



# Zwipe

A technology company at the heart of the next wave of innovation in payments

Den store selskapskvelden – SMB 2019  
Oslo, 4 June 2019  
André Løvestam, CEO

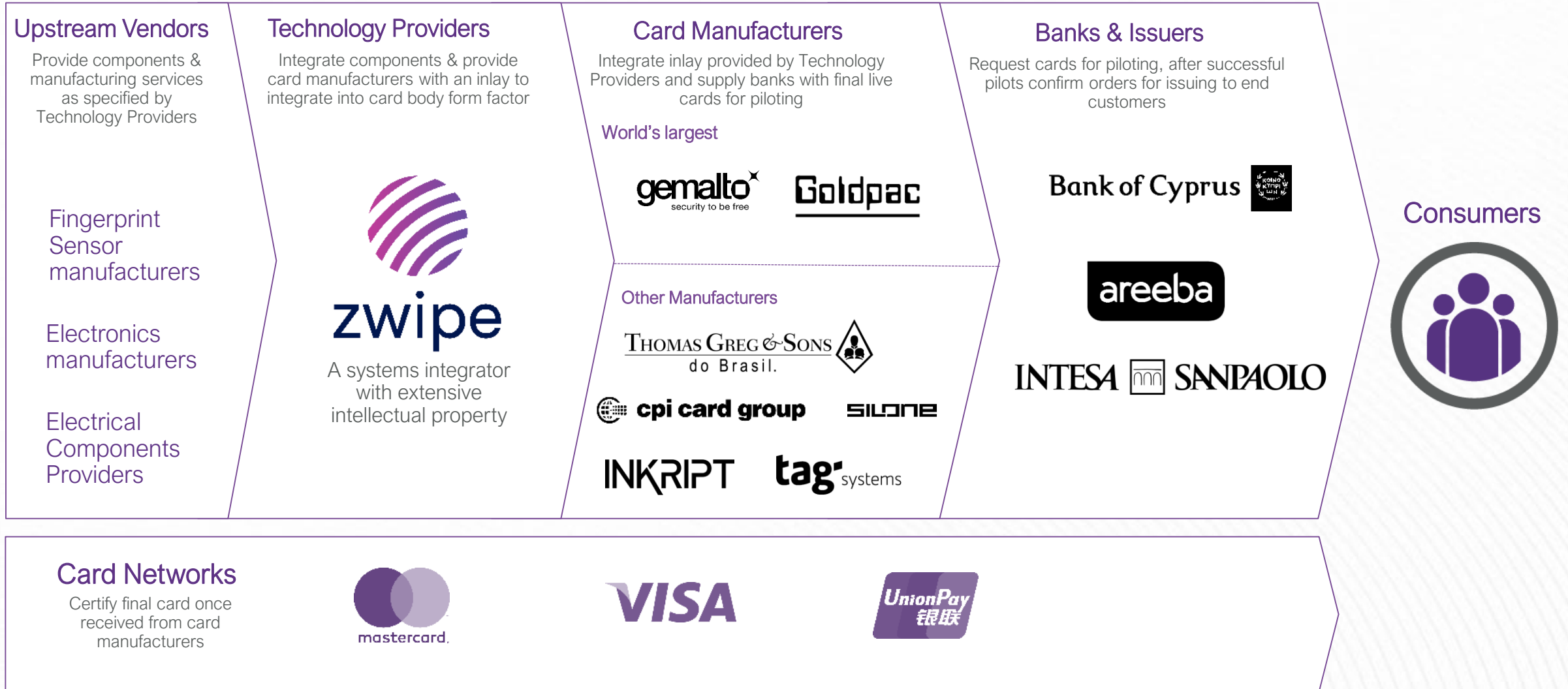
# This is how it works - everywhere



Dubliner Pub, Oslo  
10 October 2018



# How our eco-system operates



With a mission of  
*“Making Convenience Secure”*,  
Zwipe is at the forefront of battery-less  
biometric authentication

