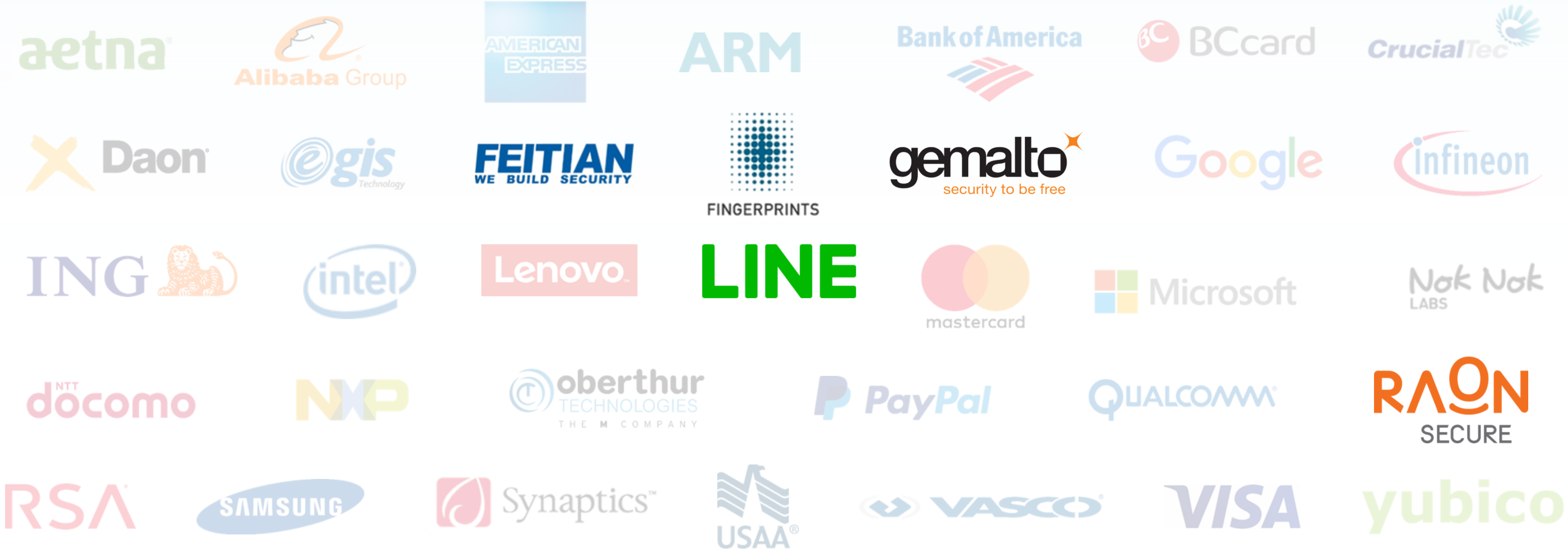
FIDO ALLIANCE: UPDATES & OVERVIEW

BRETT MCDOWELL

EXECUTIVE DIRECTOR

250+ MEMBER & PARTNER ORGANIZATIONS GLOBALLY

FIDO board members include leading global brands and technology providers



+ SPONSOR MEMBERS + ASSOCIATE MEMBERS + LIAISON MEMBERS

THE WORLD HAS A PASSWORD PROBLEM

fido alliance

81%

Data breaches in 2016 that involved **weak, default, or stolen passwords**[1]

65%

Increase in **phishing attacks** over the number of attacks recorded in 2015[2]

