# VOLKSWAGEN PAYMENTS S.A.

# Guest presentation:

# Goethe Universität Frankfurt am Main,

# Mobile Business 1

# 02.02.2021

**Anne Grünkorn**
Chief Executive Officer
Volkswagen Payments S.A. in Luxemburg &
Consultant Mobility & Payment
LogPay Financial Services GmbH

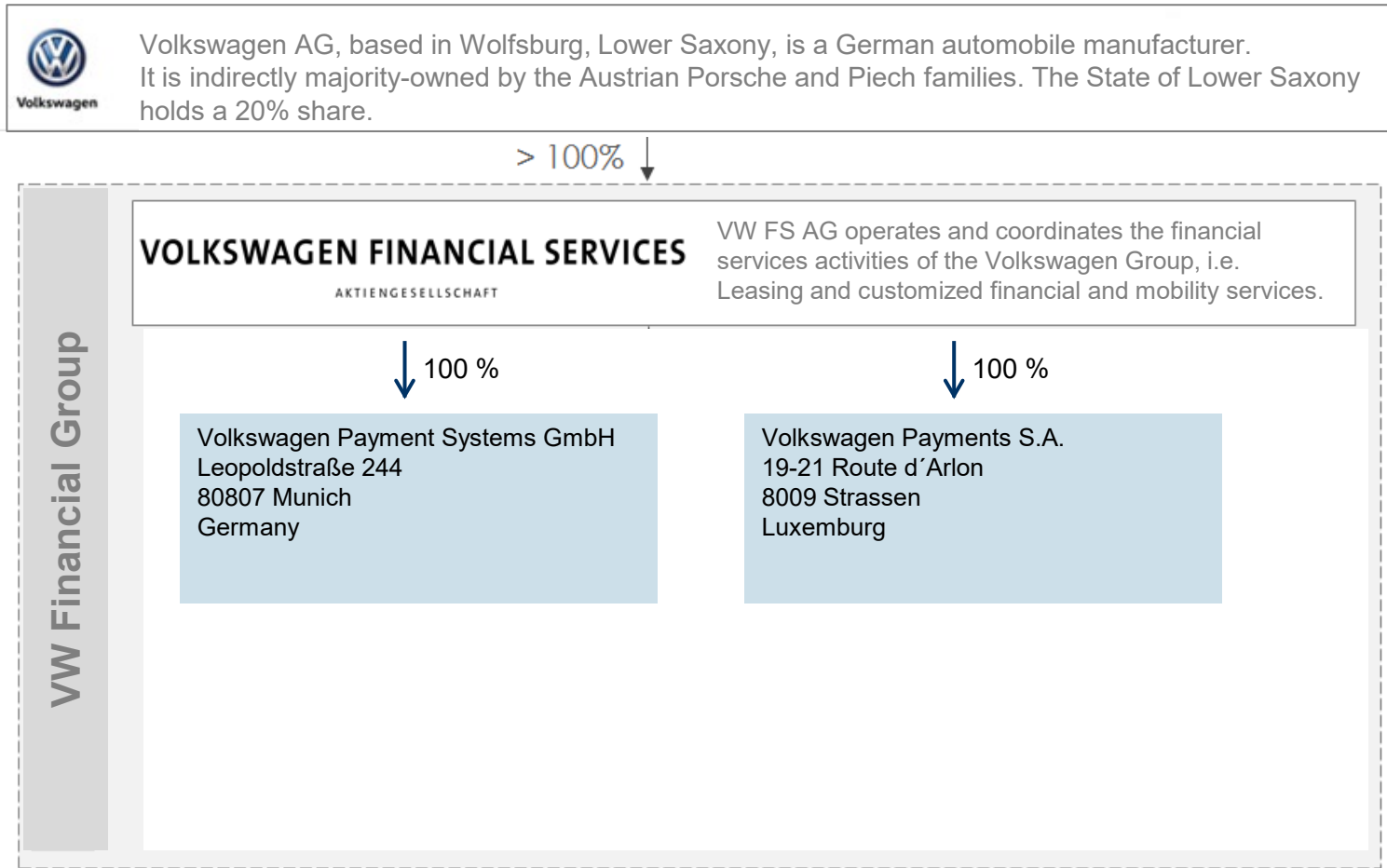# Agenda

1.  Introducing LogPay Financial Services - Payment Service Provider

2.  How LogPay managed the Corona Lockdown as mid-size Company?

