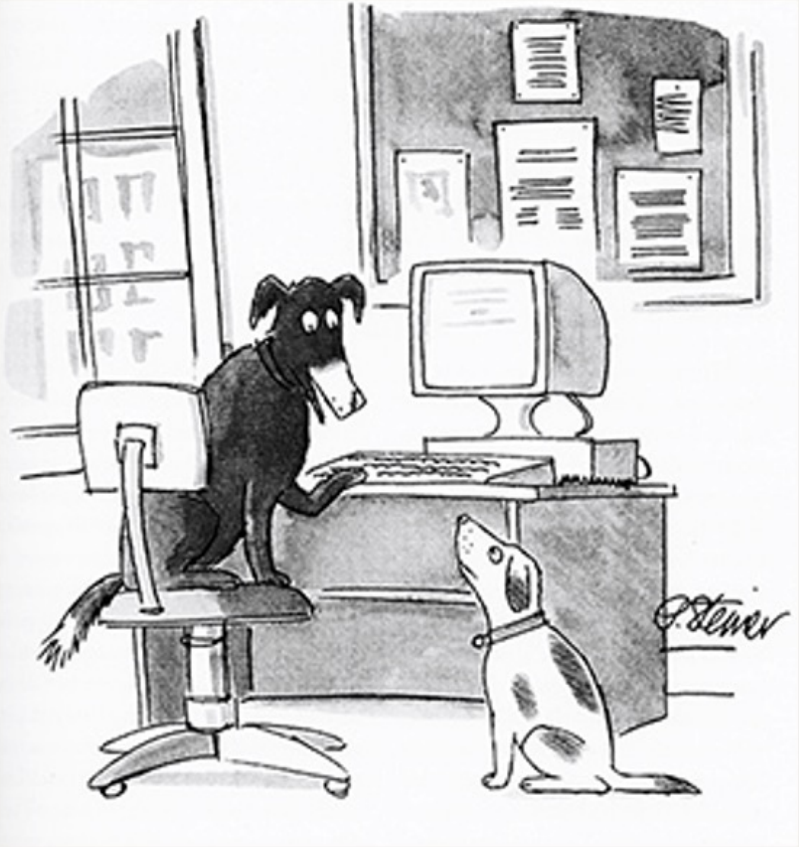
How to fight rising synthetic identity fraud?

Carsten Mürl,
Director Products & Solutions, C&I, Germany

Omnisecure

AGENDA

- Understanding Digital Identity
- Identity Fraud Landscape
- Synthetic Identities – the fastest growing financial crime
- The gaps within traditional KYC
- How Mastercard can help



Drawn Peter Steiner, published by The New Yorker on July 5, 1993.

"On the Internet, nobody knows you're a dog"

Digital Identity is the digital representation of a real-life human, company or object