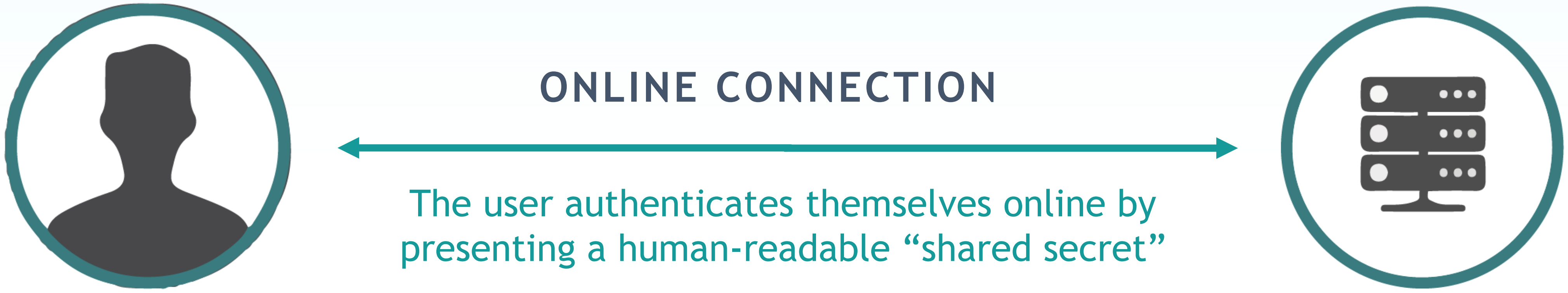
1,093

Breaches in 2016, **a 40% increase over 2015**[3]

CLUMSY | HARD TO REMEMBER | NEED TO BE CHANGED ALL THE TIME

[1] Verizon 2017 Data Breach Report | [2] Anti-Phishing Working Group | [3] Identity Theft Resource Center 2016

HOW OLD AUTHENTICATION WORKS



ONLINE CONNECTION

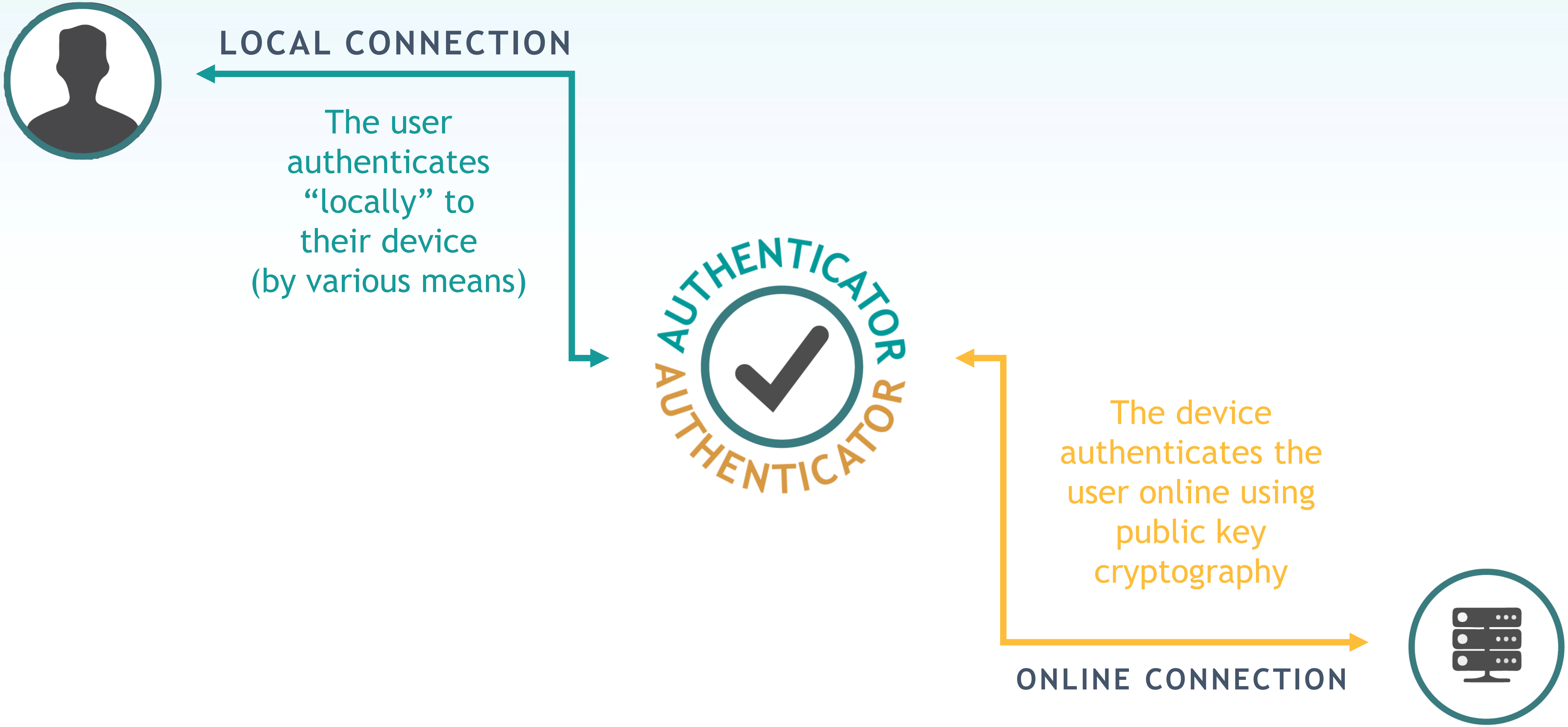
The user authenticates themselves online by presenting a human-readable “shared secret”