3.  How does the Corona Pandemic change Public Transport?

4.  Industry 4.0 - the new Life Elixir of Companies today & tomorrow

5.  Payment today and tomorrow

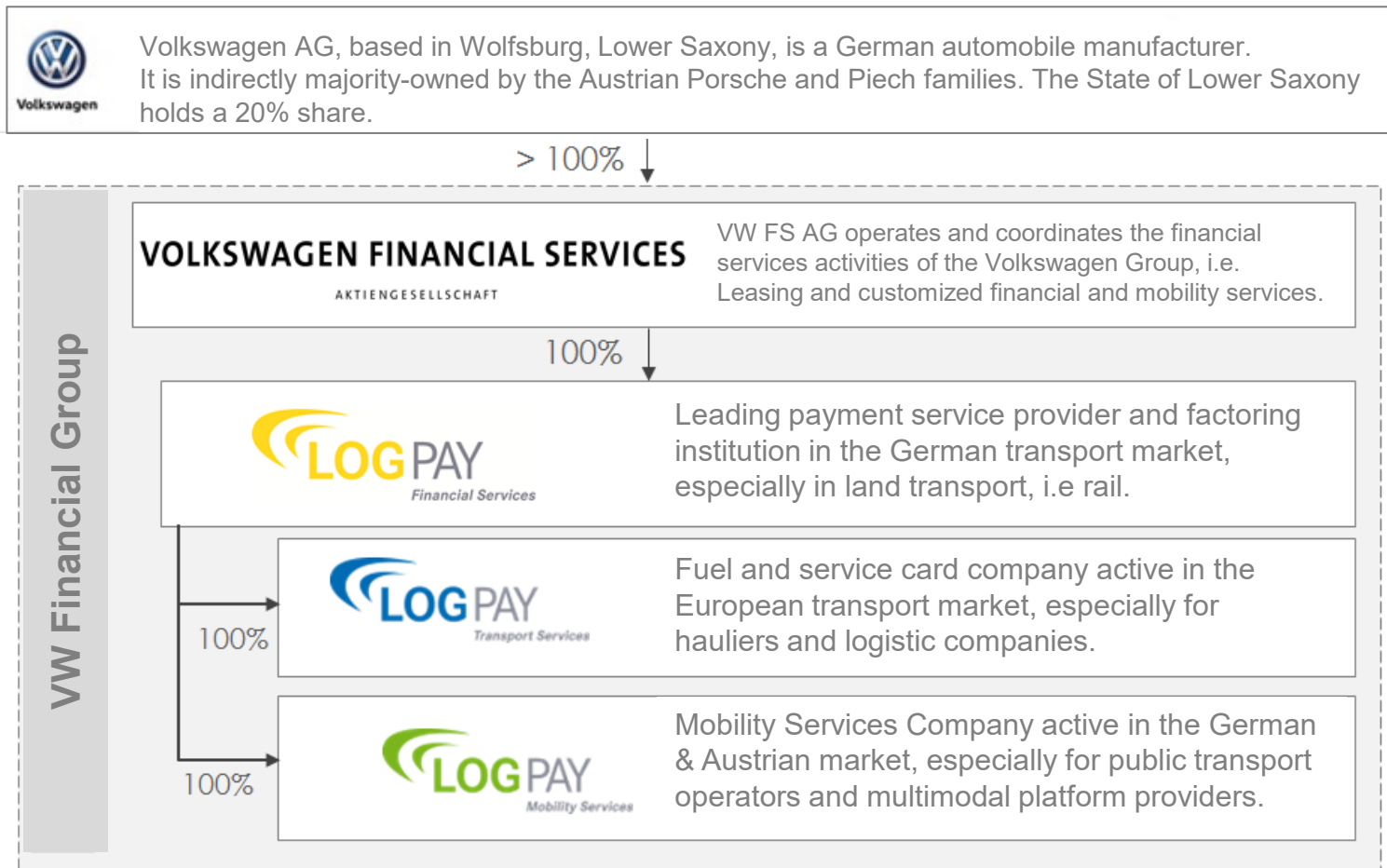6.  IoT & Online Payment & Mobility Services got you interested?

# 1. Introducing LogPay Financial Services – Payment Service Provider
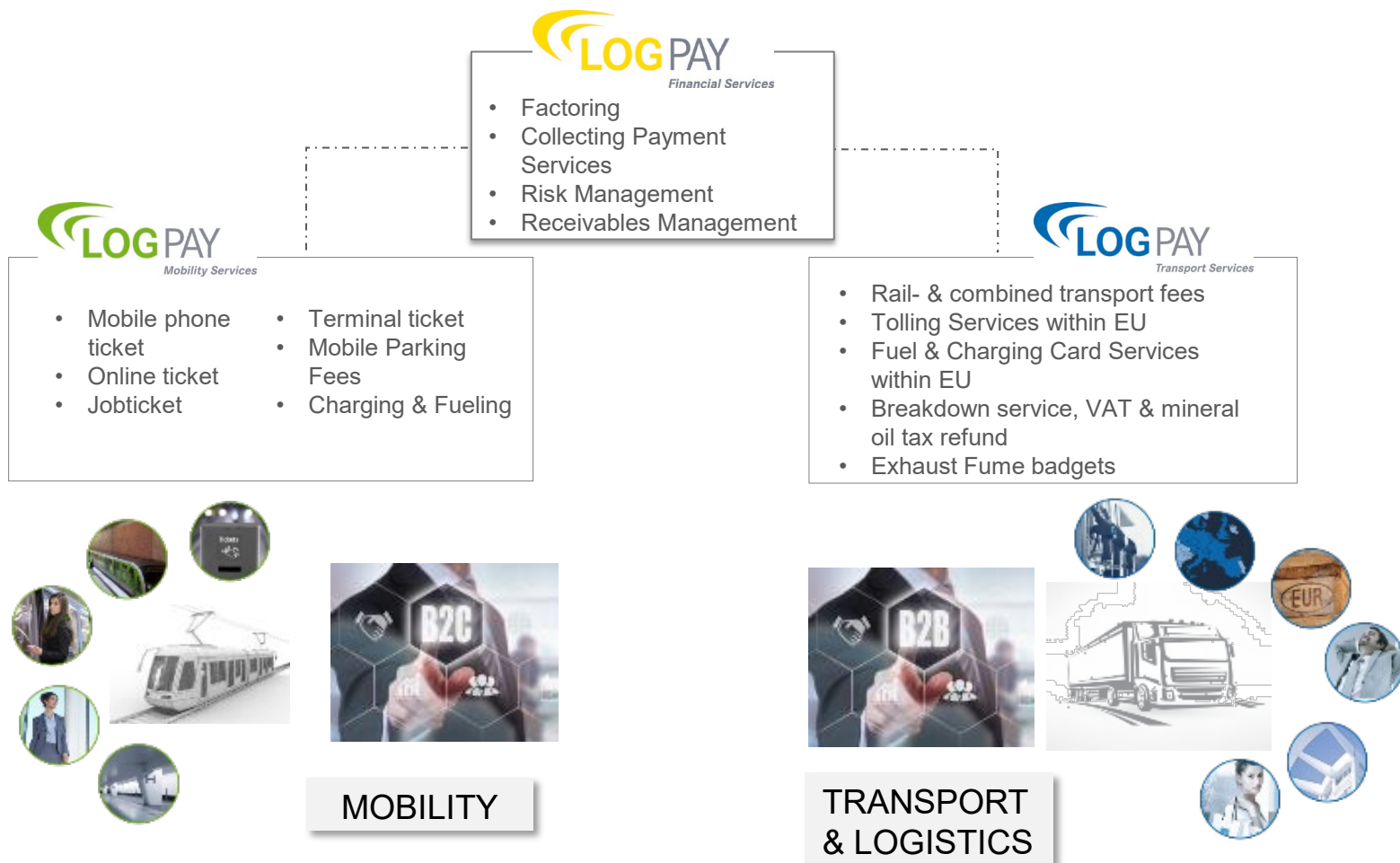
# Volkswagen Payments S.A.

