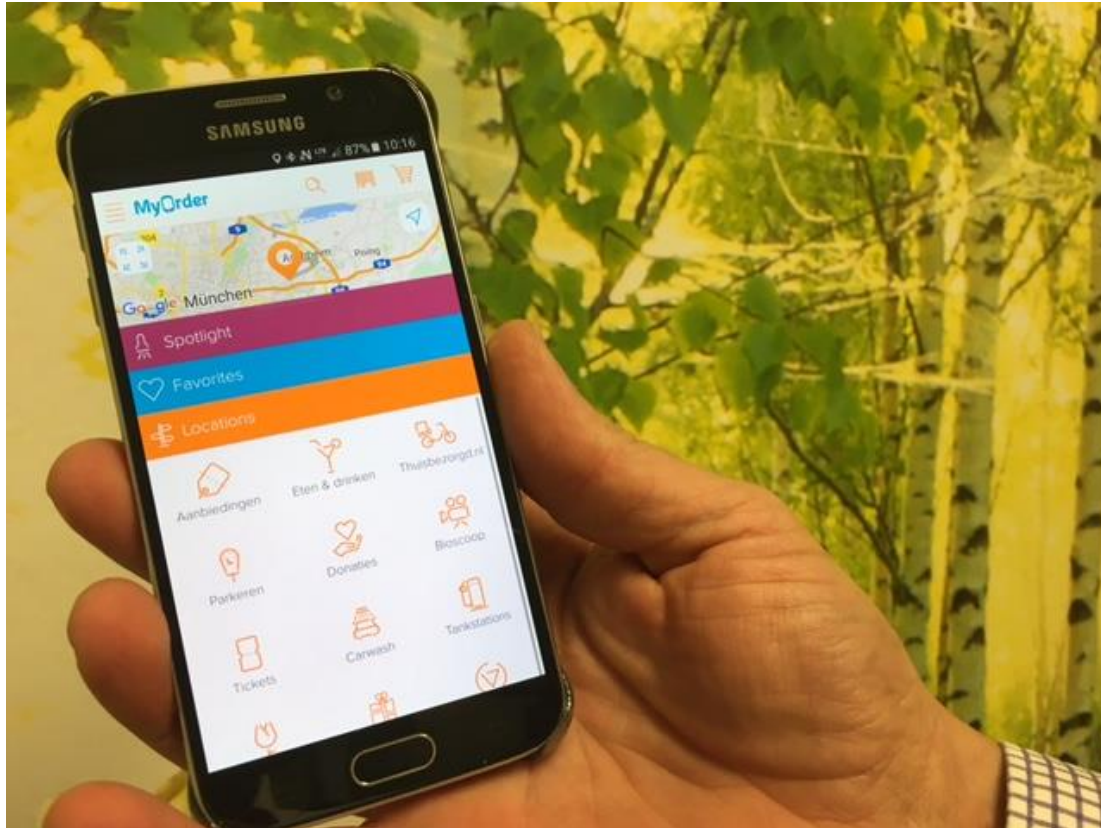
mycard2go is the prepaid Visa card that you can buy directly in-store. No application, no waiting time. Simply purchase, top up and conveniently pay at any location that accepts Visa worldwide – offline or online. mycard2go offers you absolute cost control with maximum flexibility:



MYCARD2GO

- Buy, activate, get started – just in a couple of minutes.
- First Visa & V PAY Simply One card, ideal for world-wide payments combined with a very high safety protection standard for prepaid cards
- Mobile optimised WebUI and Mobile App

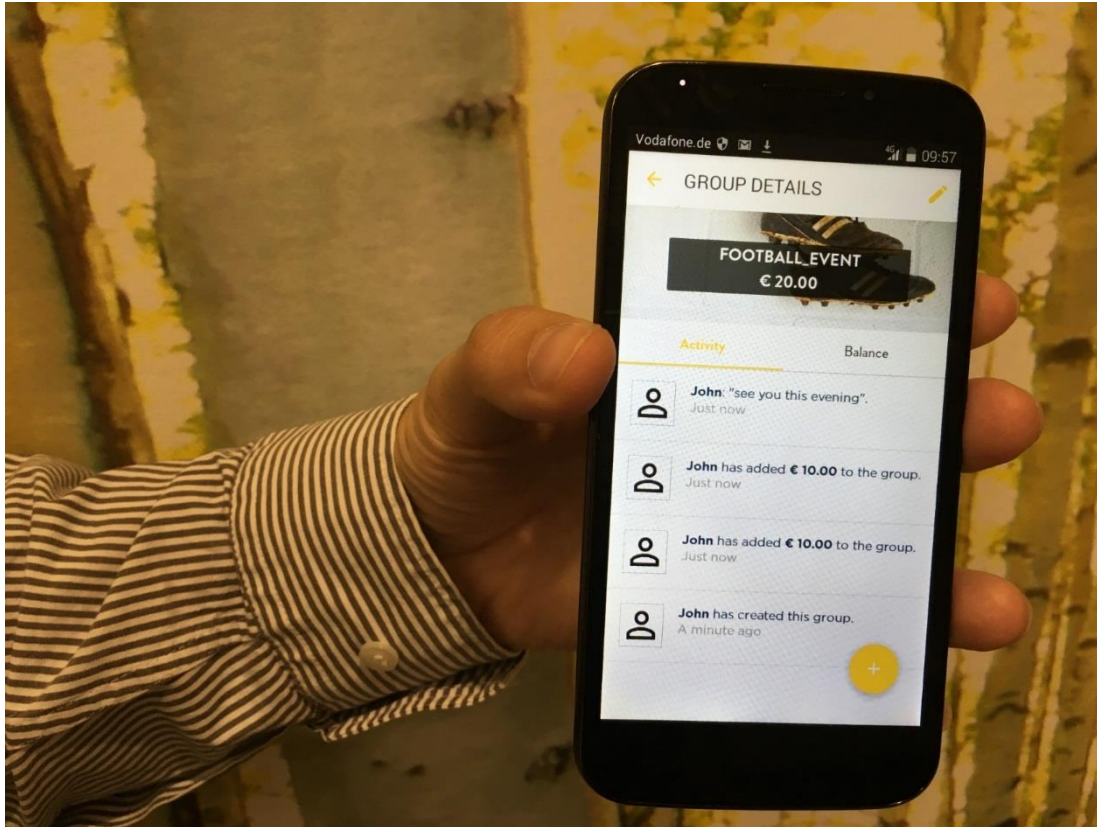
MyOrder as a contactless payment product with various features



MYORDER

- Dutch mobile contactless payment product for open loop payments at the POS and a virtual card for eCommerce
- Full integration of in-app ordering, reservation and payment of goods, tickets, parking space, ...
- Person-to-person transfer
- Location finder integrated

Also sharing expenses is made available powered by Wirecard



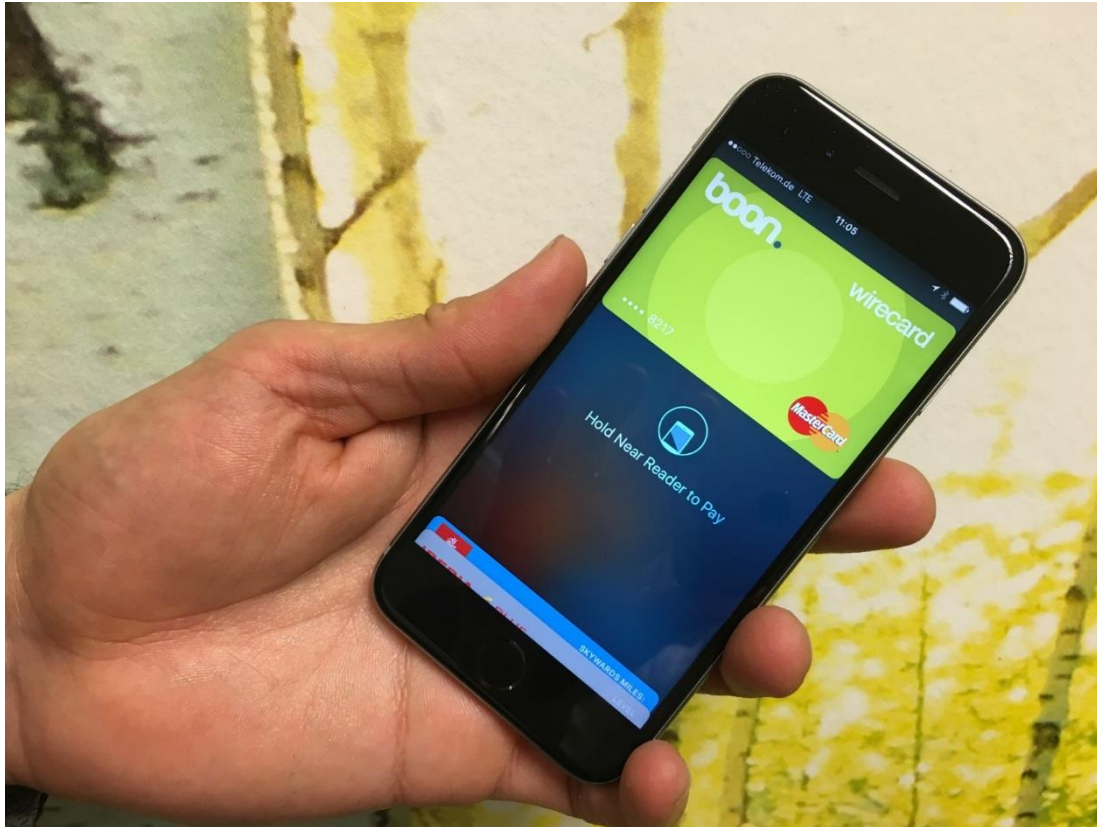
GRPPY

- Dutch mobile app, that helps people to share expenses in a convenient mobile way
- Create a group, invite other people. One person can do spending on behalf of the group. All users can track group spending
- Independent from the bank or payment method. Shared Wallet solution for both Android and iOS devices