Martin - **First Name**

martinb@gmail.com - **Email Address**

02 180 17 24 - **Phone Number**

0.1s - **Typing Cadence**

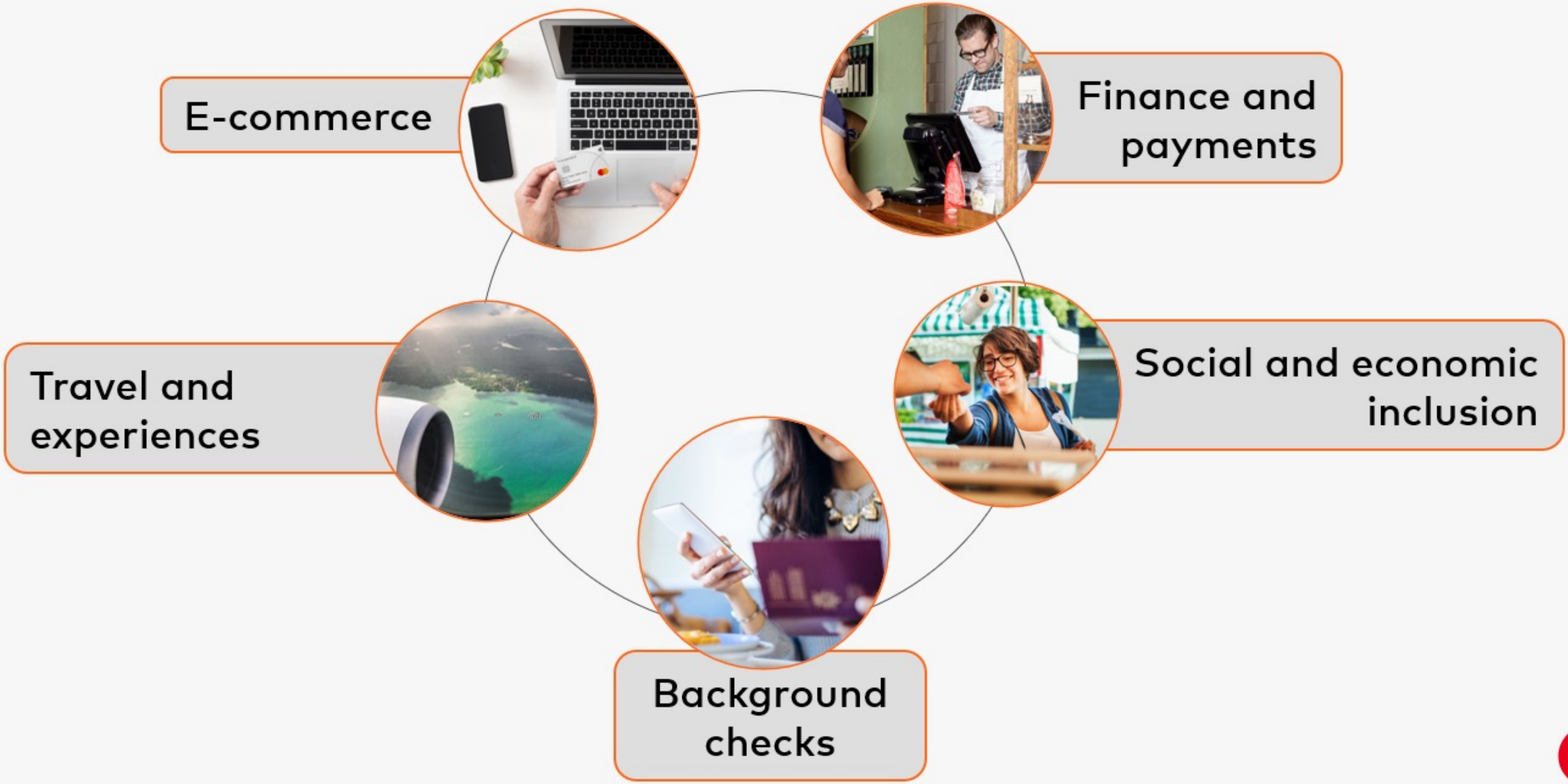
123456789–01234567890123456789

Device ID

Digital identity consists of different digital attributes and behavioral patterns that express specific aspects of the real-life entity

BUSINESS CONTEXT

Identity is core to nearly every digital interaction



E-commerce

Finance and payments

Travel and experiences

Social and economic inclusion

Background checks

CHALLENGE

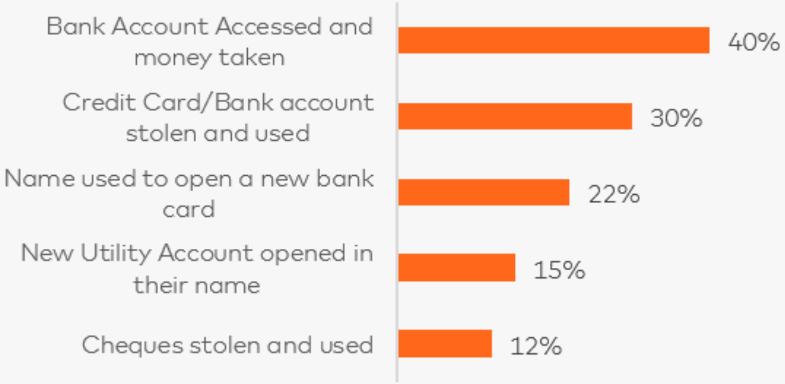
Identity fraud is the illicit use of a victim's personal identifiable information (PII) by an impostor to gain a financial advantage.