Volkswagen AG, based in Wolfsburg, Lower Saxony, is a German automobile manufacturer. It is indirectly majority-owned by the Austrian Porsche and Piech families. The State of Lower Saxony holds a 20% share.

> 100% ↓

**VOLKSWAGEN FINANCIAL SERVICES**

AKTIENGESELLSCHAFT

VW FS AG operates and coordinates the financial services activities of the Volkswagen Group, i.e. Leasing and customized financial and mobility services.

**VW Financial Group**

↓ 100 %

Volkswagen Payment Systems GmbH
Leopoldstraße 244
80807 Munich
Germany

↓ 100 %

Volkswagen Payments S.A.
19-21 Route d´Arlon
8009 Strassen
Luxemburg

# LogPay is a PSP & Fuel & Charging Card Issuer focussed on the European Transport and Mobility Market

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**VW Financial Group**

LOGPAY *Financial Services*

Leading payment service provider and factoring institution in the German transport market, especially in land transport, i.e rail.

100%

LOGPAY *Transport Services*

Fuel and service card company active in the European transport market, especially for hauliers and logistic companies.

100%

LOGPAY *Mobility Services*

Mobility Services Company active in the German & Austrian market, especially for public transport operators and multimodal platform providers.

# Brands of LogPay provide Services to B2B and B2C Customers

**LOG**PAY
*Financial Services*

- Factoring
- Collecting Payment Services
- Risk Management
- Receivables Management

**LOG**PAY
*Mobility Services*

- Mobile phone ticket
- Online ticket
- Jobticket
- Terminal ticket
- Mobile Parking Fees
- Charging & Fueling

**LOG**PAY
*Transport Services*

- Rail- & combined transport fees
- Tolling Services within EU
- Fuel & Charging Card Services within EU
- Breakdown service, VAT & mineral oil tax refund
- Exhaust Fume badgets

MOBILITY

TRANSPORT & LOGISTICS

# 2. How LogPay managed the Corona Lockdown as mid-size Company

# Finding a Balance between Home and Office Work - I

- Evaluation of potential risk at the time of strong lock-down measures in Germany

  - Staff infected?

  - Staff potential risk to be infected?

  - Protection measures?



- Everyone going into Home Office at the same time would lead to negative impact on all business areas but one business area "fueling & charging" would be affected most

- Further digitalisation of work flow – possible but time consuming

  - selection of service provider;

  - price negotiation;

  - contractual agreement and technical interface

    -> mission impossible within 10 days



- Solution: Selected staff for home office and further digitalize -> "Two leg approach"

# Finding a Balance between Home and Office Work - II

**Actions**

Introduction of hygienic company rules and set-up of specific measures (toilette, office cleaning, lunch, etc.)

Within a 10 days all staff were able to work from home using a mix of office and home equipment

Rotation of staff to minimise potential infections

Each office no more than 1 person at work location

Communication via conference calls (i.e. MS Teams)

# Finding a Balance between Home and Office Work – III



**Learnings**

Gaps of digitalisation, i.e. fuel card production, postal services (contracts documents), internal paper oriented procedures

Increase of coordination time – Conf Call Pandemic - due to less personal exchange

# Virtual Communication increased within one Week up to 50%* at Frankfurt-Data-Hub, Germany



* Source: DE-CIX Knoten

# Conference Calls instead of Personal Meetings?



Microsofts Company-Chat-App Teams did already overtake competitors Slack and Google Hangouts in their market share – 41% of companies in 2020 are said to be using Microsoft Teams according to a study of Spiceworks (900 IT companies in US and Europe participated in this study)*.

Source: t3n digital pionieers

# 3. How does the Corona Pandemic change Public Transport?

# Effects of the Corona Pandemic on Public Transport in Germany

- 85% decrease in the number of passengers

- However, in order to maintain a basic service, companies continue to run up to 75 percent of their regular timetable

- Loss of € 5 billion by the end of the year in the public transport industry (current estimates by the Association of German Transport Companies (VDV))

# Loss of Revenues, more Costs and Need of Investment

**Coronavirus: Hygiene- und Verhaltensregeln in Bus und Bahn**

**Coronavirus: Face masks included in new public transport rules for Scotland**

Die Corona-Krise trifft den ÖPNV: Voller Fahrplan bei einem Minimum an Passagieren.

ÖPNV IN DER CORONA-KRISE

**Ruf nach Rettungsschirm für Bus und Bahn**

**Coronavirus: London transport 'may run out of money by end of month'**

**Die ÖPNV-Nutzung ist in vielen Städten um 70 bis 90 Prozent eingebrochen.**

**Public transport changes in response to coronavirus**

# Increase of contactless Payments and e-Tickets via Smartphone

# Connecting all Modes in one Platform for urban & regional Mobility

# 4. Industry 4.0 - the new Life Elixir of Companies today & tomorrow

# Increased Investments in Networks and digital Infrastructures for 4.0

- After the steam engine, diligence belt and computer, the global economy is currently reinventing itself. People, machines and industrial processes are combining to form intelligent networks. In the Internet of Things (IoT), devices, systems and sensors communicate continuously with each other. The fuel of the fourth industrial revolution is provided by data streams that are available at all times in digital clouds.

