

Making Convenience Safe and Secure

Zwipe Presentation at Redeye Technology Day
25 November 2020 | André Løvestam, CEO

Zwipe is a biometric fintech company pioneering the next generation contactless payment experience



Zwipe has the most widely piloted solutions in the biometric payments marketplace

* A passive inlay has no components mounted on it, it only contains an antenna to do the energy harvesting and communication lines to handle communication between the sensor and the secure element.

This is the Zwipe investment case:

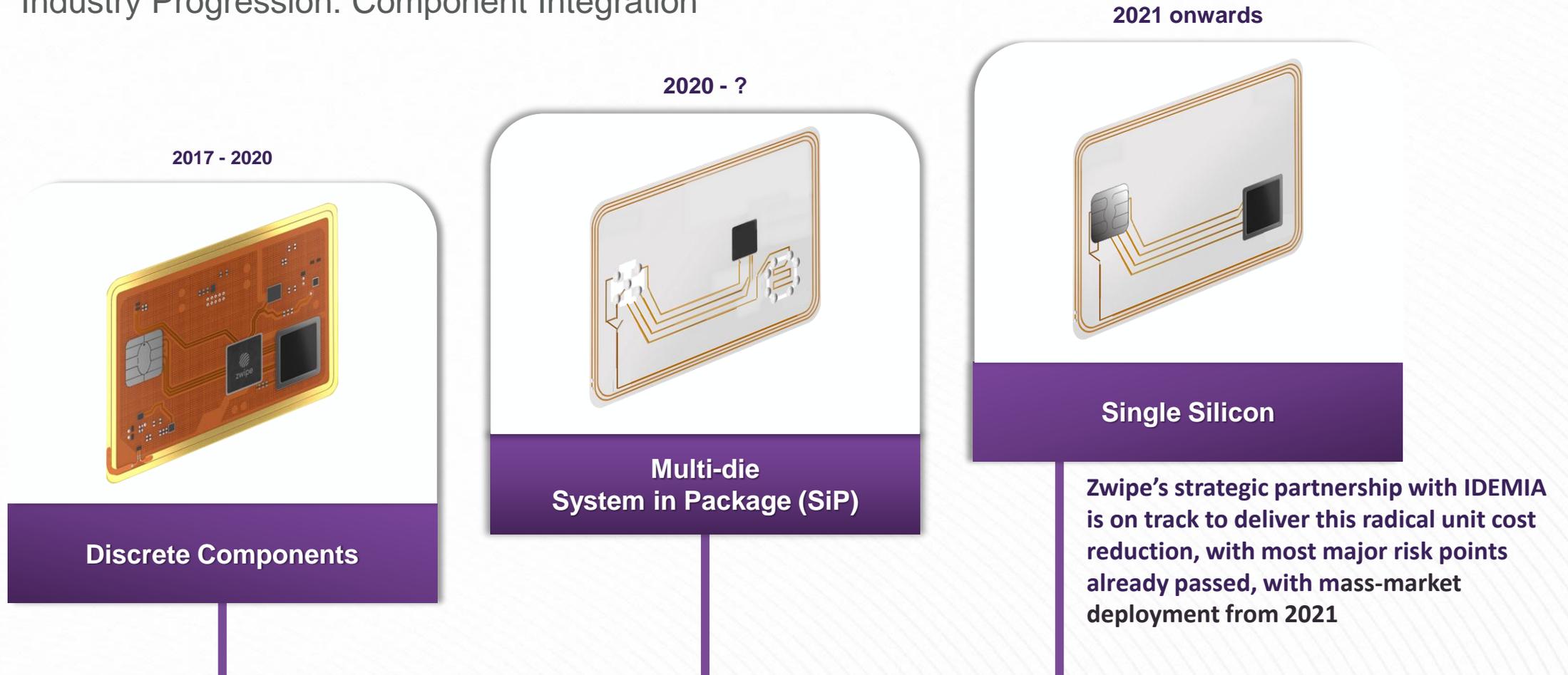
1. Addressing a **4-billion-unit market** characterized by growth from innovation
2. **Mass-market price inflection point** in sight
3. Positioned for **technology and cost leadership, exclusive global rights to disruptive technology, strong IP portfolio**
4. Unique **end-to-end systems integrator approach** and **trusted advisor** role
5. **Soaring demand** due to COVID-19, consumer willingness to pay
6. **Fast-growing customer base** with **global coverage**
7. **Lean and scalable** business model ready for growth
8. **Strong management and board**