## First-mover

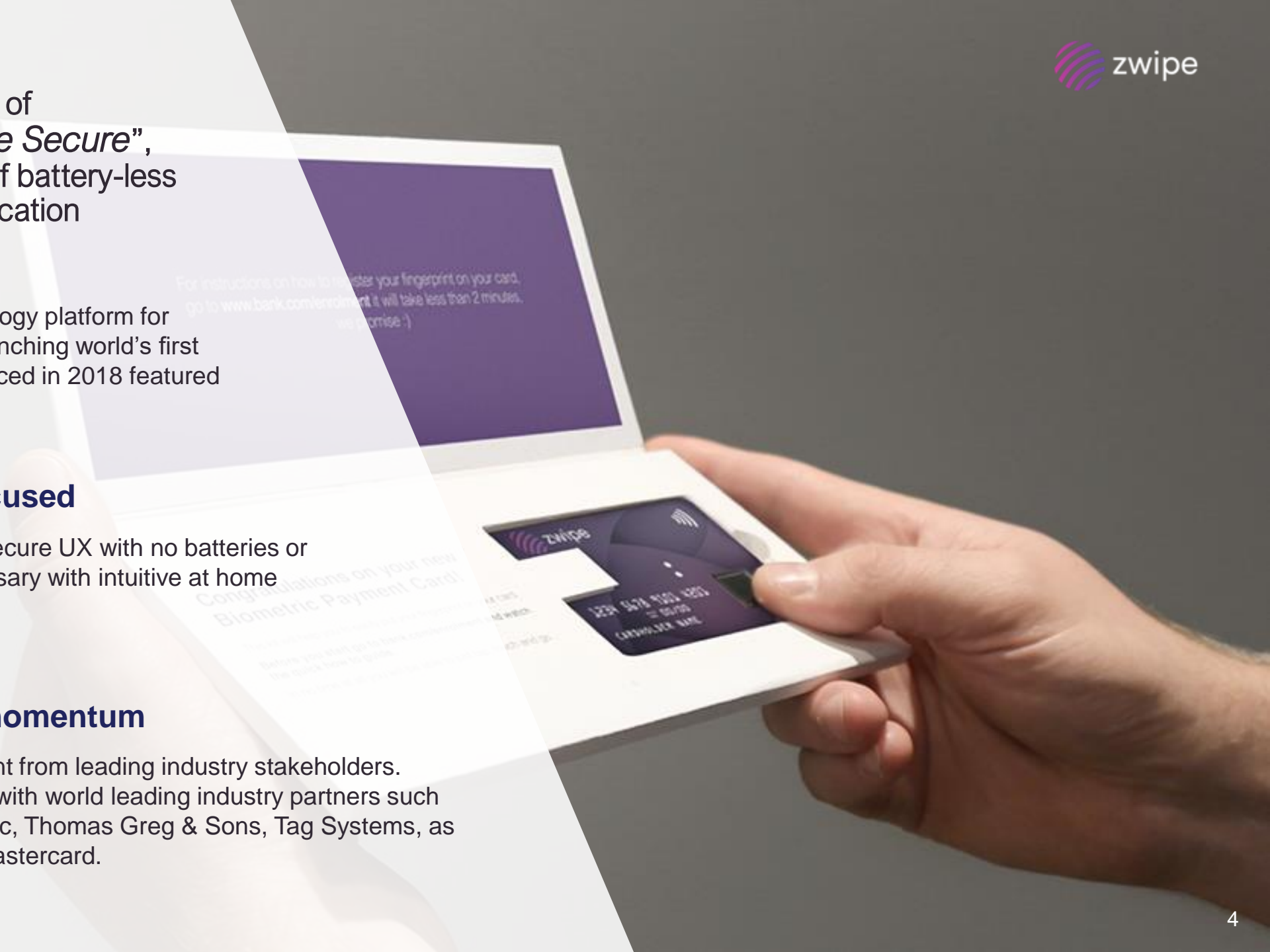
With industry-leading technology platform for biometric payment cards, launching world’s first pilots. 12 of 17 pilots announced in 2018 featured Zwipe technology.

