

TeleTrust-Konferenz 2019

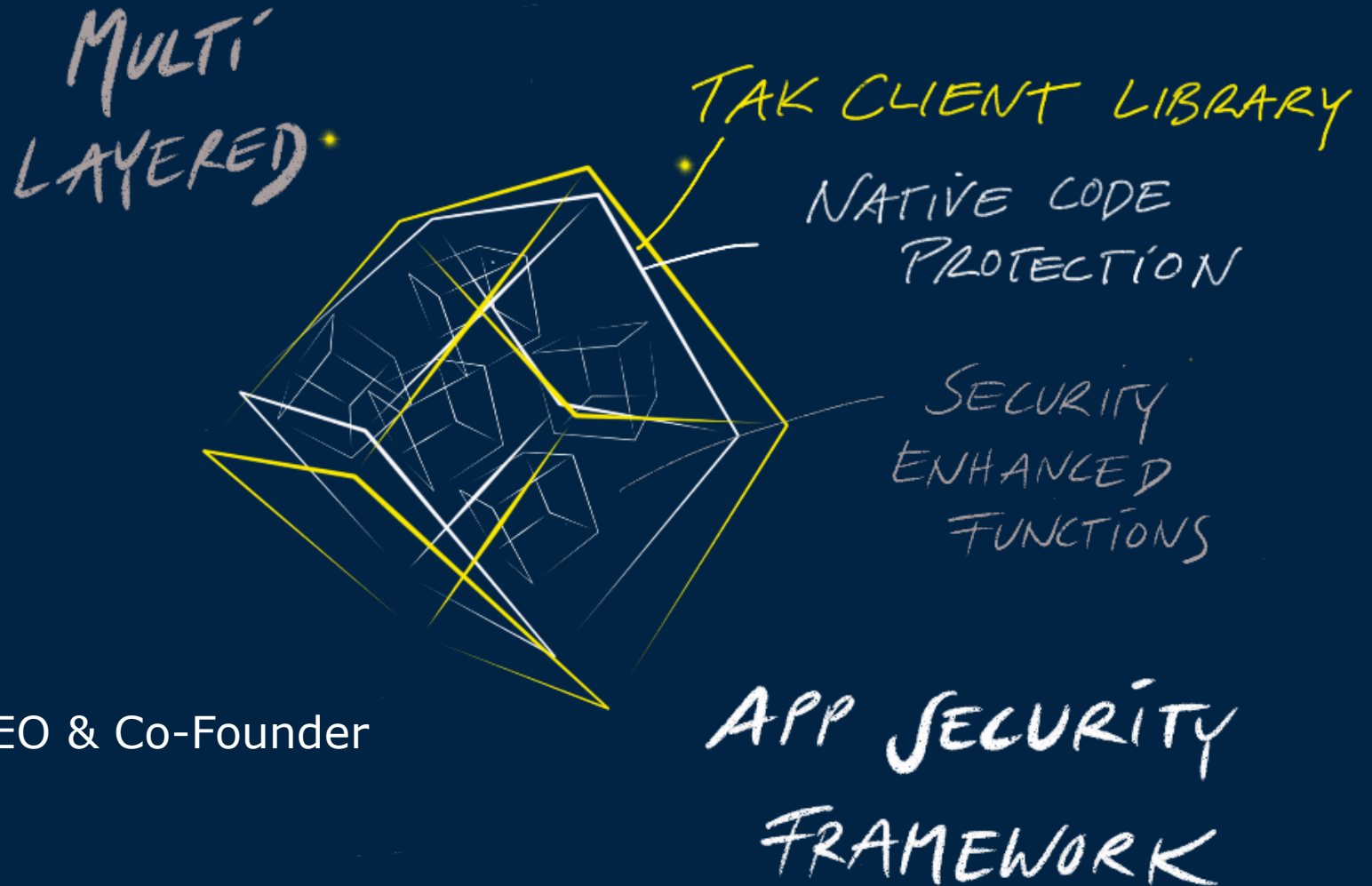
Bundesverband IT-Sicherheit e.V. (TeleTrust)