Wirecard's issuing system

wirecard

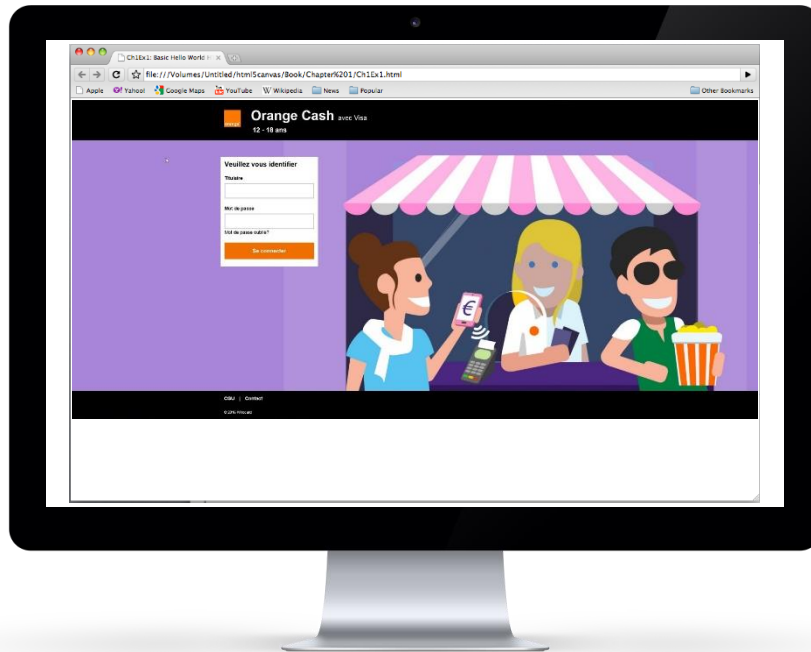
boon. powered by Wirecard, first mover with a fully digital card in apple Pay



BOON. FOR APPLE PAY

- First fully digital card in ApplePay
- Funding via Faster Payments, Debit- or Credit Card
- Simple adding of the card to the Apple Wallet
- For every iPhone with iOS 9

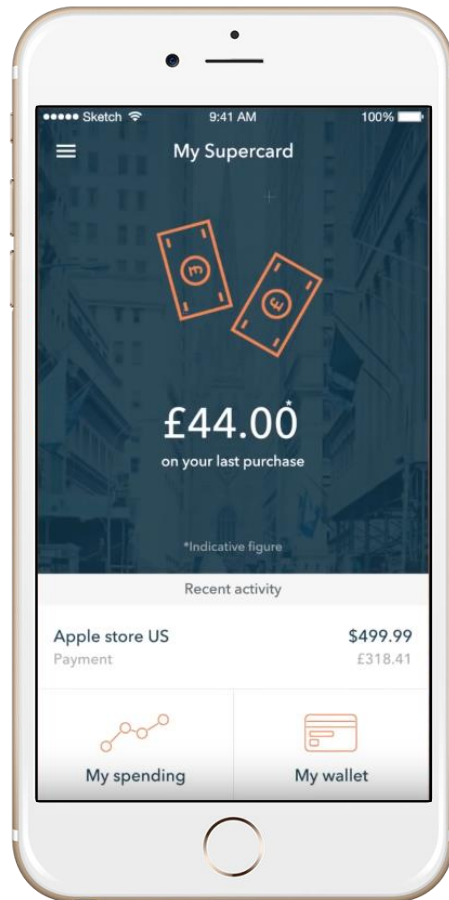
Orange Cash Teen, introducing the family card concept



ORANGE CASH TEEN

- Parents / Guardians sign up their child for a Orange Cash account
- Guardian has full funding and spending control via a new web UI
- Child gets an own, fully functional Android Orange Cash Account & App
- Child account is prepaid only, MCC restricted

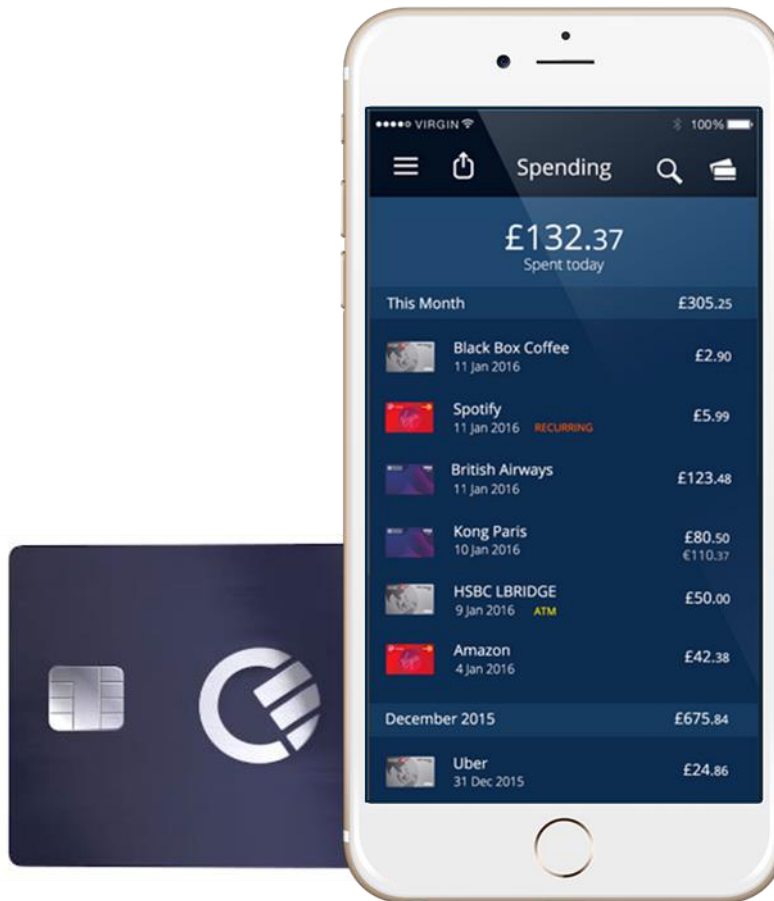
Travelex Supercard powered by Wirecard, to eliminate foreign currency exchange fees for travelers



SUPERCARD BY TRAVELEX

- Users simply link their credit or debit card to their Supercard through an app keeping track of their spending and fx savings
- Proxy card model
- Platform integration with expense management tools
- Customer perception of free FX

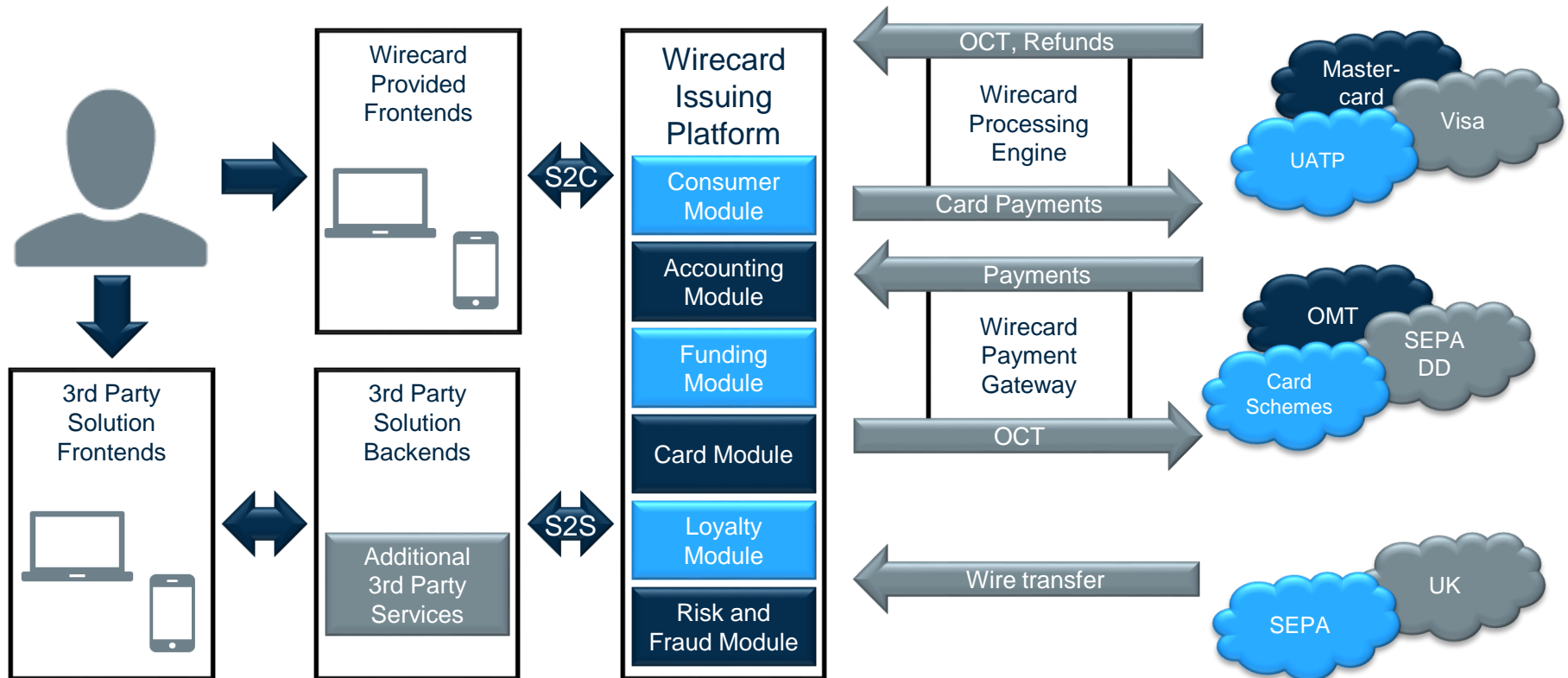
CURVE app, carry all your cards in one card



CURVE

- Connect unlimited number of bank cards into one physical payment card, accepted everywhere
- One PIN for all the cards and accounts
- Transactions for all accounts in one screen in real-time

Wirecard's issuing platform – behind all the success stories



3

**Taking advantage of the
opportunity: flexible global
scaling alongside the value
chain**

Enabling a global coverage with a flexible collaboration model

BIN sponsor

- Holding authorised scheme memberships (MC, Visa)
- Issuance of cards for program manager
- Holding program funds, daily settlement with schemes
- KYC & sanctions screening
- Fraud, disputes and chargebacks
- Suspicious transaction monitoring and reporting
- Scheme reporting
- Risk management