9% Of Europeans became a victim of Identity fraud in the past year[1]

€54B was lost globally in 2020 due to identity fraud[2]

€17k Average loss per breach[2]

Consequences for fraud victims in the past 12 months[1]:

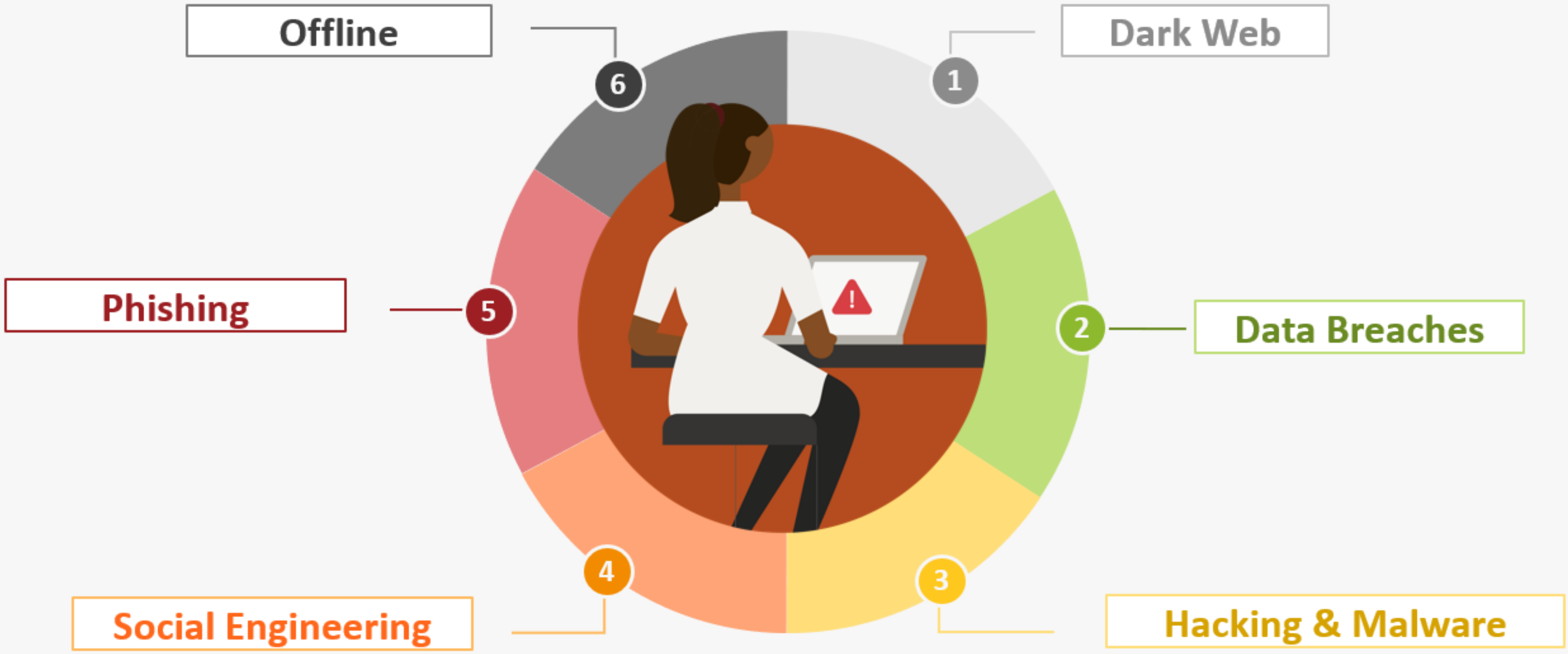


[1] GBG THE STATE OF DIGTAL IDENTTIY 2022

[2] ZENDESK CUSTOMER EXPERIENCE TRENDS REPORT 2020

IDENTITY THEFT

Personal Identity Insights can be easily acquired and exploited by fraudsters



6 Offline

1 Dark Web

5 Phishing

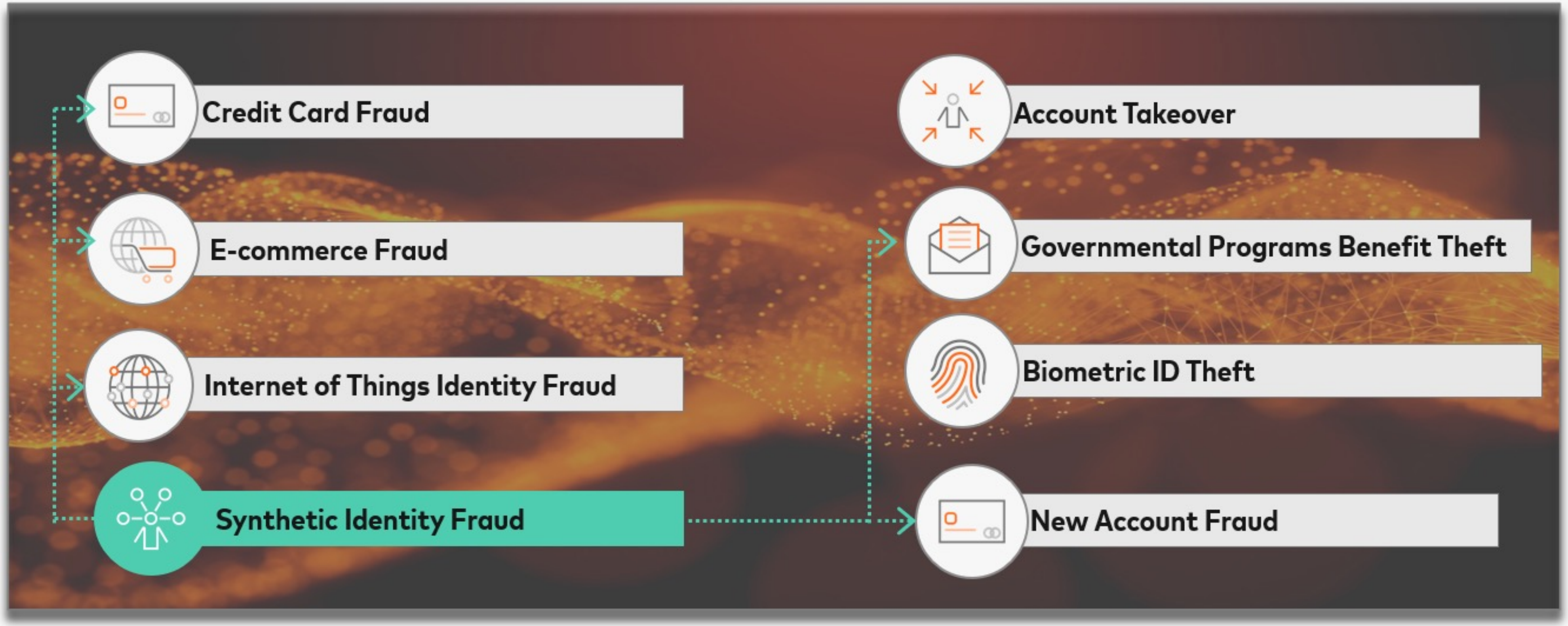
2 Data Breaches

4 Social Engineering

3 Hacking & Malware

TYPES OF IDENTITY FRAUD

Identity fraud is sophisticated and fraudsters are finding new vulnerabilities



Credit Card Fraud

E-commerce Fraud

Internet of Things Identity Fraud

Synthetic Identity Fraud

Account Takeover