2&3: Mass-market price inflection point in sight and under control,
Zwipe poised for cost and technology leadership with single silicon solution



Industry Progression: Component Integration



Industry Progression: Component Integration with radical complexity-down, size-down, cost down

Enrolment



passive



mobile app based

At Home Enrolment

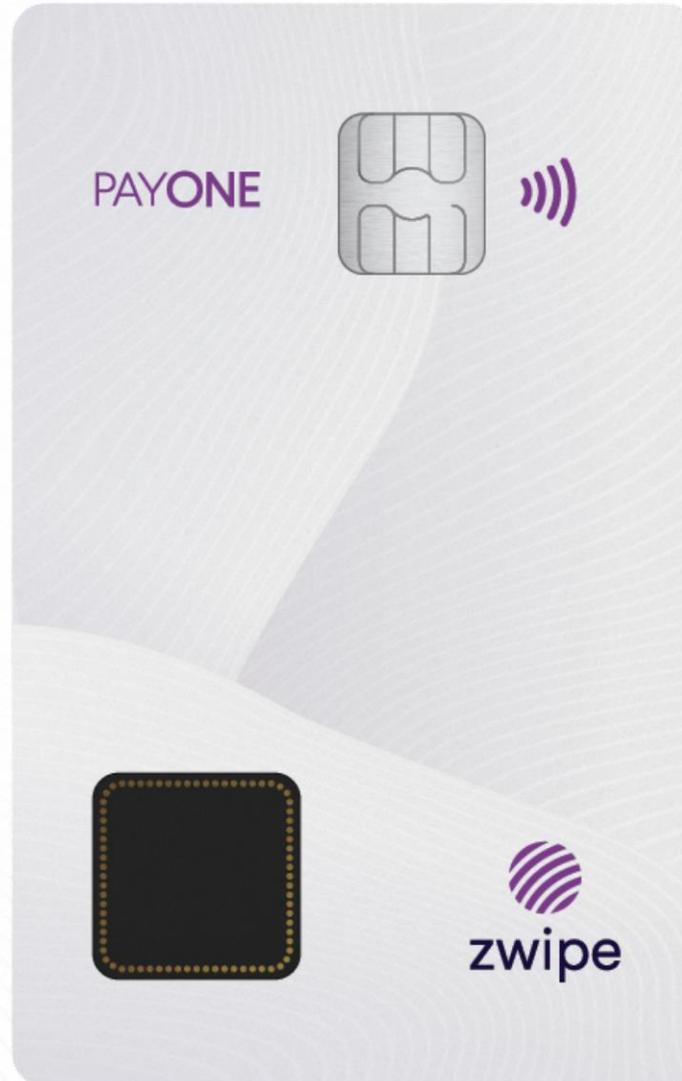
4: The cornerstones of Zwipe's competitive position

Our platform towards mass market deployments of biometric payment cards and wearables



Zwipe's competitive position is built on the combination of our:

- technology cost and performance leadership
- value-adding trusted advisor/end-to-end systems integrator role



The first-of-its-kind solution

Zwipe Pay ONE will offer card manufacturing customers a solution with superior energy efficiency and excellent biometric performance at highly competitive prices

A basic package consists of:

- A packaged ISO contact plate module (with the single silicon secure element)
- a biometric Java Card OS
- inlay and card reference designs
- integration support

With Options

- Passive inlay/prelaminated sheets
- biometric-aware payment applets for e.g. VISA and Mastercard
- enrolment solutions.
- If customers want a fully-blown turn-key solution, we can even offer the IDEX sensor directly