## User experience focused

Simple, frictionless and secure UX with no batteries or fixed power supply necessary with intuitive at home user onboarding

## Strong market momentum

Growing commitment from leading industry stakeholders. Zwipe is partnering with world leading industry partners such as Gemalto, Goldpac, Thomas Greg & Sons, Tag Systems, as well as VISA and Mastercard.





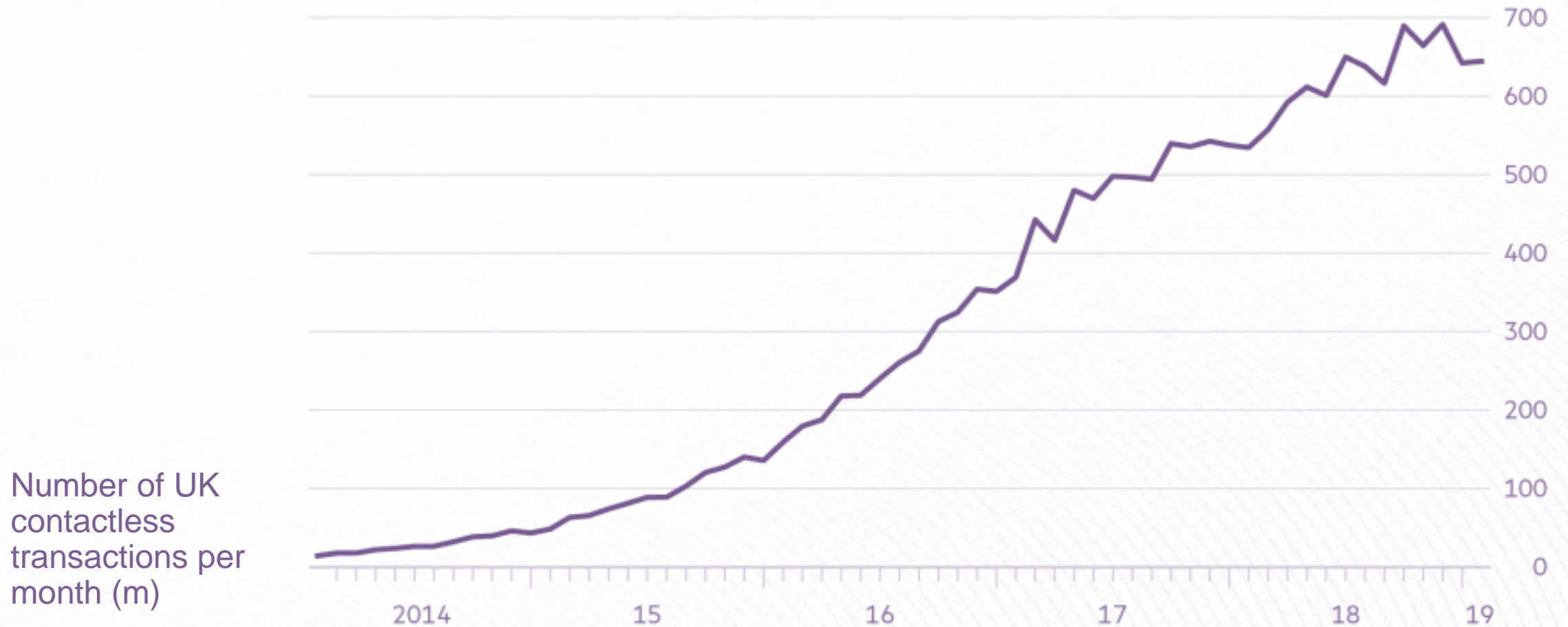
## Our core technology is at the heart of secure convenience