Governmental Programs Benefit Theft

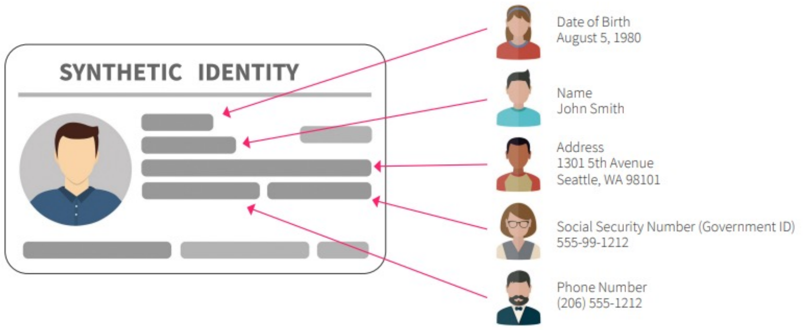
Biometric ID Theft

New Account Fraud

SYNTHETIC IDENTITY FRAUD

What is a Synthetic Identity?

Synthetic Identity Fraud combines stolen personal information with other fake information, to create an entirely new consumer profile



> *"Traditional Identity theft is a 'smash and grab"*

> *"With Synthetic Identity, the victim exists nowhere except in a credit profile"*

HOW IT WORKS

How do fraudsters make a Synthetic Identity?

Primary Personal Identity Insights Elements

Identity elements that are, in combination, typically unique to an individual or profile.

Supplemental Personal Identity Insights Elements

Elements that can help substantiate or enhance the validity of an identity but cannot establish an identity by themselves.