- The economic potential is huge. German industry plans to invest 40 billion euros in industry 4.0 applications in 2020.

Source: BMWi

# Industry 4.0 - I

- First focus: Creating networks of means of production via cyber-physical systems

- Now: all areas of business use the suffix 4.0 as symbol of integration of digitalisation in different business areas

- Reason 1: Reduction of costs for powerful sensoric, low-energy transmitting technology allow for battery-operating solutions

- Example: pay-per-use

- Reason 2: Increasing server capacities and cloud-based data warehouses

- Example: Amazon cloud services for companies

- Advantages: new business-models through KI-developments & autonomous networks

# Industry 4.0 - II

What does this mean for LogPay – example "hauliers (truck) & logistic companies"

➢ further digitalisation of onboarding processes for B2B customers with internal decision taking processes for a 24/7 services

➢ connecting different system components to enhance the existing IT infrastructure with dynamic customer data

- Acquisition of potential customers -> CRM system connecting to different system components of LogPay system

- Risk evaluation of company data & check of creditworthiness -> internal and external system components and intelligent human machine interface

- Digitalisation of contract processes -> eSignature provider connected to LogPay own system component & high-level qualified customer care service

- E-Invoicing -> adapting and upgrading existing IT system according to country specific tax rules

- Monitoring of customer lifecycle -> enhanced CRM system

- Controlling of financial risks through customers contract life with LogPay -> Alert system

# In order to boost Digitalisation Data Warehouse & Security is Key

## Digital Transformation Investments

**Which of these activities are you implementing to support digital transformation in 2020?** (Choose all that apply)

| Activity | Percentage |
|---|---|
| Refresh/upgrade on-premises IT infrastructure | 52% |
| Increase investment in security to address new threats and compliance/regulatory requirements | 47% |
| Increase the speed/volume of new app development/delivery | 43% |
| Modernize legacy applications | 39% |
| Break down data silos within the organization | 36% |
| Increase investment in technologies that improve employee experience and productivity | 29% |
| Increase utilization of automation and artificial intelligence | 27% |
| Increase utilization of cloud services | 26% |
| Restructure staff (reskill existing employees, hire new talent, etc.) | 18% |
| Upgrade/invest in sales and marketing technologies to enhance customer experience | 11% |

Source: 2020 IT Priorities (DACH) n=106

©TechTarget 20

## Observations

**Employee Experience** investment theme carries through to many technologies for 2020

**On-premises** gets boost during digital transformation

# Doing more with Data collected from various Devices

## IoT

**Which of these Internet of Things (IoT) related technologies or initiatives do you plan to implement in 2020?** (Choose all that apply)

| | |
|---|---|
| Analyze data from IoT devices/sensors | 52% |
| Upgrade security for IoT | 40% |
| Deploy IoT data sensors | 35% |
| IIoT (Industrial IoT) or ICS (Industrial Control Systems)... | 33% |
| Low power WAN (LPWAN) | 27% |
| IoT Device Management Platform | 27% |
| Deploy edge infrastructure to support IoT | 27% |
| Autonomous systems (AI/ML to support IoT) | 27% |
| IoT connectivity upgrades (5G or other) | 23% |
| Invest or manufacture "smart" capabilities (ie: smart... | 21% |
| Blockchain to support IoT | 21% |
| Stream analytics on IoT edge | 8% |

Source: 2020 IT Priorities (EMEA) n=737

©TechTarget 22

### Observations

**IT is planning large investments** in security upgrades and connectivity

**Edge infrastructure** projects heating up in 2020

**AI/ML** investments looking strong

# Where and how do we produce Personal Data
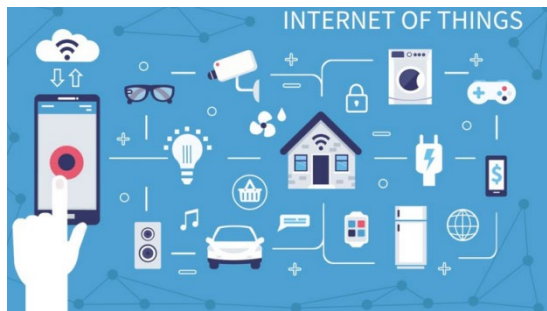




- Source Chip.de: Amazon stores all data unlimited, which you provide using online-shop: payment data, adress and orders. On top Amazon for example: which product you look at, what are you selecting and what you are searching
- Even more data is collected when using Alexa: each word spoken or written is stores as Audio-Datei or as text.
- If you register and accept terms & conditions you agree – if you do not like than do not us Amazon

## How can this Data be used

- Creation of user profiles -> online marketing/target marketing/customized marketing

- Combination of data/Data collecting -> 'Data are the new gold'

- Know your customer -> 'Knowledge is power'