Completely end-to-end

We also offer professional services to banks and issuers on biometric payments, consumer insights, marketing, presentation and pilot execution services



Zwipe listed on Nasdaq First North Growth Market in Stockholm

January 28, 2020



the company announced that **Masria Digital Payments**, one of the largest SCMs in the Middle East & Africa, selected Zwipe for its drive to roll out biometric payment solutions

March 25, 2020



the company alongside IDEMIA announced the achievement of key technical milestones towards its next-generation card platform Zwipe Pay ONE, emphasizing that the project is **comfortably on schedule to reach time and cost targets**, with first availability expected for the end of this year and volume roll-out in 2021

April 8, 2020



the company announced the signing of an agreement that will see Zwipe **combining IDEX Biometrics sensor products with the Zwipe Pay ONE platform** to enable a complete system solution for biometric payment cards

April 20, 2020



Toppan Forms Card Technologies, one of the best positioned SCMs in Hong Kong and Macau, partnered with Zwipe to prepare to offer biometric payment cards

April 23, 2020



Asia Credit Card, a specialist SCM based in Hong Kong, partnered with Zwipe to offer biometric payment products and services

April 28, 2020



Zwipe steps up collaboration with Toppan Forms Card Technologies (TFCT), with **TFCT placing an order to begin small scale manufacturing of biometric payment cards**.

June 8, 2020



Announced partnership with **Watchdata Technologies**, a Chinese based smart card manufacturer serving **80 million banking customers in over 70 countries**.

June 18, 2020



Announced the **extension and renewal of an exclusive partnership with Thomas Greg & Sons do Brasil**, one of the largest smart card manufacturers in Latin America

June 29, 2020



Announced partnership with **largest local smart card manufacturer in Italy, Publicenter**, addressing the stronger desire in Italy and Europe for safer and more secure contactless payments

July 1, 2020



Announced partnership with Liveo Research a **major supplier of PVC materials to some of the world's largest card manufacturers**, to offer a highly optimized route to efficient and scalable manufacturing of biometric payment cards

July 28, 2020



Announced the ramping up of collaboration with Smart Technology Services (STS) to industrialize Zwipe Pay ONE, STS one of the world's first smart card equipment manufacturers to develop a biometric payment card milling and embedding enabled systems

August 18, 2020



Announced partnership with Wisecard Technology, a **leading supplier of EMV personalization and payment solutions** to support the co-development of card personalization offerings for Zwipe Pay family of products and solutions

August 20, 2020



Announced partnership with Zwipe and Cardmatix, a **leading player in the development of industrial manufacturing and testing equipment specifically for mass production of payment cards**, on mass-production of Zwipe Pay ONE

September 14, 2020



Announced partnership with **TietoEVRY** to deliver biometric payments to banks in the Nordic and Baltic regions

October 8, 2020



Announced partnership with **areeba** to bring nxtgen biometric contactless payments to banks in the Middle East & Africa

October 14, 2020



Announced partnership with **Inkript** to launch **Zwipe Pay ONE** in the Middle East, with Inkript placing an order to Zwipe commencing small scale manufacturing of biometric payment cards based on Zwipe Pay ONE

October 15, 2020



Announced order of 300,000 sensors from **IDEX Biometrics** to support the rollout of **Zwipe Pay ONE** to a growing list of smart card manufacturers and issuers in Europe, the Middle East, the Americas and Asia

October 19, 2020



Launched Swedish market study with **TietoEVRY** showing large interest in biometric cards in response to Covid-19 in-store payment concerns

November 17, 2020



Zwipe Pay ONE in first biometric payment card pilot in the Nordics, with OP Financial Group and TietoEVRY and Tag Systems

November 23, 2020

5. Soaring demand due to COVID-19, leading to **consumer willingness to pay**



4 out of 5 are concerned about touching the pin pads



1 in 2 would pay an annual fee of SEK 120 or more for a biometric payment card (without additional benefits)

1 in 2 say they would even switch banks if another bank offered a biometric payment card

We have now surveyed **400+ cardholders in Sweden and Norway** about their payment habits and concerns in the pandemic...