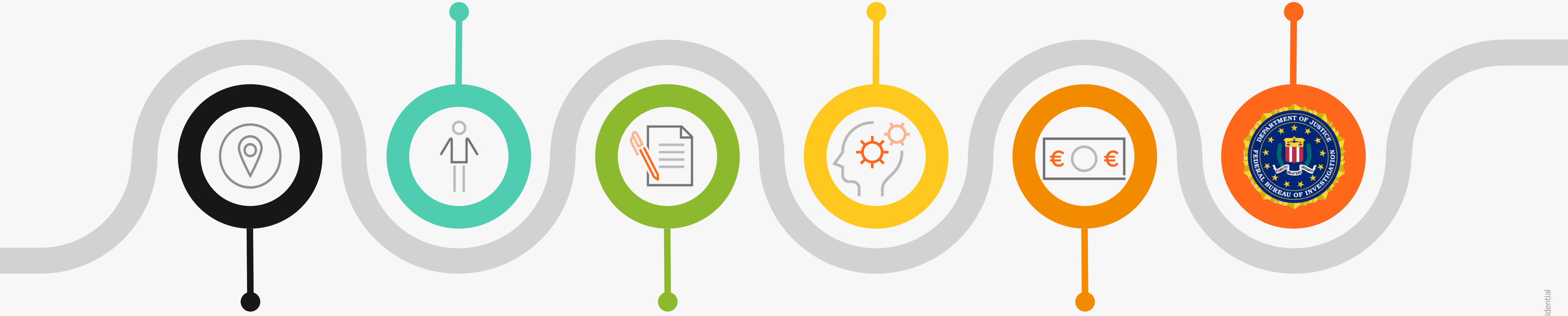
FABRICATION	MANIPULATION	COMPILATION
🟠 James Bond	🟢 John Smith	🟢 John Smith
🟠 james.bond@gmail.com	🟠 js123@gmail.com	🟢 jane.doe@gmail.com

🟠 Fake Data

🟢 Real Data

REAL LIFE CASE STUDY - CREDIT CARD FRAUD

“Eighteen People Charged in International $200 Million Credit Card Fraud Scam”



Obtaining the Data

18 fraudsters obtained real SSN and Addresses

Synthetic Identities

Fraudsters were able to create 7,000 fake identities

Applications

Fraudsters apply for and obtain over 10,000 credit cards

Building up the profile

Making fake purchases from business they created/own

Cash out

Fraudsters secure final line of credit worth $200M and disappear

Justice

Caught because they created 7,000 identities, but used only 1,800 addresses.

