FINGERPRINTS IN BRIEF
WE BELIEVE IN A SECURE AND SEAMLESS UNIVERSE, WHERE YOU ARE THE KEY TO EVERYTHING
Fingerprints™ of Sweden

- Founded 1997
- SEK 3 billion in revenue 2017
- Market leader in fingerprint sensors for mobile phones
- Develops biometric systems consisting of sensors, software, algorithms and tools
- Focus areas
  - Capacitive touch sensors
  - Touchless biometrics with iris recognition
  - Disruptive in-display technology being developed
  - Payments including smartcards
  - IoT, Automotive and Smart Cities
Our solution launched in over 300 mobile devices by over 30 different brands

MORE COMING…
10 BILLIONS OF TOUCHES

DAILY
Our solution is found in hundreds of different IoT devices
CURRENT SITUATION AND FOCUS AREAS
Fantastic and challenging journey

Revenue, SEK million

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue, SEK million</th>
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</thead>
<tbody>
<tr>
<td>2012</td>
<td>10</td>
</tr>
<tr>
<td>2013</td>
<td>95</td>
</tr>
<tr>
<td>2014</td>
<td>234</td>
</tr>
<tr>
<td>2015</td>
<td>2,900</td>
</tr>
<tr>
<td>2016</td>
<td>6,638</td>
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<tr>
<td>2017</td>
<td>2,966</td>
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What are we doing now?

- Result impacted by intense competition, a product mix shift and a declining Chinese smartphone market vs last year.

- We are lowering our costs further…
  - Second cost reduction program announced June 4 with the aim of reaching an OPEX level below SEK 400 M (on an annual basis, and before capitalization of R&D expenses)
  - Launched fourth-generation fingerprint sensor, expected to be integrated in customer products in late 2018 or early 2019

- … and diversifying our business
  - Expanding our biometric technology portfolio with a focus on in-display and touchless solutions
  - New application areas for biometric solutions
LOOKING AHEAD
Our view of the future

SINGLE-PURPOSE BIOMETRICS
- Fingerprint touch sensor on smartphone to unlock and make mobile payments

BIOMETRIC MULTI MODALITY
- More and new biometrics, Iris / Face for touchless, in-display fingerprint sensors
- Biometrics moving into different formfactors; smartcards for payments, IoT

BIOMETRIC ID AND CYBER SECURITY
- Smart homes, smart cities and cloud solutions where everything is connected fueling biometrics for identification and continuous authentication

2011 - 2017 - FUTURE
Multimodality for convenient security

- Why have one if you can have two?
- Strong combination of touch & touchless biometrics with fingerprint and iris solution
- Our multimodal solution launched in smartphones like Fujitsu ARROW and BitVault®, the world’s first blockchain phone

**Better Convenience**
- Wet fingers
- Gloves
- Phone on desk (backside sensor)

**Higher Security**
- Corporate login
- High value transactions and payments
- Protect apps and services
In-display solutions gaining ground

Fingerprints is developing a disruptive ultrasonic in-display technology
In parallel, we are planning to bring an optical in-display solution to market
Smart cards – the next biometrics mass market

Future usage, beyond mobile, in the minds of the consumers

1. Bank card
2. PC
3. Car
4. Home entrance
5. Register work time

2017: Approximately 4 billion smartcards produced/year

2018: First purchase orders for biometric smart cards, larger volumes expected in 2019/2020

A market with high expected growth

SOURCE FingerprintSTM in collaboration with Kantar TNS. Base: 4,000 online consumers in China, India, UK, USA.

FINGERPRINT IN A PAYMENT CARD IS THE NEXT APPLICATION BEYOND SMARTPHONES IN THE MINDS OF CONSUMERS TO REPLACE THE PIN
Key success factors for biometric payment cards

- **Supporting a battery-less and contact-less scenario**
  - Very low power consumption required

- **Complying with packaging and production requirements**
  - Ultra-thin ISO certified, supporting lean, effective, and robust card manufacturing

- **User experience**
  - Speed and reliable biometric performance, from first enrollment to everyday use

- **Complete biometric system solution**
  - Hardware, software, algorithms, packaging, tools and support
Smartcards – Fingerprints’ strengths

- Strong experience in volume production, robust hardware and stable software
- Offering biometric performance in a low computing power environment
- Ultra-low power consumption
- Strong collaboration with smartcard industry leaders
T-Shape™

- Easy to integrate
- Lower total card cost
- Ultra-low power consumption
- Superior image quality and biometric performance
- Compatible with existing card manufacturing processes
Initial T-Shape™ orders received during Q2 2018

- Initial orders for T-Shape™ module received from two major global card manufacturers, to be used in dual-interface (contact and contactless) payment cards
- Smartcard ecosystem working together to introduce biometric cards at scale
- Positive feedback from ongoing market trials
Where are we now?

- **CARD HOLDERS**: Want biometric payment card
- **PRODUCT**: Optimized sensor and system
- **CARD INTEGRATION**: Solution providers and card manufacturers integrate and test
- **SCHEMES – TRIALS, STANDARDIZATION & CERTIFICATIONS**: Payment systems and standardization bodies, test, qualifies and certifies

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**ISSUER PILOTS**: End user market trials with banks

**SMALLER VOLUME FOR PILOTS**

**HIGH VOLUME DEPLOYMENT**
Summary

- Keep leadership position in mobile segment by driving cost efficiency and introducing new solutions
- Adjusting cost base to prevailing market conditions while reallocating R&D investments towards new, emerging markets for biometric solutions
- Fingerprint is well-positioned to benefit from the adoption of biometry in smart cards as well as in new embedded/IoT/automotive areas
Q&A