Zwipe's technology solution enables battery-less, contactless, ultra-low power, self-contained biometric authentication solutions in constrained environments

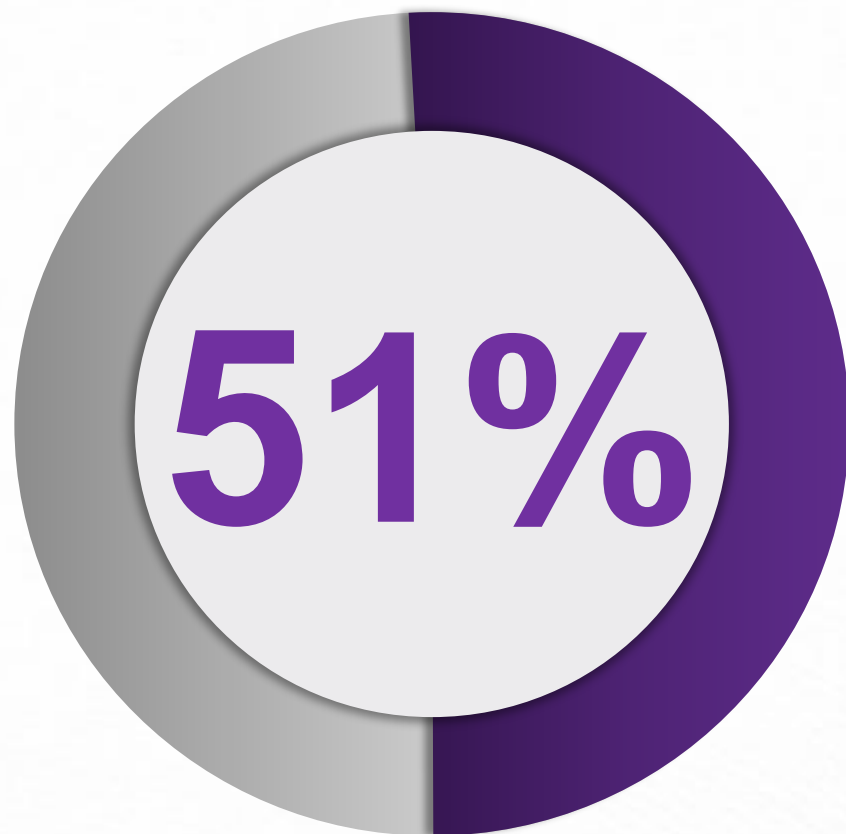
Zwipe has a strong IP portfolio covering 31 patent families, of which 8 are granted.

# The rise of contactless cards

Mature markets like the UK provide an indicative sample of what is quickly becoming a global trend