Source: https://archives.fbi.gov/archives/newark/press-releases/2013/eighteen-people-charged-in-international-200-million-credit-card-fraud-scam

IMPACT ON INDUSTRY

As of 2020, identity theft is the second most-common type of fraud in Europe[1].

1.3 MILLION	**Consumers**	**Adults in the UK had their name used to open new fraudulent credit card/bank account [2]**
44%	**Crypto**	**Identity Fraud is the most common type of fraud incident at crypto providers [3]**
$20B	**Businesses**	**Annual losses worldwide related to synthetic identity Fraud [4]**
$90,000	**Lenders**	**Average loss from Credit Bust Out Fraud [4]**

1. GRC WORLD
2. GBG THE STATE OF DIGTAL IDENTTIY 2022
3. PYMNTS INTELLIGENCE: KEEPING CRYPTOCURRENCY PAYMENTS SAFE FROM IDENTITY FRAUD
4. FIVERTY 2021 SYNTHETIC IDENTITY FRAUD REPORT

IS KYC ENOUGH AND HOW CAN A SYNTHETIC ID PASS THROUGH THE CRACKS?

KYC processes rely solely on validating traditional, primary data elements that can be easily procured on the dark web and are only tangentially related to digital identity.

Phone no, email id and postal address are the most used identity elements to create synthetic identities. KYC doesn't look at the relationship between these elements[1]

SSN Number	$1
Drivers Licence	$20
Utility bill	$25
Credit Card Info	$30
10 Million Email Addresses	$120
Online Payment Services Log-in Info	$20-200
Verified Crypto Account	$250
European Passport[2]	$750

KYC is not fraud prevention. More than KYC is needed.

[1] Equifax - Identity and fraud treands report 2021

[2] Experian - Brian Stack, "Here's How Much Your Personal Information Is Selling for on the Dark Web," Experian, December 6, 2017,

CUSTOMERS EXPECT A SAFE & SEAMLESS ONBOARDING EXPERIENCE

Expectation

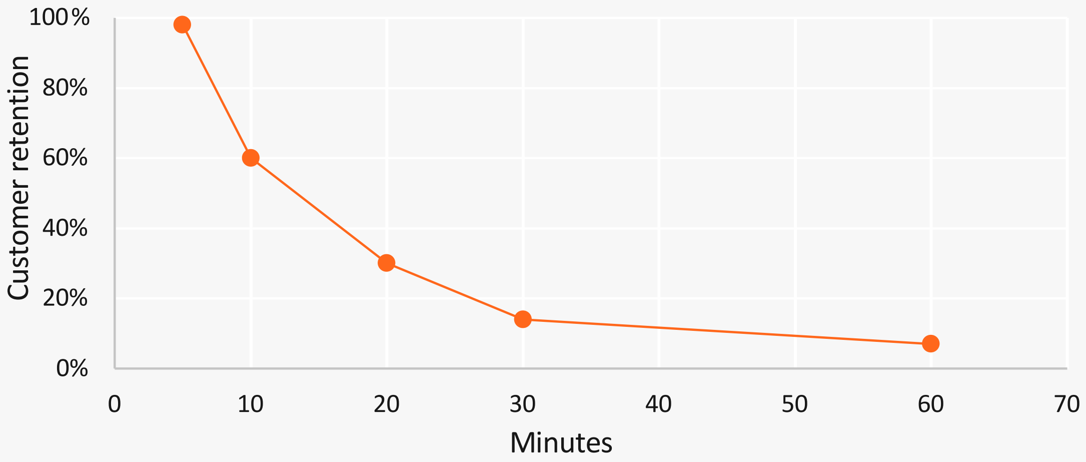
92%

Expect a fast, frictionless, trustworthy ,and secure online experience[1]

