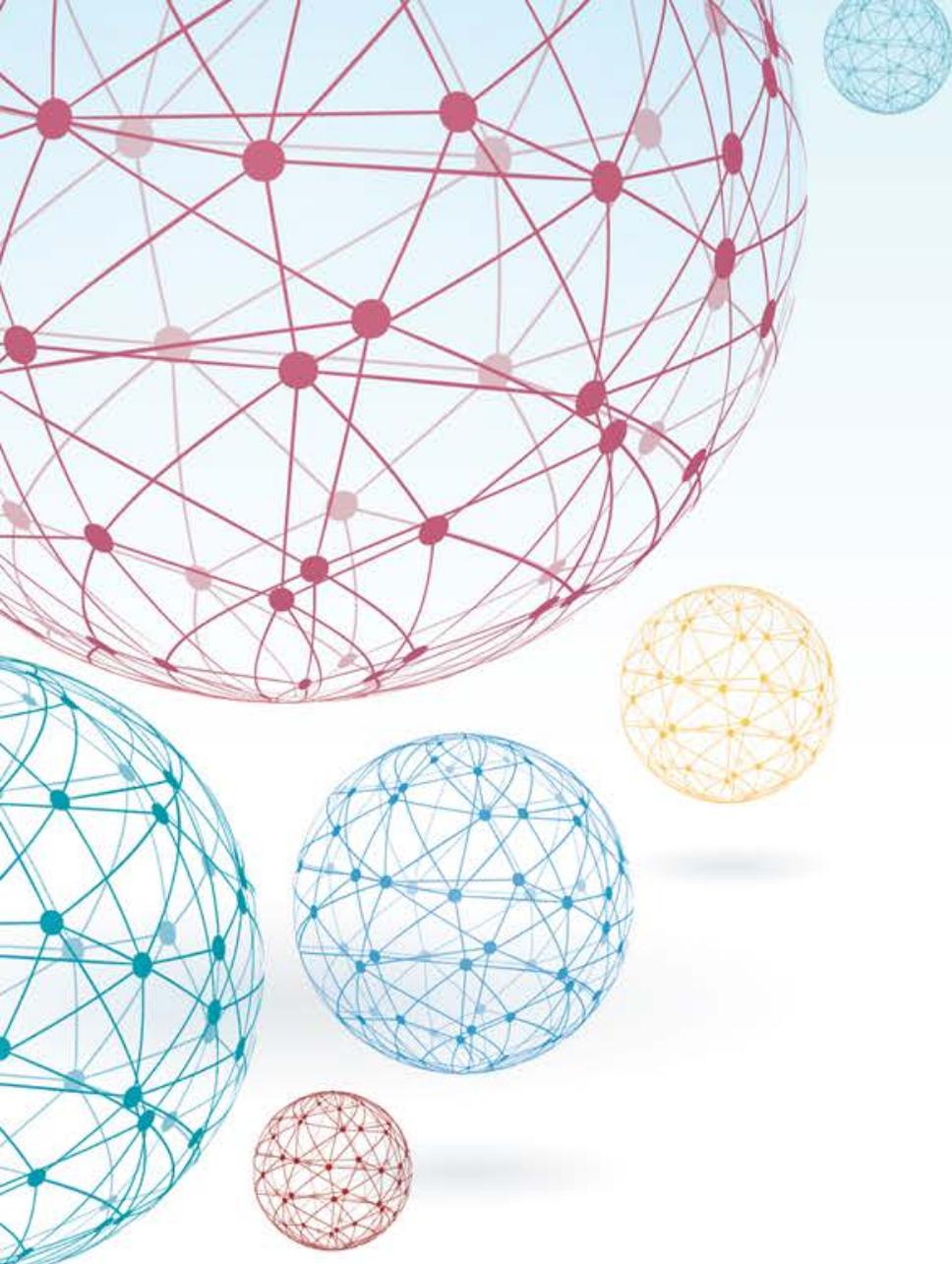# FIDO AUTHENTICATION FOR GAMING

## FIDO ALLIANCE WEBINAR
## JUNE 27, 2017

# TODAY'S AGENDA

- FIDO Overview
- Intel Online Connect for Gaming:  Dave Singh
- Synaptics Fingerprint Sensor for Gaming:  Sean Lin
- Q & A

# INTRODUCTION TO THE FIDO ALLIANCE

ANDREW SHIKIAR

SENIOR DIRECTOR OF MARKETING

JUNE 27, 2017

# THE FACTS ON FIDO

The FIDO Alliance is an open, global industry association of 250+ organizations with a focused mission:

## AUTHENTICATION STANDARDS

based on public key cryptography to solve the password problem

Today, its members provide the world's largest ecosystem for standards-based, interoperable authentication