- Date privacy -> data protection & data security

- Possible data mining: tracking, evaluation of behaviours (search for products), preferred payment methods, etc.
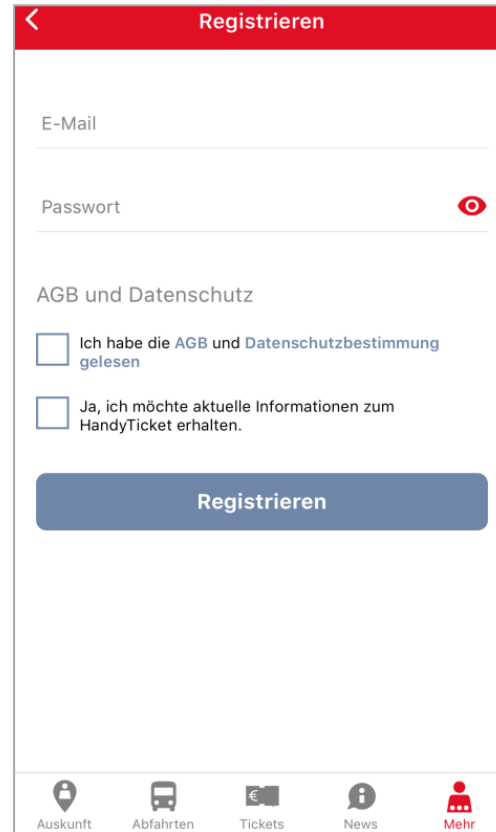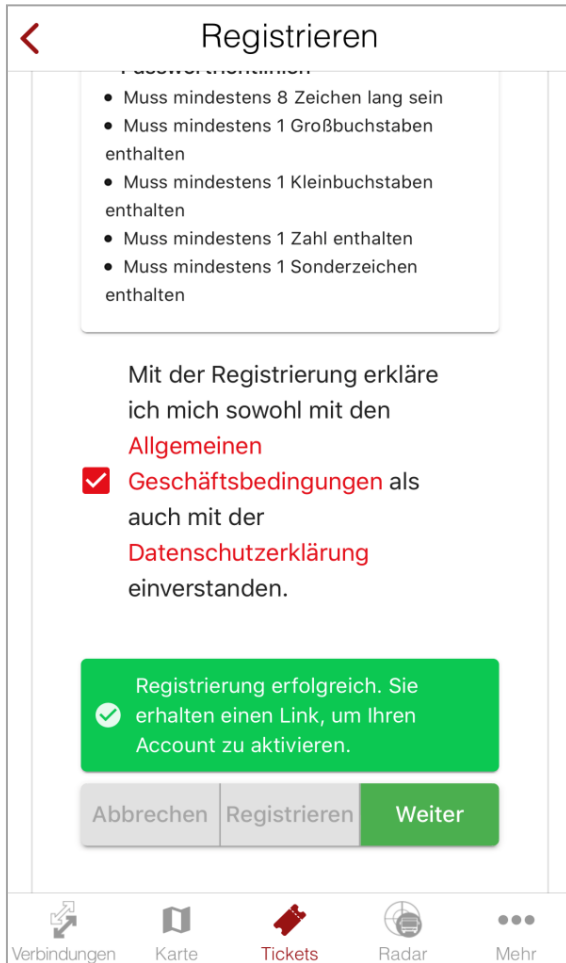
# Do you read the Terms & Conditions when you use an App?

How often do you read the terms and conditions of Online Shops? (always / mostly / sometimes / rarely / never)
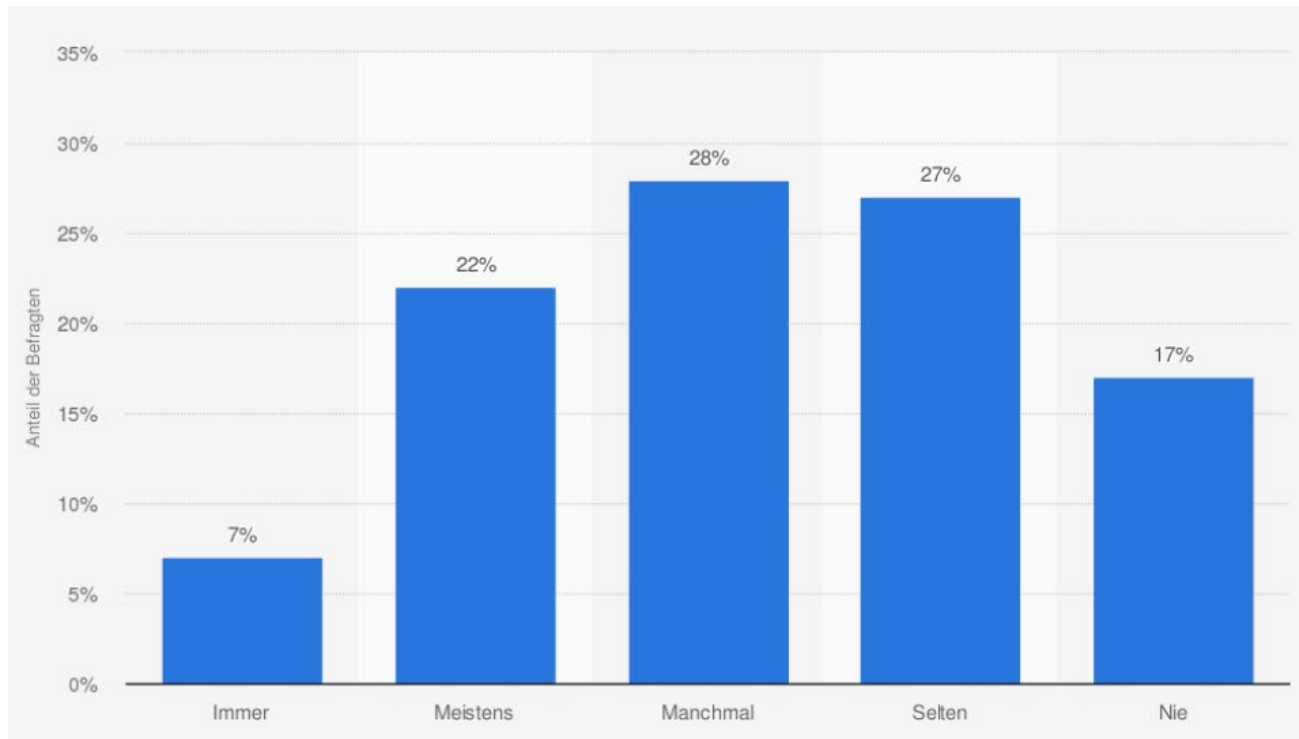


Source: Statista, 2017
896 respondents, who buy at least occasionally on the Internet.