Payment processor

- Processing all POS, E-Commerce & ATM transactions on the cards
- Processing loads to cards, holding card balances
- Maintaining cardholder authorisation parameters
- Processing connections to the schemes
- Risk management
- Reporting to BIN sponsor
- Control cardholder access (e.g. block suspected fraud)
- Disputes and chargeback administration

Programme manager

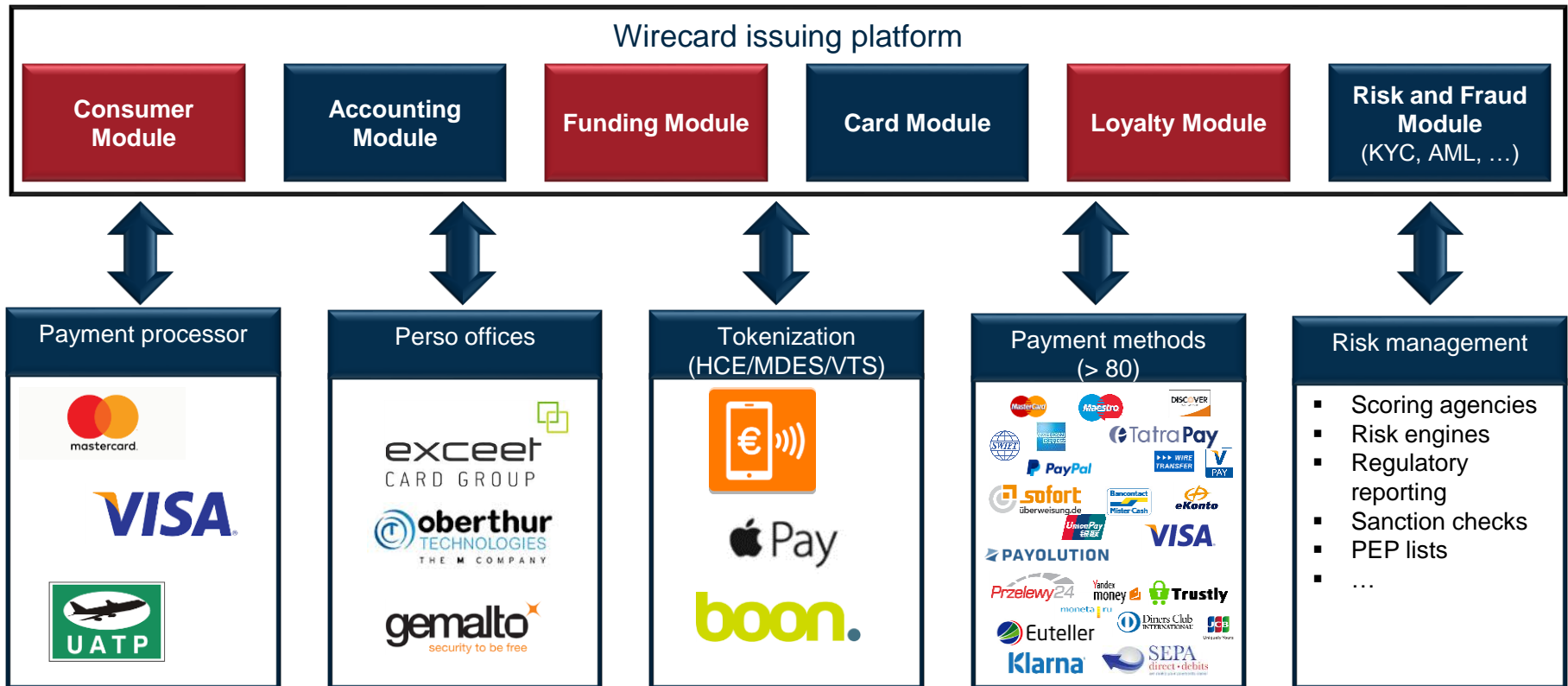
- Develop and launch prepaid products, promote in market
- Contract with corporate clients, manage implementations
- Provide core program technology
- Process client instructions, produce and distribute cards
- Provide cardholder and client servicing and reporting
- Fraud and suspicious activity monitoring for BIN sponsor
- Support BIN sponsor in meeting AML requirements
- Financial reporting of programs and business
- Strategic vendor management

Card bureau

- Provides plastics and co-ordinates card design personalisation and distribution
- Provides PIN mailer along with other forms of material (card carrier, etc.)
- Provides fulfilment
- Provides card replacements

Taking advantage

The Wirecard system can connect to various parties globally to make services available for the customer



Accessing the full spectrum of services via easy to integrate APIs (1/2)

Server to client interfaces

- Interface based on restful web services
- Optimised for usage with end consumer client devices
- Token authentication concept to avoid storage of basic authentication data on client devices
 - Configurable token levels per web service
 - Configuration of lifetime and number of usages per token level
- Security proxy and certification system
 - Web services are reachable only with proper client certificate
 - Web services hidden behind high risk or low risk proxies

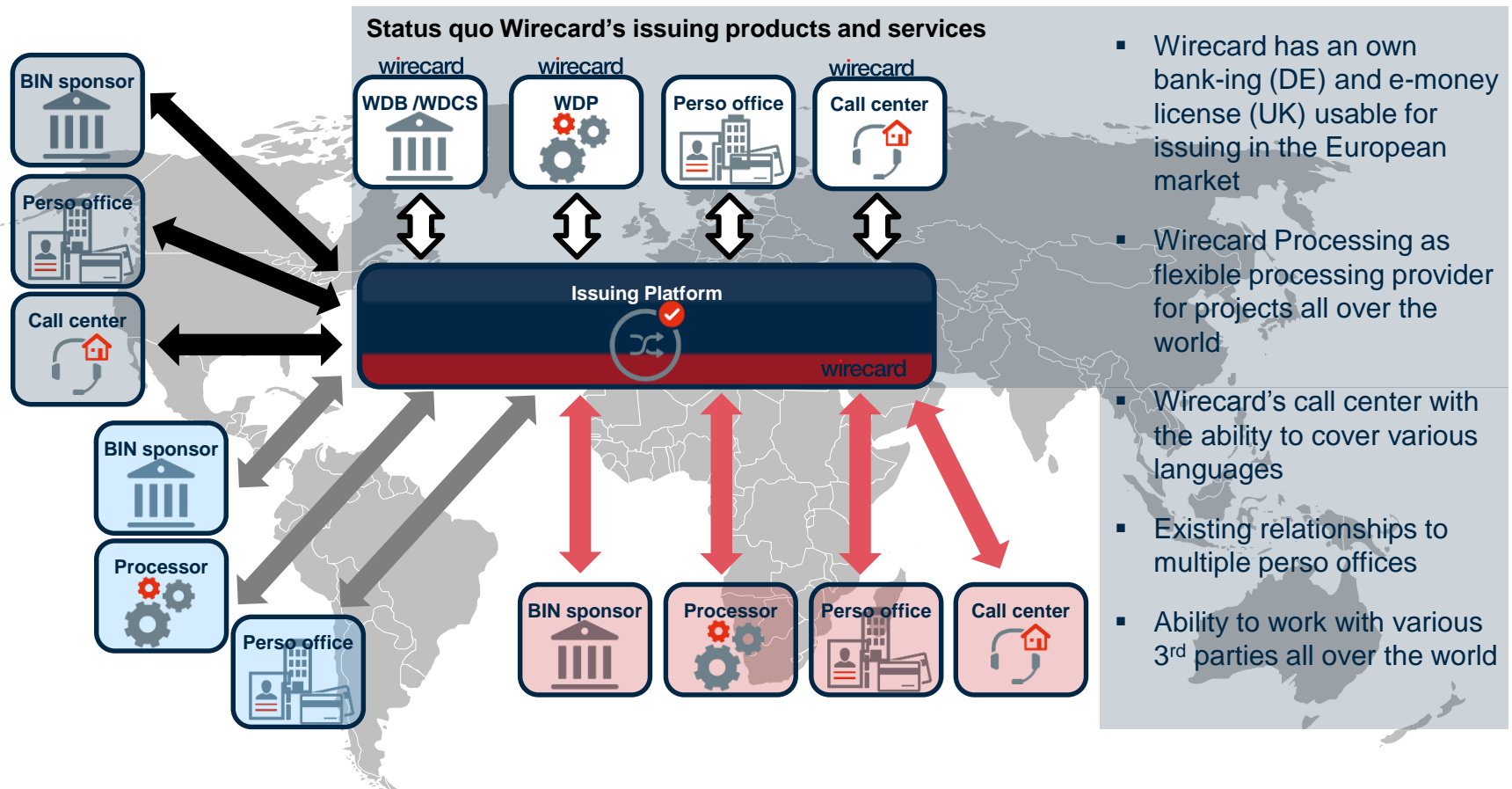
Accessing the full spectrum of services via easy to integrate APIs (2/2)

Server to server interfaces

- Interface based on restful web services
- Optimised for usage with 3rd party backend solutions or client applications that require a view on several customers
- Authentication based on technical user concept
 - ➔ Customers have to be selected by customer search
- Security proxy and certification system
 - Web services are reachable only with proper client certificate
 - Web services hidden behind high risk or low risk proxies
 - Certificate configuration per single web service

Taking advantage

Enabling globalisation with the Wirecard issuing platform



Taking advantage

Partners making globalisation possible: BIN Sponsors & Processors

BIN sponsor



- Holding authorised scheme memberships (MC, Visa)
- Issuance of cards for Program Manager
- Holding program funds, daily settlement with schemes
- KYC & sanctions screening
- Fraud, AML, disputes and chargebacks
- Suspicious transaction monitoring and reporting
- Scheme reporting
- Risk management

Processor



- Processing all POS & ATM transactions on the cards (EMV, Magstripe)
- Processing E-Commerce and card not present transactions
- Processing loads to cards, holding card balances
- Connecting to local ATM networks
- Maintaining cardholder authorisation parameters (fees, limits, CVM, 3DS)
- Processing connections to the schemes
- Risk management
- Reporting to BIN Sponsor
- Control cardholder access (e.g. block suspected fraud)
- Disputes and chargeback administration

wirecard

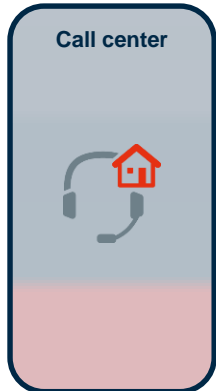
- Collaborations with BIN sponsors to be able to issue cards in countries not covered with own license as well as specific requirements e.g. on KYC
- Collaborations with Processor e.g. in case on-site processing is required or an existing beneficial connection to an ATM network