## 350+
**FIDO Certified solutions**

**Available to protect**
## 3.5 BILLION+
**user accounts worldwide**

# DRIVEN BY 250+ MEMBERS WORLDWIDE

## Board of Directors comprised of leading global brands and technology providers



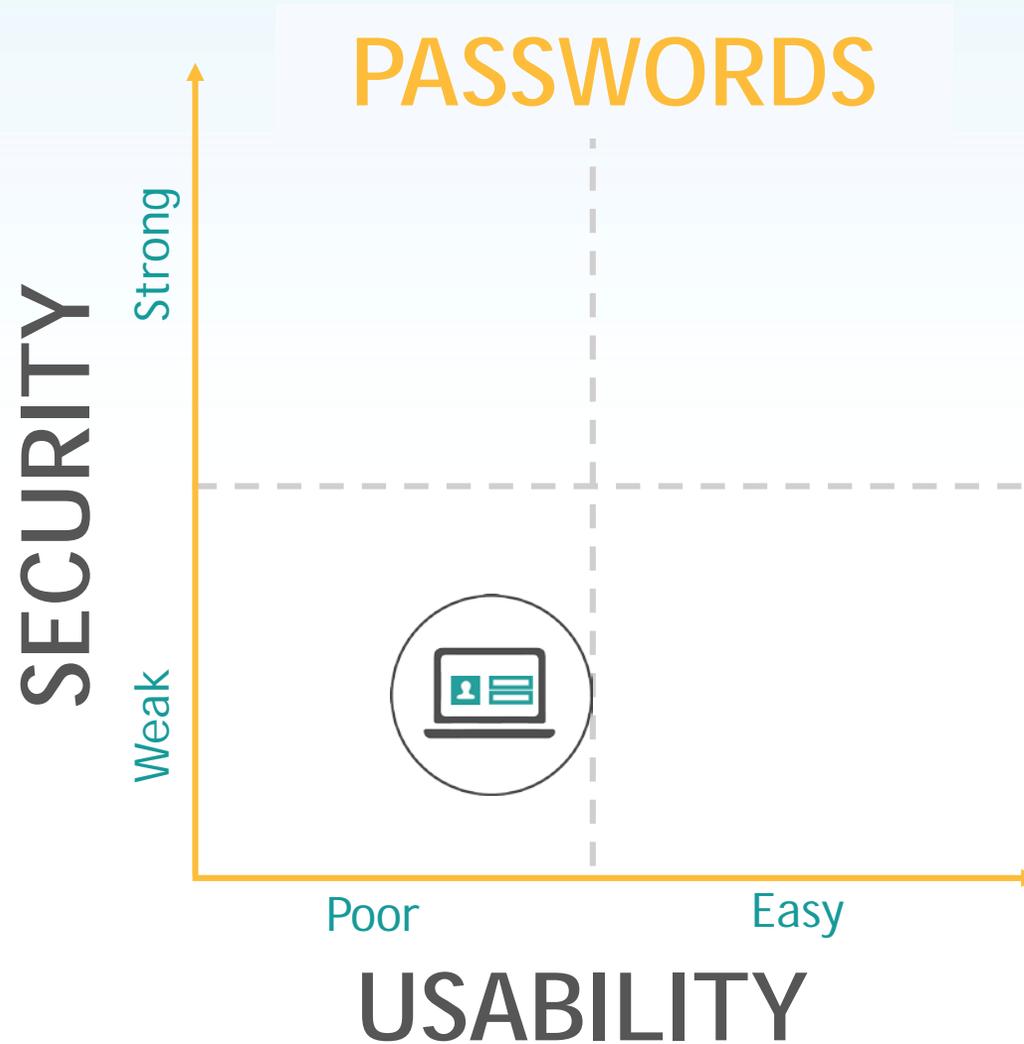+ SPONSOR MEMBERS        + ASSOCIATE MEMBERS        + LIAISON MEMBERS

# The World Has a Password Problem

**fido** alliance®

## PASSWORDS

## Usability

For users, they're **clumsy**, **hard to remember** and they **need to be changed** all the time

**SECURITY**

Strong

Weak

**USABILITY**

Poor          Easy

## Security

**63%** of data breaches in 2015 involved weak, default, or stolen passwords
-Verizon 2016 Data Breach Report

**65%** Increase in phishing attacks over the number of attacks recorded in 2015[2]
-Anti-Phishing Working Group

There were **1093** data breaches in 2016, **a 40% increase** from 2015
- Identity Theft Resource Center, 2016