# General Terms and Conditions – check Trustworthiness & Company Background & Location
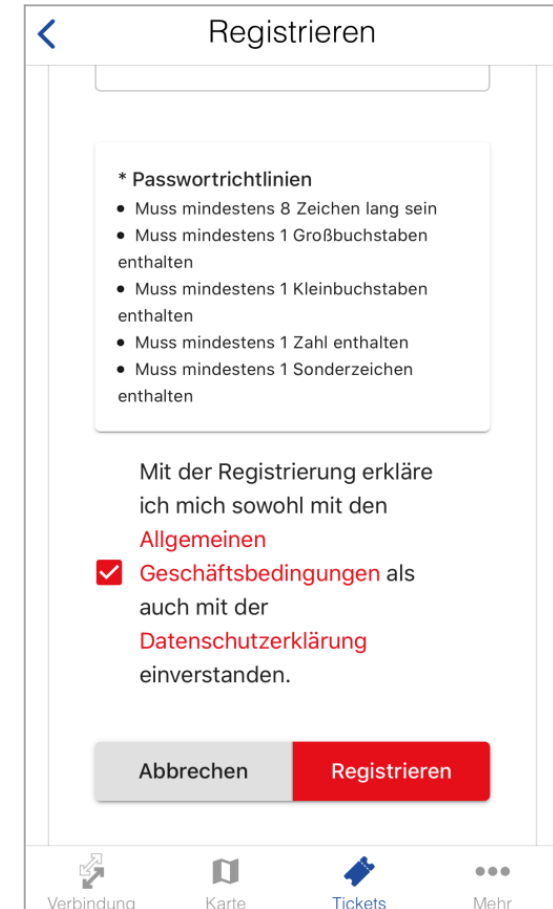
# 5. Payment today and tomorrow

# Paying Online

- In Germany Online payment will be growing by 17% each year from 2020 to 2024.

- 3.46 Billions of payment transactions were processed by PayPal in the fourth quarter of 2019. In 2010 there were only 340 millions.

- In public transport about 25% are using Apps or Online Shops to purchase their transport ticket:

Source: Statista/PayPal
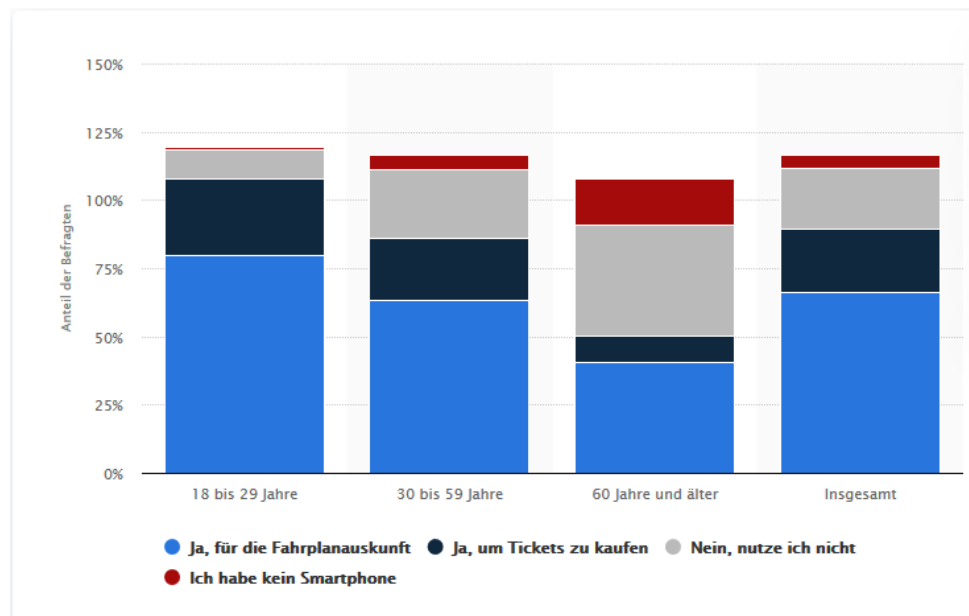
# Mobile Wallet – Definition

Mobile Payment -> phone provider solution „MNO Billing or carrier billing"– less common as payment method in Germany

Mobile Wallet -> increasing usage: Apple Pay and Google Pay
-> A mobile wallet is a virtual wallet that stores payment card information on a mobile device. Mobile wallets are a convenient way for a user to make in-store payments and can be used at merchants listed with the mobile wallet service provider.

The mobile wallet is an app that can be installed on a smartphone or it is an existing built-in feature of a smartphone. A mobile wallet stores credit card, debit card, coupons, or reward cards information.

Once the app is installed and the user inputs payment information, the wallet stores this information by linking a personal identification format such as a number or key, QR code or an image of the owner to each card that is stored.