Main take-away:

Biometric payment cards is a **mass-market proposition**



A strong business case for the issuers

A conservative revenues estimation from higher card fees for a bank with 1 million cardholders*

# Card holders	1,000,000
% of card holders willing to pay	50% (vs 55%-59% in Norway and Sweden)
Monthly fee card holders are willing to pay	NOK 20 (vs NOK 10-70 in Norway and Sweden)
> Annual revenues from higher card fees = 1,000,000 x 50% x NOK 20 x 12 months = MNOK 120	

Additional positive revenue effects (MNOK)**

Fraud prevention	10.8
Top of wallet effect	10.8
Increased card transactions	3.6
= Total MNOK 25 in additional annual revenues for the issuers	

In addition there will be **reduced churn and new customers attracted** (not included in this calculation)

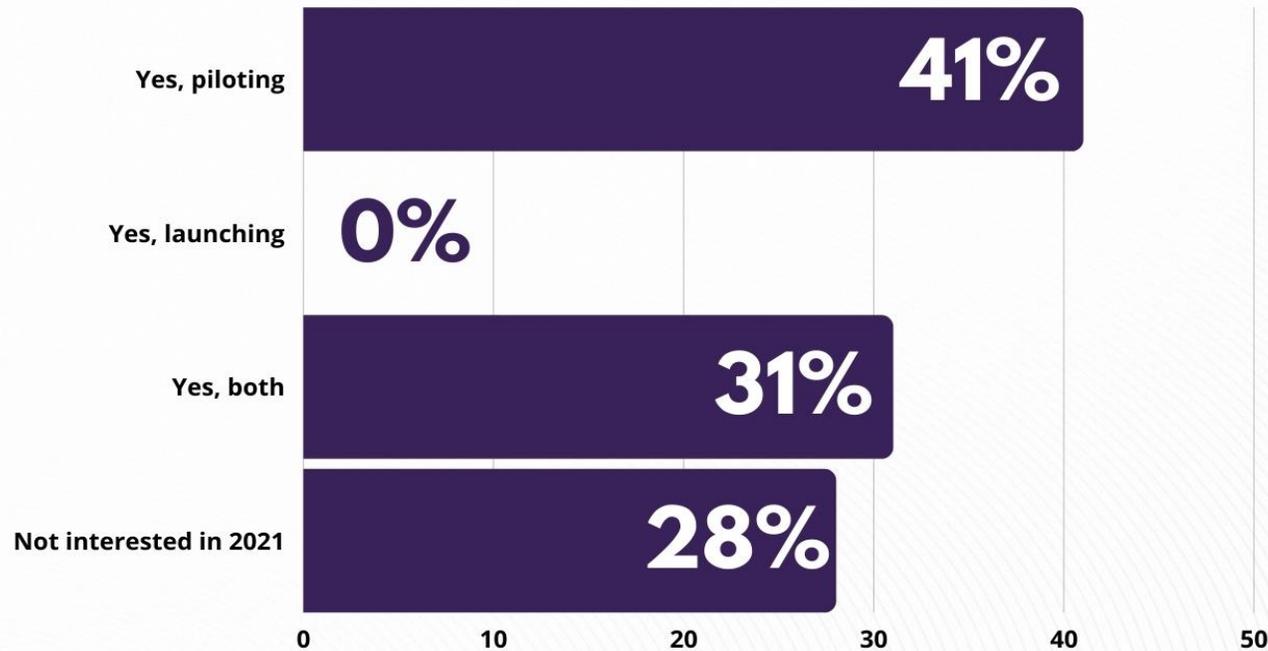
Total annual revenues: MNOK 145

* Based on Zwipe insights

** RedEye analysis and calculations in report as of 24 November 2020

TietoEVRY and Zwipe webinar poll on 17 Nov 2020 (~70 participants from Nordic & Baltic banks):