# WHY FIDO?

OTPs improve security but aren't easy enough to use - and are still phishable



## Usability

OTPs

SECURITY

Strong

Weak

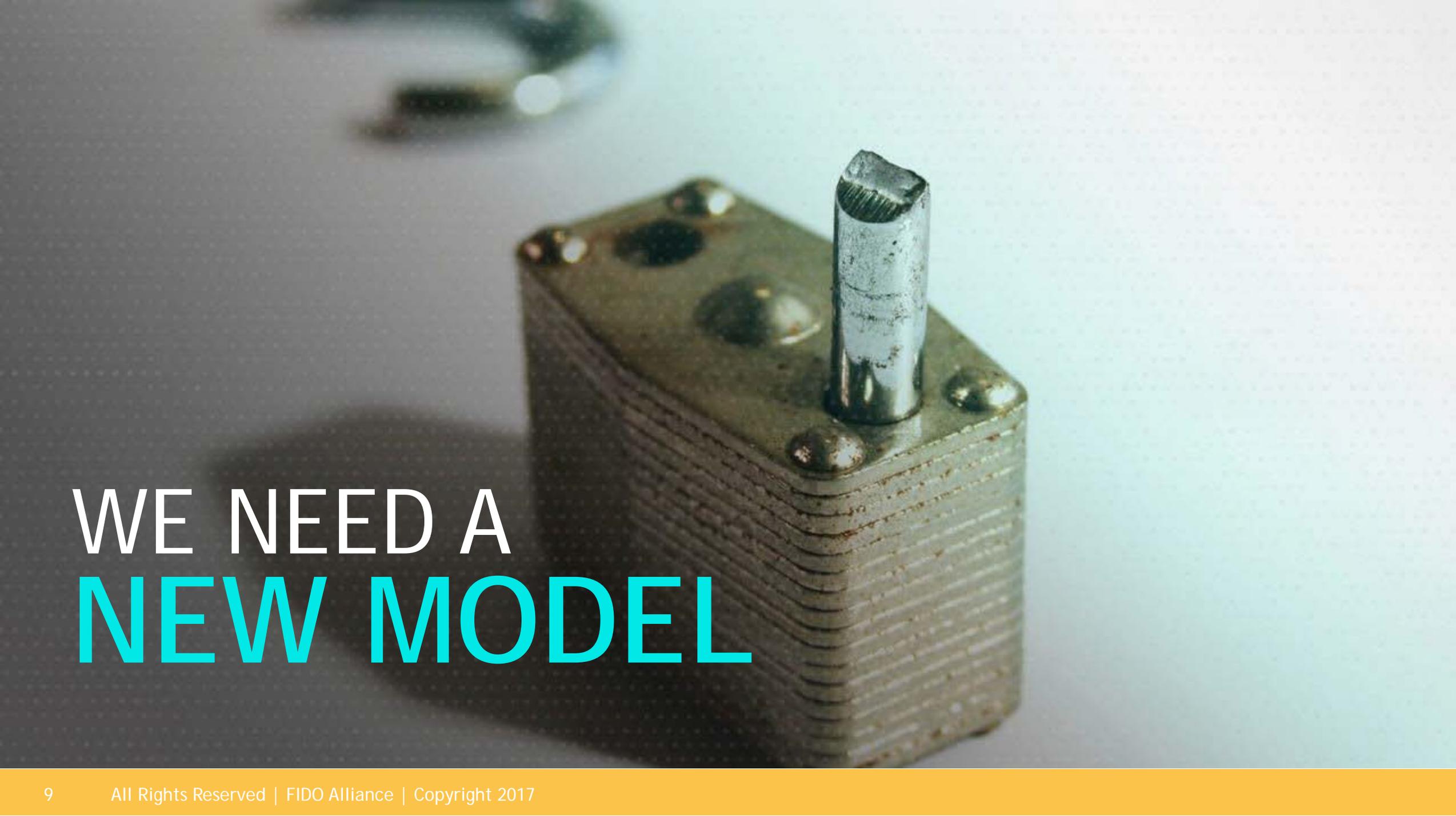TOKEN NECKLACE    USER CONFUSION

Poor            Easy

USABILITY

## Security

STILL PHISHABLE    SMS RELIABILITY

# THE WORLD HAS A "SHARED SECRETS" PROBLEM

# WE NEED A
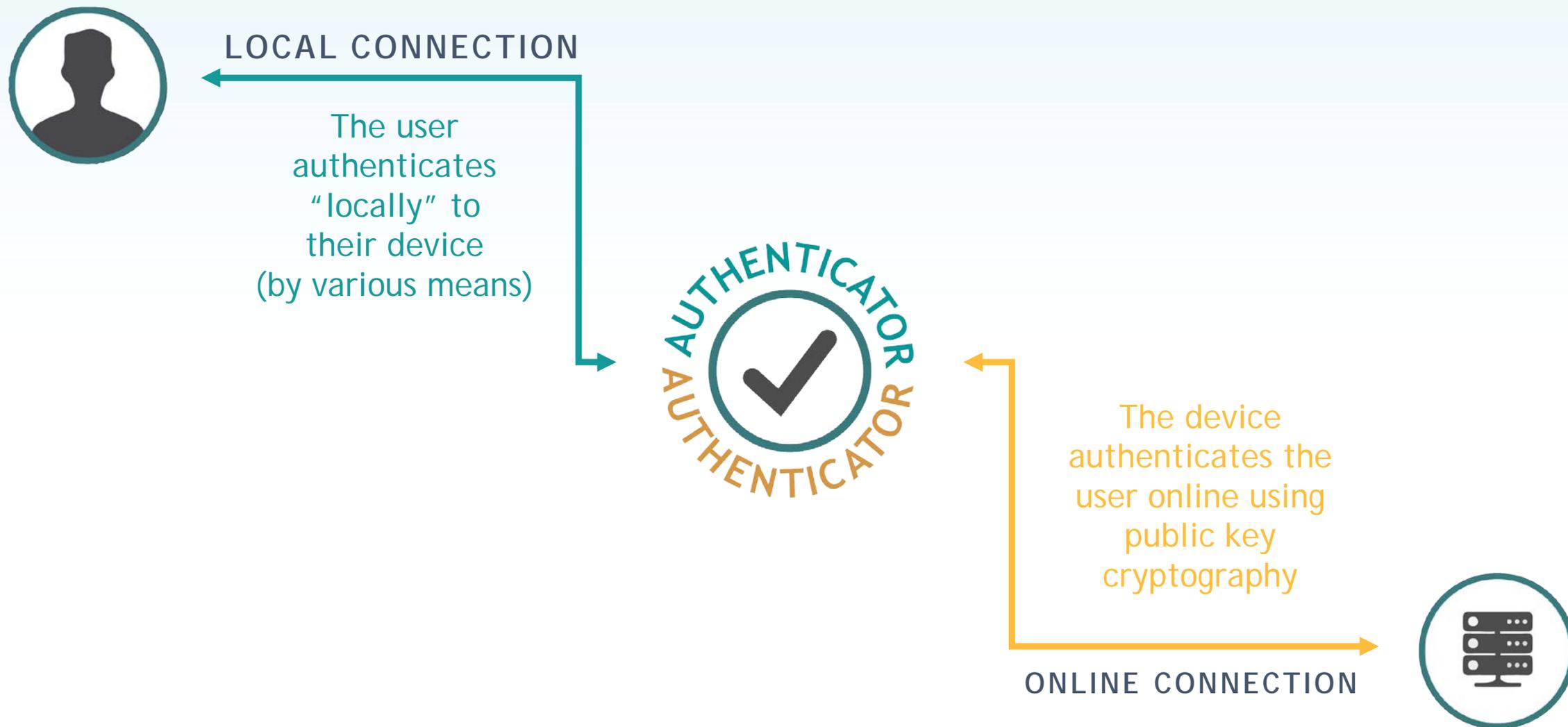# NEW MODEL

# HOW OLD AUTHENTICATION WORKS

**ONLINE CONNECTION**

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

# HOW FIDO AUTHENTICATION WORKS

**LOCAL CONNECTION**

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

AUTHENTICATOR

The device authenticates the user online using public key cryptography

**ONLINE CONNECTION**
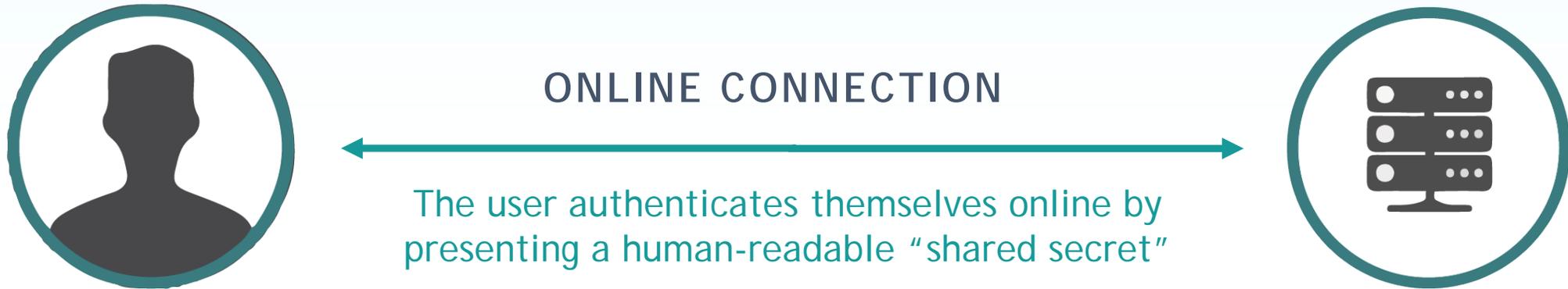
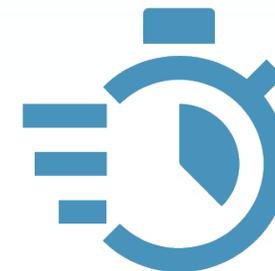# SIMPLER AUTHENTICATION