# Process illustration Apple Pay

2. Customer presses
Button

4. Customer changes/activates
selection

1. Apple Pay-Button

3. Selevtion steps in the App:
- Credit card
- Address

5. Request to Apple

6. Token from  Apple

7. VerifyPayment-Request to LogPay with
Token

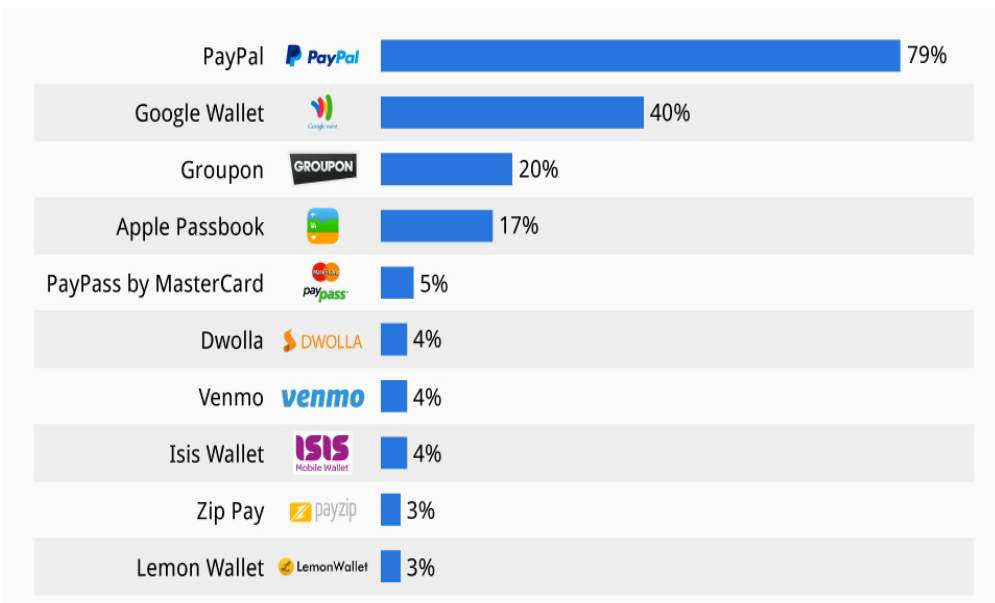8. LogPay decrypts Token

9. LogPay confirms VerifyPayment

10. ConfirmPayment request to LogPay

11. LogPay submits payment
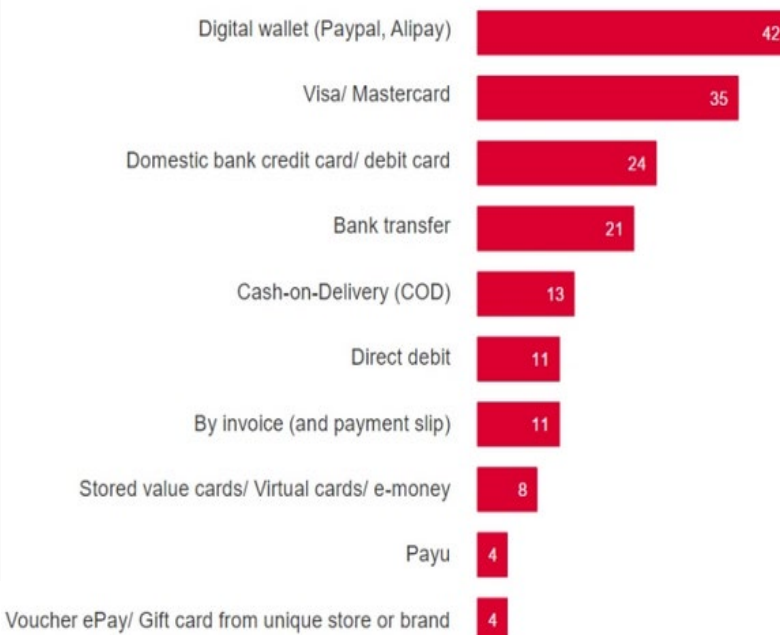
12. LogPay confirms confirmPayment

# Different Payment Methods – different Customer Preferences

## Competition among wallet payment methods
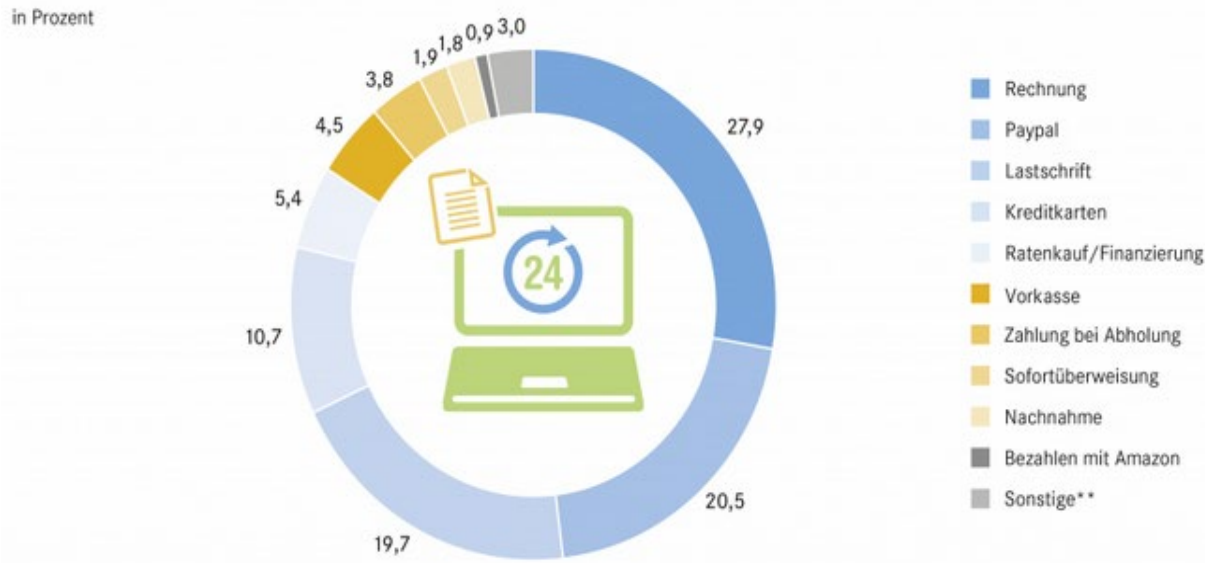(percentages; respondents in the USA who used the following mobile payment services)



| | |
|---|---|
| PayPal | 79% |
| Google Wallet | 40% |
| Groupon | 20% |
| Apple Passbook | 17% |
| PayPass by MasterCard | 5% |
| Dwolla | 4% |
| Venmo | 4% |
| Isis Wallet | 4% |
| Zip Pay | 3% |
| Lemon Wallet | 3% |

## Europeans' most popular payment methods for online purchases (in percent)



| | |
|---|---|
| Digital wallet (Paypal, Alipay) | 42 |
| Visa/ Mastercard | 35 |
| Domestic bank credit card/ debit card | 24 |
| Bank transfer | 21 |
| Cash-on-Delivery (COD) | 13 |
| Direct debit | 11 |
| By invoice (and payment slip) | 11 |
| Stored value cards/ Virtual cards/ e-money | 8 |
| Payu | 4 |
| Voucher ePay/ Gift card from unique store or brand | 4 |