THE NEW MODEL

Fast
IDentity
Online

open standards for
simpler, stronger authentication
using public key cryptography

HOW FIDO AUTHENTICATION WORKS



LOCAL CONNECTION

The user authenticates "locally" to their device (by various means)

The device authenticates the user online using public key cryptography

ONLINE CONNECTION

SIMPLER AUTHENTICATION

Reduces reliance on complex passwords

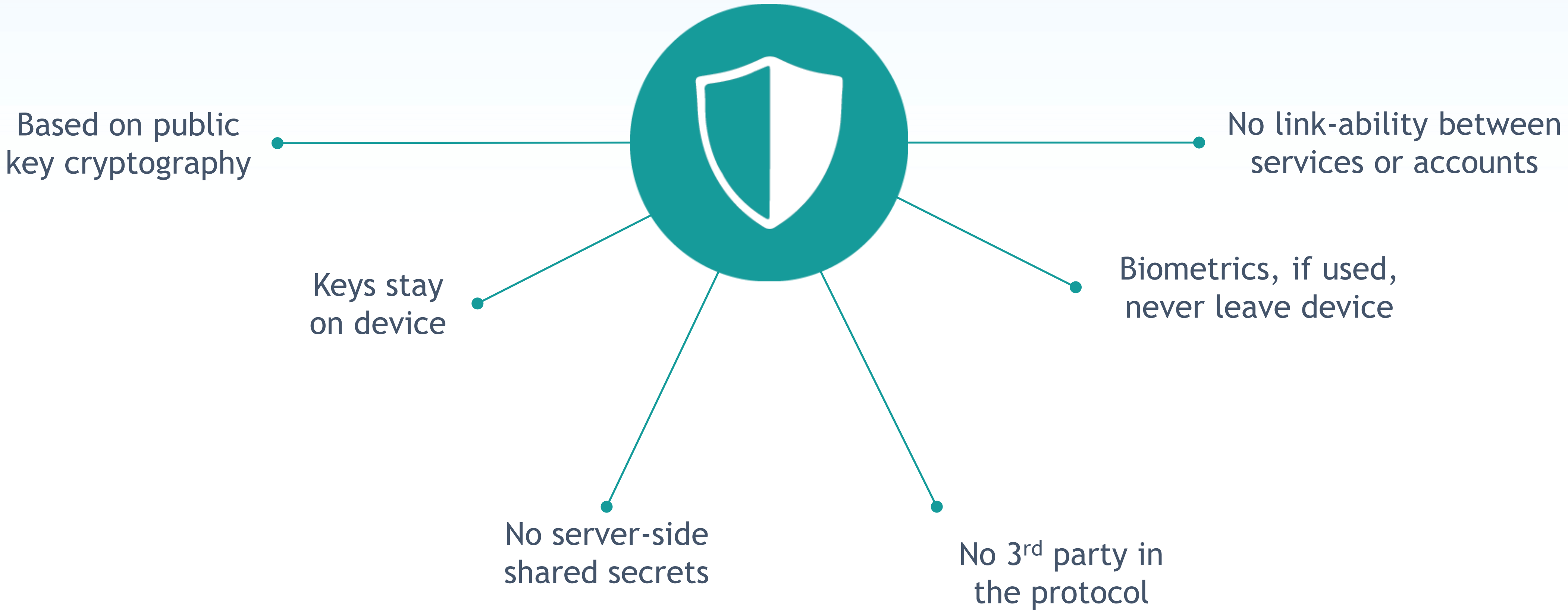