Reduces reliance on complex passwords

Single gesture to log on

Works with commonly used devices

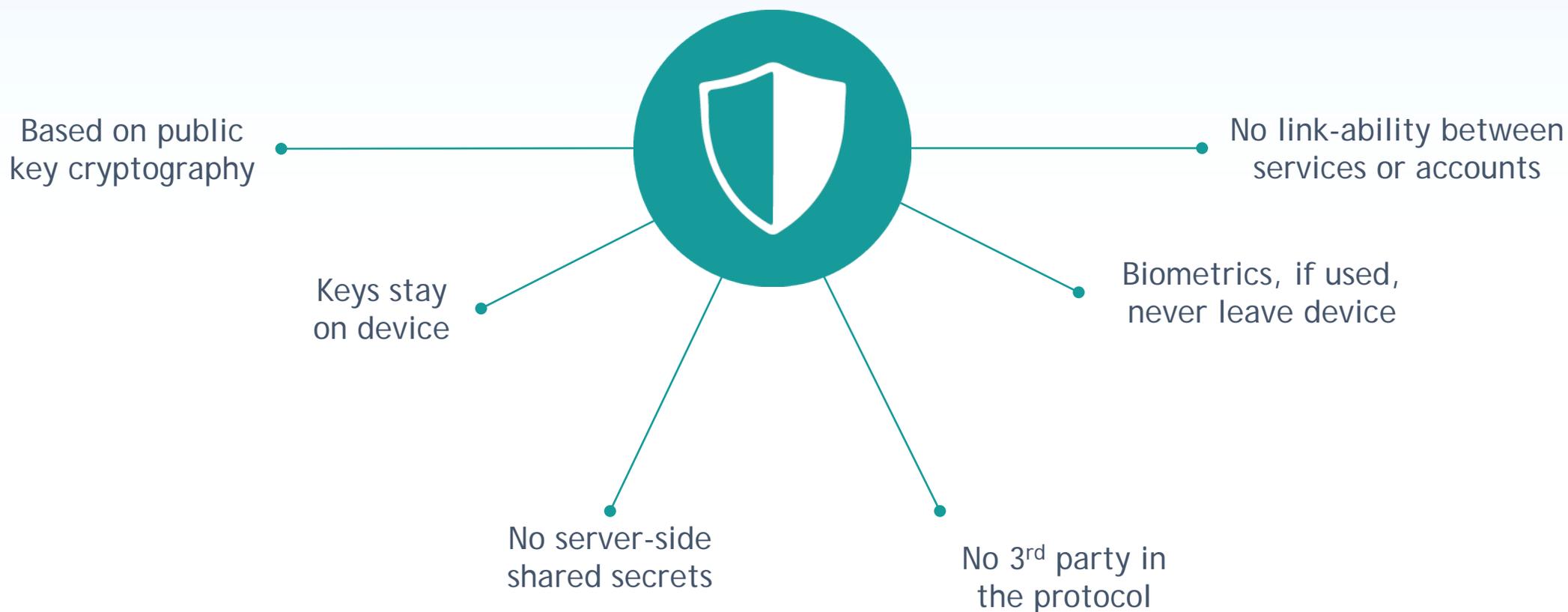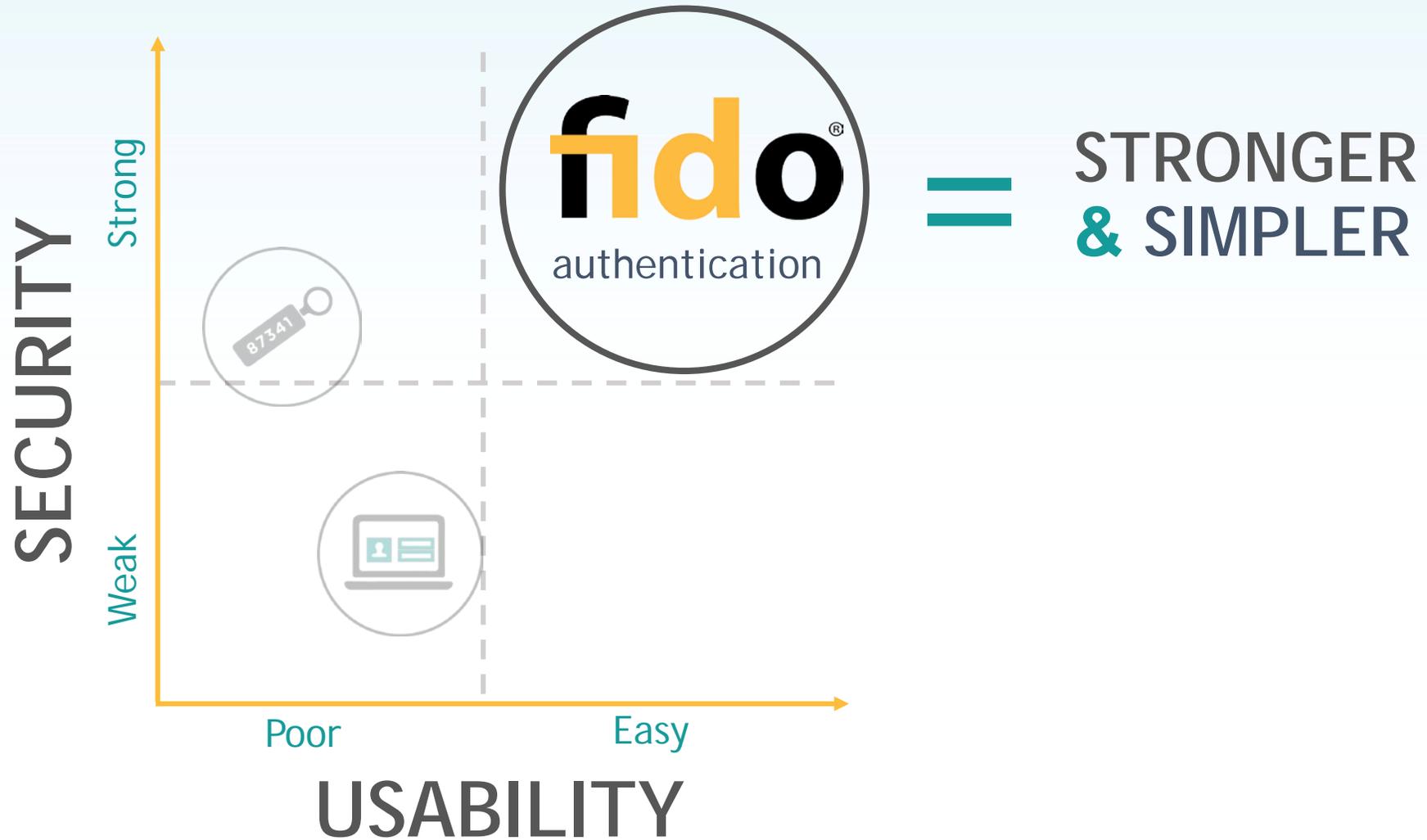Same authentication on multiple devices

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

# FIDO — A NEW PARADIGM:



SECURITY

Strong

Weak

USABILITY

Poor    Easy

fido® authentication = STRONGER & SIMPLER

# FIDO CERTIFIED MOBILE DEVICES

**QUALCOMM SAMSUNG**

| S5, Mini | Alpha | Note 4,5 | Note Edge | Tab S, Tab S2 | S6, S6 Edge | S7, S7 Edge |
|---|---|---|---|---|---|---|

**FUJITSU**

| Arrows NX | Arrows Fit | Arrows Tab |
|---|---|---|
| F-01J    F-04G | F-04H    F-02H | F-01H    MO1T |

**HUAWEI**

Mate 8

**ZUK** a Lenovo company

Z2, Z2 Pro

**SONY**

| Xperia Z5 SO-01H | Xperia Z5 Compact SO-02H | Xperia Z5 Premium SO-03H | Xperia X Performance | Xperia XZ | Xperia X Compact SO-02J |
|---|---|---|---|---|---|