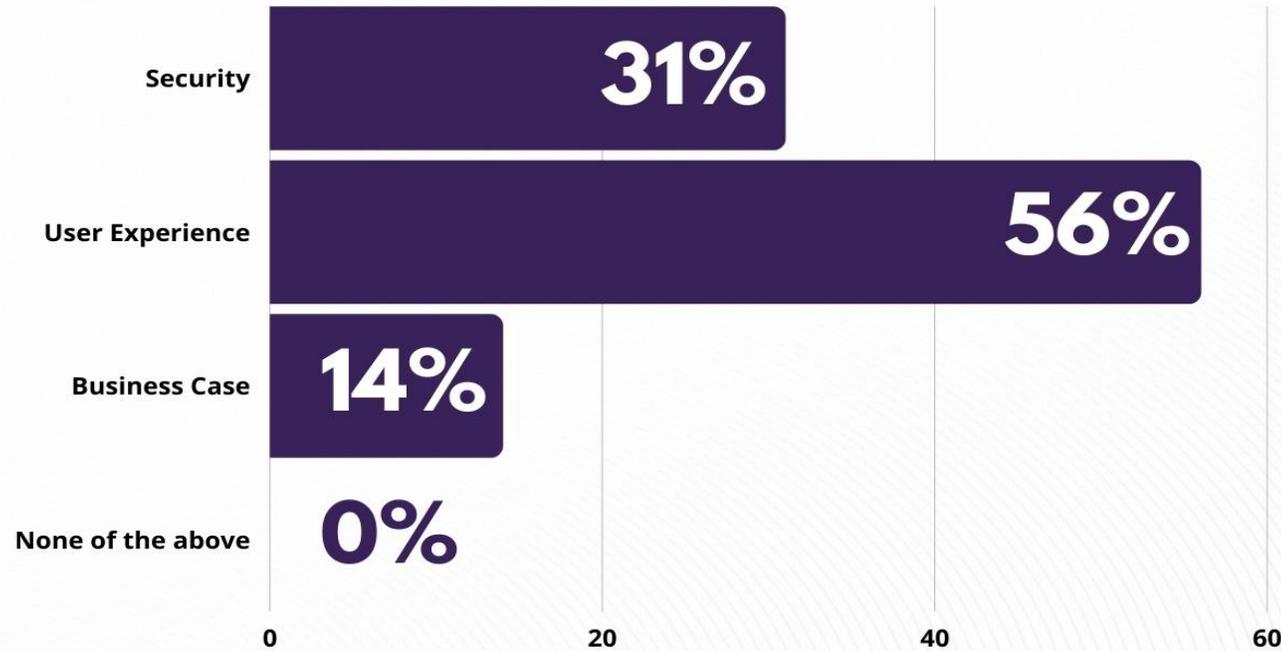
Q: Would you be interested piloting/launching biometric payment cards in 2021?



Main take-away:
72 % of respondents interested in pursuing biometric payment cards in 2021

TietoEVRY and Zwipe webinar poll on 17 Nov 2020 (~70 participants from Nordic & Baltic banks):

Q: Which biometric payment card value proposition is most compelling to you?