Source: UK Finance  
© FT



Are very or extremely  
concerned about fraud  
on contactless cards



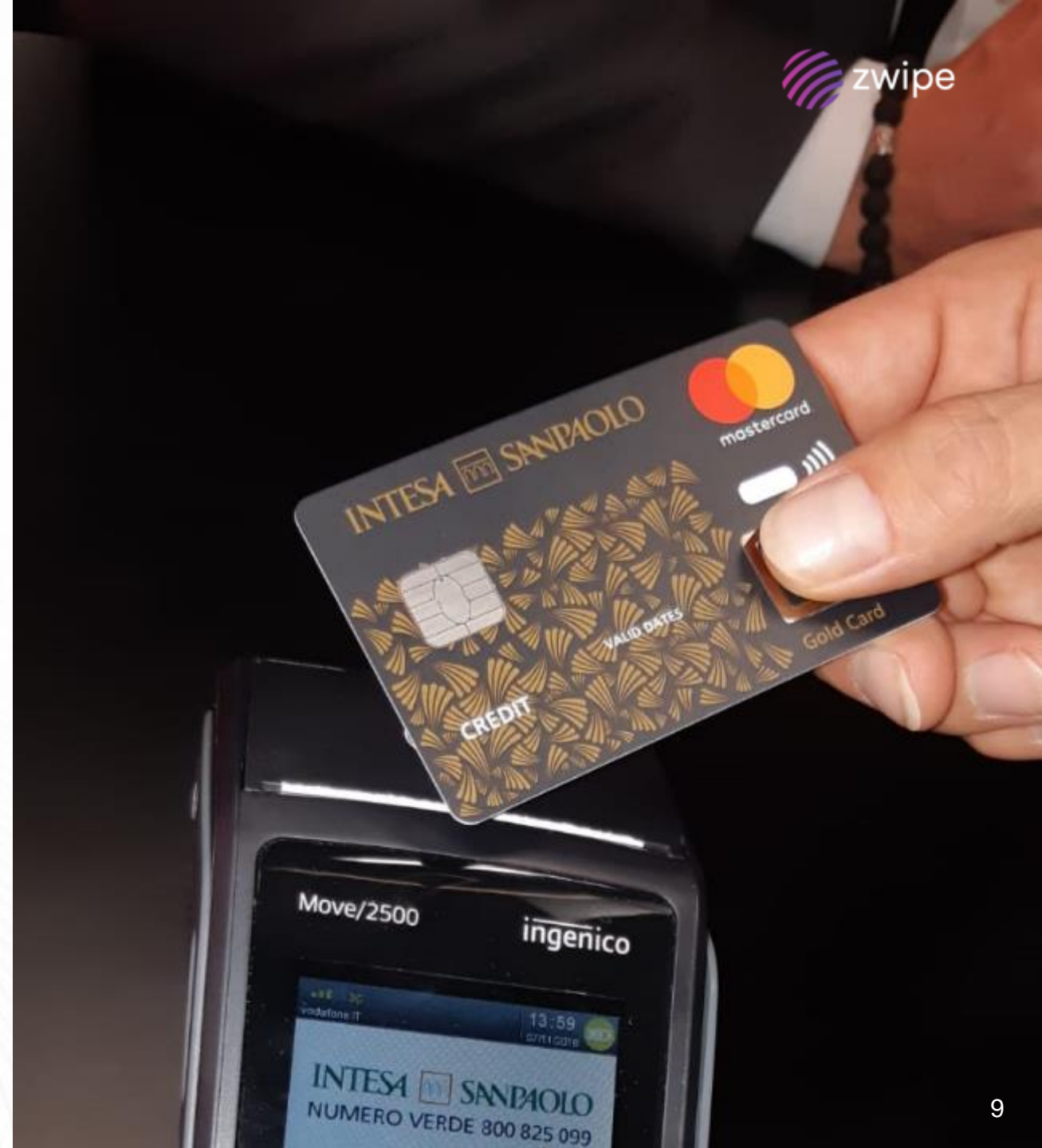
Global card expenditure to reach 45 trillion USD by 2023 on back of contactless payments