**LG Electronics**

| V10 | G5 |
|---|---|

**NEW-BUND**

Vernee Thor

**Lenovo**

| Phab2 Pro | Phab2 Plus |
|---|---|

**SHARP**

Aquos Zeta
SH-03G    SH-01H    SH-02J

# FIDO IN THE WINDOWS + WEB ECOSYSTEMS



## Windows Platforms

## Web

Yoga 910

Windows 10
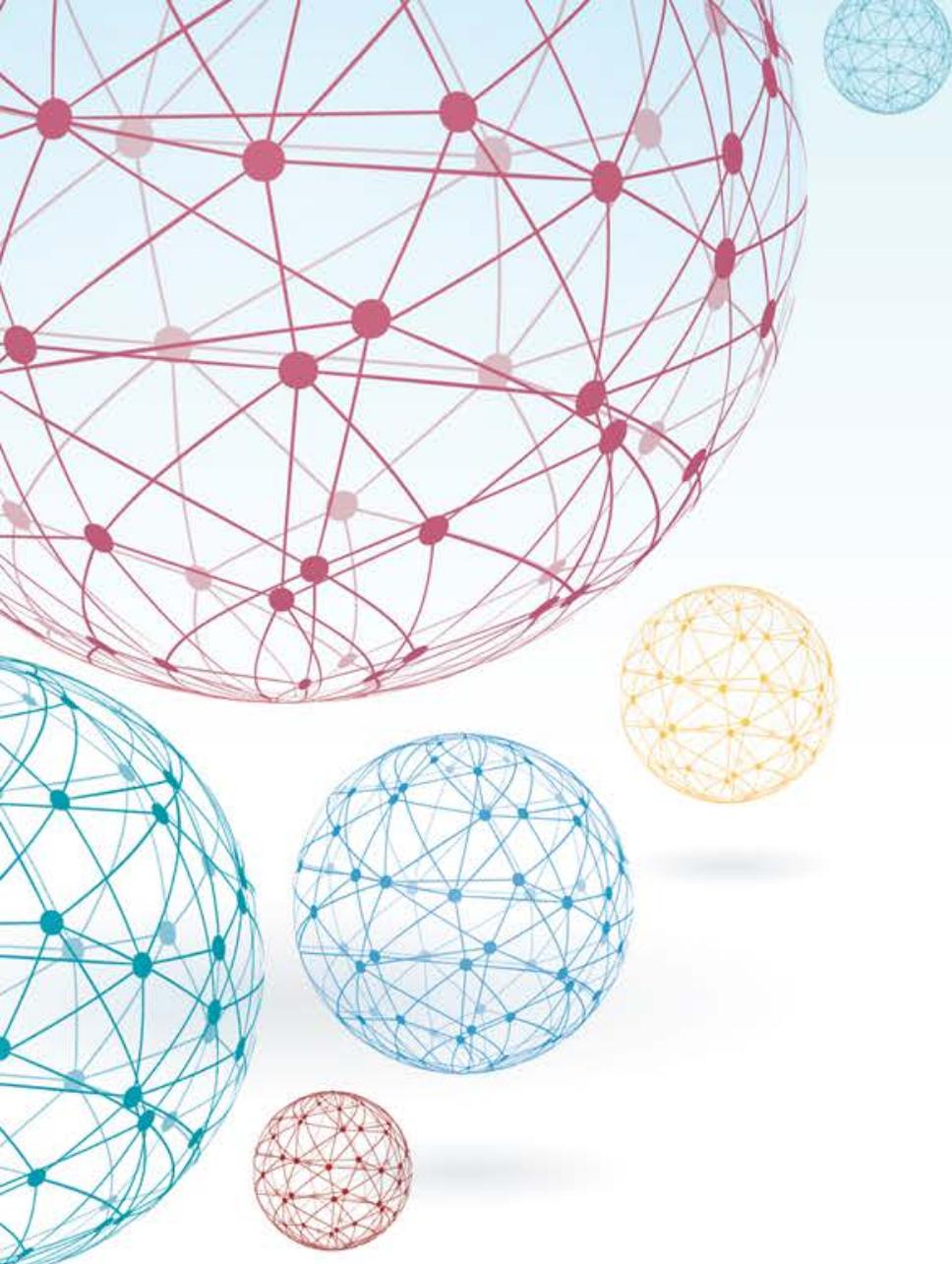
Microsoft Edge

# FIDO-ENABLED APPS + SERVICES
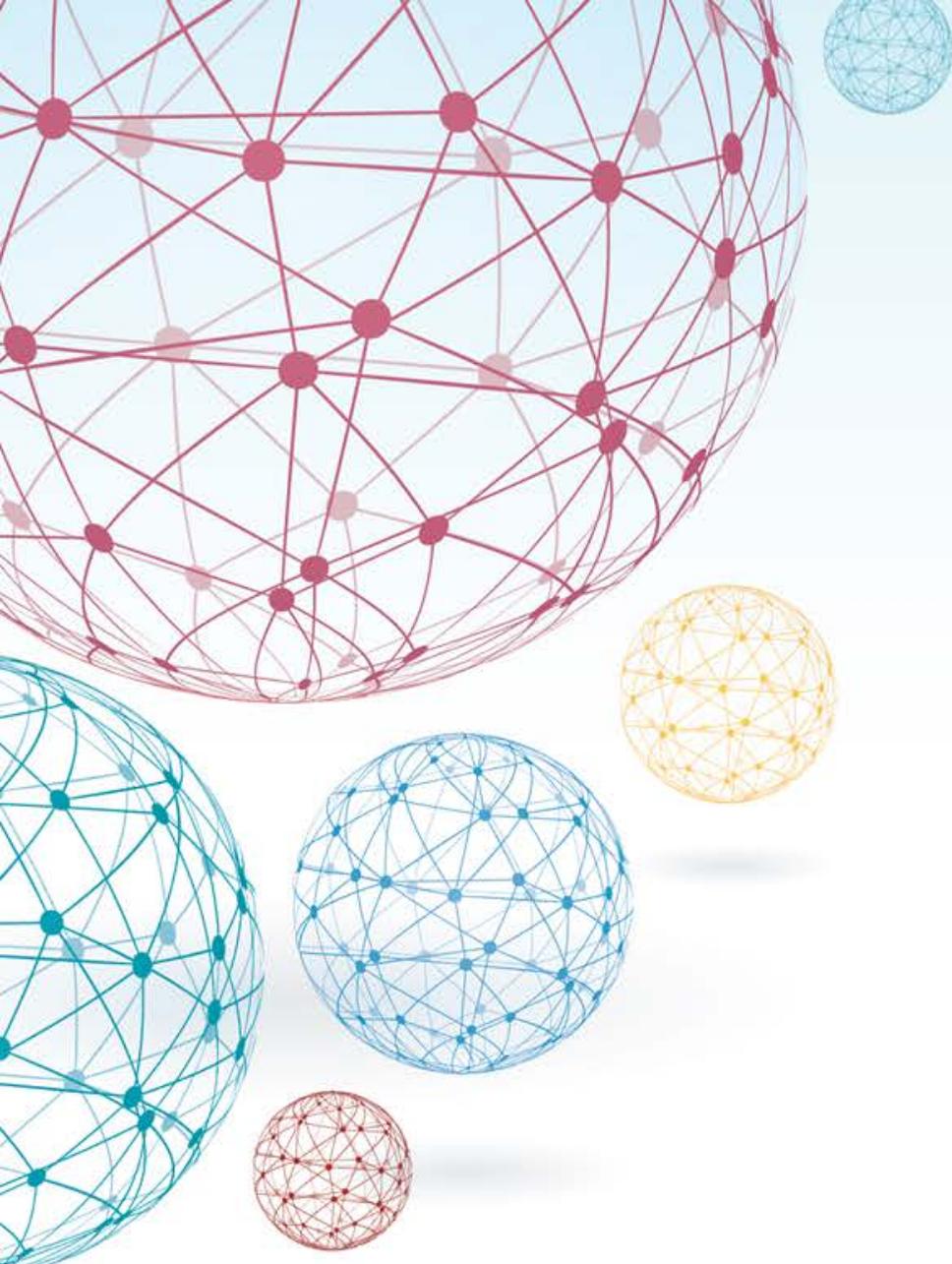
AVAILABLE TO PROTECT

# 3.5 BILLION+

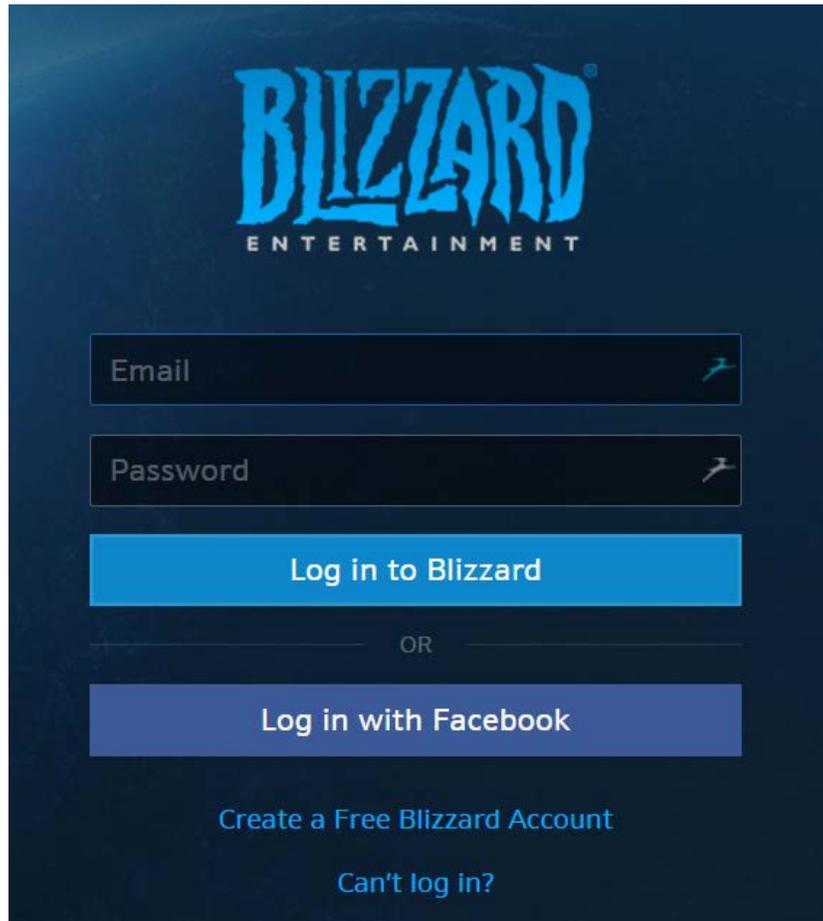ACCOUNTS WORLDWIDE

# THANK YOU

ANDREW SHIKIAR

SR. DIRECTOR OF MARKETING

ANDREW@FIDOALLIANCE.ORG

# INTEL ONLINE CONNECT FOR GAMING

## DAVE SINGH, INTEL ONLINE CONNECT PRODUCT OWNER

# Current state



"As more money flows into games, criminals are targeting this new and lucrative market with the tools and techniques they once used to hack online banks and Internet retailers."

"The gaming community has become a highly desirable target for cybercriminals," Santiago Pontiroli, of Kaspersky Lab's Global Research & Analysis Team, said.

In certain underground forums, hackers target online games and cash out by selling the virtual gold and other unique virtual goods obtained by the victim's character for real-world money. Steam accounts (Steam being the most popular store for PC games) are also sold on the black market and can be used for cash-outs or simply to gain access to games purchased by the victim