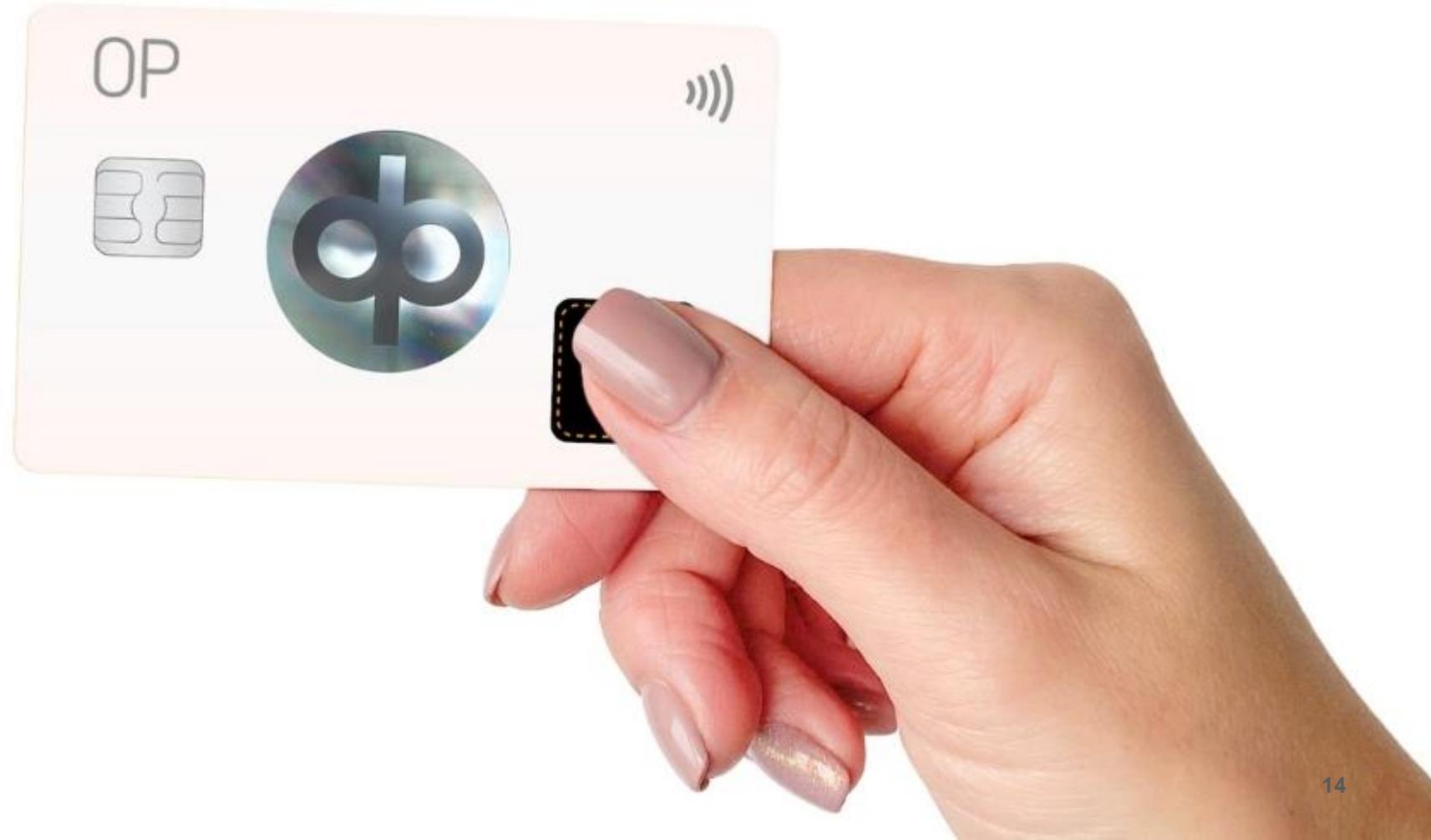
Main take-away:
Key drivers for banks are customer needs and concerns (which is how you build a business case anyway...)