Berlin, 28.11.2019

Threat Intelligence für mobile Endgeräte

Dr. Christian Schläger, CEO & Co-Founder Build38

Mobile App Security



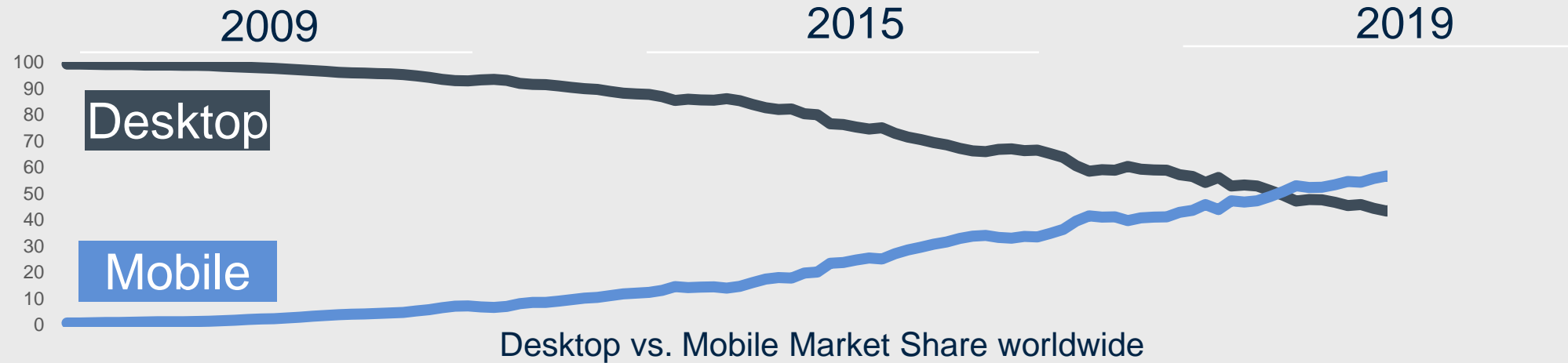
Dr. Christian Schläger, M.D. / CEO & Co-Founder
November 2019

Build38 at a Glance

- Founded in 2018
- Spin-off of Giesecke+Devrient (G+D) with over 165 years of security experience
- HQ in Munich (Germany), subsidiaries in Barcelona (Spain) and Singapore
- References in EMEA and APAC in government, banking, healthcare, automotive, digital platforms, ticketing
- Securing already +10 million devices worldwide with self defending security on the mobile device



Customers shift from desktop to mobile: Mobile First becomes Mobile Only



194B

app downloads in 2018
worldwide

80%

of mobile time is spent on
using apps

70%

CAGR in app vulnerabilities
since 2009

Source: Cvedetails, OpenSignal

Today's main challenge: How to run secure apps on insecure devices

Current situation

- Mobile apps are **less protected than web applications** and are attractive targets for hackers
- 80% of apps run on compromised devices
- Proliferation of apps with **sensitive information is growing**
- Impact of apps on insecure devices is a critical **unmanaged business risk**

Challenge

- Provide access to **sensitive information** with mobile apps, develop fast and still top secure and protect your backend from attacks
- Provide a layer of security **without interfering with the customer experience**

Standard Mobile Security Model

Cumbersome, unreliable and unsecure – we need a change!

How it works today

Security is dependent on users

Users need to update phone and apps - unrealistic

Security is dependent on the developer and its resources

Non-security experts try to be smarter than expert hackers – an uneven battle

Security is dependent constant development

Constant investment in dev. team to keep up-to-date in non-functional areas – not in the budget

Dependent on iOS and Android

Possible in a secure homogenous environment with enforced updates and monitoring – not your mobile market



Disadvantages

When smartphone is compromised, app is compromised

customer data, business APIs, compliance are compromised

Low protection for 90% of devices

Multitude of vendors, models, OS versions make mobile device testing a nightmare

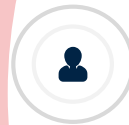
Exposure to OS vulnerabilities

Android is open source code with higher risk for vulnerabilities

Mobile applications are exposed to a number of mobile risks

Biggest security risks in the field

- Reverse engineering & code manipulation
- Differential comparative analysis
- Key extraction
- Mobile app cloning
- Resource manipulation & theft
- Network sniffing & Man-in-the-Middle sniffing
- Rooting, jailbreak, debugging
- App impersonation
- Malware risks



Countermeasures

- Native code protection & obfuscation
- Secure storage & fast encryption
- Strong device binding
- Protection against app cloning / fake apps
- File & resource protector
- TLS – secure connection
- Personalization of every app
- Environment and runtime checks
- Remote device attestation via platform



Changes in the company view of mobile security



The app is the most valuable endpoint as it connected digital processes and workflows with the customer

C'T DECKT AUF 11.

Massive privacy app Ada

Health apps like "Ada" their developers like to of users is to them. He made by the app Ada to third parties.

Mobile Security awareness has risen (c't / Ada Health), mobile security must be included in every App!



The number of relevant endpoints has exploded with GDPR, PSD2, ITSiG2:
Alerts and Events?

Go for it!

You are safe.

- **Focus on your core competency: app development**
Don't worry about security – that's Build38's job
- **Customer satisfaction is your ultimate goal**
Develop faster and meet your project timelines
- **Knowledge is power**
know what your apps are doing out there

Your contact persons for questions about our solution.



Dr. Christian Schläger

Managing Director & Co-Founder

 +49 172 680 7769

 christian@build38.com

 www.build38.com