Late last year, one of the world's largest online video game platforms, admitted that 77,000 of its gamer accounts are hacked every month. This revelation represented the first time that a major video game company acknowledged cyber crime.
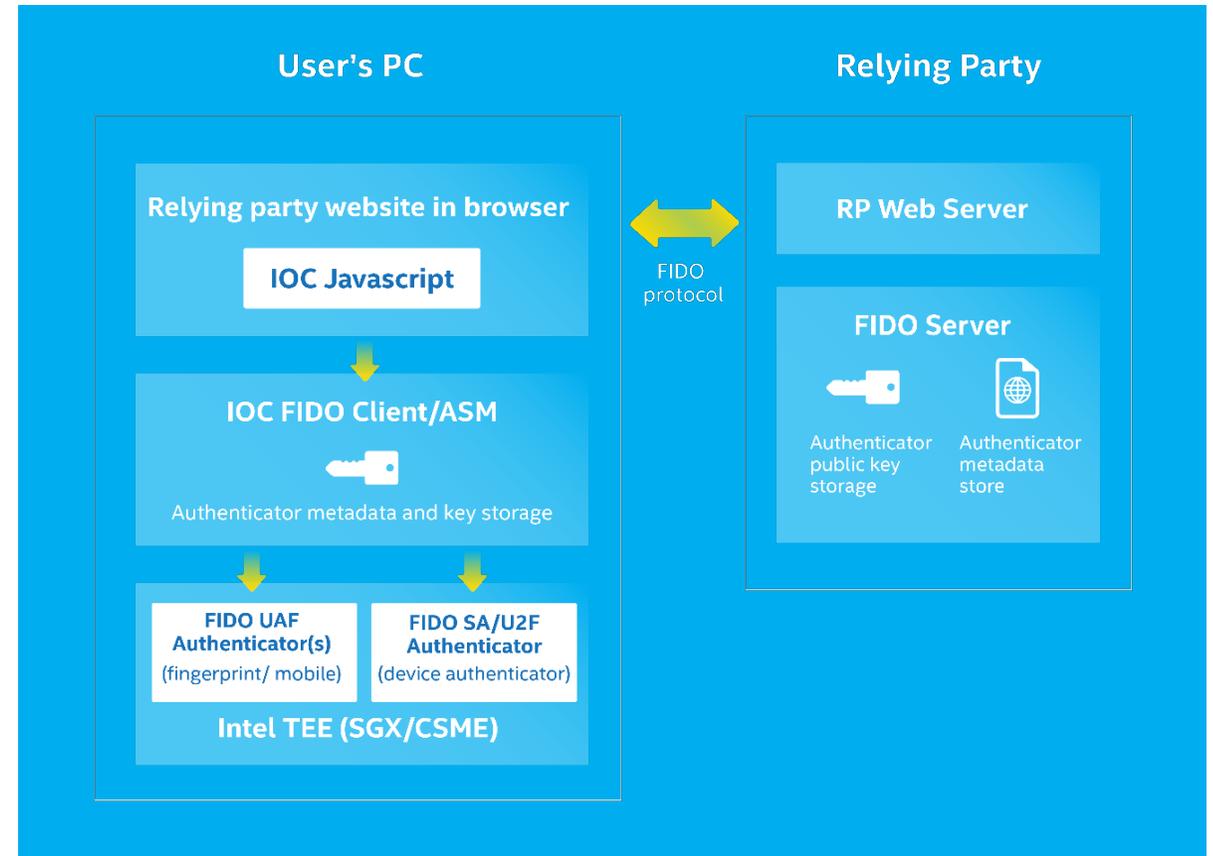
*Online gaming must move beyond the Password – Simple | Easy | Secure*

# Introducing - Intel Online Connect:

*Hardware Enhanced Multi-Factor Authentication for Web Services & Payments*

Intel Online Connect offers standards based, hardware protected options for website authentication and payments on online gaming:

- Device Identification (UAF)

- Device Identification + User Presence  (U2F)

- Device Identification + Biometric Authentication (UAF)

**User's PC**

Relying party website in browser

IOC Javascript

IOC FIDO Client/ASM

Authenticator metadata and key storage

FIDO UAF Authenticator(s)
(fingerprint/ mobile)

FIDO SA/U2F Authenticator
(device authenticator)

Intel TEE (SGX/CSME)

FIDO protocol

**Relying Party**

RP Web Server

FIDO Server

Authenticator public key storage

Authenticator metadata store

*Cross-Browser | Hardware Protected TEE | FIDO Certified*

# For more information

- Contact our Security Alliance Team: Kibibi Moseley | kibibi.moseley@intel.com

- Web Link: www.intel.com/hardwaresecurity/intelonlineconnect
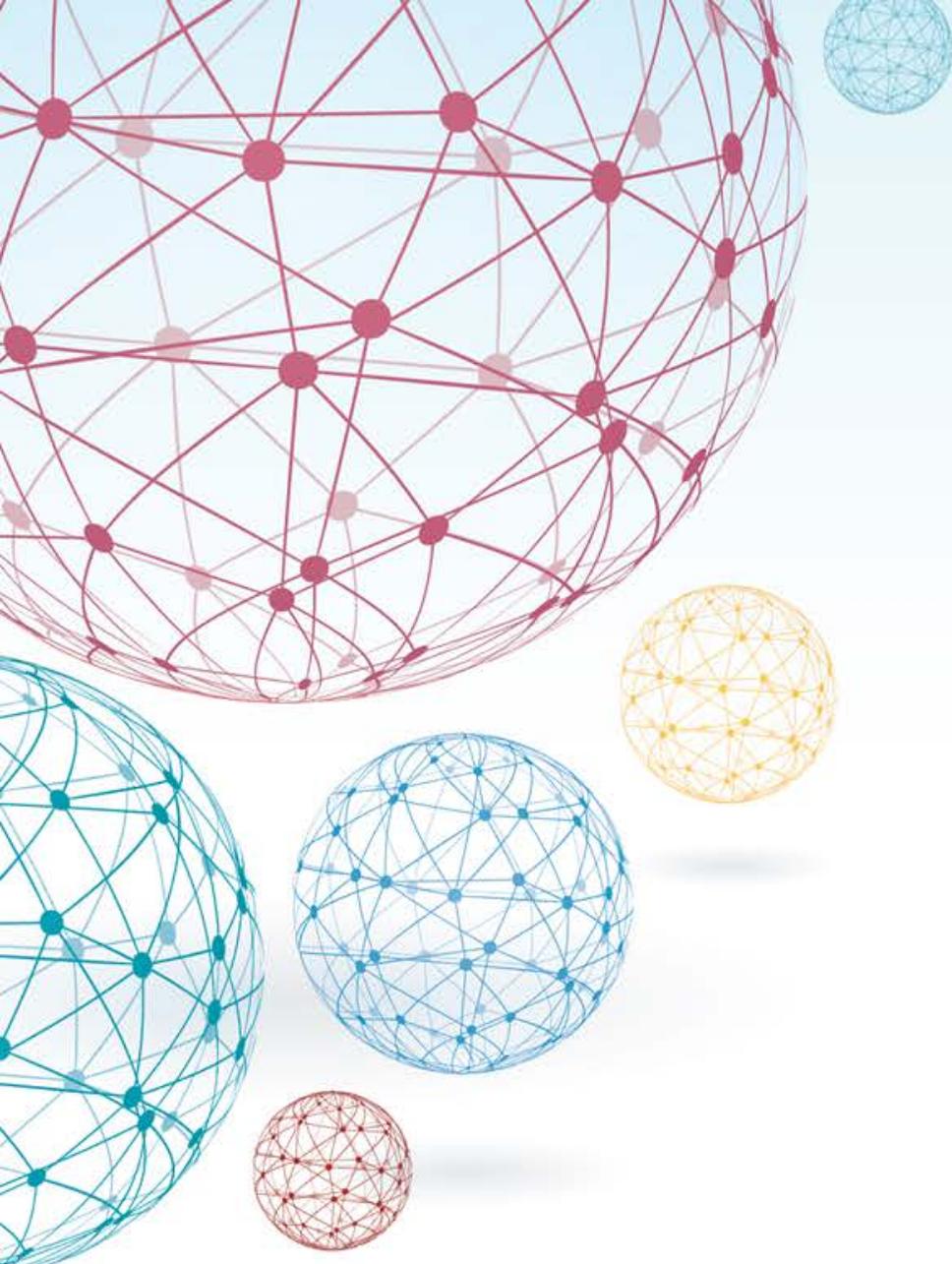
# SYNAPTICS FINGERPRINT SENSORS FOR GAMING