Taking advantage

Partners making globalisation possible: Perso office & call center



- Provides plastics and co-ordinates card design personalisation and distribution
- Provides PIN mailer along with other forms of material (card carrier, etc.)
- Provides fulfilment
- Provides card replacements
- Supports various form factors
- Take care of card shipping (individual and bulk)



- Offer 1st Level Support
- Support of local language(s)
- 24/7 lost and stolen hotline
- Host IVR
- Provide local dial in numbers

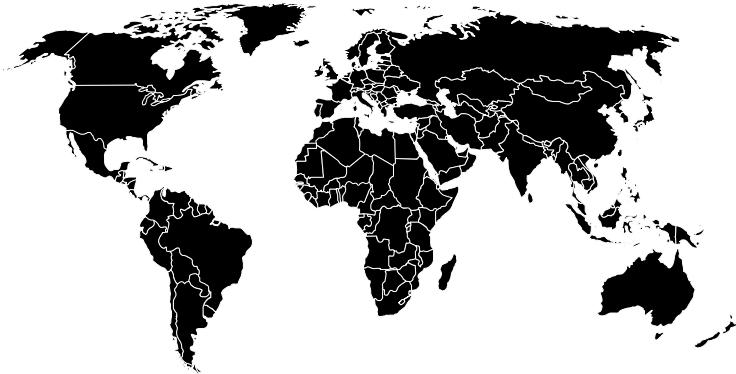
- For on site-issuing of cards to make to process faster and more cost efficient (shipping) local perso offices can be used
- Collaborations with various call centers to cover the languages in the local markets as well as providing 24/7 support globally

Widening the scope

Driving financial inclusion with global money remittance

Global remittance: Wirecard with partners

wirecard + WESTERN UNION



- Global coverage based on Western Unions existing network

wirecard + BIN Sponsors



- Sending corridor between two BIN sponsors

THANK YOU

An abstract graphic composed of a dense grid of thin, light blue lines. The lines are arranged in a way that creates a sense of depth and movement, with some lines curving and overlapping to form a complex, three-dimensional structure. The overall effect is that of a wireframe model or a digital mesh, set against a solid, slightly darker blue background.

Global omni-channel PSP & payment acceptance by Carlos Häuser

1

Current differentiators in PSP & acquiring services

Value proposition of Wirecard

- 1 True omni-channel payment support
- 2 Industry leading consumer related risk management and scoring offering
- 3 Industry leading fraud prevention services with high quality base rule sets per industry segment
- 4 Highly skilled and trained risk analysts to support and consult merchants
- 5 Acquiring proposition on 45 payment methods

Product overview – risk management and fraud prevention options

Credit rating & data cleansing methods	Transaction fraud prevention methods	Analytics	Rule / decision management	Case management	
<ul style="list-style-type: none"> Address normalisation Address verification Doublet identification Address hotlist Sanctions pool Credit scoring (B2B and B2C) 	<ul style="list-style-type: none"> 3-D Secure™ CVC verification Account validation IP/BIN verification Velocity checks AVS Hotlists Rule engine Device fingerprint 		<ul style="list-style-type: none"> Standard rule library 		Best practices¹⁾
<ul style="list-style-type: none"> Dynamic credit limits (scorecards) Strategy management & decisioning solutions Age verification 		<ul style="list-style-type: none"> Payment defaults and fraud patterns analytics 	<ul style="list-style-type: none"> Premium rule Template library Custom rules & decision logic 		Advanced²⁾ (Best practices inclusive)
	<ul style="list-style-type: none"> Fraud screening and pattern (behaviour) detection engine 	<ul style="list-style-type: none"> Financial performance of rules Fraud indicator relevance and accuracy 	<ul style="list-style-type: none"> Advanced rule Template library Custom rules Custom pattern Detection logic 	<ul style="list-style-type: none"> Built-in web-based case management console. 	Premium³⁾ (Advanced inclusive)

Value added services

1) Different best practices to be applied for different industries, businesses and payment methods.
 2) Requires consulting services available with Wirecard Professional Services.
 3) Requires managed services package.

Risk management and fraud prevention options - benefits

Reduce your fraud by...

- detecting fraudulent behaviour (patterns) automatically,
- incorporating market specific data into the fraud decision process, including itinerary information such as departures, stopovers, arrivals and airport information.

Decrease your costs by....

- reducing chargebacks, safeguarding against surcharges and fines
- reducing the number of transactions being queued for manual review,
- decreasing time spent on processing exceptions (chargeback notifications, etc.).

Optimise your revenue by...

- accepting more genuine business,
- identifying and protecting your „good“ customers.

Thus optimising sales conversion, while minimising fraud risk and manual review and associated costs.

2

Trends in PSP services

Optimising customer conversion

- 1 Transformation of Risk Management & Fraud Prevention towards an active of consumer conversion tool
- 2 Dynamic consumer individualised checkout process
- 3 Market relevant mix of payment methods
- 4 Introduction of alternative payment acceptance in point of sale environments

Trends in PSP Services

Data driven services

- 1 Measurement of conversion rates and consumer behavior during checkout process
- 2 Peer group analysis of transaction data
- 3 Analysis of shopping baskets across channels and consumers
- 4 Market insights and comparisson across different regions

European trends and opportunities

- 1 Account Information APIs as result of Payment Service Directive 2.0
- 2 Pan-European realtime payments with payment guarantee through payment initiation APIs
- 3 Extended risk management and scoring services

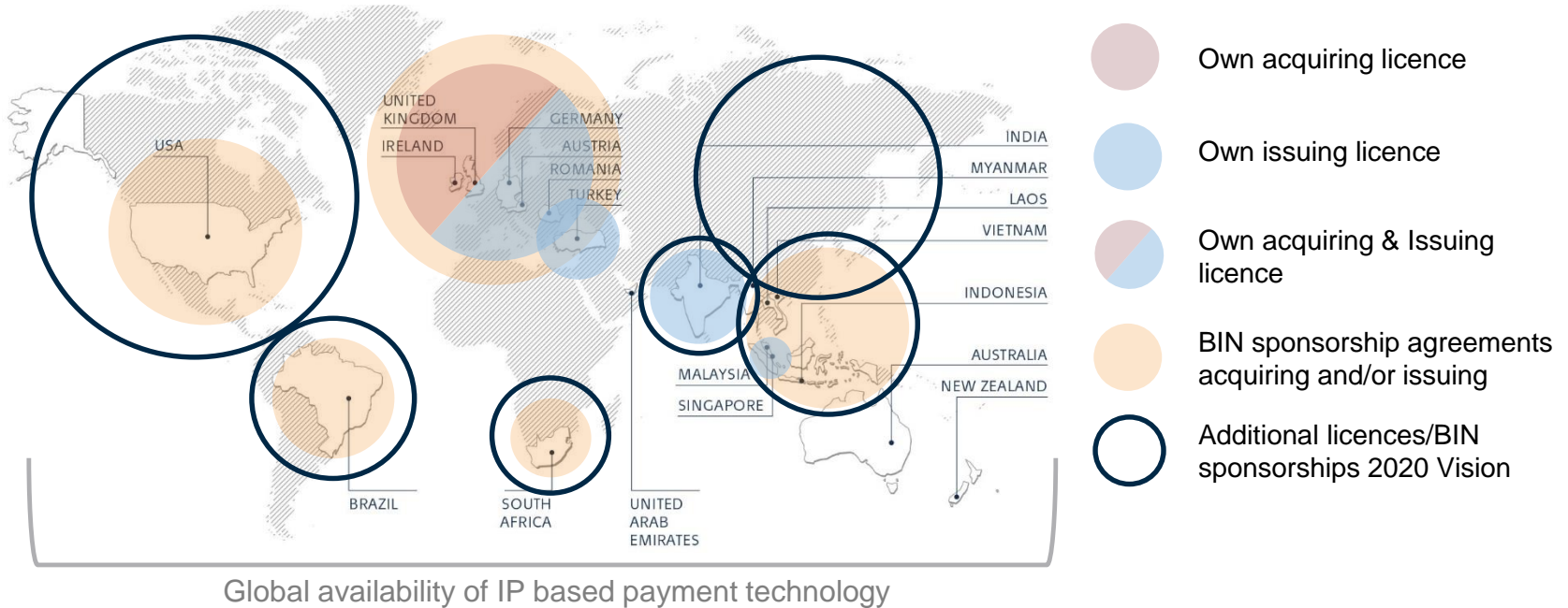
Global trends and opportunities

- 1 POS terminal consolidation at the retail outlets and requirement for omni-channel frontends
- 2 Smart POS terminals based on state-of-the-art technology allowing for new and innovative services
- 3 Widespread governmental initiatives to convert into cashless societies

3

Service globalisation

Vision 2020 – global payment provider



Status quo

- Leading position in Europe
- Dominant position in Southeast Asia
- Market entry in North America
- Global provision of payment technology
- Global airline & travel licences
- Adding relevant global markets
- Addressing needs of local and global merchants

Vision 2020

Addressing all relevant global markets with:

- Global payment technology
- Global licensing framework
- Global risk management
- Global provision value added services and big data
- Hubs in all relevant geographies

Globalisation of service offerings

- 1 Distributed deployment of PSP processing infrastructure
- 2 Localisation of support services on global payment infrastructure
- 3 Extension of acquiring capabilities through own licenses as well as through BIN sponsorship agreements
- 4 Extension of consumer identification services in risk management

4

Technology trends

Vision statement

“Wirecard offers an open payment platform based on newest technologies enabling merchants, merchant system providers and related communities to easily facilitate accepting payments and managing existing and new, innovative payment methods and related processes, such as risk management, fraud prevention, recurring payment handling, etc. in an easy and flexible way.