Single gesture to log on

Works with commonly used devices

Same authentication on multiple devices

Fast and convenient

STRONGER AUTHENTICATION



Based on public key cryptography

No link-ability between services or accounts

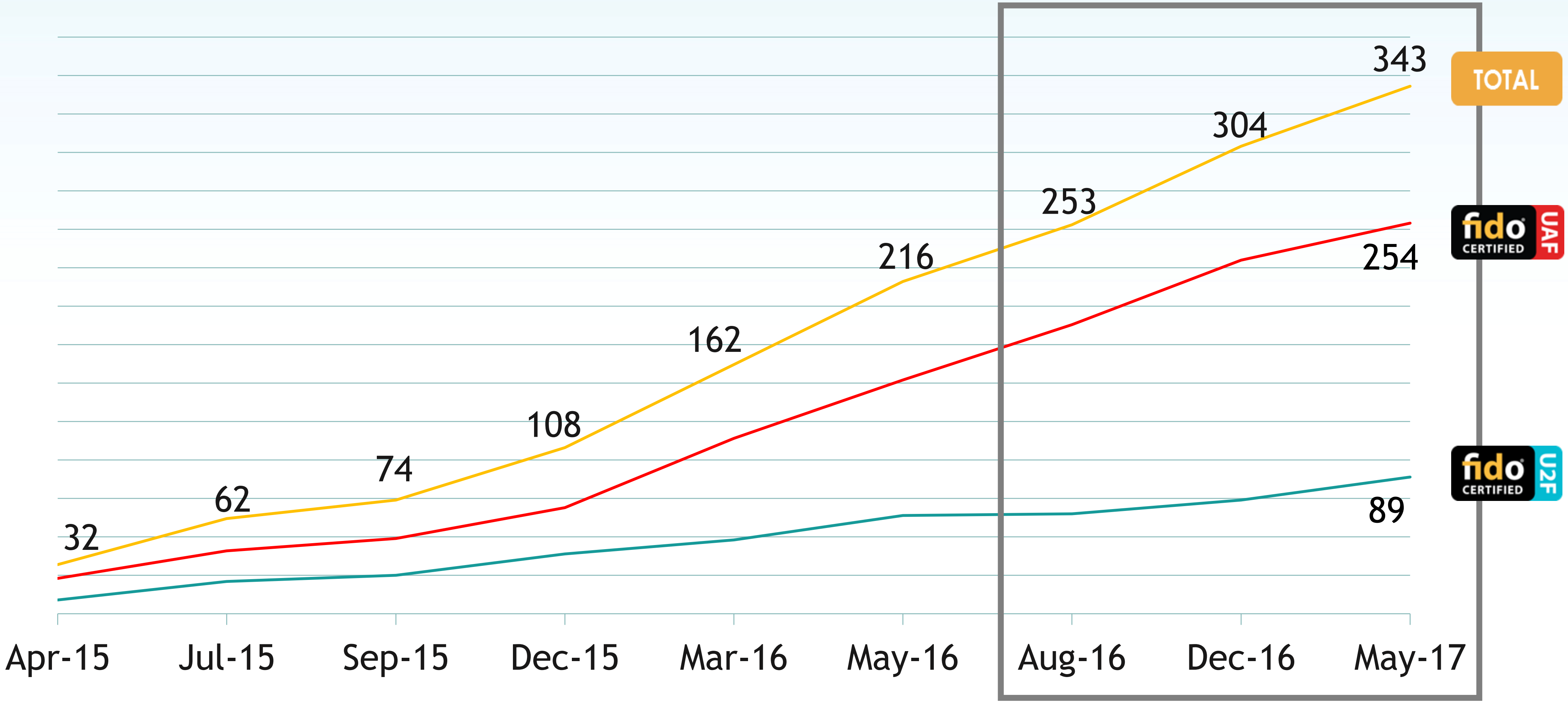
Keys stay on device

Biometrics, if used, never leave device

No server-side shared secrets

No 3rd party in the protocol

BY THE NUMBERS: CERTIFICATIONS