## SHAWN LIN,
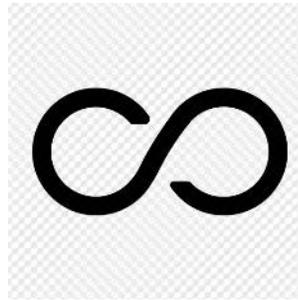### *PRODUCT SUPPORT ENGINEER*

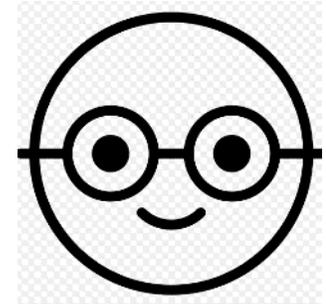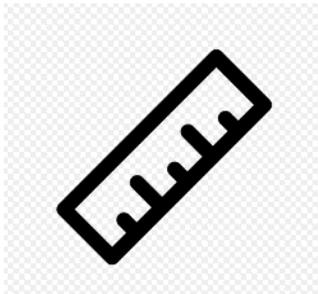# Why Fingerprint? Commercially successful Biometric Technologies
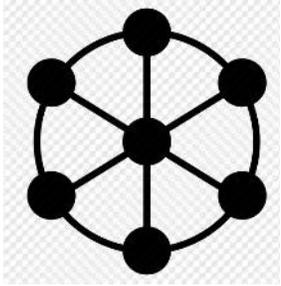
Universal

Unique
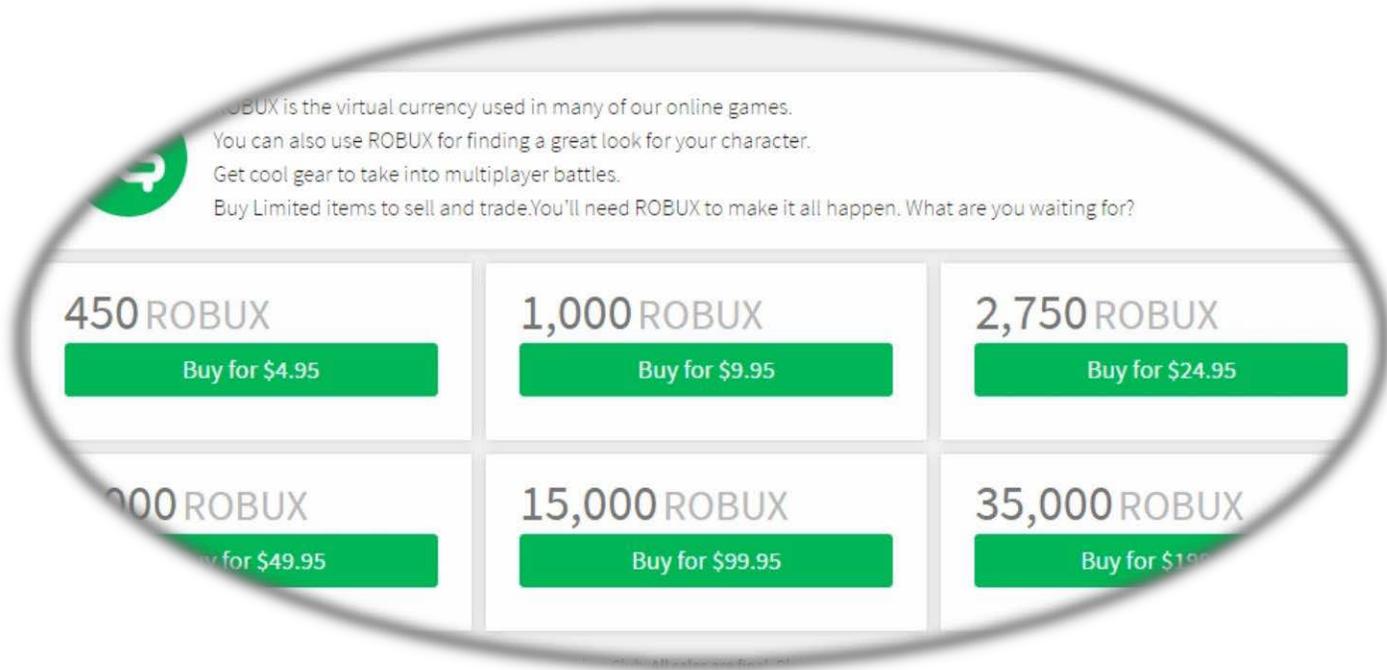
Permanent

Reproducible

Unobtrusive

Measurable

Timely

Spoof Resistant

➢**Fingerprint** is the most widely used biometric for mobile, PC/Laptop platforms, given the above considerations

# Fingerprint for Trade in Gaming



FP to **authenticate** the trading transaction for gaming **digital goods** and **virtual currency** (e.g. Robux in Roblox)

## FP prevents impersonation

# Fingerprint to Combat Smurfing

- In online gaming, a smurf is an experienced player who uses a new account to deceive other players into thinking he's a noob (newbie)

- The 'smurf' will dominate his opponent and humiliate them further as they have now beaten by an apparent noob

- This could become a more significant issue as cash prize tournament and eSports gambling expand



# FP blocks fake identity

# Synaptics Fingerprint Biometrics Solutions

- **Biometrics**
  - No more passwords (stolen, forgotten)
  - Something unique about you (same authentication on multiple devices)
  - Simple, fast and convenient (single gesture to log on)
  - Multiple factors for maximum strength

- **Secure architecture**
  - Match in Sensor
  - Authenticate locally / transact globally

- **Ecosystem**
  - Common worldwide solution

Consumers

Online Service Providers

fido alliance™

Enterprises

# Synaptics Fingerprint Solution for Desktop PC (Thermaltake Gaming) Mouse

- Synaptics Extending the company's market leading fingerprint sensing technology for smartphones into desktop PC peripherals

- Synaptics is meeting an emerging desktop PC ecosystem demand for easy and secure authentication driven by factors such as the security requirements defined by Windows 10 biometric integration and FIDO compliance.

- It provides users with a fast and secure passwordless experience to login into their system and web pages with the utmost of ease.

http://www.synaptics.com/company/news/fingerprint-mouse

# Kensington, PQI Launch Synaptics-Enabled USB Fingerprint Dongles

- Add simple, swift and secure fingerprint authentication to Notebook PCs lacking integrated biometric sensor implementation

- The dongles are fully housed, ready-to-use fingerprint modules small enough to remain unobtrusively installed in any notebook USB port

- After secure authentication is completed with a single touch of a finger, enabling fast PC access and the full use of Windows Hello.

http://www.synaptics.com/company/news/kensington-pqi--usb-fingerprint-dongles

Q & A