Clients of Wirecards PSP platform will be capable of customising and extending the already rich feature set to support their business models in the best possible way, making payments the least of their worries thus enabling focus on accelerating their own business growth.

One platform with one coherent interface and integration options across all channels will enable merchants to accelerate their business with a real cross channel solution and optimise their business insights based on one reconciliation and one reporting interface with all relevant business related information across all channels. Self-service administration capabilities will enable merchants to tune their payment process based on data analytics in regards to acceptance rates, transaction costs, conversion rates and alike.

Wirecard will, in addition to self-service capabilities, offer best in class support services helping merchants to benefit from broad and in-deep payment knowledge.”

Technology trends in the financial industry

- 1 Digital transformation
- 2 Open APIs
- 3 Blockchain
- 4 Android and Linux based POS terminals
- 5 Internet of things

THANK YOU



**Value added services
by Jörn Leogrande**

1

Introduction

Mobile services definition

Mobile Services is a product division of Wirecard.

We are developing holistic solutions for mobile platforms like IOS, Android or Windows Mobile.

We are partnering with mobile technology providers like Alipay and startups like Bijli. And we are solution provider for retailers like Munich Airport, Printemps, Berjaya and international banks like DBS or CIMB.

2

**Overview –
current challenges in retail**

Omni-channel

- The days of mono-channel and the undigital shopper are over.
- 8 out of 10 consumers globally use a computer, smartphone, tablet or digital in-store technology while shopping¹.
- Even while in-store 42% of consumers conduct research online via a smartphone or other technology².
- Consumers don't differentiate their shopping experiences by channel, and if retailers want to thrive in the digital age, they must align to the customer expectations – not the other way around.

¹ Forrester Research, "Customer Desires vs. Retailer Capabilities: Minding the Omnichannel Commerce Gap"

²



MasterCard, "The Omnishopper Project, 2015"

Retail challenges

- Data driven commerce: Consumers have become more demanding – driven by new technology and the real-time capabilities it enables. This is why real-time, data-driven retail is the new imperative.
- Empowering shop associates: Sales associates have historically served as a source of relatively static information. That's no longer enough for today's digitally empowered shoppers.
- Personalisation: Customers expect that when entering the store, retailer is aware of their browsing/purchase history, personal preferences & loyalty status
- Alternative payment schemes: Over 64% of customers prefer to shop at retailers that provide mobile wallet payment options and approximately the same amount would spend more if they could use mobile wallets to pay for items
- New fulfilment options: Half of all consumers cite click-and-collect as important or very important when shopping online, although only a third of retailers today support store-pickup programs.

3

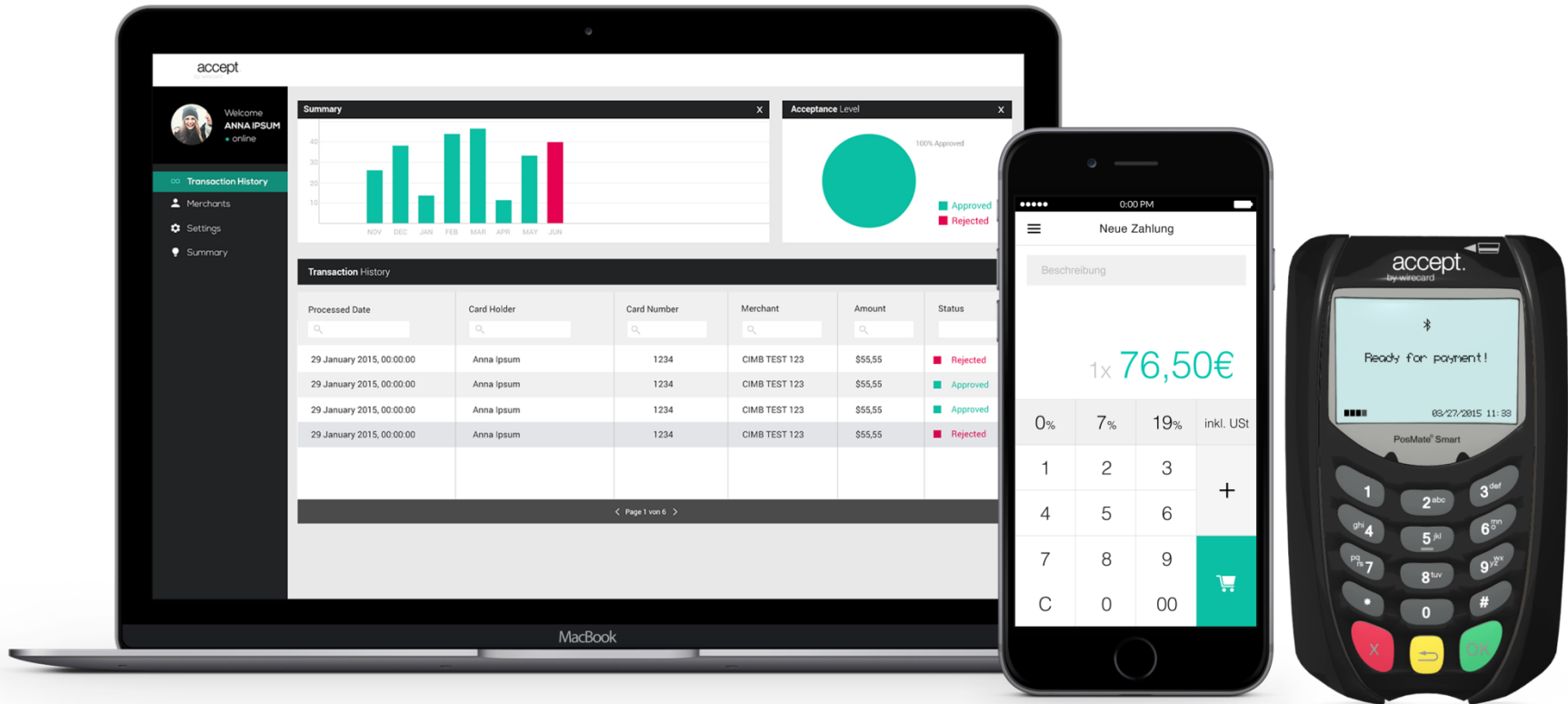
**Mobile services solution
portfolio**

MPOS

Wirecard is providing a global white label platform for mobile card acceptance (mPOS) for partners like O2 Czech, Bijli (India), CIMB (Singapore).

Mobile services solution portfolio

White label solutions



Mobile services solution portfolio

wirecard

Accepted by Wirecard cashier system



POS platform – features and functionalities

Terminal Management System, User & Employee Management & Payment Routing

Integrate multiple 3rd party services (Risk, Cashier, ERP) via Rest API

Fully customisable product inventory

Connected to partners loyalty system

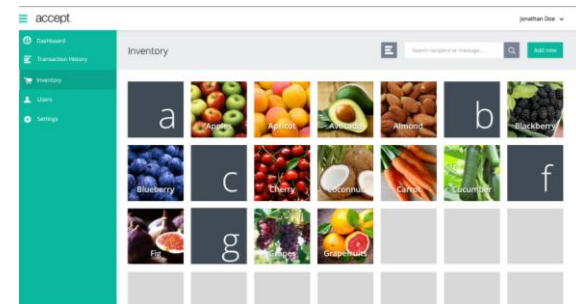
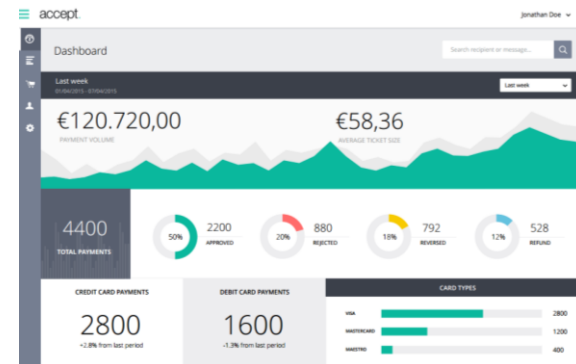
Rest API connect to external BI systems in real time