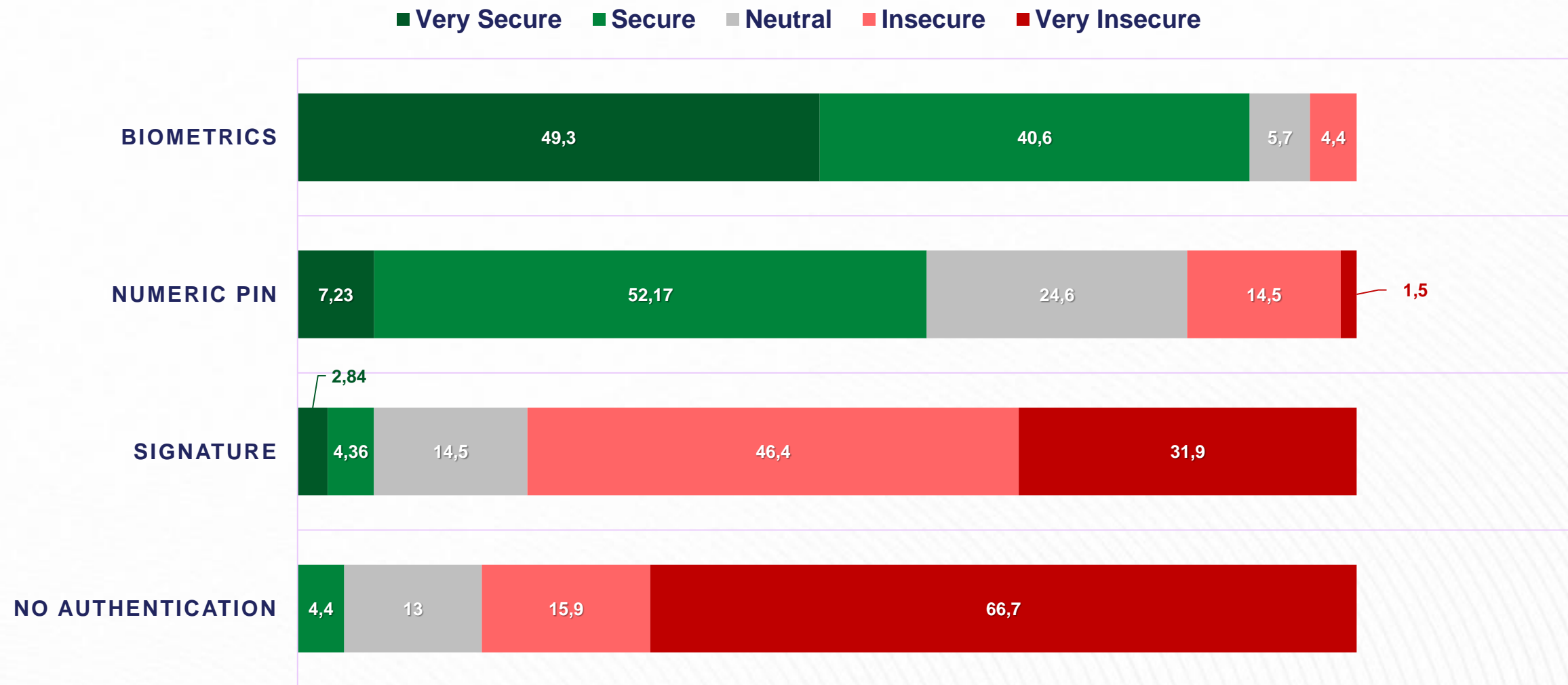


Biometric authentication  
is fast becoming a  
necessity for all devices

...especially for banking and payments



# Biometrics perceived as delivering superior security

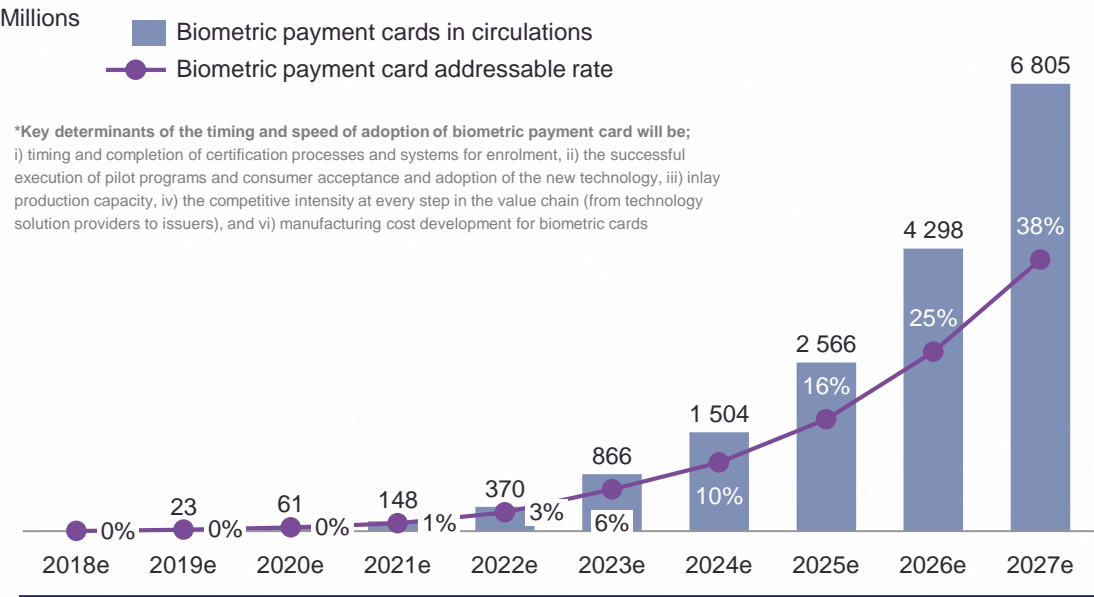


Source: VISA Ready for Biometrics Report, AYTM Market Research, April 2018, among pilot participants

# Growth in contactless drives demand for dual-interface **biometric** payment cards



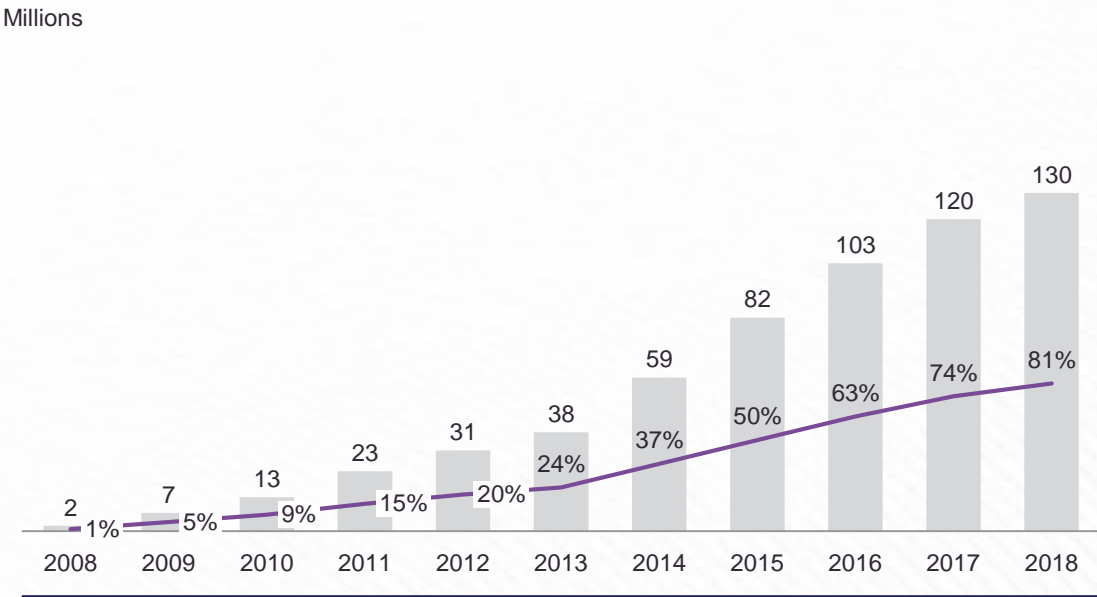
## Addressable market for biometric payment cards growing fast



### Demand from different key players in the payments eco system expected to trigger exponential adoption of biometric sensors on payment cards:

- Biometric authentication technology already validated and accepted by the mass market due to smart phones
- Card issuers looking for new ways to differentiate and meet evolving consumer expectations
- Governments and regulators promoting use of biometric solutions to minimise fraud and identity issues
- VISA & Mastercard industry mandate that all POS terminals must accept contactless payments by 2020 in Europe