Zwipe Pay ONE in TietoEVERY & OP Financial Group biometric payment card pilot



First biometric payment card pilot announced in the Nordics

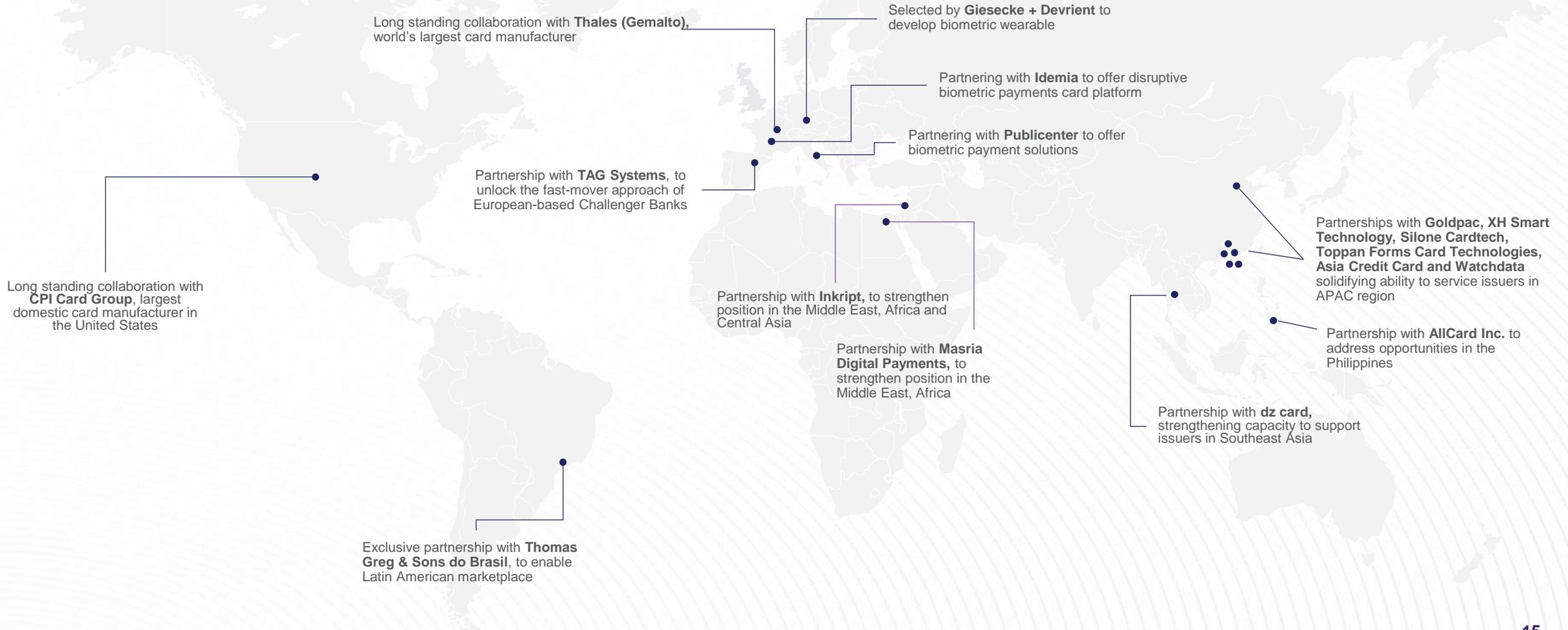
- First pilot announced on Zwipe Pay ONE
- First pilot announced with TietoEVERY
- First pilot announced with TAG Systems



6. Fast-growing customer network with global coverage



Zwipe is now engaging with more than 40 of the world's top 50 card manufacturers, of which 17 announced collaborations/partnerships



Key Financial highlights as of Q3 2020

- Average monthly operational cash outflow in Q3 2020 of MNOK 4.4 vs MNOK 7.6 in Q3 2019 (down over 40%)
- Cash balance as of 30 September 2020 was MNOK 117.3
- In October and November Zwipe received additional MNOK 23
 - ✓ MNOK 18 are payments from the private placement and the subsequent offering
 - ✓ MNOK 5 is the Norwegian “Skattefunn” grant

Final take-away:

The big picture: *It's all coming together*

- The market for biometric payment cards is **happening now - with increasing traction from issuers**
- The long-term market potential of BPC is **far greater** than anticipated – from niche to mass market
- Zwipe is **working successfully** to maximize long term value creation and mitigate risk
 - ✓ Zwipe's position, Go-to-Market approach and Zwipe Pay One technology platform are being **constantly confirmed and acknowledged** by important stakeholders in the ecosystem
 - ✓ Zwipe is seeing good technological progress and solving challenges one-by-one, **on track for mass-market deployment from 2021**
 - ✓ Zwipe is attracting new issuers, smart card manufacturers and GtM partners, with a **continued strong pipeline**
- ***In conclusion, the Zwipe opportunity is greater and the risk is lower than ever before***