Allows partner to keep managing business from established system

Cash payments and cash counter

Statistics & daily sales reports

Employee management



Partnerships – O2 eKasa system

1. Pokladna

O₂ eKasa

2. Terminál

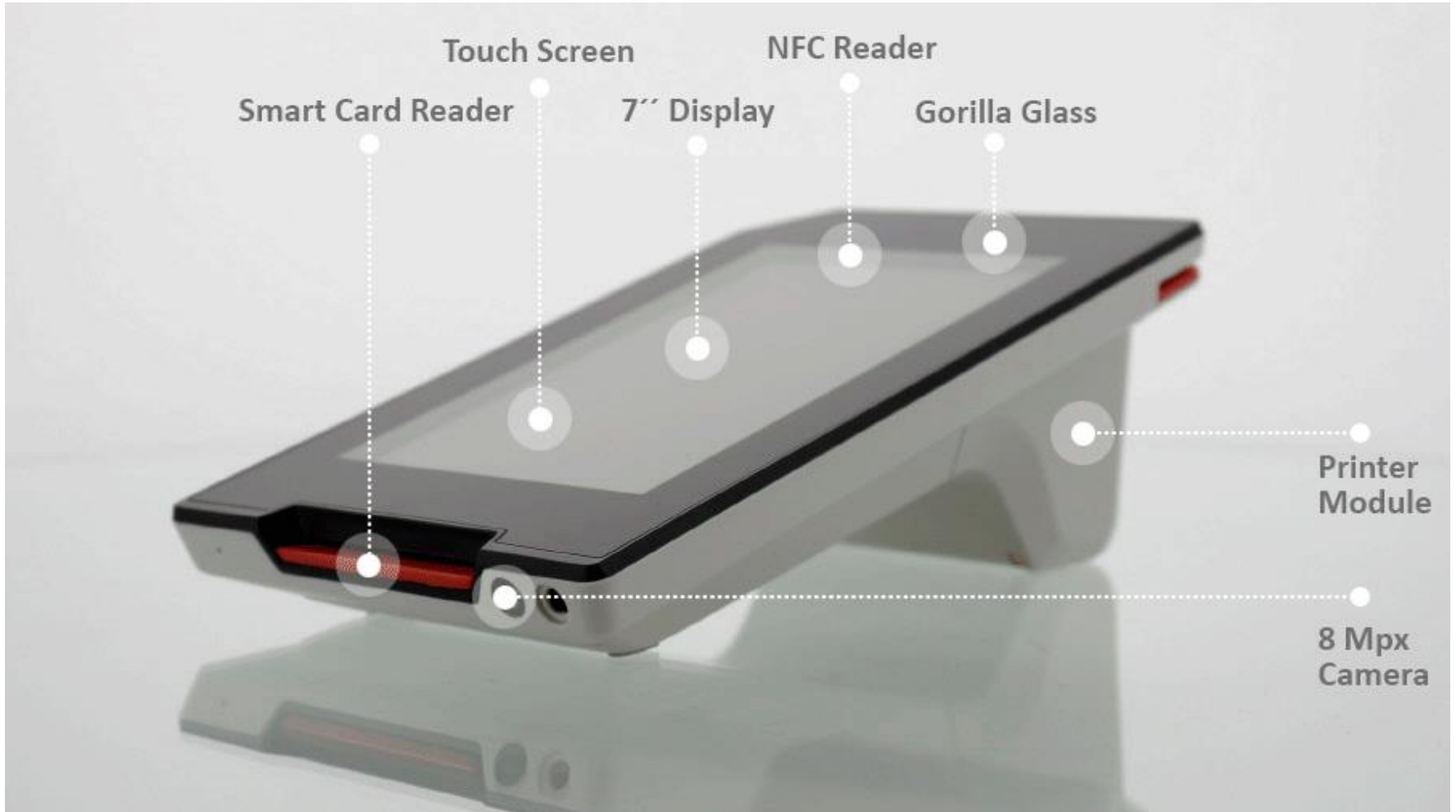
3. Tiskárna

Pokladní tiskárna účtenek
Lehká. Mobilní. Vždy po ruce. Přijmout platbu a vytisknout účtenku bude otázkou chvilky. Účtenky tiskne technologií Termo ve formátu 58 mm.

Platební terminál získáte zdarma
Náš mobilní terminál zvládne magnetické, čipové, klasické i bezkontaktní, kreditní, debetní i stravenkové platební karty. A čím více plateb kartou přijmete, tím víc ušetříte. [Více >](#)

Mobile services solution portfolio

Innovation – Wincor albert



Coupons & loyalty

Wirecard's innovative Card-Linked Offers Platform offers a fully integrated mobile loyalty experience.

The loyalty backend allows the setup of flexible campaign schemes and redemptions in real-time.

Single tap loyalty fully integrated in the payment process.

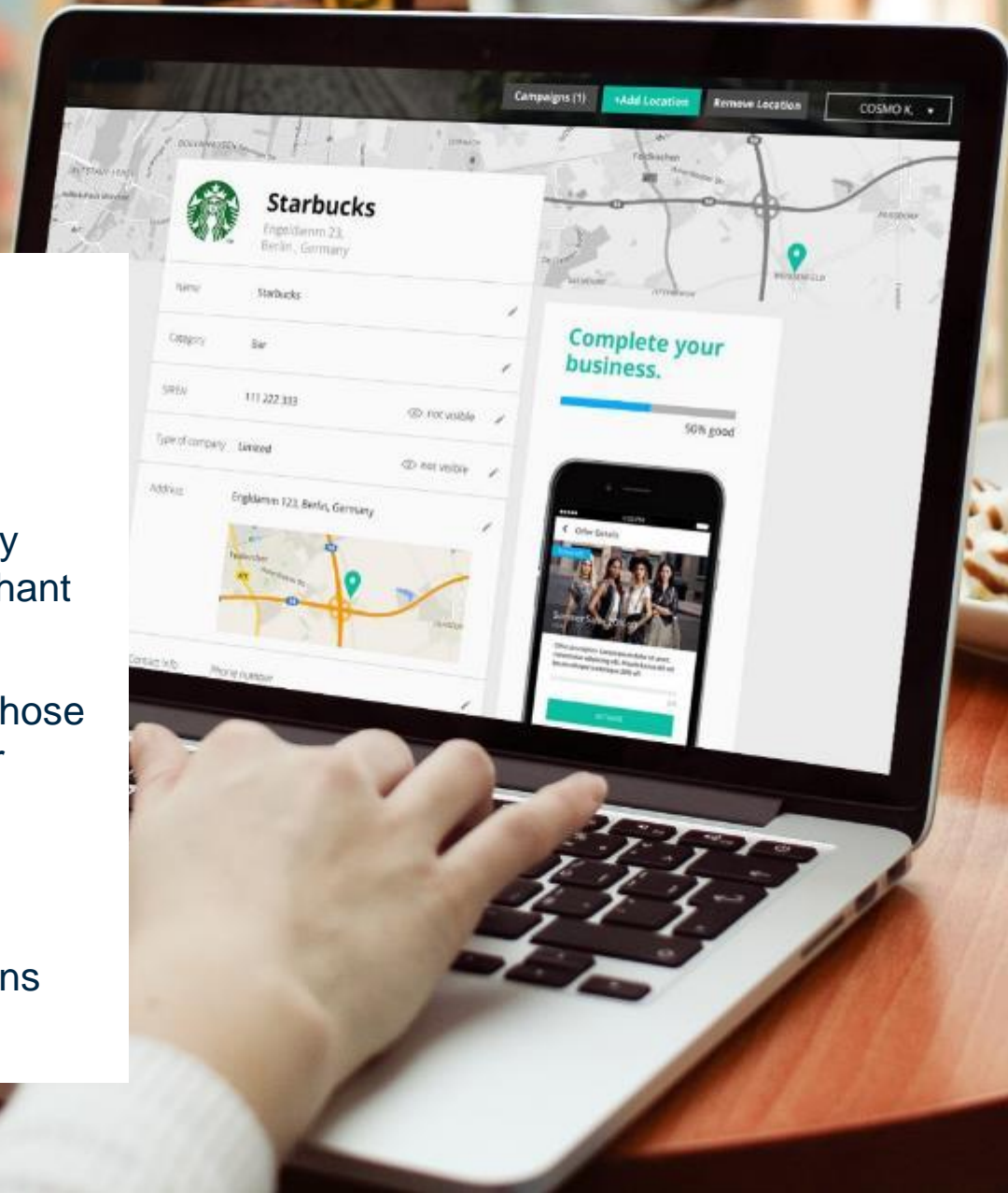
OFFER STREAM

- Offer stream shows overview of all available campaigns by category, date and location
- Possibility to prioritise display of offers by campaign type e.g. by program manager, merchants, location or interest of consumers
- Support of punch cards, promotions, incentive programs, spending targets, top-up and signup bonus campaigns
- Multiple visualisation capabilities for campaigns including multi-media content and various text formatting options or style-sheets
- Example shows live deployment with Orange in France and Spain



SELF-SERVICE PLATFORM

- Enrollment process and merchant profile: Merchants can conveniently sign up and create their own merchant profile and see real-time reporting.
- Campaign setup: Merchants can choose from a list of popular campaigns or create their own offers and loyalty programs.
- Operator access: Operators can moderate merchants and campaigns and access all reporting.



Case study – target customers with orange cash

Which data is accessed to target Orange Cash customers?

SENIORITY

When did customers register to orange cash?

PURCHASE BEHAVIOR

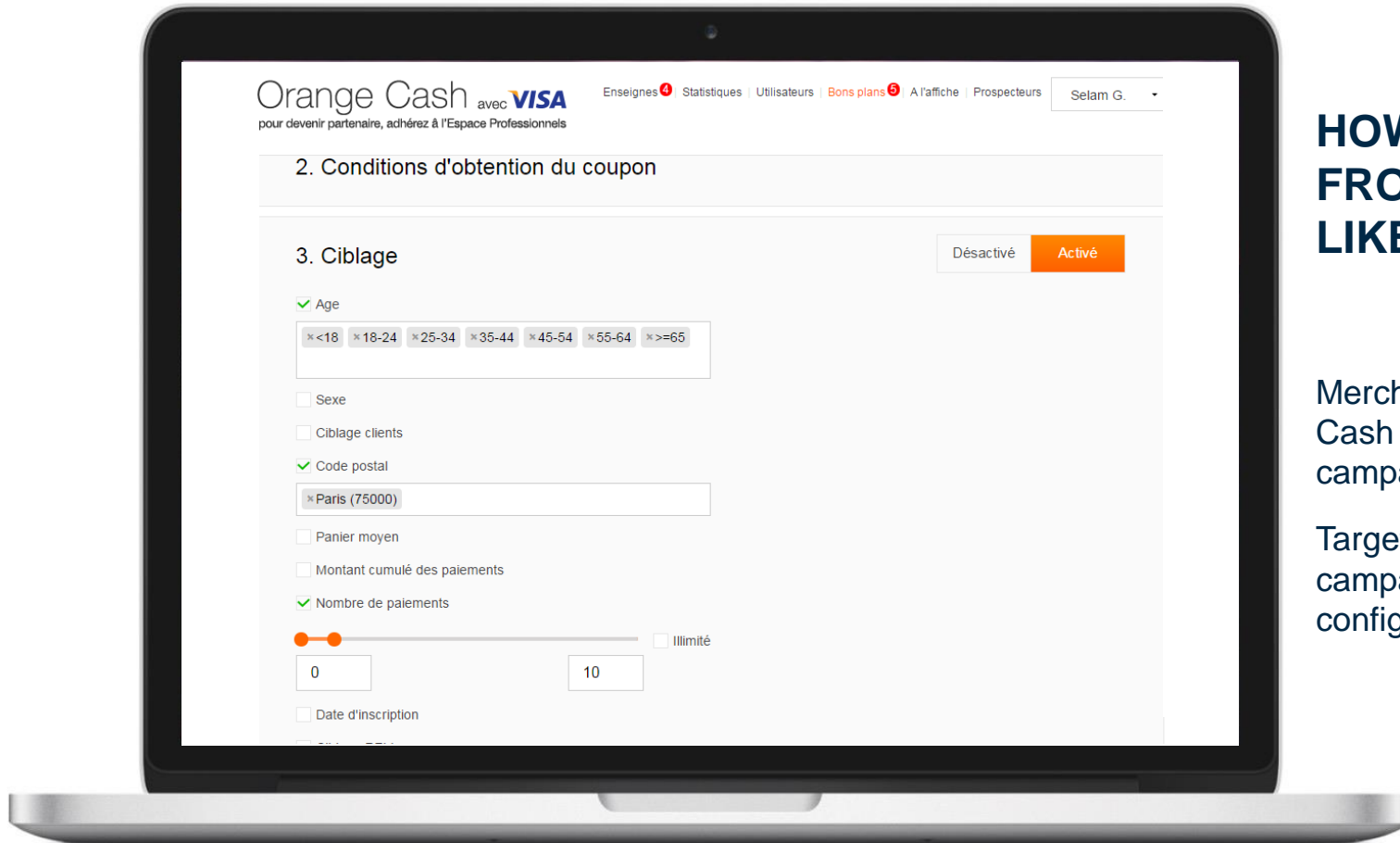
How much did customers pay?