Reality

50% Would switch to a competitor after one bad experience online [2]

31% Of users express frustration at the amount of personal information required [2]



[1] Ekata Study, 2019
[2] Signicat- Battle to On-board III report

HOW Mastercard CAN HELP:

Strike a balance between security, compliance and convenience using "EKATA"

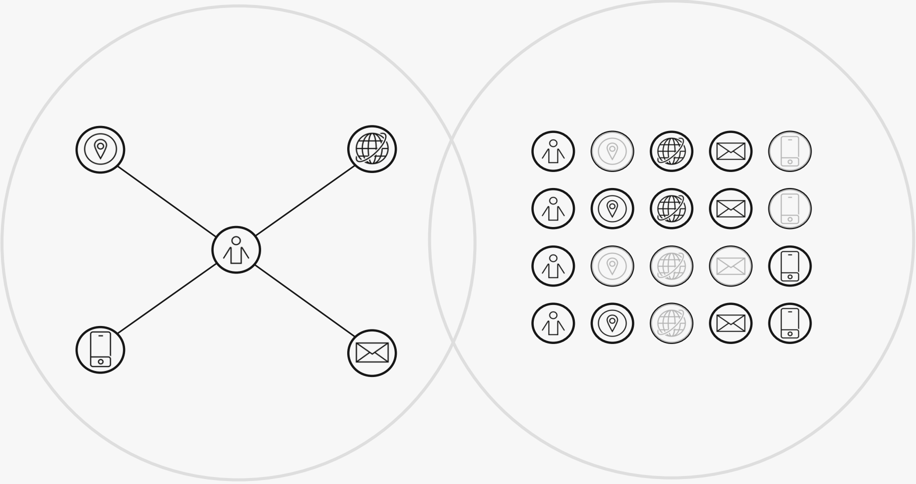
Ekata Identity Engine

Gain data and risk indicators to help you know who your consumer is and how their information is being used online —not just in their e-commerce ecosystem

Email Name Phone Address IP

Questioning identity elements

- Does this email belong to the person?
- Is this address valid?
- What type of phone carrier is this?
- When was this email first/last used?
- How many times has this address been used?



Identity Graph

Identity Network

7B+ Identity Elements

2B+ Identities

5B+ Digital Interactions

50M+ Identity Elements added per day

EKATA API RESPONSES

Relays real-time validity checks, risk scores and linkages to help you confidently make risk decisions

Identity Risk Score

Output between 0 to 500

Identity Network Score

Output between 0 to 1

Phone

- Match to name
- Match to address
- Is valid
- Line type
- Carrier
- Last seen days
- Linked to email days