Source: https://www.statista.com/chart/2534/mobile-payment-usage-in-the-us/

Source: Ecommerce News europe, https://ecommercenews.eu/online-payment-methods-europe/

# How do the Germanys pay Online?

in Prozent



**How do you pay online for physical goods in Germany?**

➢ Purchase on account is the most popular means of payment

➢ PayPal takes second place, followed by SEPA direct debit and the credit cards

Legend:
- Rechnung
- Paypal
- Lastschrift
- Kreditkarten
- Ratenkauf/Finanzierung
- Vorkasse
- Zahlung bei Abholung
- Sofortüberweisung
- Nachnahme
- Bezahlen mit Amazon
- Sonstige**

Values: 27,9 | 20,5 | 19,7 | 10,7 | 5,4 | 4,5 | 3,8 | 1,9 | 1,8 | 0,9 | 3,0

\* Top-1.000 Onlineshops laut Studie E-Commerce-Markt Deutschland 2018, EHI/Statista: 42,8 Mrd. Euro
\*\* Sonstige: Debitkarte, Giropay, Paydirekt, Masterpass, Barzahlen.de, Kundenkarte, Geschenkkarte, Prepaidkarte, iDeal, Vorkasse in Filiale
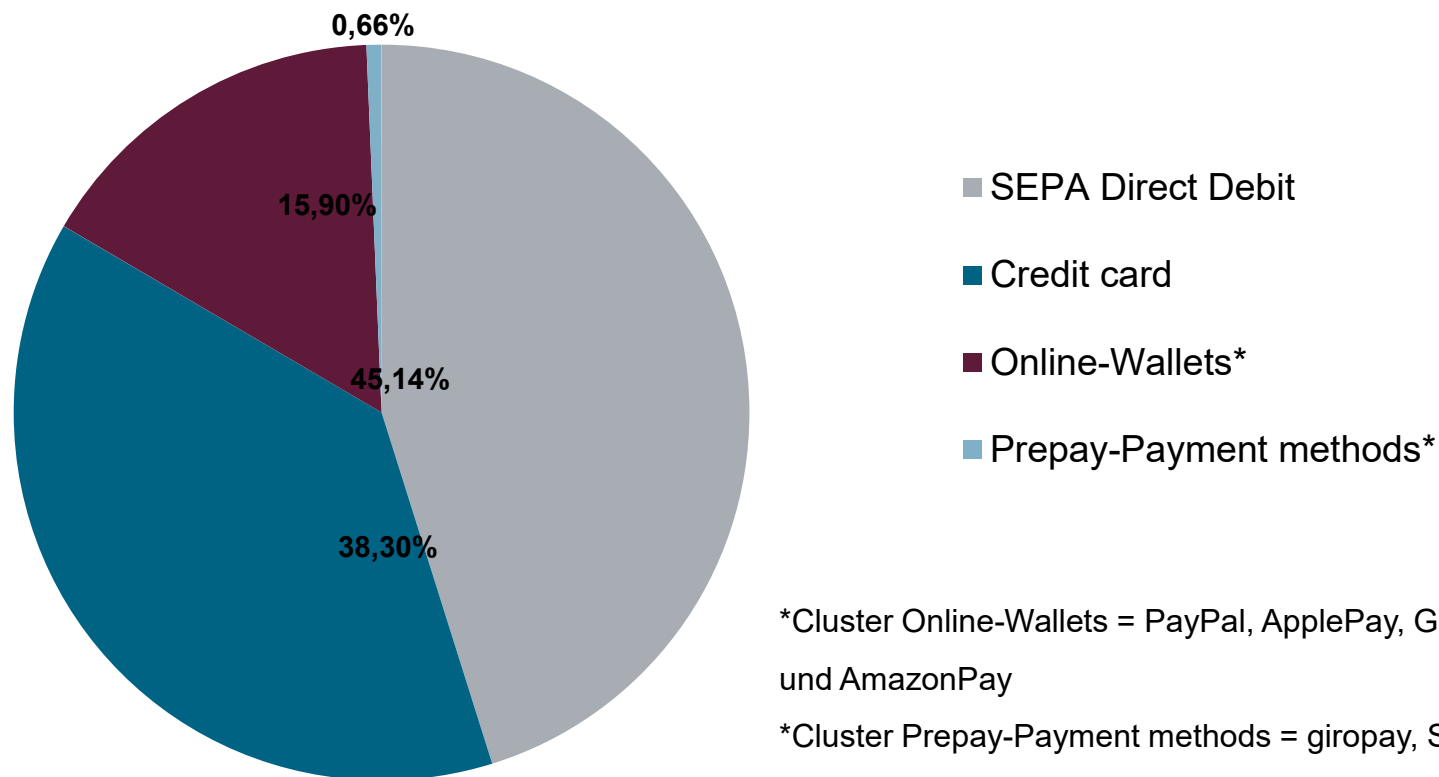
Source: EHI-Study, Online-Payment, 2019

➡ **Statistics on B2C online shops with physical goods; the results of which cannot be transferred 1:1 to the mobility industry.**

# Why is paying for Public Transport different?

Payment type distribution
for LogPay in 2019



- SEPA Direct Debit
- Credit card
- Online-Wallets*
- Prepay-Payment methods*

*Cluster Online-Wallets = PayPal, ApplePay, GooglePay
und AmazonPay

*Cluster Prepay-Payment methods = giropay, SOFORT,
Prepaid, MNO-Billing

# 6. IoT & Online Payment & Mobility Services got you interested?

# Your are invited to join the LogPayaner Family

**Your choice:**

- Working student
- Dual student

**Your goals:**

- Supervision of theses
- Working in teams
- Do your own project

**Your skills:**

- Engage with motivation
- Apply methods & knowledge

# Thank you.

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