How often did customers pay?

PROFILE

Where do customers come from?
Which demographic data is related to my customers?

Case study – target customers with orange cash



HOW DOES THE FRONTEND LOOK LIKE?

Merchants within Orange Cash can set up their own campaigns.

Targeting parameters for campaigns are freely configurable by merchants.

Connected POS

Wirecard`s own connected POS technology enables legacy POS systems for cutting-edge solutions in payments and value added services.

Mobile services solution portfolio

Connected POS

How can retail stores benefit from big data?



Mobile services solution portfolio

Connector device



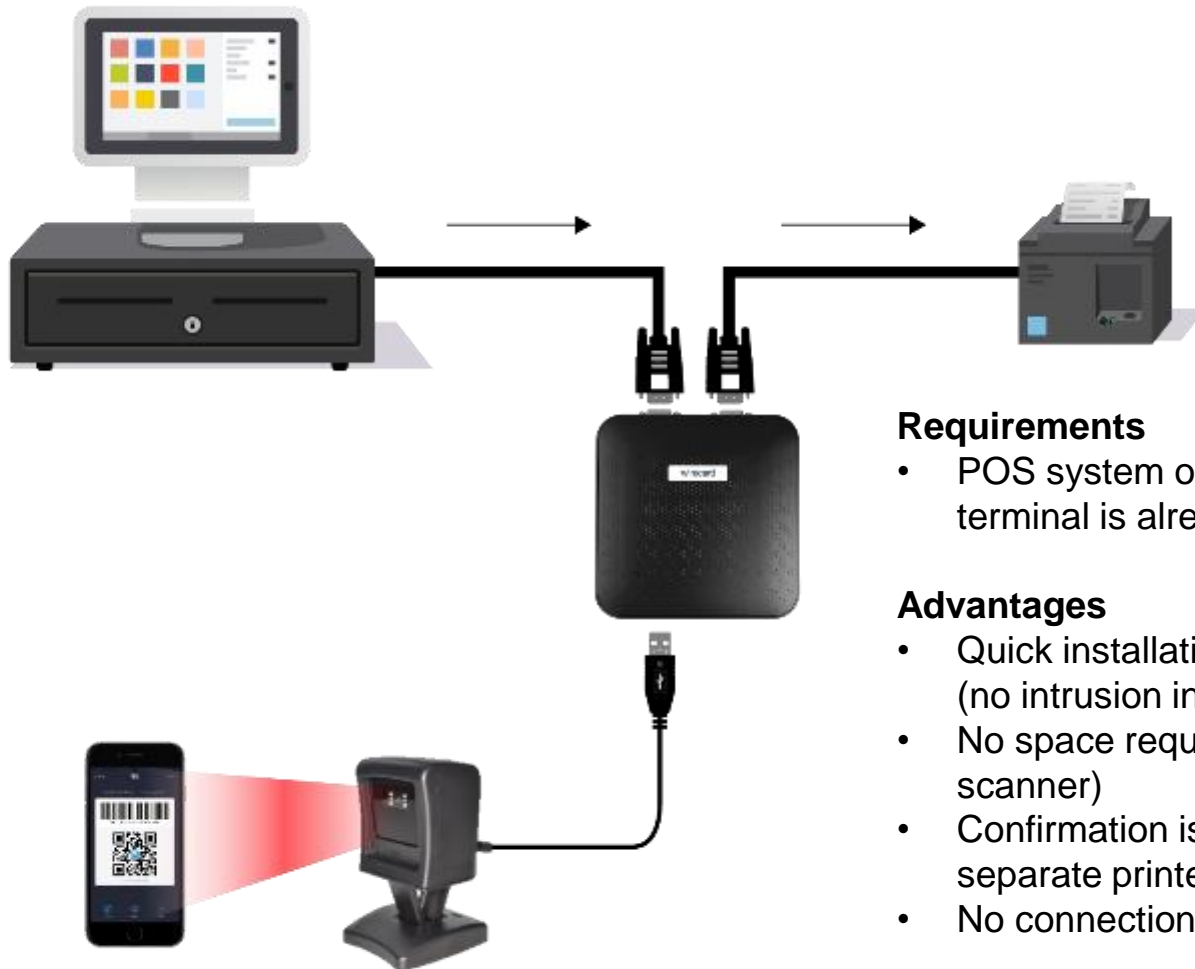
- Smart device made for the Point of Sale
- Interface between cash registers and cloud infrastructure
- Provides connectivity
- No integration into retailer networks
- Easy to deploy

ALIPAY MOBILE PAYMENT

- Use QR code for payment with Alipay app
- QR scanner is separate form POS, no intrusion into POS system
- Faster than credit card payment
- POS process remains business as usual



POS integration using POS connector

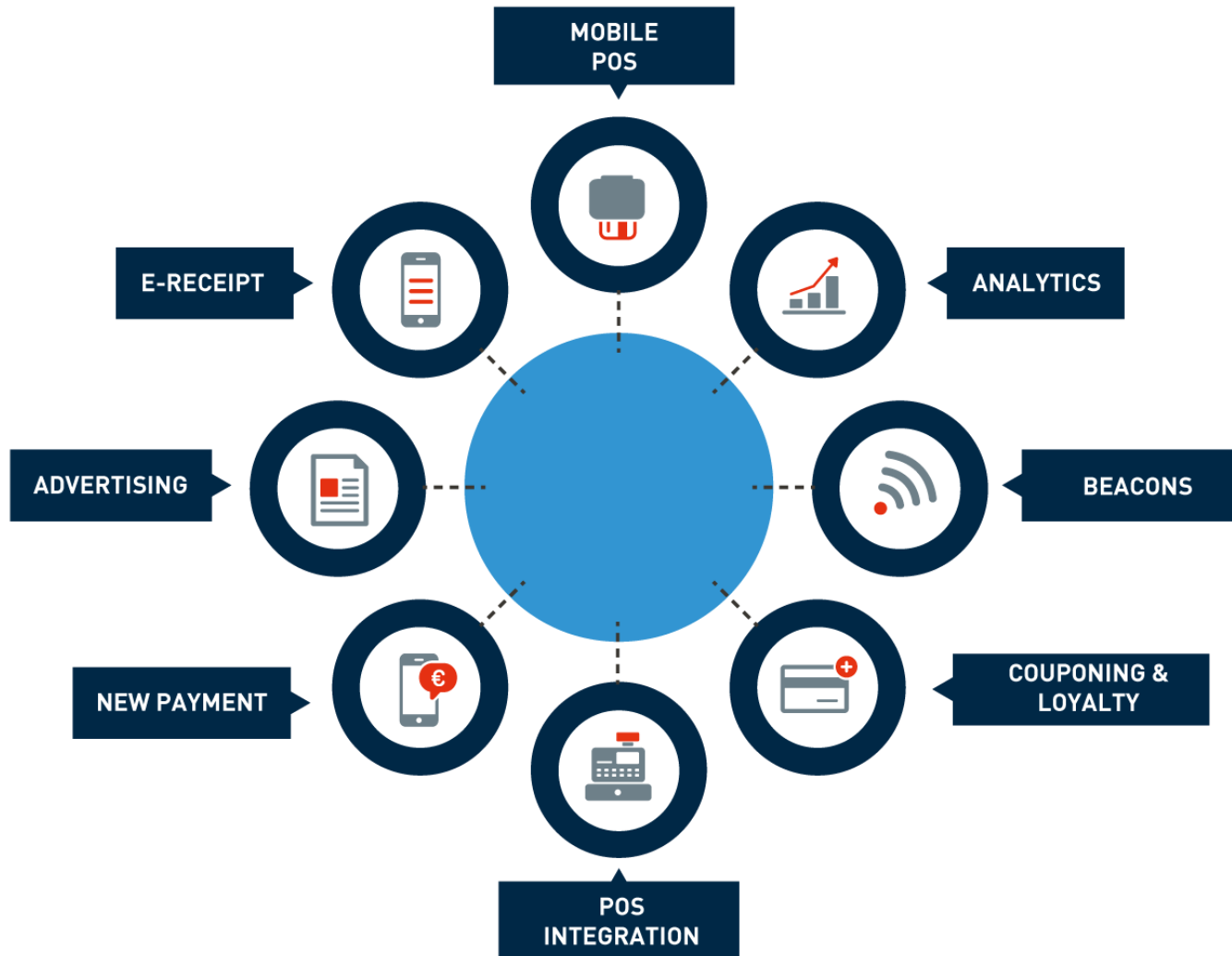


Requirements

- POS system offers terminal interface or terminal is already in place

Advantages

- Quick installation, no new software required (no intrusion into POS system)
- No space required at counter (except scanner)
- Confirmation is printed on POS printer or separate printer
- No connection to network/LAN required



4

Smart data analytics

Create value with data

**MERCHANT
LOCATIONS**

At which places do my consumer prefer to buy?