SAMPLE: FIDO-ENABLED SERVICES

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Google

Bank of America

ebay

facebook

salesforce

AVAILABLE TO PROTECT

3.5 BILLION+

ACCOUNTS WORLDWIDE

GitHub

NTT docomo

PayPal

keeper

dashlane

Dropbox

신한은행 SHINHAN BANK

BCcard

中国民生银行 CHINA MINSHENG BANK

FIDO Specifications Update

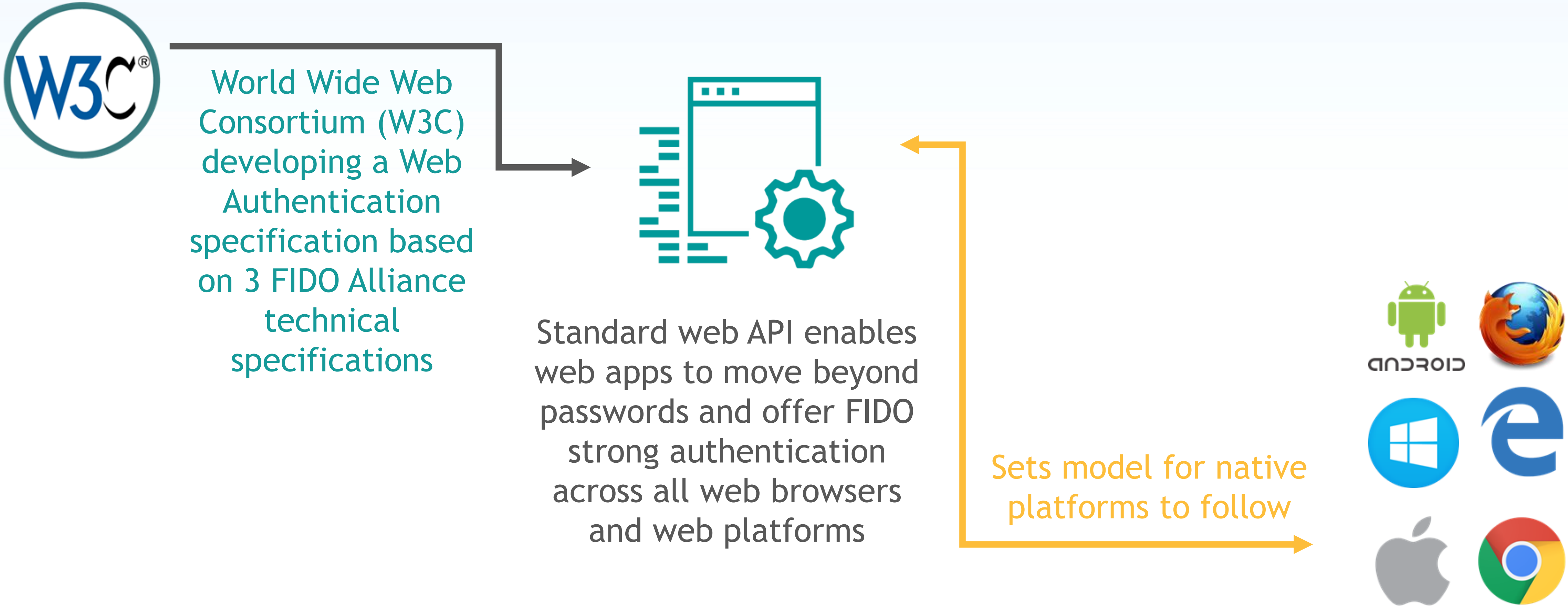
FIDO 1.1
(FIDO UAF
FIDO U2F)

CTAP*
(FIDO)

WebAuthn*
(FIDO+W3C)