Address

- Match to name
- Is valid

Email

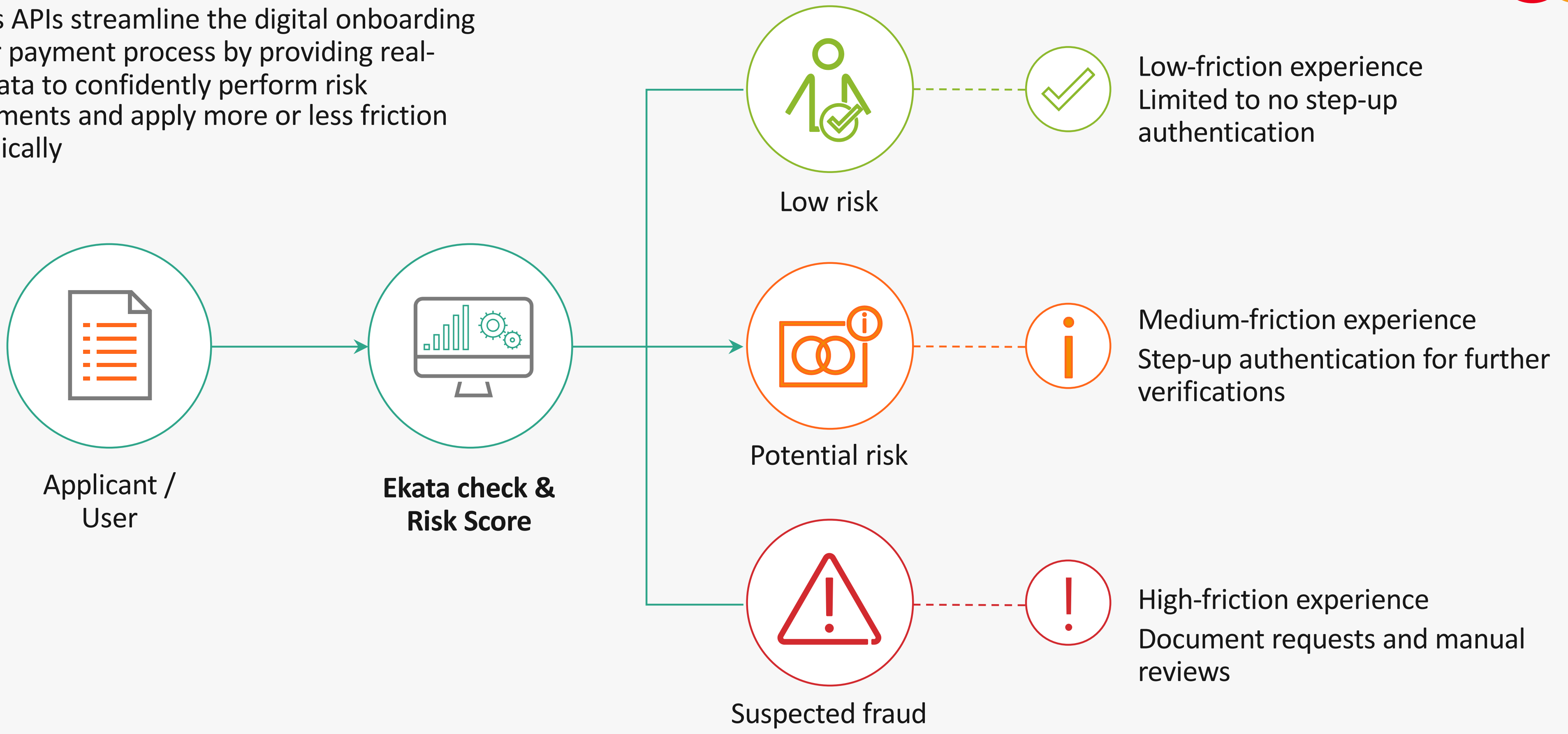
- Match to name
- Is valid
- First seen days
- Domain creation date
- Linked to phone days

IP Address

- IP risk flag & score
- Last seen days
- Distance from address
- Distance from phone
- Country code
- Subdivision

A CUSTOMIZED ONBOARDING JOURNEY

Ekata's APIs streamline the digital onboarding and/or payment process by providing real-time data to confidently perform risk assessments and apply more or less friction dynamically



Low-friction experience
Limited to no step-up authentication

Medium-friction experience
Step-up authentication for further verifications

High-friction experience
Document requests and manual reviews

SUCCESS STORY

Decrease friction and increase conversion

Customer

- Challenger Bank

Problem

- High amount of fraud observed at sign-up
- Too many good customers going through high-friction processes or abandoning
- Aggressive growth plans needed a change in new account flows online

Result

- Empowered the FI to redefine their onboarding KYC processes – by balancing risk management and security considerations, based on their risk profile.

29%

Decrease in Fraudulent Accounts

42%

Increase in sign-ups by good customers

Thank you!

To find out more about the product presented today or to share your experiences with synthetic identity fraud – please reach out to your Account Manager or directly to Carsten Mürl

[*Carsten.muerl@mastercard.com*](mailto:Carsten.muerl@mastercard.com)