**PRODUCT
ITEMS**

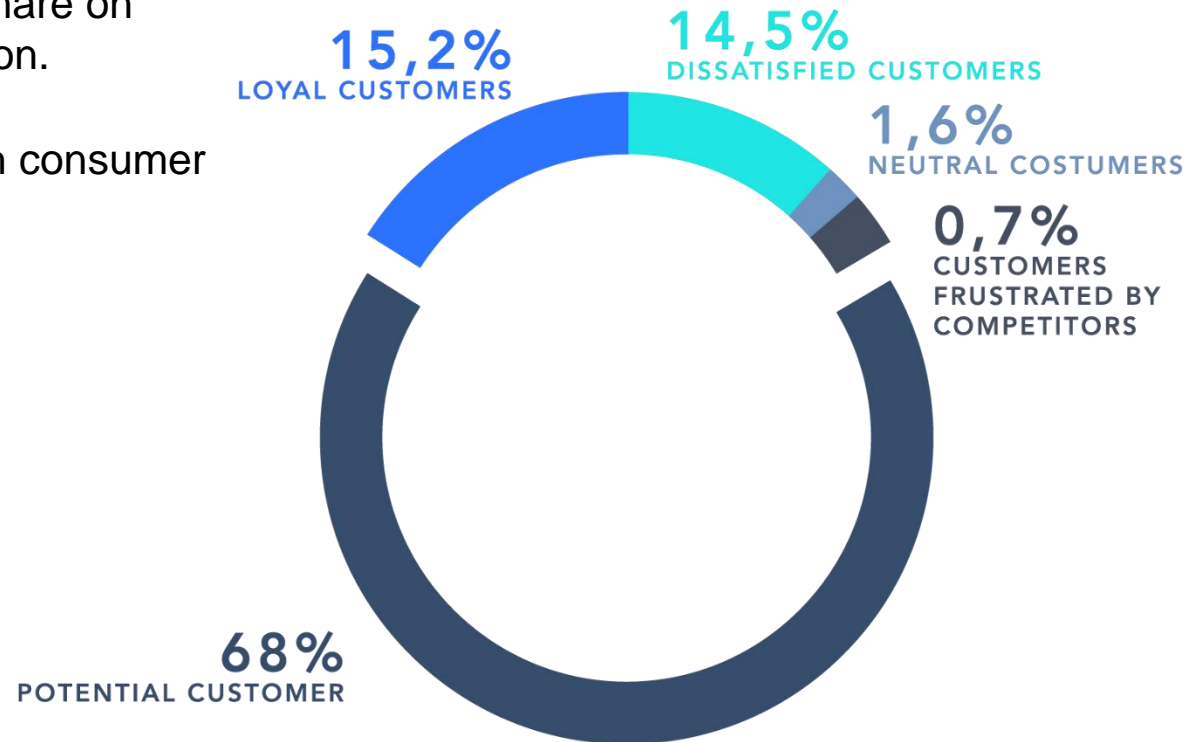
At which places do my consumers prefer to buy which products?

**LOCALISATION OF
CUSTOMERS**

At which places do my consumers prefer to buy which product – and how do they get into stores?

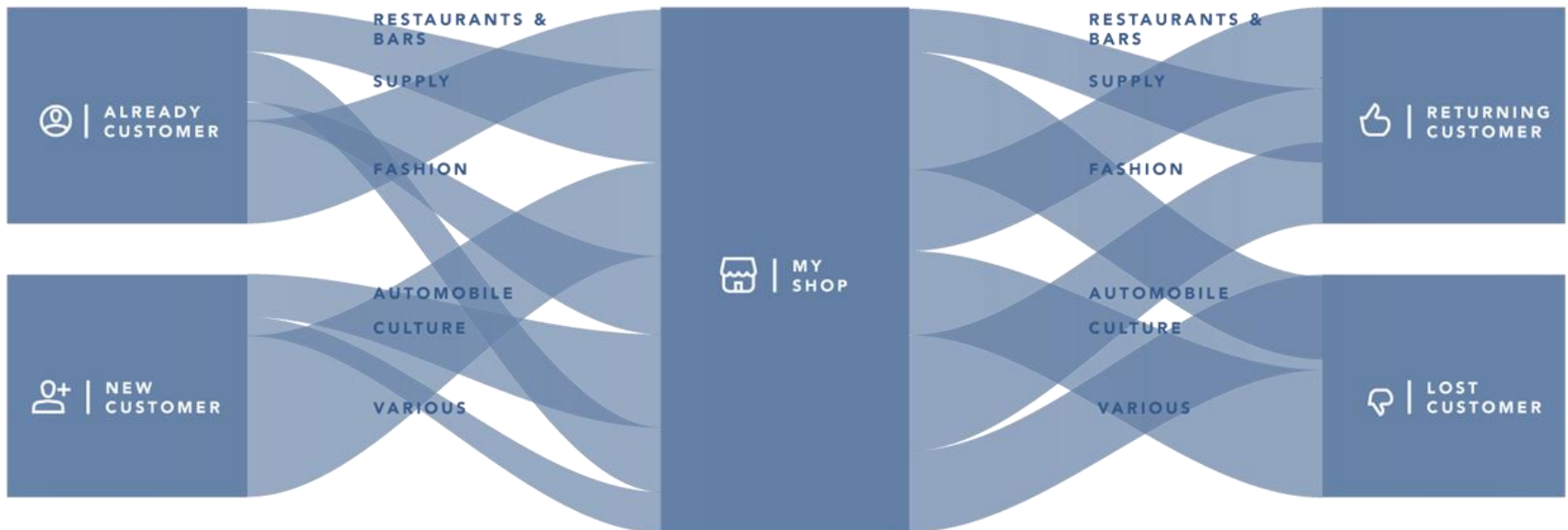
Example algorithm: customer potential

- Understand consumer journey through transactions by users per merchant category code
- Display merchant market share on basic transaction information.
- Enrich transaction data with consumer profile information



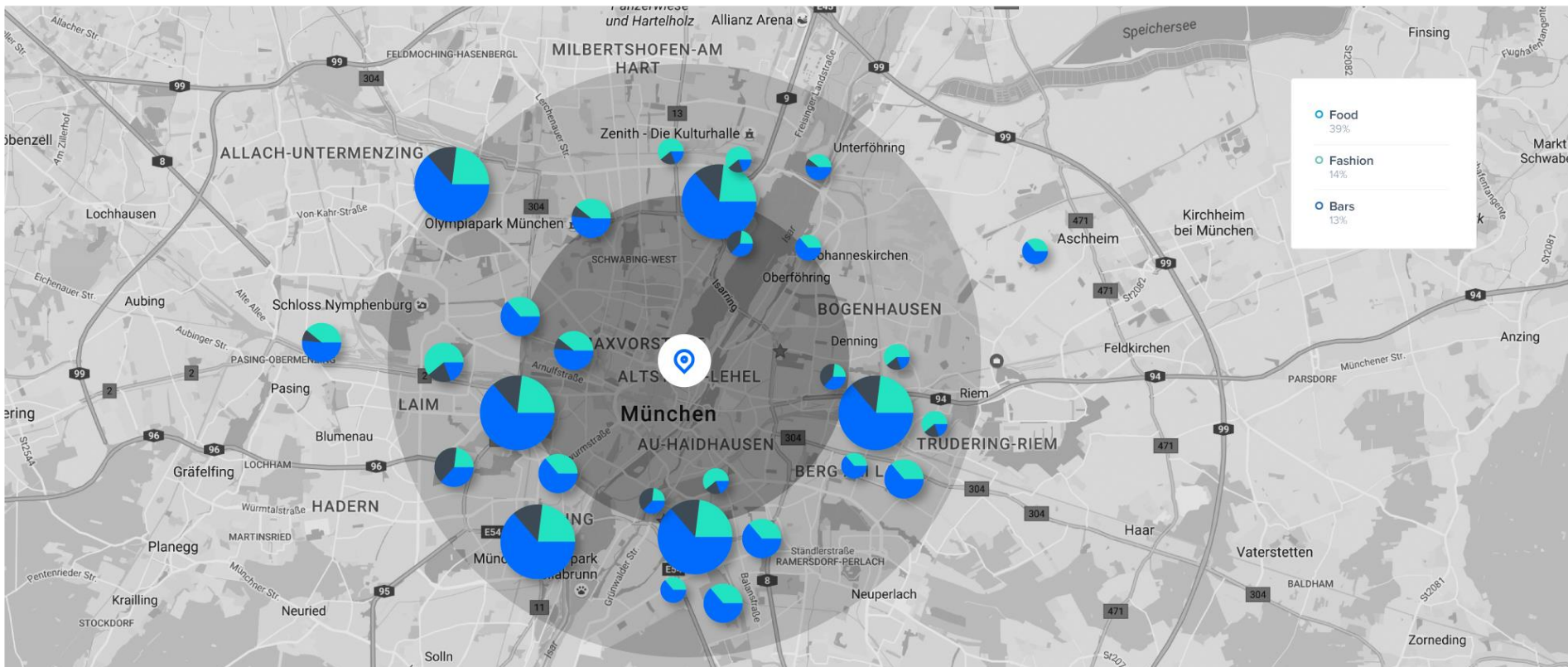
Example clustering: customer journey

- Clustering merchant's consumers with merchant categories
- Monitor how consumers purchase and where they purchase afterwards
- Match product sales, campaigns with consumer's purchase journey



Example clustering: customer journey

- Where do users come from?
- How many customers are located in near regions?
- In which merchant categories do my customers purchase in merchant stores?

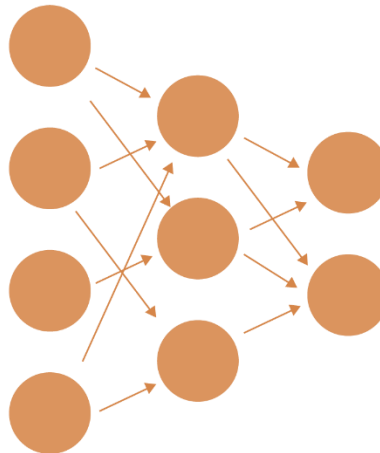


Scoring system for brands and retailers

DATA

- Average amount spent by consumers at relevant merchants:
 - Transactions
 - Item level transactions
 - Customer profile
 - Campaign success rate
 - Customer geolocalised information
- Consumer purchase power in shops
- Numbers of Merchants visited
- Identification of relevant customer groups
- Density of local competitors

SCORING ALGORITHM



SCORE

- Conversion optimisation
- Effective customer acquisition
- Highly targeted promotional offers
- Stock planning
- Recognise cross-selling and up-selling potentials
- Effective basket analysis
- Recognize spill over effects
- Effective exploitation of seasonal/periodic effects

THANK YOU

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