*FIDO 2 Project: In Development

WEB AUTHENTICATION SPECIFICATION BRINGS FIDO TO THE PLATFORM



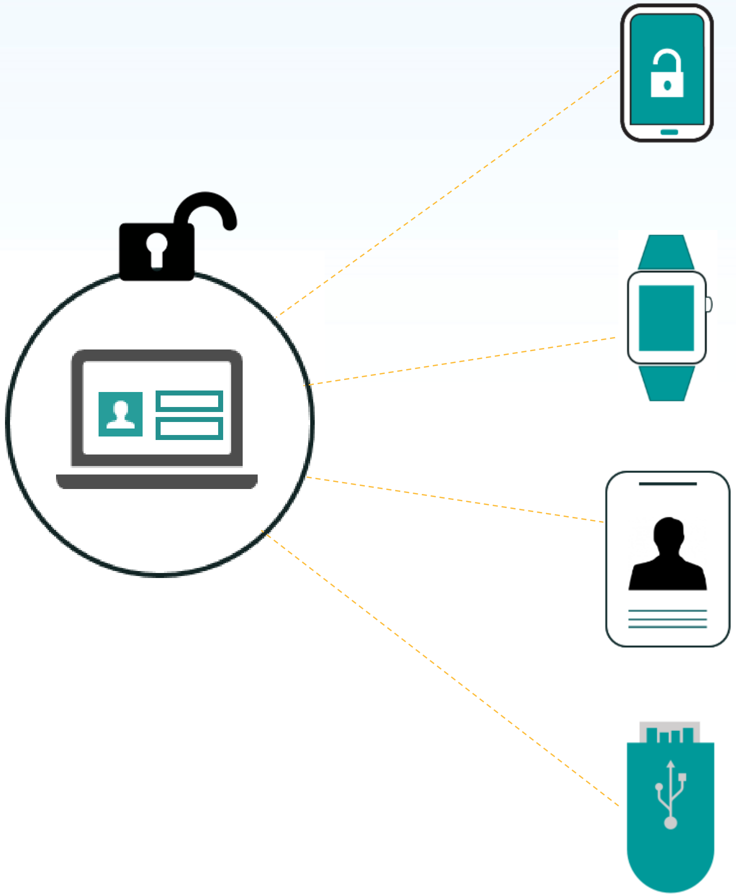
World Wide Web Consortium (W3C) developing a Web Authentication specification based on 3 FIDO Alliance technical specifications

Standard web API enables web apps to move beyond passwords and offer FIDO strong authentication across all web browsers and web platforms

Sets model for native platforms to follow

CLIENT-TO-AUTHENTICATOR PROTOCOL (CTAP)

- CTAP expands browsers and operating systems ability to talk to external authenticators like USB keys, NFC and Bluetooth-enabled devices
- Use a wearable or mobile device, for example, to log in to a computer, tablet, IoT device, etc.
- Removes requirement to re-register on every device



ADDRESSES BROADER ARRAY OF USE CASES

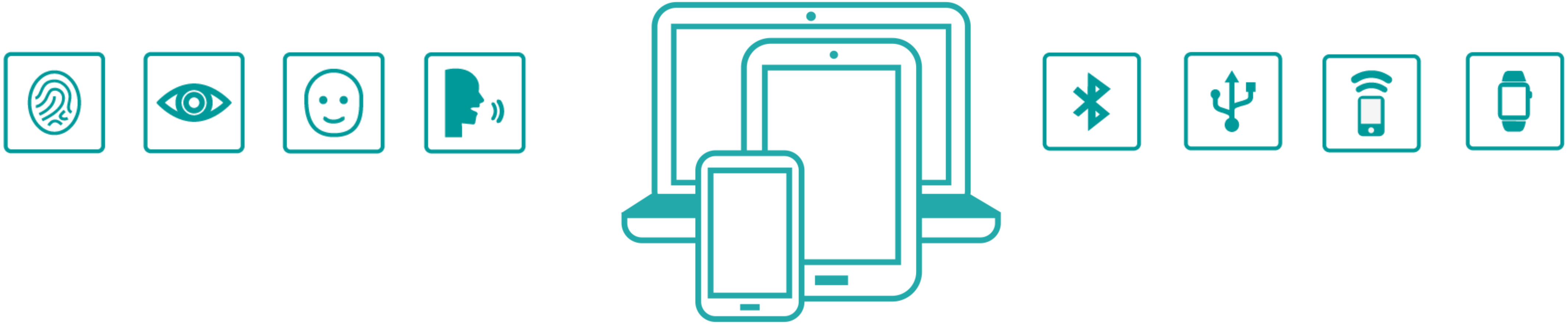
FIDO standards provide support for user-friendly, privacy-aware user experiences across platforms to meet varying requirements

PASSWORDLESS EXPERIENCES

- Biometrics authn via mobile device
- Biometric authn via PC
- Biometrics authn to PC via mobile device

SECOND FACTOR EXPERIENCES

- External token to PC (USB, BLE)
- External token to mobile device (NFC/BLE)
- Embedded second factor on PC



FIDO IMPACT ON POLICY

FIDO specifications offer governments newer, better options for strong authentication – but governments may need to update some policies to support the ways in which FIDO is different

POLICY CHANGES ARE HAPPENING TODAY:

Example 1: U.S. NIST/OMB guidance
Example 2: European Banking Authority’s PSD2
Example 3: e-IDAS
Example 4: Taiwan’s Guideline for e-Banking Security Control
Example 5: South Korea

**As technology evolves,
policy needs to evolve with it.**

Join the FIDO Ecosystem

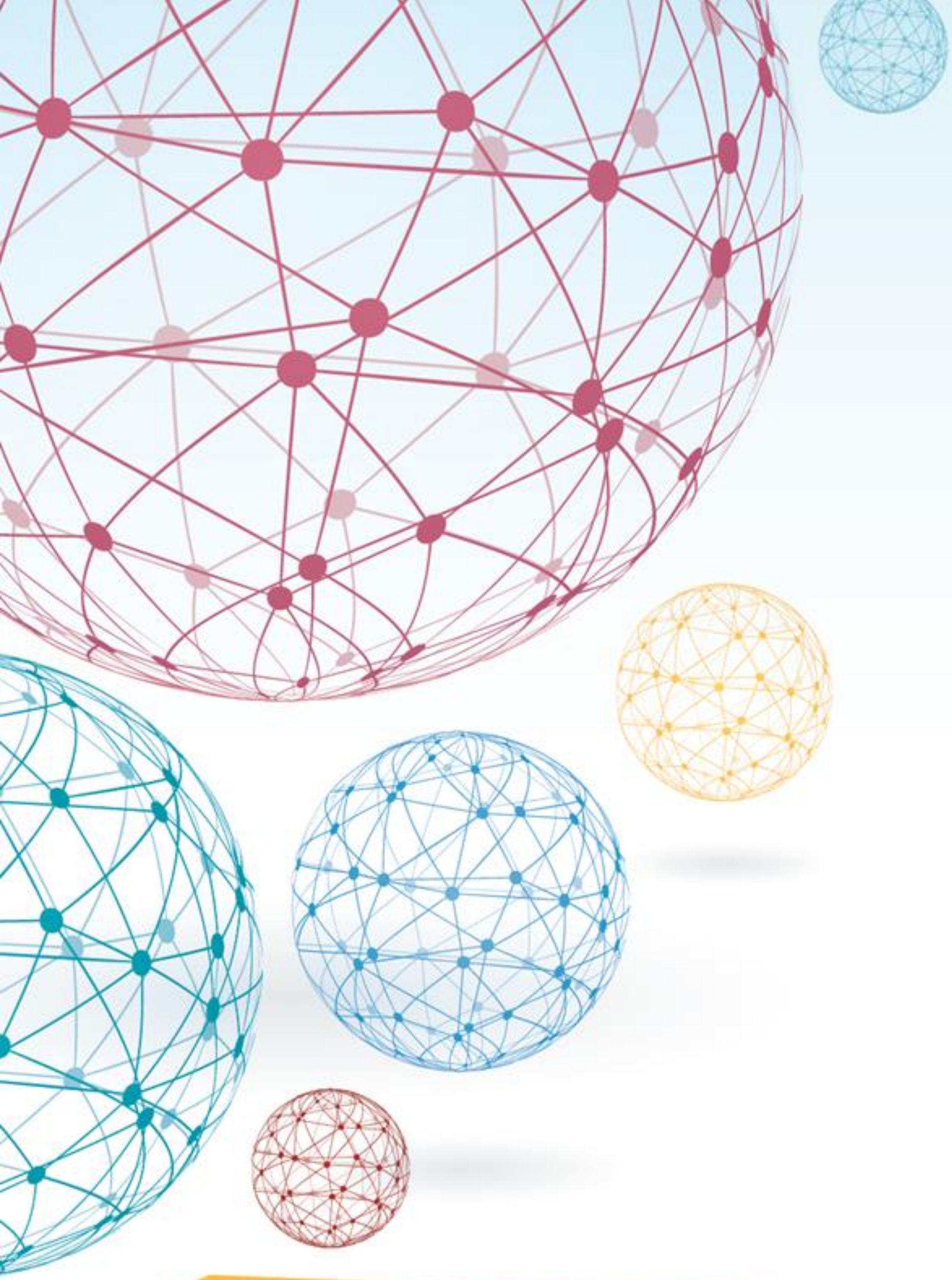
Build FIDO Certified Solutions

Deploy

Join the Alliance

Take Part in FIDO Events

www.fidoalliance.org



THANK YOU

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