## Case study: Dual-interface cards in the UK



- Gradual adoption due to latent demand and lack of NFC compatible POS terminals
  - i.e. consumers did not know or were unaware of their preferences until they got used to contactless (“tap and pay”)
  - Today, over 2/3 of payment terminals in stores are compatible with NFC

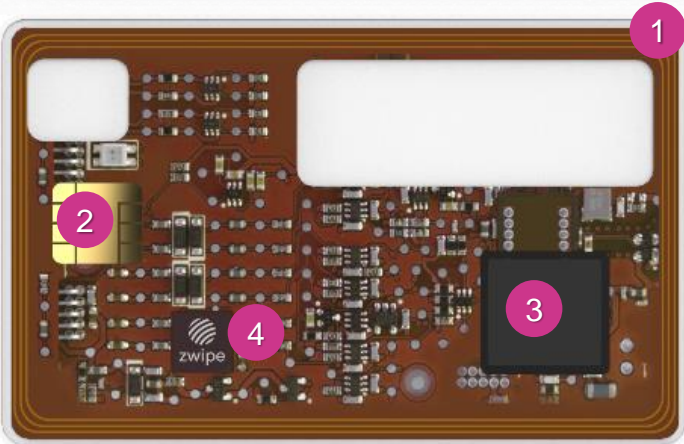


# Transition to an integrated circuits and system provider



## Current inlay

approx. 15 USD/inlay (excl. sensor)

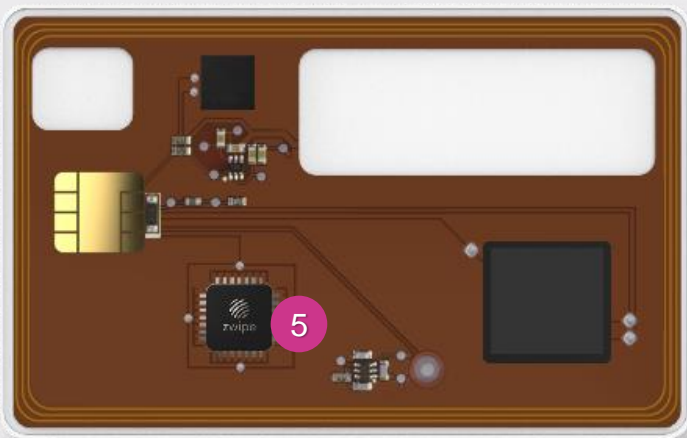


- 1 Energy harvesting inlay design and IP
- 2 Biometric interface integration into EMV chip
- 3 Fingerprint Sensor and protective bezel
- 4 Ultra-low power biometric MCU with proprietary firmware and algorithm

2019

## Generation Nxt: Redesigned inlay

Below 10 USD (excl. sensor)



- 5 Zwipe to sell integrated circuit/system bundles (ASIC and MCU with proprietary firmware) to manufacturers of biometric payment cards and wearables

2020

## Components

Below 4 USD



Zwipe to transition to selling embedded integrated circuits and licensing intellectual property

2021

Notes: (1) Application Specific Integrated Circuit (2) Micro Controller Unit. The photos are is not true reflections of Zwipe's technology.

# Key medium term financial aspirations

1

## Revenue

Annualised revenue of USD 125 million (NOK 1 billion)

2

## Volume

Annual sales of 20-40 million embedded systems for dual-interface biometric cards, with expectations to reach cash-flow break-even at these volumes

3

## Price

Average sales price in the range of USD 3-4 per unit at full volume

4

## Market position

No.1 in the market for dual-interface biometric payments with 30% market share

Not only Payment cards...

Zwipe is partnering with Tappy Technologies to jointly develop and launch biometric enabled wearables as well







**For more information please contact Zwipe Investor Relations:**



+47 930 44 040



[ir@zwipe.com](mailto:ir@zwipe.com)



Rådhusgata 24, 0151 Oslo, Norway



[www.zwipe.com](http://www.zwipe.com)